



November 26, 2012

NRC 2012-0101
10 CFR 50.54(f)

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Point Beach Nuclear Plant, Units 1 and 2
Docket 50-266 and 50-301
Renewed License Nos. DPR-24 and DPR-27

NextEra Energy Point Beach, LLC Response to 10 CFR 50.54(f) Request for Information
Regarding Near-Term Task Force Recommendation 2.3, Seismic

- References:
- (1) NRC letter to All Power Reactor Licensees and Holders of Construction Permits in Active or Deferred Status, dated March 12, 2012, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident (ML12056A046)
 - (2) NextEra Energy Point Beach, LLC letter to NRC, dated July 9, 2012, NextEra Energy Point Beach, LLC's 120-Day Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Seismic Aspects of Recommendation 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident (ML12192A206)
 - (3) U.S. Nuclear Regulatory Commission letter to Nuclear Energy Institute, dated May 31, 2012, Endorsement of Electric Power Research Institute (EPRI) Draft Report 1025286, "Seismic Walkdown Guidance" (ML12145A529)

On March 12, 2012, the NRC staff issued Reference (1), requesting information pursuant to 10 CFR 50.54(f). Enclosure 3 of Reference (1) contains specific Requested Actions and Requested Information associated with Recommendation 2.3 for Seismic. Requested Information Item 2 of Reference (1), Enclosure 4, requested addressees conduct a seismic walkdown and submit a final report which addressed various requirements detailed in the item. Reference (1), Enclosure 3 required addressees submit a final seismic walkdown report within 180 days of the NRC's endorsement of the seismic walkdown process.

Via Reference (2), NextEra Energy Point Beach, LLC (NextEra) confirmed it will use the NRC-endorsed Electric Power Research Institute (EPRI) Technical Report 1025286, Seismic Walkdown Guidance, in performing and reporting the seismic protection walkdowns, and submit a report by November 27, 2012, which corresponds to 180 days after the NRC endorsed the EPRI seismic walkdown guidance (Reference 3).

Enclosures 1 and 2 provide the seismic walkdown reports for Point Beach Nuclear Plant, Units 1 and 2, respectively, which were prepared in accordance with the guidance of EPRI Technical Report 1025286, and provide the requested seismic walkdown information. This submittal completes the NextEra response to the Requested Information of Reference (1), Enclosure 3.

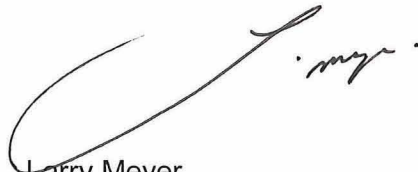
This letter contains no new Regulatory Commitments and no revision to existing Regulatory Commitments.

If you have any questions please contact Mr. Michael Millen, Licensing Manager, at 920/755-7845.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on November 26, 2012.

Very truly yours,

NextEra Energy Point Beach, LLC

A handwritten signature in black ink, appearing to read 'Larry Meyer', is written over a large, light-colored oval shape that serves as a placeholder or a stylized element.

Larry Meyer
Site Vice President

Enclosures

cc: Administrator, Region III, USNRC
Project Manager, Point Beach Nuclear Plant, USNRC
Resident Inspector, Point Beach Nuclear Plant, USNRC
Director, Office of Nuclear Reactor Regulation, USNRC

ENCLOSURE 1

**NEXTERA ENERGY POINT BEACH, LLC
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2**

**NEXTERA ENERGY POINT BEACH, LLC RESPONSE TO 10 CFR 50.54(F)
REQUEST FOR INFORMATION REGARDING NEAR-TERM TASK FORCE
RECOMMENDATION 2.3, SEISMIC**

**SEISMIC WALKDOWN REPORT
POINT BEACH NUCLEAR PLANT, UNIT 1
12Q0114-R-001
REVISION 0**

SEISMIC WALKDOWN REPORT

**IN RESPONSE TO THE 50.54(f) INFORMATION REQUEST REGARDING
FUKUSHIMA NEAR-TERM TASK FORCE RECOMMENDATION 2.3: SEISMIC**

for the

POINT BEACH NUCLEAR PLANT UNIT 1

NRC Docket No. 50-266

NextEra Energy
Point Beach Nuclear Plant
6610 Nuclear Road
Two Rivers, WI 54241

12Q0114-R-001
Revision 0

Prepared by:
Stevenson & Associates
1661 Feehanville Dr., Suite 150
Mt. Prospect, IL 60056

Submittal Date
November 2012

Contents

List of Tables	i
Executive Summary.....	ii
1 Introduction.....	1
1.1 Background.....	1
1.2 Plant Overview	1
1.3 Approach.....	1
2 Seismic Licensing Basis.....	2
3 Personnel Qualifications	4
3.1 Overview	4
3.2 Project Personnel.....	4
3.3 Equipment Selection Personnel	5
3.4 Seismic Walkdown Engineers.....	5
3.5 Licensing Basis Reviewers	5
3.6 IPEEE Reviewers.....	5
3.7 Peer Review Team.....	5
3.8 Additional Personnel	5
4 Selection of SSCs.....	6
5 Seismic Walkdowns and Area Walk-Bys.....	7
5.1 Overview	7
5.2 Seismic Walkdowns	7
5.3 Area Walk-Bys	14

Contents (cont'd.)

6	<i>Licensing Basis Evaluations</i>	22
7	<i>IPEEE Vulnerabilities Resolution Report</i>	23
8	<i>Peer Review</i>	24
9	<i>References</i>	25
A	<i>Project Personnel Resumes and SWE Certificates</i>	A-1
	A.1 Introduction	A-1
	A.2 Resumes & Certifications	A-2
B	<i>SWEL Selection Report</i>	B-1
C	<i>Seismic Walkdown Checklists (SWCs)</i>	C-1
D	<i>Area Walk-By Checklists (AWCs)</i>	D-1
E	<i>Plan for Future Seismic Walkdown of Inaccessible Equipment</i>	E-1
F	<i>Peer Review Report</i>	F-1

List of Tables

<u>Table</u>	<u>Section</u>
Table 3-1. Personnel Roles.....	3.2
Table 5-1. Anchorage Configuration Confirmation	5.2
Table 5-2. Issues Identified during Seismic Walkdowns	5.2
Table 5-3. Issues Identified during Area Walk-Bys	5.3

Executive Summary

The purpose of this report is to provide information as requested by the Nuclear Regulatory Commission (NRC) in its 50.54(f) letter issued to all power reactor licensees and holders of construction permits in active or deferred status (Ref. 5). In particular, this report provides information requested to address Enclosure 3, Recommendation 2.3: Seismic, of the 50.54(f) letter (Ref. 5).

The 50.54(f) letter requires, in part, all U.S. nuclear power plants to perform seismic walkdowns to identify and address degraded, non-conforming, or unanalyzed conditions and to verify the current plant configuration is within the current seismic licensing basis. This report documents the seismic walkdowns performed at Point Beach Nuclear Plant (PBNP) Unit 1 in response, in part, to the 50.54(f) letter issued by the NRC.

The Nuclear Energy Institute (NEI), supported by industry personnel, cooperated with the NRC to prepare guidance for conducting seismic walkdowns as required in the 50.54(f) letter, Enclosure 3, Recommendation 2.3: Seismic (Ref. 5). The guidelines and procedures prepared by NEI and endorsed by the NRC were published through the Electric Power Research Institute (EPRI) as EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012; henceforth, referred to as the "EPRI guidance document" (Ref. 1). NextEra/PBNP has utilized this NRC-endorsed guidance as the basis for the seismic walkdowns and this report (Ref. 1).

The EPRI guidance document was used to perform the engineering walkdowns and evaluations described in this report. In accordance with the EPRI guidance document, the following topics are addressed in the subsequent sections of this report.

- Seismic Licensing Basis
- Personnel Qualifications
- Selection of Systems, Structures, and Components (SSC)
- Seismic Walkdowns and Area Walk-Bys
- Seismic Licensing Basis Evaluations
- Individual Plant Examination for External Events (IPEEE) Vulnerabilities Resolution Report
- Peer Review

Seismic Licensing Basis

The Seismic Licensing Basis is briefly described in Section 2 of this report. The safe shutdown earthquake for the PBNP site is 0.12g horizontal ground acceleration and 0.08g vertical ground acceleration (Ref. 2).

Personnel Qualifications

Personnel qualifications are discussed in Section 3 of this report. The personnel who performed the key activities required to fulfill the objectives and requirements of the 50.54(f) letter are qualified and trained as required in the EPRI guidance document (Ref. 1).

Selection of SSCs

Selection of SSCs is discussed in Section 4 of this report. The process used to select the items that were included in the overall Seismic Walkdown Equipment List (SWEL) is described in detail in the EPRI guidance document, Section 3: Selection of SSCs (Ref. 1).

Seismic Walkdowns and Area Walk-Bys

Section 5, Appendix C, and Appendix D of this report documents the equipment Seismic Walkdowns and the Area Walk-Bys. The majority of the online seismic walkdowns for PBNP Unit 1 were performed September 17-21 and October 1-3, 2012. During the majority of the walkdown activities, the walkdown team consisted of two 2-person Seismic Walkdown Engineer (SWE) teams.

The seismic walkdown team performed the inspection of 99 of the 104 components on the SWEL (comprised of SWEL 1 and SWEL 2). A partial walkdown was performed for four (4) pieces of equipment. The walkdown could not be completed for these equipment due to accessibility issues given energized equipment. The five (5) remaining Unit 1 items will be walked down during a unit outage or another time when the equipment is accessible, as appropriate. Anchorage verification was required for a minimum of 33 components (Ref. 1). A total of 37 anchorage configurations were confirmed to be installed in accordance with the station documentation.

During the seismic walkdowns at PBNP Unit 1, Condition Reports (CRs) were issued for a variety of issues as summarized in Table 5-2 and 5-3. After evaluation through the Corrective Action Program (CAP), it was determined that none of the conditions identified in the CRs were adverse seismic conditions.

Seismic Licensing Basis Evaluations

Conditions identified during the walkdowns were documented on the Seismic Walkdown Checklists, Area Walk-by Checklists, and then entered into the CAP. For those conditions that required an evaluation, seismic licensing basis evaluations were completed and documented within the CR. Tables 5-2 and 5-3 in the report provide a summary of the condition and the action completion status.

IPEEE Vulnerabilities

IPEEE vulnerabilities are addressed in Section 7 of this report. All identified IPEEE vulnerabilities have been resolved.

Peer Reviews

The Peer Review of the checklists consisted of a group discussion. The group was made up of all walkdown team members. Some of the team members participated by teleconference. The walkdown team members are all engineers, mostly civil engineers. Appendix F of this report contains a summary of the Peer Review. The Peer Review determined that the objectives and requirements of the 50.54(f) letter are met.

Furthermore, it was concluded by the peer reviews that the efforts completed and documented within this report are in accordance with the EPRI guidance document.

Summary

Seismic walkdowns have been completed at PBNP Unit 1 in accordance with the NRC endorsed walkdown methodology. All potentially degraded, nonconforming, or unanalyzed conditions identified as a result of the seismic walkdowns have been entered into the CAP.

Evaluations of the identified conditions are complete and documented within the CAP. These evaluations determined the Seismic Walkdowns resulted with no adverse anchorage conditions, no adverse seismic spatial interactions, and no other adverse seismic conditions associated with the items on the SWEL. Similarly, the Area Walk-Bys resulted with no adverse seismic conditions associated with other SSCs located in the vicinity of the SWEL item(s).

The Seismic Walkdowns identified several minor issues. The Seismic Walkdowns identified no degraded, nonconforming, or unanalyzed conditions that resulted in operability concerns for the affected equipment. No planned or newly identified protection or mitigation features have resulted from the efforts to address the 50.54(f) letter.

Follow-on activities required to complete the efforts to address Enclosure 3 of the 50.54(f) letter include inspection of nine (9) items deferred due to inaccessibility. Area Walk-Bys will be completed, as required, during these follow-on activities.

1

Introduction

1.1 BACKGROUND

In response to Near-Term Task Force (NTTF) Recommendation 2.3, the Nuclear Regulatory Commission (NRC) issued a 10 CFR 50.54(f) letter (Ref. 5) requesting that all licensees perform seismic walkdowns to identify and address plant degraded, non-conforming, or unanalyzed conditions, with respect to the current seismic licensing basis. The Nuclear Energy Institute (NEI), through the Electric Power Research Institute (EPRI), prepared industry guidance to assist licensees in responding to this NRC request. The industry guidance document, EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012 (Ref. 1), was endorsed by the NRC on May 31, 2012. NextEra Energy Point Beach Nuclear Plant (PBNP) has committed to using this NRC-endorsed guidance as the basis for these walkdowns and this report.

1.2 PLANT OVERVIEW

The PBNP Unit 1 consists of a pressurized water reactor (PWR) generating unit located in Two Creeks, Wisconsin. PBNP has a containment building of concrete construction with a carbon steel liner. The unit was originally rated at 1518.5 MWt power, and has been uprated to 1800 MWt. PBNP began commercial operation in December 1970 (Ref. 2, Section 1.0). PBNP used the Seismic Qualification Utility Group (SQUG) Generic Implementation Procedure (GIP) method to resolve Unresolved Safety Issue (USI) A-46.

1.3 APPROACH

The EPRI Seismic Walkdown Guidance (Ref. 1) was used for the PBNP seismic walkdowns and evaluations described in this report. In accordance with Reference 1, the following topics are addressed in the subsequent sections of this report:

- Seismic Licensing Basis
- Personnel Qualifications
- Selection of Structures, Systems, and Components (SSC)
- Seismic Walkdowns and Area Walk-Bys
- Licensing Basis Evaluations
- Individual Plant Examination of External Events (IPEEE) Vulnerabilities Resolution Report
- Peer Review

2

Seismic Licensing Basis

The licensing basis for Seismic Class I equipment at PBNP is defined in the Updated Final Safety Analysis Report (UFSAR) (Ref. 2), Appendix A.5. Site design ground motion response spectra for the Safe Shutdown Earthquake (SSE) are provided in UFSAR Figure A.5-2. Damping values for Seismic Class I SSCs are listed in UFSAR Table A.5-2.

The equipment at PBNP is classified as recommended by TID-7024, "Nuclear Reactors and Earthquakes" August, 1963 (Ref. 7) and G. W. Housner "Design of Nuclear Power Reactors Against Earthquakes" (Ref. 8). The UFSAR defines Seismic Class I as, "Those structures and components including instruments and controls whose failure might cause or increase the severity of a loss-of-coolant accident or result in an uncontrolled release of excessive amounts of radioactivity. Also, those structures and components vital to safe shutdown and isolation of the reactor."

All components, systems, and structures classified as Class I are designed in accordance with the following criteria:

1. Primary steady state stresses, when combined with the seismic stresses resulting from a response spectrum normalized to a maximum ground acceleration of 0.04g in the vertical direction and 0.06g in the horizontal direction simultaneously, are maintained within the allowable stress limits accepted as good practice and, where applicable, set forth in the appropriate design standards, e.g., ASME Boiler and Pressure Vessel Code, USAS B31.1 Code for Pressure Piping, ACI 318 Building Code Requirements for Reinforced Concrete, and AISC Specifications for the Design and Erection of Structural Steel for buildings.
2. Primary steady state stresses when combined with the seismic stress resulting from a response spectrum normalized to a maximum ground acceleration of 0.08g acting in the vertical direction and 0.12g acting in the horizontal direction simultaneously, are limited so that the function of the component, system or structure shall not be impaired as to prevent a safe and orderly shutdown of the plant.

The spectrum response curves for the equipment inside the building are generated by the time history technique of seismic analysis. The sample earthquake utilized is that recorded at Olympia, Washington 45N-120W on April 13, 1949. The originally recorded earthquake is scaled to that of .06g. Essentially, the curves are generated by applying the recorded earthquake to a single degree of freedom system, for which the values for damping and natural frequency are varied. Some averaging of the curves is provided to smooth out the erratic response of the earthquake's random behavior. At the high frequency end of the curve, the acceleration levels converge to the peak input value at the location inside the building. Table A.5-2 (in the UFSAR) gives the damping factors used in the design of components and structures.

PBNP performed a verification of seismic adequacy of equipment per NRC Generic Letter 87-02. Section A.5.6.1 states the following for evaluation of existing plant equipment:

“Seismic adequacy evaluation of then-existing plant equipment necessary to bring the plant to, and maintain it in, a safe shutdown condition during the first 72 hours following a safe shutdown earthquake (SSE) was performed in response to Generic Letter (GL) 87-02. Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue (USI) A-46. This was done using the SQUG Generic Implementation Procedure (GIP) for Verification of Nuclear Plant Equipment, Revision 2. For these evaluations, safe shutdown was defined as the reactor subcritical with a minimum shutdown margin between 1% and 2.77% and the reactor coolant average temperature at or greater than 540°F.”

Additionally, Section A.5.6.2 of the UFSAR states the following relative to seismic design and verification of modified, new, and replacement equipment:

“Modified, new, or replacement equipment classified as Seismic Class I may be seismically designed and verified (after installation) for seismic adequacy using seismic experience data in accordance with a methodology developed by the Seismic Qualification Utility Group and approved by the NRC as documented in both of the following:

1. Seismic Qualification Utility Group (SQUG), “Generic Implementation Procedure (GIP) for Seismic Verification of Nuclear Plant Equipment”, Revision 2, Corrected February 14, 1992; as modified by
2. U. S. Nuclear Regulatory Commission, “Supplement No. 1 to Generic Letter (GL) 87-02 that Transmits Supplemental Safety Evaluation Report No. 2 (SSER No. 2) on SQUG Generic Implementation Procedure, Revision 2, as Corrected on February 14, 1992 (GIP-2)”, May 22, 1992.

The scope of equipment to which the SQUG methodology above may be applied includes certain classes of active mechanical and electrical equipment as specified in the SQUG GIP, electrical relays, cable trays and conduit, heat exchangers, and tanks (modification of existing tanks only).”

Per Section 5.1.1.5 of the UFSAR, the containment is designed to meet the requirements of American Concrete Institute (ACI) Building Code 318-63 (Ref. 9) and the 1963 version of the American Institute of Steel Construction (AISC) Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings (Ref. 10).

Per Appendix D, Section D.1, the Diesel Generator Building is designed in accordance with ACI 318-89 (Ref. 11) and the 9th Edition of the AISC Manual of Steel Construction (Ref. 12).

In various locations in the UFSAR, reference is made to (United States of America Standard) USAS B31.1-67 (Ref. 13) for piping design.

3

Personnel Qualifications

3.1 OVERVIEW

This section of the report identifies the personnel that participated in the NTTF Recommendation 2.3 Seismic Walkdown efforts. A description of the responsibilities of each Seismic Walkdown participant's role(s) is provided in Section 2 of the EPRI Seismic Walkdown Guidance (Ref. 1). Resumes for the personnel that contributed to the seismic walkdown and/or peer review provided in Appendix A provide detail on each person's qualifications for his or her role.

3.2 PROJECT PERSONNEL

Table 3-1 below summarizes the names and corresponding roles of personnel who participated in the NTTF Recommendation 2.3 Seismic Walkdown effort.

Table 3-1. Personnel Roles

Name	Equipment Selection	Plant Operations	Seismic Walkdown Engineer (SWE)	Licensing Basis Reviewer	IPEEE Reviewer	Peer Reviewer
Point Beach Nuclear Plant (NextEra Energy)						
S. Guokas	X				X	X
R. Merkes	X	X				
D. Brown	X		X			X
D. Nuttall			X	X		X
J. Buboltz			X			X
M. Nielsen			X	X		X
C. McDonald			X			X
R. LaPlante			X			X
S. Kahl			X			X
Duane Arnold Energy Center (NextEra Energy)						
R. Severson					X	X
Stevenson & Assoc.						
D. Carter			X			X
N. Juraydini			X			X
T. K. Ram						X

3.3 EQUIPMENT SELECTION PERSONNEL

The SWEL was developed by the PBNP Probabilistic Risk Assessment (PRA) Group, and was reviewed by Operations and Design Engineering.

3.4 SEISMIC WALKDOWN ENGINEERS

The seismic walkdown teams (SWT) consisted of nine SWEs, two from Stevenson and Associates (S&A) and seven from PBNP. The SWTs were led by S&A with support from PBNP. Resumes are included in Appendix A.

S&A is recognized internationally as a leading seismic consultant to the nuclear industry and as a regular contributor to the advancement of earthquake engineering knowledge through funded research projects. The professional staff has expertise and capabilities in earthquake engineering, structural dynamics, and structural design. S&A has performed seismic evaluations of US nuclear power plants, using either Seismic PRA or Seismic Margin Assessment, to address NRC IPEEE for over 35 US and European plants.

3.5 LICENSING BASIS REVIEWERS

The Licensing Basis Reviews were performed by the SWEs from PBNP.

3.6 IPEEE REVIEWERS

The IPEEE reviewer was the preparer of the SWEL and the preparer of the PBNP IPEEE submittal.

3.7 PEER REVIEW TEAM

The Peer Reviewer Team is listed, along with their roles and qualifications, in the Peer Review Report included in Appendix F.

3.8 ADDITIONAL PERSONNEL

Various Operations and Maintenance personnel also provided support to the walkdown by reviewing the list of components for accessibility and accompanying the SWTs to open electrical cabinets and panels.

4

Selection of SSCs

The Seismic Walkdown Equipment List is documented in the SWEL Selection Report, provided in Appendix B. This report describes how the SWEL was developed to meet the requirements of the EPRI Seismic Walkdown Guidance (Ref. 1). The final SWEL (both SWEL 1 & SWEL 2) is included in the SWEL Selection Report in Appendix B.

5

Seismic Walkdowns and Area Walk-Bys

5.1 OVERVIEW

The PBNP Seismic Walkdowns and Area Walk-Bys were conducted by two 2-person teams of trained SWEs, in accordance with the EPRI Seismic Walkdown Guidance (Ref. 1). The majority of the walkdowns occurred on September 17-21, and October 1-3, 2012.

5.2 SEISMIC WALKDOWNS

The Seismic Walkdowns focused on the seismic adequacy of the items on the SWEL as provided in Attachment A of the SWEL report which is contained in Appendix B of this report. The Seismic Walkdowns also evaluated the potential for nearby SSCs to cause adverse seismic interactions with the SWEL items. The Seismic Walkdowns focused on the following adverse seismic conditions associated with the subject item of equipment:

- Adverse anchorage conditions
- Adverse seismic spatial interactions
- Other adverse seismic conditions

The results of the Seismic Walkdowns have been documented on the Seismic Walkdown Checklist (SWC) provided in the EPRI guidance document, Appendix C. Seismic Walkdowns were performed and a SWC completed for 99 of the 104 items identified on the PBNP Unit 1 SWEL 1 and SWEL 2. SWCs were prepared for four electrical equipment items that could not be completed due to the equipment being energized. The SWCs are provided in Appendix C of this report.

Seismic walkdowns are deferred for five (5) items, and additional inspections are required for four (4) items, until safe access conditions can be provided. These items could not be walked down during the 180-day period following the issuance of the 10CFR 50.54(f) letter due to their being inaccessible because of the electrical safety hazards posed while the equipment is operating. SWCs for the four (4) items that require additional walkdowns are included in Appendix C with the status indicated as "unknown". Appendix E of this report identifies the inaccessible equipment along with the plan for future Seismic Walkdowns.

The following subsections describe the approach followed by the SWEs to identify potentially adverse anchorage conditions, adverse seismic interactions, and other adverse seismic conditions during the Seismic Walkdowns.

Drawings and other plant records are cited in some of the SWCs, but are not included with the SWCs because they are readily retrievable documents through the station's document management system.

5.2.1 Adverse Anchorage Conditions

Guidance for identifying anchorage that could be degraded, non-conforming, or unanalyzed relied on visual inspections of the anchorage and verification of anchorage configuration. Details for these two types of evaluations are provided in the following two subsections.

The evaluation of potentially adverse anchorage conditions described in this subsection applies to the anchorage connections that attach the identified item of equipment to the civil structure on which it is mounted. For example, the welded connections that secure the base of a Motor Control Center (MCC) to the steel embedment in the concrete floor would be evaluated in this subsection. Evaluation of the connections that secure components within the MCC is covered later in the subsection "Other Adverse Seismic Conditions."

Visual Inspections

The purpose of the visual inspections was to identify whether any of the following potentially adverse anchorage conditions were present:

- Bent, broken, missing, or loose hardware
- Corrosion that is more than mild surface oxidation
- Visible cracks in the concrete near the anchors
- Other potentially adverse seismic conditions

Based on the results of the visual inspection, the SWEs judged whether the anchorage was potentially degraded, non-conforming, or unanalyzed. The results of the visual inspection were documented on the SWC, as appropriate. If there was clearly no evidence of degraded, nonconforming, or unanalyzed conditions, then it was indicated on the checklist and a licensing basis evaluation was not necessary. However, if it was not possible to judge whether the anchorage is degraded, nonconforming, or unanalyzed, then the condition was entered into the CAP as a potentially adverse seismic condition.

Additionally, any significant comments are noted on the SWCs. Drawings and other plant design documents are cited in some of the SWCs, but they are not included with the SWCs because they are readily available in the plant's electronic document management system.

Anchorage Configuration Confirmation

As required by the EPRI Seismic Walkdown Guidance (Ref.1, page 4-3), at least 50% of the items were confirmed to be anchored consistent with design documents. Line-mounted equipment (e.g., valves mounted on pipelines without separate anchorage) was not evaluated for anchorage adequacy and was not counted in establishing the 50% sample size.

Examples of documentation that was considered to verify that the anchorage installation configurations are consistent with the plant documentation include the following:

- Drawings
- Calculations

- SQUG Walkdown Seismic Evaluation Work Sheets (SEWS)

The Table C-1 indicates the anchorage verification status for components as follows:

N/A: components that are line-mounted and/or are not anchored to the civil structure and therefore do not count in the anchorage confirmation total.

Y: components that are anchored to the civil structure which were confirmed to be consistent with design drawings and/or other plant documentation

N: components which had anchorage but were not chosen for anchorage configuration confirmations.

See Table 5-1 below for the accounting of the 50% anchorage configuration confirmations, and the individual SWC forms in Appendix C for the specific documents used in each confirmation.

Table 5-1. Anchorage Configuration Confirmation

Total SWEL Items	SWEL Items without Anchorage (N/A)	Minimum Required to Confirm	Total Items Confirmed
A	B	$(A - B) / 2$	
99	34	33	37

5.2.2 Adverse Seismic Spatial Interactions

An adverse seismic spatial interaction is the physical interaction between the SWEL item and a nearby SSC caused by relative motion between the two during an earthquake. An inspection was performed in the area adjacent to and surrounding the SWEL item to identify any seismic interaction conditions that could adversely affect the capability of that SWEL item to perform its intended safety-related functions.

The three types of seismic spatial interaction effects that were considered are:

- Proximity
- Failure and falling of SSCs (Seismic II over I)
- Flexibility of attached lines and cables

Detailed guidance for evaluating each of these types of seismic spatial interactions is described in the EPRI guidance document, Appendix D: Seismic Spatial Interaction.

The SWEs exercised their judgment to identify seismic interaction hazards.

Section 5.2.5 provides a summary of issues identified during the Seismic Walkdowns.

5.2.3 Other Adverse Seismic Conditions

In addition to adverse anchorage conditions and adverse seismic interactions, described above, other potentially adverse seismic conditions that could challenge the seismic adequacy of a SWEL item could have been present. Examples of the types of conditions that could pose potentially adverse seismic conditions include the following:

- Degraded conditions
- Loose or missing fasteners that secure internal or external components to equipment
- Large, heavy components mounted on a cabinet that are not typically included by the original equipment manufacturer
- Cabinet doors or panels that are not latched or fastened
- Other adverse conditions

Any identified other adverse seismic conditions are documented on the items' SWC and Table 5-2, as applicable.

5.2.4 Issues Identified during Seismic Walkdowns

Table 5-2 provides a summary of issues identified during the equipment Seismic Walkdowns. The equipment Seismic Walkdowns resulted with a total of ten (10) concerns identified and each of these was entered into the station's CAP. All of the identified concerns were assessed and it was concluded that the condition would not prevent the associated equipment from performing its safety-related function(s). None of the conditions identified by the SWEs during the equipment Seismic Walkdowns were concluded to be adverse seismic conditions.

Table 5-2: Table of Actions Resulting from Seismic Walkdown Inspection						
Equipment ID	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
1MS-02090	A section of tubing is supporting the solenoid and attached flexible conduit fitting. The solenoid and the fitting are relatively heavy compared to the capacity of the tubing supporting them.			X	NextEra Engineer determined from P&ID drawings that a loss of air to the valve results in the valve going to a safe position. Initiated CR.	Being tracked in the CAP.
1-83/DY-03 and DY-0C	The south side of panel DY-0C is in contact with an electrical fitting attached to panel 1-83/DY-03. It is uncertain what components are in each panel.		X		NextEra performed an evaluation of contents of the panels and determined that the interaction would not affect the operability of the components. Initiated CR.	Closed
1B-04	Cracks identified in concrete along centerline of anchors.			X	The condition was evaluated and determined to be acceptable. A review of the modification and calculation determined that there is sufficient margin to accommodate the crack. Initiated CR.	Being tracked in the CAP.
1P-002A	Light supported off incorrectly oriented beam clamp.		X		Informed maintenance and operations to repair. Initiated CR.	Closed. Identified issue repaired.

Table 5-2: Table of Actions Resulting from Seismic Walkdown Inspection

Equipment ID	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
1P-014A	An overhead light fixture was raised by overlapping the light fixture chain and securing it with ty-wraps.	X			The walkdown team determined that the light fixture would not fall and interact with seismically qualified equipment since the chain would support the light fixture if the ty-wraps were to break. Initiated CR.	Work Request initiated to repair.
1B-03	Rear bottom panel is missing a mounting bolt.	X			The walkdown team determined that the missing bolt does not adversely affect the seismic capability of the equipment. The bolt is one of many that attach the rear panel to the frame. Initiated CR.	Work Request initiated to repair.
P-012A	Chain for valve SF-1 can interact with the oiler on the pump.	X			The chain was secured behind conduit and judged not to pose a current concern. Initiated CR.	Closed. Chain is tied off to a support with seal type lock.

Table 5-2: Table of Actions Resulting from Seismic Walkdown Inspection

Equipment ID	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
HX-013A	East bolt spacing is not per drawing EC-36A-3, Job 12703, Rev. 3. Bolts are spaced at 8", 9" and 8" in the north south direction. The drawing shows the bolts spaced at 9", 9" and 9".		X		Per calculation 91C2696-C-021 a spacing of 9", 9", 9" is used. There is a safety factor of 42.5 on these anchors. Therefore, they are concluded to be capable of carrying the load with the slightly reduced spacing. Initiated CR.	Being tracked in the CAP.
HX-013B	East bolt spacing is not per drawing EC-36A-3, Job 12703, Rev. 3. Bolts are spaced at 7 3/4", 9 1/4" and 7 3/4" in the north south direction. The drawing shows the bolts spaced at 9", 9" and 9".		X		Per calculation 91C2696-C-021 a spacing of 9", 9", 9" is used. There is a safety factor of 42.5 on these anchors. Therefore, they are concluded to be capable of carrying the load with the slightly reduced spacing. Initiated CR.	Being tracked in the CAP.
P-32A	Overhead trolley control pendant wedged between pump junction box and pump casing.			X	NextEra Engineer determined junction box and pump casing are rugged and will not be damaged by the pendant. Initiated CR.	Work request initiated to repair.

5.3 AREA WALK-BYS

The purpose of the Area Walk-Bys is to identify potentially adverse seismic conditions associated with other SSCs located in the vicinity of the SWEL items. Vicinity is generally defined as the room containing the SWEL item. If the room is very large (e.g., Turbine Hall), then the vicinity is identified based on judgment, e.g., on the order of about 35 feet from the SWEL item. This walk-by area is described on the AWC, shown in Appendix D of this report. A total of 30 AWCs were completed for PBNP Unit 1. It is noted that additional AWCs will be completed, as required, as deferred and supplemental inspections are completed.

The key examination factors that were considered during Area Walk-Bys include the following:

- Anchorage conditions (if visible without opening equipment)
- Significantly degraded equipment in the area
- A visual assessment (from the floor) of cable/conduit raceways and HVAC ducting (e.g., condition of supports or fill conditions of cable trays)
- Potentially adverse seismic interactions including those that could cause flooding, spray, and fires in the area
- Other housekeeping items that could cause adverse seismic interaction (including temporary installations and equipment storage)
- Scaffold construction was inspected to verify they were not a seismic interaction concern.
- Seismic housekeeping was examined to verify that items would not move and interact with seismically qualified equipment.

The Area Walk-Bys are intended to identify adverse seismic conditions that are readily identified by visual inspection, without necessarily stopping to open cabinets or taking an extended look. If a potentially adverse seismic condition was identified during the Area Walk-By, then additional time was taken, as necessary, to evaluate adequately whether there was an adverse condition and to document any findings.

The results of the Area Walk-Bys are documented on the AWCs included in Appendix D of this report. A separate AWC was filled out for each area inspected. A single AWC was completed for areas where more than one SWEL item was located.

Additional details for evaluating the potential for adverse seismic interactions that could cause flooding, spray, or fire in the area are provided in the following two subsections.

Seismically-Induced Flooding/Spray Interactions

Seismically-induced flooding/spray interactions are the effect of possible ruptures of vessels or piping systems that could spray, flood or cascade water into the area where SWEL items are located. This type of seismic interaction was considered during the IPEEE program.

One area of particular concern to the industry is threaded fire protection piping with long unsupported spans. If adequate seismic supports are present or there are isolation valves near the tanks or charging sources, flooding may not be a concern. Numerous

failures have been observed in past earthquakes resulting from sprinkler head impact. Less frequent but commonly observed failures have occurred due to flexible headers and stiff branch pipes, non-ductile mechanical couplings, seismic anchor motion and failed supports.

Examples where seismically-induced flooding/spray interactions could occur include the following:

- Fire protection piping with inadequate clearance around fusible-link sprinkler heads
- Non-ductile mechanical and threaded piping couplings can fail and lead to flooding or spray of equipment
- Long, unsupported spans of threaded fire protection piping
- Flexible headers with stiffly supported branch lines
- Non-Seismic Category I tanks

The SWEs exercised their judgment to identify only those seismically-induced interactions that could lead to flooding or spray.

Seismically-Induced Fire Interactions

Seismically-induced fire interactions can occur when equipment or systems containing hazardous/flammable material fail or rupture. This type of seismic interaction was considered during the IPEEE program. Those prior evaluations were considered, as applicable, as information for the Area Walk-Bys.

Examples where seismically-induced fire interactions could occur include the following:

- Hazardous/flammable material stored in inadequately anchored drums, inadequately anchored shelves, or unlocked cabinets
- Natural gas lines and their attachment to equipment or buildings
- Bottles containing acetylene or similar flammable chemicals
- Hydrogen lines and bottles

Another example where seismically-induced fire interaction could occur is when there is relative motion between a high voltage item of equipment (e.g., 4160 volt transformer) and an adjacent support structure when they have different foundations. This relative motion can cause high voltage busbars, which pass between the two, to short out against the grounded bus duct surrounding the busbars and cause a fire.

The SWEs exercised their judgment to identify only those seismically-induced interactions that could lead to fires. No such interactions were found in PBNP, Unit 1.

5.3.1 Issue Identified during Area Walk-bys

None of the anomalies or issues identified by the SWEs during the area walk-bys was ultimately judged to be "Potentially Adverse Seismic Conditions" because in all cases it was concluded that the anomaly or issue would not prevent the equipment from performing its safety-related function. Table 5-3 at the end of this section shows 19 issues identified in the Area Walk-bys.

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 3	The instrument pipe behind valve 1RH-716B has a long horizontal cantilever. The first support clamp is loose.	X			The seismic walkdown team assessed the potential interaction during the walkdown and determined not to be a concern. The pipe will not move enough to interact and damage seismically qualified equipment. Initiated CR.	Work request initiated to repair.
AWB 5	Masonry wall located behind 2CV-351. Could not determine if wall was seismically evaluated.			X	NextEra Engineer determined that the masonry wall was not in vicinity of safety related equipment. Initiated CR.	Closed
AWB 8	The nuts for the south post for 1T-006A are not fully tightened.		X		Initiated CR. NextEra Engineering performed a preliminary calculation to show that there is sufficient capacity in the remaining bolts to prevent the tank from overturning and becoming an interaction concern.	Work request initiated to repair.

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 9	An S-Hook supporting a light fixture was observed to be opened.	X			In the judgment of the walkdown team, the light fixture would not fall and interact with any seismically qualified equipment. Initiated CR.	Work request initiated to repair.
AWB 15	The public address speaker is close to an instrument line and could interact with it.	X			The seismic walkdown team determined that the tubing was sufficiently rugged that it would not be damaged by the speaker in a seismic event. Initiated CR.	Work request initiated to repair.
AWB 19	A 3/8" tube for valve 1SI-881A has a long span (~10') and is very flexible.	X			The walkdown team judged that the tube was not an interaction hazard and would deflect but not break in a seismic event. A preliminary calculation of the tubing spans showed that the tubing will not overstress. Initiated CR.	Work request initiated to repair.

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 19	On the west wall there is a flexible pipe from SI-917A that appears to bearing on some conduit clamps. The hose could dislodge from the clamps and interact with items below.	X			The walkdown team determined that the condition was not a seismic concern. There were no soft targets immediately below. Initiated CR.	Work request initiated to repair.
AWB 19	A conduit for valve 2SI-825C is attached to the flange of a vertical hanger with clamps oriented such that they are resisting dead load with friction. Clamps should be re-orientated.	X			The conduit is attached to nearby cable tray JG08 and will not fall. Initiated CR.	Work request initiated to repair.
AWB 19	A copper instrument air pipe is attached to a vertical hanger with clamps oriented such that they are resisting dead load with friction. The clamps should be reoriented.	X			The bottom support of the pipe is oriented correctly. There is a support in the horizontal run at the top of the riser. Based on this the pipe is judged not to fall. Initiated CR.	Work request initiated to repair.
AWB 19	There are two lights in the area that are attached to structural steel with magnets. It is suggested that the magnets be backed up with lanyards to assure they will not fall.	X			The lights were tug tested and determined to be adequately supported. Initiated CR.	Closed

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 20	A pipe support in the north west corner of the room was observed to have potential deficiencies. The support is a structural member (W shape) with the weak axis resisting dead load welded to a four bolt anchor plate at each end. One of the anchors on the south plate is missing. The west flange of the support and about ½ of the web are notched in three places. There is a shackle on the south west anchor on the north plate.	X			The walkdown team judged it to be acceptable since the support is lightly loaded. CR initiated.	Being tracked in the CAP.
AWB 24	Various housekeeping items identified at Elevation 66, above the SFP Hx area	X			The walkdown team judged the items acceptable due to no soft targets in the area. Initiated CR.	Work request initiated to repair.
AWB 24	The anchors for T-161A appear to be in oversized holes and some had minor corrosion.		X		The walkdown team judged the anchors to be adequate to support the tank. Initiated CR.	Work request initiated to repair.
AWB 24	The piping from T-161C to the header is not clamped to the supports. Hence it is not laterally supported.	X			The walkdown team judged the piping to not be a falling hazard since there are no soft targets below. Initiated CR.	Work request initiated to repair.
AWB 27	There is a missing anchor bolt on the pipe support west of P-31A	X			Previously identified and evaluated in CR.	Work Request initiated to repair.
AWB 27	There is a missing anchor bolt on the base plate north west of P-31A for a chlorination line.	X			Previously identified and evaluated in CR.	Work Request initiated to repair.

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 27	There is corrosion on P-31A and P-31B base plates.	X			Corrosion evaluated by NextEra Engineering and determined to minor surface corrosion and not a concern. CR initiated.	Closed. Will be tracked through structures monitoring program.
AWB 42	The G-01 diesel room contains threaded fire protection piping that is supported from threaded rod hangers. The fire protections system is only laterally supported at a connection to a fire protection header which comes into the room through a wall. The lines are supported off various lengths threaded rods that are typically attached to a shell type anchor in the concrete ceiling. On the west end, the fire protection line and a sprinkler head are relatively close to the room fans. The Seismic Walkdown Team was unable to conclude that the fire protection pipe and sprinkler head would not move and interaction with the fans. In addition, the team could not conclude that the fire protection line would not deflect in a manner that would cause the threaded fittings to leak.			X	NextEra Engineering performed a walkdown and determined that much of the area is not susceptible to issues do to spray. A preliminary evaluation was performed for the piping at the west end of the room and it was determined that the piping is within code allowable stresses and will not leak. This preliminary evaluation was considered a bounding case and thus the remaining piping will not leak. Initiated CR.	Being tracked in the CAP.

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 48	The cable tray overhead spanning from C-180 to C-181 is sagging and several of the rungs are bent.	X			The walkdown team determined that the cable tray is sufficiently supported that it would not fall. CR initiated.	Closed

6

Licensing Basis Evaluations

Potentially adverse conditions identified during the walkdowns were documented on the Seismic Walkdown and Area Walk-By Checklists, as appropriate, and entered into the CAP.

7

IPEEE Vulnerabilities Resolution Report

The seismic assessments performed for the PBNP IPEEE Report (Ref. 4) and A-46 Report (Ref. 14) was reviewed for any seismic vulnerabilities identified. Several plant improvements were made in response to seismic assessments in the IPEEE and A-46 walkdowns. A list of the outlier resolutions is provided in Table 3 of the SWEL Report included in Appendix B.

8

Peer Review

The Peer Review Report is included as Appendix F. This includes the peer review of the SWEL selection, peer review of the seismic walkdown, and peer review of this report.

9

References

Reference drawings related to SWEL items are provided in the Seismic Walkdown Checklists and if applicable, in the Area-Walkdown Checklists.

1. EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012.
2. Point Beach Final Safety Analysis Report (UFSAR), Dated 2012.
3. WE Letter VPNPD-95-056 from Bob Link to NRC Document Control Desk dated June 30, 1995, "Dockets 50-266 and 50-301, Generic Letter 88-20, Supplement 4 (TAC NOS. 74452 and 74453), Summary Report on Individual Plant Examination of External Events for Severe Accident Vulnerabilities, Point Beach Nuclear Plant, Units 1 and 2"
4. Point Beach Report REP-0699, "Point Beach Nuclear Plant Individual Plant Examination of External Events for Severe Accident Vulnerabilities Summary Report" dated June 30, 1995.
5. NRC (E Leeds and M Johnson) Letter to All Power Reactor Licensees et al., "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendation 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," Enclosure 2.3, "Recommendation 2.3: Seismic," dated March 12, 2012.
6. NRC Letter from Beth A. Wetzel to Michael B. Sellman, dated September 15, 1999, "Point Beach Nuclear Plant, Units 1 and 2 – Review of Individual Plant Examination of External Events (IPEEE) Submittal (TAC NOS. M83661 AND M83662)"
7. TID-7024, Nuclear Reactors and Earthquakes", August 1963
8. G. W. Housner, "Design of Nuclear Power Reactors Against Earthquakes" Proceedings of the Second World Conference on Earthquakes Engineering, Vol. 1, Japan 1960.
9. ACI 318-63, Building Code Requirements for Reinforced Concrete
10. AISC Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings, April, 1963.
11. ACI 318-89, Building Code Requirements for Reinforced Concrete

12. AISC Manual of Steel Construction, 9th Edition.
13. USAS B31-1-1967, Power Piping
14. USNRC Generic Letter 87-02, USI A-46 Resolution, Seismic Evaluation Report, Rev. 1, June 1996.

A

Project Personnel Resumes and SWE Certificates

A.1 INTRODUCTION

Resumes and certificates from the EPRI Walkdown Training Course for the personnel that contributed to the seismic walkdown and/or peer review are included in this Appendix.

A.2 RESUMES & CERTIFICATIONS

DOUGLAS P. BROWN

SUMMARY Over thirty two years of experience includes a diversity of civil engineering aspects such as researching and writing technical documents, procurement related activities and structural design. Competent in codes such as AISC and AWS. Computer literate with experience on numerous software programs. SQUG certified.

EXPERIENCE

Technical Documents

- Assembled, compiled and published design criteria.
- Researched and wrote procurement specifications and coordinated requirements with other technical disciplines e.g. electrical and mechanical engineering departments.
- Researched and wrote maintenance manuals for plant roads, drainage systems and roofs
- Wrote procedures for collection of field data
- Assessed QAIQC findings and nonconformance reports and issued responses specifying appropriate actions to be taken by responsible personnel.
- Reviewed wastewater treatment facility modifications for acceptability. Reviewed, collated and evaluated field data sheets.
- Developed manhour estimates for Civil engineering for budget negotiations. Evaluated plant equipment and generated engineering reports. Investigated fuel cleanliness and issued an engineering report.
- Point Beach Nuclear Plant Seismic Qualification Program Responsible Engineer

Design Calculations

- Performed calculations for the design/evaluation of structural beams, columns, connections and anchor bolts
- Evaluated existing structures using various load case combinations including seismic load cases by means of structural calculations.
- Performed analysis of plane frames and trusses, and space frames and trusses using various computer programs such as STARDYNE and GTSTRUDL
- Executed structural calculations for the design of equipment foundations and equipment access platforms
- Calculated storm runoff and drainage flow estimates for sizing of drainage culverts.
- Calculated cut and fill estimates for fill material to be used in construction of an industrial plant

DOUGLAS P. BROWN

Page 2

Procurement

- Assembled purchase requisitions.
- Oversaw and provided guidance for procurement activities for civil engineering department.

Field Engineering

- Researched applicable drawings, procedures and criteria to be used by craft personnel for installation/modification of structures.
- Assembled and wrote work plans to provide instructions to craft personnel for performing and documenting their work.
- Interfaced with craft and design engineering to resolve problems regarding installation/modification of structures.

WORK HISTORY

2007-Present **Next Era Energy** (formerly Florida Power & Light Energy – Point Beach
2001-2007 **Nuclear Management Co.**, Senior Engineer
1998-2001 **DUKE ENGINEERING & SERVICES**, Engineer
1997-1998 **RAYTHEON ENGINEERS AND CONSTRUCTORS**, Consulting Engineer
1996- 1997 **SELF-EMPLOYED**, Painting contractor
1993-1995 **RAYTHEON ENGINEERS AND CONSTRUCTORS**(formerly Ebasco Constructors, Inc.), Spring City, TN, Field Engineer 1
1991-1993 **EBASCO SERVICES, INC.**, Spring City, TN, Senior Engineer
1987-1991 **EBASCO SERVICES, INC.**, Spring City, TN, Engineer
1984-1987 **EBASCO SERVICES, INC.**, Stuart, FL, Engineer
1981-1984 **EBASCO SERVICES, INC.**, Elma, WA, Senior Associate Engineer
1979-1981 **EBASCO SERVICES, INC.**, Jericho, NY, Associate Engineer
1978-1979 **EBASCO SERVICES, INC.**, Jericho, NY, Assistant Engineer

EDUCATION

Bachelor of Engineering (Civil), City College of New York, NY, 1978

CERTIFICATES

Engineer-In-Training - Washington State No. 11 134

COMPUTER SKILLS

- Structural Analysis Programs: STARDYNE, GT STRUDL, BASEPLATE 11
- CAD: AutoCAD LT, DesignCAD 3D, Generic CADD, MicroStation

- Word Processing: Word Perfect (DOS & Windows) • Database: DBase III, Foxpro • Spreadsheet., Lotus 1-2-3
- Operating Systems: DOS, Windows



JEFFREY J. BUBOLTZ, P.E.

EDUCATION

Milwaukee School of Engineering, Milwaukee, Wisconsin
B.S. Architectural Engineering; May 1992
Major G.P.A. 3.26 (4.0)
Studies Included: Construction Practices and Management, Concrete Design, Estimating, Foundation Design, Structural Analysis, and Steel Design.

**WORK
EXPERIENCE**

NextEra Energy Point Beach LLC, Two Rivers, WI
Senior Rapid Response Engineer
May 2011- present

Responsible for emergent structural engineering issues at the plant. This includes the engineering work and the required paperwork for the NRC.
Projects/Accomplishments include:
Successfully completed Systems Training which is a requirement to be an engineer at the plant. Systems teaches all aspects of the nuclear plant and the operations of the plant.

Foth Production Solutions, Green Bay, WI
Lead Structural Engineer
May 2006- May 2011

Responsible for reviewing project requirements, writing proposals, working with designers, managing project schedule and budget, and issuing final construction documents.
Projects include:
Structural Transition Leader: After being awarded engineering services for major paper mill in Pennsylvania, traveled to site to lead the structural group. Also was the site contact for all structural work and worked with Foth engineers and outside consultants to complete work. Participated in the interview process to find a permanent on-site leader.
Structural Audit: Completed field work to observe all areas of paper mill to identify structural deficiencies. Used clients CBA to complete repairs based on severity of damage which included engineering the repairs and working with contractors to complete the repairs.
On-Site Structural Engineer: Worked with on site contractor and plant personnel in almost every department to assist with new projects, repair projects, shutdown repair work, and maintenance work.

STS Consultants, Ltd., Green Bay, WI
Project Engineer
June 2004 – April 2006

Responsible for leading and supporting civil/structural design projects involving concrete repair, steel reinforcing of structures and dock wall design for private and public sectors. Project manager for dock wall projects coordinating permits with the WDNR and Corps of Engineers.
Projects include:
Coke Tower Repair: Designed temporary platforms for contractors to work from to make repairs to coke tower concrete platform. Also assisted to

develop brackets to lift the coke tower so repairs could be made to the concrete base.

Dock Walls: Designed the supports and connections for public and private dock walls. Worked with clients to obtain funding for the projects. Also worked as project manager developing project manuals, schedule, change orders, and coordination with the contractor.

Kocken & Associates, DePere, WI

Structural Engineer

May 2003 – June 2004

Responsible for the design of equipment supports, bridge cranes, foundations, and platforms. Worked with vendors on equipment layouts and obtaining certified drawings. Also responsible for shop drawing review.

Projects include:

Green Field Paper Mill: Supplemental structural design of waste paper storage, de-ink, paper machine, and converting buildings; and utility supports.

Baisch Engineering, Kaukauna, WI

Structural Engineer

March 1996 – April 2003

Responsible for leading and supporting civil/structural design effort related to site development, building structural systems and foundations, foundations for independently supported equipment support systems, and other structures such as tanks, exhaust stacks, platforms, and towers.

Projects include:

Mill Structural Survey: Evaluation, analysis, and design related to capacity of existing structures and design to enable structures to meet existing and new loads. Project included analysis of truss system over supercalender and winder to carry crane loads and reinforcement required to enable existing mezzanine to be used for material storage.

Starch Silo Foundation: Design of foundation for new starch silo (82'tall x 14'diameter). Poor organic soil, tight space, and cost considerations made for a challenging spread foundation design.

Screw Press Installation: Install a new screw press in an existing building. Modified existing building by removing portions of second level to install new press and crane system.

Paper Machine Rebuild: Convert dry crepe machine to a swing machine capable of tissue and towel. New foundation for pressure screen over u-drain.

Replaced motors and reinforced floors for increased loads. Design based on keeping machine in operation during construction.

**COMPUTER
KNOWLEDGE**

Enercalc, SAFE, RISA, Word, and Excel

INTERESTS

Golf, Boating, Fishing, and Family



Stanley E. Guokas
PROFESSIONAL ENGINEER

SUMMARY

- Experienced in HRA, fault tree analysis, event tree analysis, data analysis, common cause, HAZOPs, what-if, checklist, FMEA and FMECA.
- Knowledgeable in use of PRA tools including NUPRA, WINNUPRA, SAPHIRE/IRRAS, CAFTA, ORAM-Sentinel and support codes.
- Twenty two years experience in Safety and Probabilistic Risk Assessments.
- Lead experience in PRA.
- Qualified for root cause evaluations.

EXPERIENCE AND QUALIFICATIONS

Probabilistic Risk Assessment - Performs PRA tasks for various PRA projects including data analysis at Point Beach, Quad Cities, Lungmen and Clinton, fault tree development at Angra, Quad Cities, Clinton, Dresden and LaSalle, event tree development at Quad Cities, Point Beach and Angra, HRA at Point Beach and Quad Cities, Angra and Lungmen, common cause failure at Quad Cities and Point Beach, independent peer review of PRA for maintenance rule at Kewaunee, Braidwood and Prairie Island, internal flooding at Point Beach and Quad Cities, PRA analysis to support maintenance rule at Point Beach, Fire analysis at Point Beach, initiating event frequency analysis at Quad Cities and Point Beach, risk ranking of equipment at Quad Cities, Point Beach and Kewaunee, developed and tested ORAM-Sentinel model for Quad Cities, LaSalle and Dresden, PRA analyses to support diesel-generator AOT extensions, PRA analysis to support reduced test frequency on safety related components, Safety Monitor implementation projects at D. C. Cook. Prepared PRA notebooks and summary reports for Quad Cities, Lungmen and Point Beach. Performed software testing on 32 PRA software applications and developed installation CIDs with instructions for upgrading software on computers. Developed top logic models for Point Beach Units 1 and 2, Quad Cities Units 1 and 2, and Clinton.

Developed RG 1.200 compliant Point Beach PRAs for Internal Events, High Winds and Internal Flooding.

Performed IPE and IPEEE analysis and submittals to the NRC for Point Beach. Developed External events analysis for Point Beach including fire, external flood, high winds and tornados.

Hazard's analyst for Yucca Mountain. Developing specification for single failure proof cranes and electric locomotives. Evaluating scenarios for equipment damage, lost production time and worker/public hazards. Preparing methodology for assigning dollar value to risk profile.

Stanley E. Guokas

Page 2

Developed the Lungmen Final Safety Analysis Report - Probabilistic Risk Assessment Section, a risk informed FSAR. Resolved comments from previous draft. Made the document traceable and transparent. Developed system descriptions for the FSAR, reviewed and provided corrections to fault trees, corrected basic events file and common cause failure calculations, reviewed and commented on event trees, reviewed shutdown PRA and provided comments on fault trees, HEPs, fire analysis, event trees and data analysis. Created fault trees and draft system notebooks for the FIN 5 GE project. Reviewed event trees for the BWR owner's group. Completed parts count, FMECA and Fault Tree analysis on variable speed drive for reactor coolant pumps.

Updated Point Beach FSAR to be consistent with licensing basis and design basis documentation. Prepared, presented and had accepted thirty-three 50.59's in support of this effort. When completed, the FSAR, licensing basis and design basis documentation all matched.

Provided hazardous chemical reviews at Presque Isle Power Plant and Port Washington Power Plant as required by EPA and OSHA. As lead, had to assemble team, prepare for review, document review and obtain buy-in from team members, plant staff and management. Reviews met EPA and OSHA requirements. Recommendations led to significant cost reductions at both locations.

Performed root cause evaluation at Point Beach for inadvertent loss of reactor coolant while at reduced inventory. Evaluation clearly identified cause and enabled viable solutions to be implemented. Evaluation included development of TAP-ROOT model, obtaining background information, interviews and final report.

Developed weak link analysis for Point Beach motor operated valves. Needed individual analysis for each type of valve. Used MATHCAD to develop models for motor operators and valves which provided information that was verifiable, retrievable, and easy to use for parametric studies.

Performed system analysis using fault tree methodology to determine reliability of modification to the service water system at Point Beach. Determined modification would reduce reliability of service water system as proposed. Used fault tree methodology to determine modifications which would improve system reliability and reduce cost. Modification cost was reduced by \$5,000,000 over initial design.

Performed PRA in support of Security at Point Beach. Developed methodology which identified potential weaknesses in the security plan through use of fault trees. Enabled security and operations to redeploy to critical areas based on compromised conditions and provided direction to operations on how to safely shut down the units after loss of equipment.

Stanley E. Guokas

Page 3

Project Manager - Project manager for cradle to grave management of more than 40 modifications to Point Beach Nuclear Plant. Modified reactor internals, instrument air, main and extraction steam, low and high pressure steam turbines, air and motor operated valves, moisture separator reheaters, feedwater heaters, turbine lube oil, turbine bearings, hydrogen coolers, turbine oil lift system, chemical sampling panels, HVAC for battery rooms, electrical equipment rooms and control room. Cognizant engineer for analytical, and design issues relevant to Point Beach Nuclear Plant. Responded to Generic Letters and Information Notices from NRC and INPO. Provided design calculations when required to support continued operation of Point Beach. Performed 50.59 reviews in support of modifications. Provided budget analysis, capital vs. expense advisories, specifications, recommended modifications, implementation, commissioning and closeout of modification packages.

EDUCATION

University of Wisconsin
Bachelor of Science, Nuclear Engineering, 1974

LICENSING AND CERTIFICATIONS

Professional Engineer, State of Wisconsin

Scott D. Kahl, P.E.
Sr. Project Engineer

Current Employer

Point Beach Nuclear Plant
Two Rivers, Wisconsin
October 2008 - Present

Education

North Dakota State
University
B.S., Civil Engineering,
1998
Emphasis: Structures

Registration

PROFESSIONAL ENGINEER:
WISCONSIN, 2006
MINNESOTA, 2006

Civil Engineer:
California, 2002

Professional

ASCE

Computer Skills

RISA3D, MathCAD,
Enercalc, Excel and
Word, AutoCAD

Activities

Habitat for Humanity
ATC-20 Certified
Co-Founder of PGJ
Foundation

Areas of Experience

Serves as Sr. Project Engineer in the Civil/Structures group with more than 13 years of progressively responsible experience in the field of Civil/Structural and power piping.

Responsibilities include Structures Monitoring Program Owner, IWL responsible engineer, safety evaluations, engineering analysis, condition reports, modifications, lead shielding and fall protection packages and structural inspections. Acted as temporary Civil/Mechanical Project Engineering Supervisor for Capital Projects Group.

Past Work Experience:

STS | AECOM
Project Engineer

October 2005-October 2008

Responsibilities included structural evaluation, non-destructive testing, seismic and structural design on simple to complex engineering projects. Extensive experience in seismic design in steel and wood structures. Experience also includes project management, deriving and maintaining the budget and schedule, preparation of construction documents, construction administration and overseeing technical and nontechnical staff. Engineer of record on multiple projects with seismic design and detailing requirements.

Dominion Energy Kewaunee – Polar Crane

Kewaunee, Wisconsin

Performed a structural engineering analysis and evaluation on the box girder for the 235-ton Polar Crane. RISA 3D was utilized for the finite element analysis.

Dominion Energy Kewaunee – ISFSI

Kewaunee, Wisconsin

Structural rebar observation on the mat slab reinforcement for the Independent Spent Fuel Storage Installation project. Verified the reinforcement was placed as per the construction documents.

Lambeau Field

Green Bay, Wisconsin

Derived the bowl seating area concrete condition assessment program, evaluated the pre-cast concrete seating elements through the use of drilled power samples which determined the depth of carbonation and chloride ion penetration, half-cell potential testing to measure the in-situ driving force for electrochemical corrosion and corrosion-rate monitoring to measure in-situ rate of reinforcing steel loss.

Infinity Tower

Dubai, UAE

Responsible for the evaluation of the cross-lot braces supporting the failed sheet pile wall. RISA 3D was utilized to analyze the ordinary moment frames resisting the stability demands from the braces.

CTA Subway Evaluation

Chicago, Illinois

Responsible for the evaluation of two subway tunnels in downtown Chicago. The first tunnel had a 3-foot slurry wall located 18 feet away from the tunnel's edge with an anticipated movement of 2 3/8-inch, the tunnel was analyzed to evaluate induced stresses due to slurry wall deflection. The second tunnel was below an attached parking ramp for a 39-story, 350-unit apartment tower and was evaluated for the increased vertical demands. Both tunnels were evaluated following an ASD approach utilizing RISA 3D.

Scott D. Kahl, P.E.
Sr. Project Engineer

DASSE Design, Inc. San Francisco, California
Project Engineer

January 1999-October 2005

Don Callejon K-8 School

Santa Clara, California

Derived project budget and schedule, responsible for the production of construction documents, calculations, specifications, client interaction, construction administration activities, management of staff engineers and drafting personnel. This \$16.5M campus included three wood construction and two wood/steel hybrid buildings. The hybrid buildings included SMRFs to resist the wind and seismic lateral forces.

Morgan Hill Courthouse

Morgan Hill, California

Responsible for all facets of the project design, management of team members and budget for the two story \$15M county courthouse supported by a steel superstructure with concrete fill over metal deck and SCBFs.

Horace Mann Elementary

San Jose, California

Designed and detailed the CMU bearing and shear wall multi-purpose building for Horace Mann Elementary School, a \$16.2M project and winner of the 2004 Concrete Masonry Design Award.

Patterson Middle School

Patterson, California

Designed, detailed and performed construction administration for the \$16.3 million, 10 building middle school campus with Wood Shear Walls and Ordinary Moment Resistant Frames.

Dublin Fire Stations #17 and #18

Dublin, California

Managed project budget, schedule, production of construction documents, calculations, drafting personnel and client interaction on two Fire Stations supported by CMU and Wood bearing shear walls with an OMRF at the apparatus bay.

McCarthy Construction, San Francisco, California

Summer 1998

Engineer Intern

- Reviewed shop drawings, RFIs, change orders.
- Calculated quantity takeoffs on various projects for the Senior Estimator.

Weir/Andrewson Associates, San Rafael, California

Summer 1997

Structural Engineer Intern

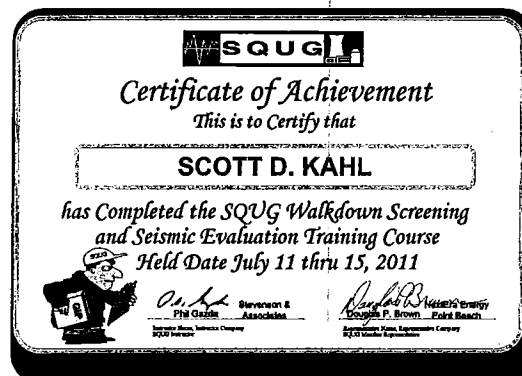
- Derived roof, deck and retaining wall design calculations.
- Developed proposals and design fixes for construction errors.

American Engineering Testing, St. Paul, Minnesota

Summer & Fall 1996

Engineer Technician Intern

- Monitored quality control on construction projects
- Performed laboratory tests on concrete cylinders, blocks, and core samples.



Richard L. LaPlante

Work Experiences

Point Beach Nuclear Plant

Next Era Energy, Two Rivers, WI

Sr. Engineer – Civil/Mechanical Design Engineering July 2008 - Present

- Provided day to day support of emergent issues as they arose to ensure continued safe operation of the in service units (including operability reviews) – with a focus on piping and structural issues
- Addressed corrective actions for the Structural group on a range of issues (including seismic), with a focus on piping systems
- Provided reviews of modifications to site systems, structures, and components, including seismic reviews of equivalencies
- Supported Engineering inspections by external regulators
- Completed evaluations, calculations, drawings, etc. necessary to support design installations
- Provided rapid support to various departments during the site refueling outages

Greenheck Fan Corp., Schofield, WI

Sr. Product Development Engineer – Testing Services April 2005 – June 2008

- Independently managed projects that utilized FEA and CFD to aid in the research and development for various engineering departments. This included design and oversight of special requests necessary to achieve specific performance, and analysis of new product development options.
- Responsible for providing analyses on various fans to assist in diagnosing field problems/failures, as well as testing to ensure safe operation of fans under specified design conditions.
- Provided input and oversight of testing in the structural test lab. Used insight to address and resolve various problems as they arose and aided in test plan development.
- Provided general computer aided analysis and structural design support to the various design groups throughout the company.

Product Development Engineer - CVI November 2003 – April 2005

- Assisted in the testing and implementation of the AX fan product line into production including expedited testing and submission of data for third party classification.
- Responsible for addressing daily manufacturing issues and resolving production problems.
- Managed several projects that modified component design to gain efficiency and cost savings
- Other tasks included performing vibration testing and troubleshooting, handling of UL product issues, providing structural design support through finite element analysis, etc.

Skills/Training

Completed the SQUG Walkdown Screening and Seismic Evaluation Training Course (July 2011)

Completed Bentley AutoPIPE vendor training program

Completed Greenheck's Design for Excellence Course

Completed Greenheck's Project Management Course through UW-Stevens Point

Completed Fluent CFD and Algor FEA training seminars

Attended and completed various fan design related seminars (including Metals Fracture and Failure, Plastic Material Selection, Wind Load Analysis, Seismic Design)

Experience using IronCAD, Autodesk Inventor, and AutoCAD

Previous experience with MathCAD, Matlab

Education

University of Wisconsin-Platteville, Platteville, WI

Graduation Date: May 2003

Bachelor of Science in Mechanical Engineering (ABET Accredited)

Mechanical Design Emphasis Cumulative GPA: 3.9/4.0

Education Achievements and Honors

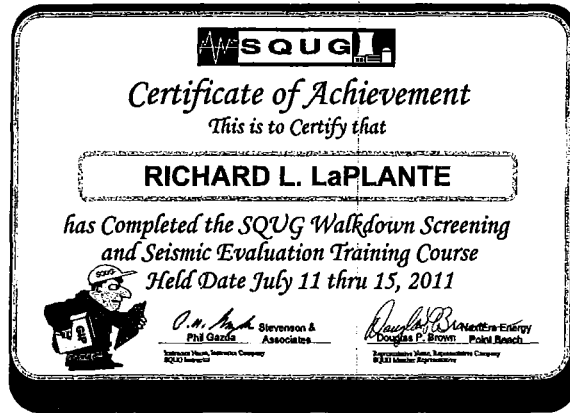
Completed Fundamentals of Engineering Exam

Chancellor's List 5 Semesters, Dean's List 8 Semesters

Wisconsin Academic Excellence Award/Scholarship

Member of Phi Eta Sigma, Alpha Lambda Delta, Pi Tau Sigma, Tau Beta Pi, and Phi Kappa Phi honor societies

References upon Request



Coreen McDonald

Objective

To obtain an Design Engineering Position in the Nuclear Utility Industry.

Education

Architectural Technology: Associate Degree 2005
Northwest Wisconsin Technical College, Green Bay, WI.

Civil Engineering: Bachelor of Science 1985
Michigan Technological University, Houghton, MI.

Professional Experience

Next Era Energy, Two Rivers Wisconsin August 2007- Present
Civil/ Structural Design Engineer
Engineer II

- Preparer of Minor Modification in the Design Engineering Group
- Rigging Evaluation
- Floor Loading Checks
- Anchor Bolt Evaluations
- Safe Load Path Issues
- Seismic Issues or Evaluations
- Lead Shielding Evaluation
- Fall Protection Concerns
- Ground Water Issues

Somerville Inc., Green Bay Wisconsin May 2005- November 2006
Structural Drafter/Detailer

- Preparer of all structural foundation, floor and roof plans with details and schedules for a 50 person A/E firm.

Unifed School District of DePere 2002-2004
Substitute High School Math Teacher

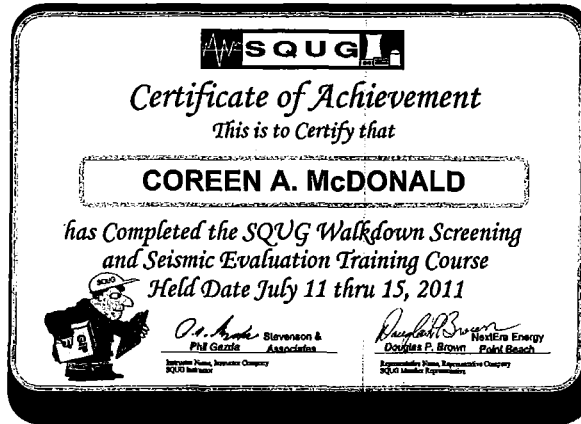
Bublitz/Spancrete Inc 1986-1987
Drafter/Detailer

- Drawing and detailing precast concrete floor systems

Accreditations

- Engineer in Training (EIT) 1986

References Available Upon Request



Mark C. Nielsen, P.E.

Summary

Three and one-half years of experience in design engineering at a nuclear power plant.

Twenty years of experience in applications engineering, technical sales and project engineering for the paper industry.

Thirteen years of experience in structural/civil design engineering and in the engineering management of major industrial projects. This experience includes projects in the mining and metals, pulp and paper, petrochemical, and manufacturing industries.

Work Experience

Nuclear Engineer – Senior Point Beach Nuclear Power Plant, Two Rivers, WI	2009 to Present (3 ½ years)
--	--

Provided engineering support for nuclear power plant operations, maintenance, and outages.

- Engineering support includes: structural/civil design and analysis, walkdowns, recommendations, condition evaluations, inspections, prepare 50.59 screenings, repairs, rigging analysis, and the design of jigs and fixtures.
- Completed the SQUG Walkdown Screening and Seismic Evaluation Training Course.
- Major Engineering Qualifications: Prepare Calculations and Engineering Evaluations, Prepare 50.59 Screenings, Rigging Evaluator, Aging Management Program Owner.

Screening Applications Manager J&L Fiber Services, Green Bay, WI	2005 to 2009 (3 ½ years)
---	---

Provided engineering analysis and technical support for screen cylinder and rotor sales to the paper industry.

- Analyzed existing pulp screening systems to identify problem areas and to find opportunities for improvement. Made recommendations and prepared proposals based upon the findings.
- Prepared interactive process flow models for both existing and new systems. These models were utilized both as a basis for system design and as tool for presenting recommendations to the customer.
- Conceived and developed sophisticated spreadsheet-based design tools (utilizing VBA code) that automated and simplified process and design calculations.
- Prepared and conducted training seminars for mill personnel.

Regional Product Manager Andritz, Inc., Green Bay, WI Regional Sales Manager Fiedler, LP, Green Bay, WI (Fiedler was acquired by Andritz in 2003.)	1993 through 2004 (11 ½ years)
---	---

Sold screen cylinders and rotors to paper mills in the Midwest Region. Provided technical support to the mills both before and after the sale.

- Audited and inspected existing paper mill screening systems to evaluate system efficiency and to determine the mechanical condition of the equipment.

- Measured existing equipment and prepared engineering sketches to be used for the manufacture of replacement components.

Regional Sales Manager Kleinfewers – Paper Converting, Green Bay, WI Project Engineer Kleinfewers Corporation, Enfield, CT	1987 to 1993 (6 years)
---	---------------------------

- Technical sales representative for soft calenders, and roll finishing systems to paper mills. Gave technical presentations and prepared detailed technical proposals for offered equipment.
- Project engineer for supercalender, soft calender, and roll finishing projects. My responsibilities began with the initial customer contact and continued through the proposal, contract negotiation, engineering, installation, and start-up stages of the project.
- Prepared conceptual designs and proposals for roll finishing systems.

Senior Engineer V Brown and Root, Inc., Houston, TX	1985 through 1986 (2 years)
--	--------------------------------

Participated in the engineering of projects in the pulp and paper industry.

- Modified the structural design of an existing facility for a major paper machine rebuild. Provided engineering support at the mill site during the construction phase of the project.
- Prepared structural designs for the modification of a paper machine and associated facilities.
- Coordinated the design effort for a finishing and shipping facility

Senior Civil Engineer Sohio Construction Company, San Francisco, CA	1981 through 1984 (3 ½ years)
--	----------------------------------

- Directed, monitored and approved the work of engineering consultants in their design of petroleum production facilities for Prudhoe Bay, Alaska.
- Prepared standard specifications and design criteria. Provided conceptual design input.

Senior Engineer Brown and Root, Inc., Houston, TX	1974 to 1981 (7 years)
--	---------------------------

Initially designed and later managed the design of major industrial structures, primarily in the mining and metals industries. Held responsible positions on a variety of projects and supervised as many as eighteen engineers and designers.

- Directed the structural design of a 200' x 400' process building for a soda ash plant.
- Supervised the structural/civil design of a major expansion of a fiberglass insulation plant.

Education and Professional

- B.S. Civil Engineering, Brigham Young University, 1974
- Registered Professional Engineer



DAVE J. NUTTALL, P.E.

Resume

05-1986 BSCE with honors from **Michigan Technological University**, Houghton, MI
Area of focus: Structural analysis and design of wood, concrete, and steel.

06-1986 thru 10-1986 – **Enterprise Engineering Consultants, Inc.** Peshtigo, WI
Structural analysis and design of glu laminated timber for structures around the world

12-1986 thru 05-1999 – **Alta Engineering Ltd.** Senior Project Engineer – Rolling Meadows, IL
First employee of a start up consulting Firm servicing dozens of Architects & Developers
Structural analysis and design of commercial, retail, educational, industrial, medical, municipal, recreational, & residential structures
Initiated CAD department. Converted office computers from DOS to Windows and added a network and file server (1998-1999)
Engineer of Record for IKEA store in Schaumburg – At the time (1999), one of the largest retail stores in North America.

Analysis:

Concrete: caissons, grade beams, structural 1-way and 2-way slabs, retaining walls, basement walls

Steel: Composite construction, beams, columns, bar joist, joist girders, plastic design, steel decking, moment frames

Masonry: Walls, pilasters, composite brick/block construction, bond beams, empirical design, reinforced masonry

Wood: Timber design, glu lam design, LVL design, PSL design, joist, trusses, stick built framing, balloon framing

Software:

RAM – Structural analysis and design – including lateral wind and *seismic modules* (1999)

AutoCad – versions 10 thru 14

Enercalc – Structural Analysis and Design

05-1999 thru 06-2000 – **Brander Construction Technology** Senior Engineer – Green Bay, WI
Pulp & Paper building renovation – Georgia Pacific Plant on Green Bay's east side
Forensic analysis
Expert witness testimony

06-2000 thru 11-2006 – **Somerville, Inc.** Senior Engineer – Green Bay, WI
Structural analysis and design of commercial, educational, medical, industrial, municipal, recreational, & residential structures
Engineered the President's proposed circular Bay Front house out of reinforced concrete using insulated concrete forms (ICF).

Analysis:

Concrete: caissons, grade beams, structural 1-way and 2-way slabs, retaining walls, basement walls

Steel: Composite construction, beams, columns, bar joist, steel decking, moment frames

Masonry: Walls, pilasters, composite brick/block construction, bond beams, empirical design, reinforced masonry

Wood: Timber design, glu lam design, LVL design, PSL design, joist, trusses, stick built framing, balloon framing

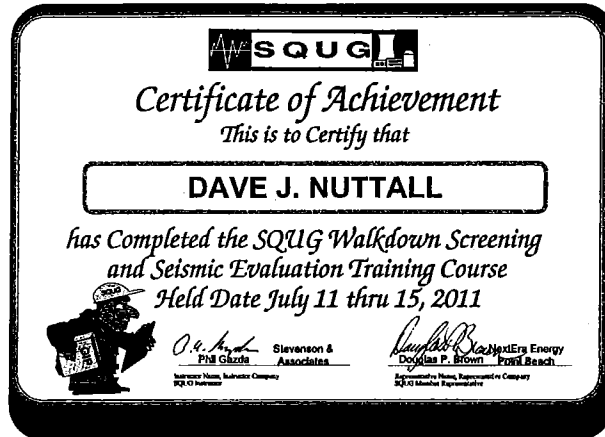
Software:

RAM – Structural analysis and design – including lateral wind and *seismic modules*.

AutoCad – version 2000

Enercalc – Structural Analysis and Design

01-2007 thru Present – **Point Beach Nuclear Power Plant** Senior Engineer, Two Rivers, WI
Civil Group – 2007 thru 2008 – *designed seismic conduit supports for the charging pump MOD*
Minor MODs group – 2009 thru present



Russ Severson
Senior Engineer
Duane Arnold Energy Center

SUMMARY

27 years of nuclear industry experience, with the last 6 years in the application of probabilistic risk assessment (PRA) technology including upgrading the internal event PRA model to meet industry standards.

WORK EXPERIENCE

1993-Present Senior Engineer –Duane Arnold Energy Center, operated by NextEra Energy

Probabilistic Risk Assessment Engineer (May 2006- Present)

Tasks performed:

- Responsible for the technical progress of the upgraded DAEC internal events PRA model to meet the Regulatory Guide 1.200 standard. Was technical lead for the project which included directing the upgrade of the accident sequences, system fault trees, applying a different Human Reliability Analysis process by implementing the HRA calculator, and upgraded the failure rate data and implemented a different common cause. Arranged and lead system manager and operations personnel interviews that included use of the simulator and an operations crew to evaluate different accident sequences.
- Participated as a peer in the full R.G. 1.200 Peer Review of the River Bend Station in 2011.
- Performed many significance determination, missed surveillance and plant mode change evaluations.

ISI/Repair and Replacement Engineer (2001- April 2006) and IST Engineer (1996-2005)

Tasks performed:

- Became the primary author of the site's fourth ISI 10 Year program update and regulatory submittal. The submittal updated from the 1989 Edition ASME B&PV Code, Section XI to the 2001 Edition through 2003 Addenda.
- Successfully implemented risk-informed ISI for Class 1 and 2 piping welds using the EPRI methodology. Successfully implemented VIP-75 augmented piping inspection program with Hydrogen Water Chemistry and Nobel Water Chemistry to significantly reduce the required number of inspections for the augmented IGSCC program.
- Primary author of the site's 4th Interval IST 10 Year Program update and regulatory submittal. The submittal updated the 1988 OM 6 & 10 Code to the 2001 O&M IST Code. Demonstrated job performance through aggressive corrective action resulting no or a low number of components on increased frequency testing, and never more than one pump on increased surveillance for many years.
- Was responsible for the site's Repair and Replacement Program, including authoring the majority of the code reconciliations and NIS-2 forms for two plant cycles. Primary author of the NIS-1 report for two refueling cycles.

Erosion Corrosion and Flow Accelerated Corrosion Lead (1996-2000) and IST Engineer (1996-2005)

Tasks performed:

- Wrote and implemented a trending software program used site wide for maintaining In-service Testing (IST) data.
- Successfully implemented new technologies such as Trace Chrome testing and Digital Radiography for the Flow Accelerated Corrosion and Service Water Corrosion Program.

Senior Plant Performance Engineer (1993-1995)

Tasks performed:

- Wrote and implemented Maintenance Rule software trending program site wide, where this software is still used today.

- Wrote and implemented Site wide trending program that combined Vibration, Lubrication Oil Analysis, and Thermography results. In 1995, INPO representative claimed this implementation was the first successful integration of these technologies in the industry, although many utilities had tried previously.
- Specified the technical details for the original purchase of the process computer PI-Server software.
- Successfully completed PEPSE training and tracked Plant Performance including identifying operational impact of leaking valves (megawatt loss determination).
- Managed the software certification process by serving as the QA Software Certification Committee Chairman for over a year at the site.

1992-1993 Site Lead – Life Cycle Engineering, Charleston, SC

Typical duties:

I was the site lead for installation of a client server PC-based trending program at Dresden Nuclear Power Station. Successfully designed the system and managed a site team at the station for determining the critical trend parameters for 14 different systems.

1989-1992 Lead Engineer - GENSYS Corporation, Bannockburn, IL

Typical duties:

I managed a team of four to develop preventive and predictive maintenance bases documents by performing reliability centered maintenance evaluations on systems at H.B. Robinson, SC and Fort Calhoun Station, NE. Successful work created many contract extensions.

At Fort Calhoun station wrote heat exchanger tests that extrapolate normal operating conditions to design conditions for safety related heat exchangers. Successfully justified the need for a full flow test line for the Auxiliary Feedwater System.

1985-1989 Plant Performance Engineer - Duane Arnold Energy Center, Palo IA

Typical duties:

Started the Rotating Machinery Vibration program on-site, including providing capability for transient data collection, phase and dual spectrum data capability.

Directed the design and testing of the remote vibration monitoring system with shaft crack potential for the Reactor Recirculation pumps.

Implemented an IST and advanced vibration analysis trending program.

Responsible for IST Program including authoring correspondence between site and NRC.

Performed 10 CFR Appendix J Leak Rate Testing including setting up and assisting in the performance of two different Integrated Leak Rate tests.

EDUCATION

Bachelor of Science in Mechanical Engineering, University of North Dakota, May 1985

Stevenson & Associates

DAVID N. CARTER

PROFESSIONAL EXPERIENCE

April, 1998-Present Wisconsin Electric, Point Beach Nuclear Plant (On loan from Stevenson & Associates)

Point Beach Nuclear Plant is located in Wisconsin between Milwaukee and Green Bay on Lake Michigan. Worked as Seismic Qualification Engineer responsible for performing seismic evaluations of plant equipment as well as providing input to procurement documents and reviewing seismic qualification reports for new plant equipment. Also worked as Design Engineer preparing and managing various plant modifications. Modifications included reinforcement of RWST anchorage, new HELB barriers and vent paths, new firewall, platform and foundation modifications. The modification preparations included preparing design change documents, 50.59 safety evaluations and calculations as well as assisting in resolution of installation problems.

December, 1997-April, 1998 Stevenson & Associates

Stevenson & Associates is a consulting engineering firm. Work includes design and analysis of building structures and components.

April, 1995-December, 1997 ComEd, Zion Station

Zion Station is a nuclear power plant that is owned and operated by ComEd, an electric utility serving northern Illinois. Member of design engineering group as a Senior Structural Engineer. Work included the scoping, cost estimating, design and preparation of design documents for various plant modifications. Prepared 50.59 safety evaluations for various plant modifications. Member of the Zion Seismic Review Team that implemented the SQUG program. Performed SQUG walkdowns and assessments. Proposed and implemented upgrades to SQUG outliners. Attended and completed the SQUG SCE Training.

April, 1984-April, 1995 Sargent & Lundy Engineers

Sargent & Lundy is a consulting engineering firm that specializes in the design and modification of power plants. Work included the design and analysis of building structures and support components on fossil and nuclear power plants. Assignment highlights include the following:

- Member of modification design project team at Zion Station.
- Member of Zion project team in Sargent and Lundy Chicago office for approximately two years. Worked on various modifications for Zion Station as a Senior Engineer in the Structural Engineering Division. Design activities included preparation, review or approval of design calculations, design documents such as engineering change notices and design criteria documents. Supervised up to four other engineers.
- Member of a design team working on the design of two new nuclear units located in Korea (Yonggwang 3&4). The design was done in the offices of Korea Power Engineering Corporation located in Seoul, Korea. Responsibilities included the design of the structural steel for the turbine building. The assignment involved working with and providing guidance for engineers from the Korean engineering company. The work also involved the preparation of design procedures, procurement specifications, and design calculations as well as the review of design drawings and shop drawings. The length of this assignment was approximately four years.

- Member of a group of engineers that worked on a weld evaluation program at Watts Bar Nuclear Power Station. The assignment included the evaluation of various weld discrepancies on structural steel connections and component supports. This assignment lasted one year.
- Member of various project teams which worked on the design of modifications for fossil and nuclear power plants. Projects include Dresden, Quad Cities, Byron, Braidwood Stations (Commonwealth Edison Co.), and Parish Station (Houston Lighting and Power). Work included the assessment of masonry walls, design of component supports, design of hot air ducts, evaluation of structural steel framing for final loads and preparation of study and design reports. Responsibilities also included the preparation and review of design documents, letters, supervising other engineers, and meeting with clients.

September, 1980-March 1984 **American Bridge Division - United States Steel Corp.**

American Bridge was a consulting engineering firm whose main client was U.S. Steel. They specialized in the design and modification of steel mill buildings. Assignments included the following:

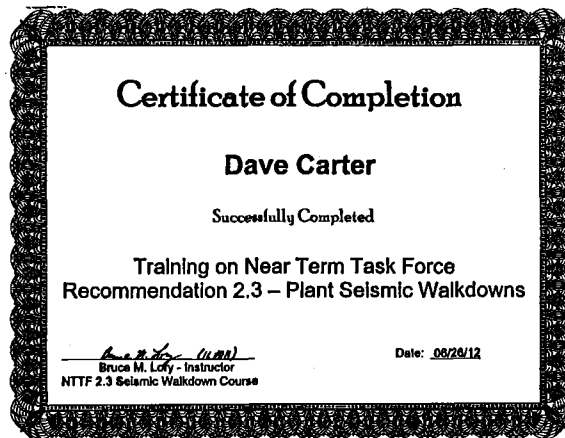
- Design of various modifications to blast furnaces.
- Member of group of engineers whose function was to inspect existing mill buildings, prepare a report of findings and recommend repairs. Included in this assignment was the preparation of design drawings showing the recommended repairs. This assignment lasted approximately one year.
- Loaned to Sargent and Lundy Engineers to assist in the design of component supports and the final load evaluation on Byron Nuclear Power Station. This assignment totaled approximately 16 months.

EDUCATION

Syracuse University, L. C. Smith College of Engineering; Bachelor of Science Degree in Civil Engineering.
Graduated Cum Laude.

PROFESSIONAL AFFILIATIONS

Licensed Professional Engineer in State of Minnesota
Licensed Structural Engineer in State of Illinois
Licensed Professional Engineer in State of Wisconsin



NABIL JURAYDINI

EXPERIENCE HIGHLIGHTS

Over 25 years of broad experience in the nuclear industry. Work highlights include: structural analysis; structural dynamic analysis; evaluation of steel and concrete structures; pipe stress analysis; high energy line break, seismic qualification of mechanical and electrical equipment; and use of SQUG methodology.

PROFESSIONAL EXPERIENCE

Stevenson & Associates

Chicago, IL
April 1998 – Present

Perform engineering and project engineering activities on a broad scope of projects. Typical engineering activities include:

- structural dynamic analysis
- seismic equipment qualification
- reinforced concrete analysis
- finite element analysis
- post tensioning tendons evaluations
- pipe stress analysis
- components & supports evaluations, modification and/or design
- SQUG walkdowns and evaluations
- plant walkdowns

Projects include:

- Point Beach:
 - Modification of decontamination structure to handle NUHOMS casks.
 - Design of new crane system for handling the new blowdown heat exchangers.
 - Design of supporting structure for new generator output breakers.
 - Analysis and modification of tanks and for seismic loads.
 - Review reports for the seismic qualification of equipment.
 - Perform SQUG walkdowns.
- Kewaunee:
 - Replace the reactor building equipment handling crane.
 - Design of tornado missile shield to protect pipes.
 - Perform review of seismic reports for new ICCMS system components.
- Prairie Island:
 - Evaluate the Turbine, Auxiliary, and Old service Building steel structures for tornado loads.
 - Perform pipe stress analysis for Main Steam, Steam to Auxiliary Feedwater Pumps, and Steam to Moisture Separator Reheaters.
- Ft. Calhoun:
 - Perform pipe stress analysis for the Main Steam line.
 - Perform pipe stress analysis to determine high energy line break and crack locations for the following lines: Feedwater, Steam to Auxiliary Feedwater Pumps, Steam Generator Blowdown, and Auxiliary Steam.
- Monticello
 - Design missile barrier for the DG exhaust pipe.
 - Evaluate the Admin. Bldg. for tornado loads.

NABIL JURAYDINI

- Braidwood & Byron
 - Review reports for the seismic qualification of equipment.
 - Perform post tensioning tendon evaluations.
- Dresden & Quad Cities
 - Develop median-centered response spectra for Reactor-Auxiliary-Turbine Bldgs.
 - Review reports for the seismic qualification of equipment.

**Northeast Utilities
Engineer**

Waterford, CT
May 1995 – March 1998

Mechanical/Civil Design Engineering Group

- **Lead Seismic Engineer:** Prepared, reviewed, and approved seismic requirements for purchase specifications for mechanical and electrical equipment. Reviewed and approved vendor supplied analysis and test reports which documented the seismic qualification of mechanical, electrical, and I&C equipment. Interfaced with the vendor to clarify and resolve qualification issues. Prepared, reviewed and approved seismic qualification documentation for plant modifications.
- **SQUG/G.L. 87-02/USI A-46 Project Engineer:** Reviewed and approved seismic adequacy evaluations for A-46 equipment in accordance with the SQUG Generic Implementation Procedure.
- **Participated in the EPRI Task Force on the Generic Technical Evaluations for Replacement Items (G-STERI).** Contributed in preparing evaluations for inclusion in the Task Force G-STERI evaluations report.
- **High Energy Line Break Project Engineer:** Set project direction. Established manpower levels, budget requirements, and schedule. Approved calculations.
- **Supported the different plant groups, such as Procurement, Work Planning, Construction Services, and Maintenance with a customer service oriented approach.**
- **Managed out-sourced activities.** Reviewed proposals. Identified project deliverables and tracked project completion.
- **Established high quality standards for in-house and out-sourced project deliverables.**

NABIL JURAYDINI

VECTRA Technologies, Inc. (formerly Impell Corp.)
Engineer

Fort Worth, TX
December 1987-June 1993 & April 1994-October 1994

Seismic Equipment Qualification Group

- Prepared, checked and reviewed calculations which documented the dynamic analysis and qualification of tanks, vessels, valves, and mechanical and electrical equipment, at CPSES Units 1 & 2, for seismic loads.
- Reviewed and approved vendor supplied analysis and test reports which documented the seismic qualification of mechanical, electrical, and I&C equipment. Interfaced with the vendor to clarify and resolve qualification issues.
- Developed finite element models, using computer programs including ANSYS and STRUDL aided in the equipment qualification process.
- Performed stress-strain analysis on the reactor containment steel liner with respect to the reinforced concrete structure, at CPSES Unit 2.
- Prepared an original calculation for the qualification of concrete tank wall pipe penetrations.
- Completed on schedule the qualification of concrete anchorages and pedestals of various mechanical equipment. This job required continuous interface with other engineering disciplines.
- Headed and completed on schedule the evaluation of concrete tanks and liners, including the piping support anchorages in the tanks.

Other duties included:

- Supervised a staff of four engineers; determined task forecasting and scheduling. Allocated work assignments; checked, reviewed, and ensured on-schedule completion of work.
- Coordinated day-to-day operations in the absence of the Managing Project Engineer.
- Trained new employees; conducted performance evaluations.
- Interfaced with technical auditors in response to inquiries.
- Participated in the project efficiency task.

Prudence/Rate Case Support, December 1989-June 1990

- Prepared white papers on various topics in substantiation of the TU Electric CPSES Unit 1 rate case.
- Researched various topics in preparation for depositions, or in response to third party allegations.
- Responded to audit questions or requests for information.
- Conducted conversations/interviews with personnel involved in past activities under review.
- Prepared chronological histories of projects.

NABIL JURAYDINI

Spent Fuel High Density Racks, June 1990-October 1990

Reevaluated the concrete structure and foundation of the Spent Fuel Pool at CPSES Units 1 & 2 for the increased rack weights. Designed the rack handling crane, evaluated the impact of NRC documents, and wrote related sections of the licensing report.

Cable Tray Hanger Project, November 1987-December 1989

- Prepared, checked, and reviewed engineering calculations which modeled, analyzed and evaluated, the structural integrity of the cable tray hangers and systems at CPSES Unit 1 per the requirements of design documents, the AISC Code and quality assurance manuals.
- Used extensively the computer program P-DELTA STRUDL for structural dynamics analysis and base plate analysis.
- Prepared design change drawings for structural modifications required as a result of technical evaluations, and performed engineering site walkdowns for field measurements.
- Developed computer spreadsheets for use in lieu of hand calculations, resulting in increased efficiency and reduction in error.

UNIVERSITY OF MICHIGAN

Assistant Engineer

Ann Arbor, MI

September 1986-June 1987

Assisted in drafting plans to remodel University offices and laboratories; communicated with occupants to determine needs.

EDUCATION

TEXAS CHRISTIAN UNIVERSITY
Master of Business Administration
Major: Finance/Accounting

Fort Worth, TX
December 1993

UNIVERSITY OF MICHIGAN
Master of Science
Major: Civil/Structural Engineering

Ann Arbor, MI
December 1986

AMERICAN UNIVERSITY OF BEIRUT
Bachelor of Engineering
Major: Civil Engineering

Beirut, Lebanon
June 1985



Tribhawan Ram

EDUCATION:

B.S. - Electrical Engineering, Punjab University, India, 1972
M.S. - Electrical Engineering, University of Cincinnati, 1977
M.S. - Nuclear Engineering, University of Cincinnati, 1982
M.B.A. - Bowling Green State University, 1996

PROFESSIONAL REGISTRATION:

State of Ohio

PROFESSIONAL HISTORY:

Stevenson & Associates, Inc., Senior Engineer, 2011 - present
Public Service Electric & Gas Co., Senior Plant Systems Engineer, Hancock Bridge, NJ, 2007 - 2011
Entergy Corporation, Plymouth, Massachusetts, Senior Design Engineer, 2002-2007
Various Companies, Contract Consulting Project Engineer, 1996 - 2002
Public Service Electric & Gas Co., Senior Staff Engineer, Hancock Bridge, NJ, 1983-1990
Toledo Edison Co., Toledo, Ohio, Senior Assistant Engineer, Associate Engineer, 1978-1983

PROFESSIONAL EXPERIENCE:

- Electrical and Controls Design Engineering
- Plant Systems Engineering
- Transformer and Relay(s) Spec Developer
- Plant Modification Engineering
- Systems and Component Test Engineering
- Factory Testing Witness
- 6 Month BWR Systems Engineering Training
- ETAP Trained
- Arc Flash IEEE 1584 Trained

Mr. Ram has over 28 years of electrical project, design and systems engineering experience in US nuclear plants. As part of the Seismic Margin Analysis (SMA) team, in 2012, Mr. Ram is leading the electrical engineering EPRI methodology effort to perform Post-Fukushima relay list development and evaluation to support Safe Shutdown Equipment List (SSEL), including relay functional screening and chatter analysis, for Taiwan nuclear plants (both PWR and BWR). In this effort, he is preparing the final reports including recommendations to replace any bad actor relays. Mr. Ram is preparing proposals to replace these bad actors including modification package development for field replacement of these relays. He has prepared proposals to lead similar forthcoming relay evaluation efforts for several Westinghouse plants in the USA. Mr. Ram has either prepared or peer reviewed the Seismic Walkdown Equipment Lists (SWEL 1 & 2) for several Exelon Plants.



As a senior plant systems engineer, Mr. Ram has: 1. Developed several test plans for modification packages for the replacement of low and medium voltage circuit breakers (ABB K-Line to Square D Masterpact; GE Magneblast to Wyle Siemens) and for the replacement of the entire Pressurizer Heater Bus switchgear; 2. Personally been involved in execution of these test plans during refueling outages; 3. Witnessed factory testing of Pressurizer Heater Bus Switchgear; 4. Interfaced with NRC in their biennial Component Design Basis Inspections (CDBI); Interfaced with INPO in their biennial evaluations; 5. Developed and executed Performance Centered Maintenance (PCM) strategies for Motor Control Centers (MCCs) and low and medium voltage circuit breakers and switchgear; 6. Developed and executed margin improvement strategies for pressurizer heater busses, for twin units, through obtaining funds and then equipment replacement; 7. Developed refueling outage scoping for low and medium voltage circuit breakers and MCCs through working with outage group, maintenance, operations, and work MGMT; 8. Resolved breaker grease hardening issue for ABB K-Line breakers, over a two year period, through working with maintenance and work MGMT in implementing accelerated overhauls with better grease; 9. Trained operations and engineering personnel in the Engaging People and Behavior Change process, as part of a case study team and; 10. Resolved day to day operations and maintenance issues with systems of responsibility (low and medium voltage systems)

Mr. Ram has regularly participated in the EPRI annual circuit breaker user group conferences; at the 2011 meeting, he made a presentation on circuit breaker as found testing vis-à-vis protection of equipment, cables, and containment penetrations, and selective coordination preservation.

As a Senior Design Engineer, Mr. Ram has: 1. Developed specifications and procured 345/4.16/4.16 kV and 23/4.16/4.16 kV transformers (ranging up to \$1.25 million); 2. Prepared a modification package to install the 23 kV/4.16 kV/4.16 kV transformer, including leading the project team to get this transformer successfully installed, tested, and placed in service; 3. Developed ETAP scenarios and performed load flow studies to successfully support the 2006 INPO evaluation; 4. Performed arc flash calculations per IEEE 1584 methodology for 4 kV, 480V Load Centers, and MCCs, enabling a justification of reduced arc flash rated clothing, thereby allowing conversion of OUTAGE PMs into ONLINE PMs and; 5. Performed single point system vulnerability analysis.

As a Consulting Lead Project Engineer, Mr. Ram was heavily involved in resolution of the USI A-46 for several plants. He performed an extensive review of dozens of control circuits for relay chattering issues. To replace bad relay actors, Mr. Ram developed and/or supervised the development of many modification packages including: selection of replacement relays (both protective and auxiliary); preparation of relay testing specification with civil engineering input; working with and visiting seismic testing facilities for relay qualification and; developing pre and post installation instructions including test procedures. He worked closely with teams consisting of maintenance, operations, and work MGMT during the development and implementation of these projects. Besides the A-46 issue, Mr. Ram first developed and then was personally involved in the implementation of modification packages consisting of Cable, Conduit, Circuit Breaker and motor starter (contactor) replacements.

The following provides a list of USI A-46 resolution projects:

- Northeast Utilities – Millstone Station
- Consumers Power Co. - Palisades Nuclear Station
- Boston Edison Co. - Pilgrim Nuclear Power Station
- Commonwealth Edison Company- Dresden Station, Quad Cities Station



B

SWEL Selection Report

This appendix includes the SWEL selection report.

Selection of the Seismic Walkdown Equipment List (SWEL) for the Requirement 2.3 Walkdown

Point Beach Nuclear Plant

Unit 1

Prepared by ... Stan Guokas (PRA Group), November 2012

Signature *S. E. Guokas* Date 11-19-12

Reviewed by ... Rick Merkes (Operations), November 2012

Signature *Rick Merkes* Date 11-21-12

Reviewed by ... Doug Brown (Engineering), November 2012

Signature *Doug Brown* Date 11/22/12

1 Introduction

This document summarizes the process for selecting the components to be included in the seismic walkdown equipment list (SWEL). This process is consistent with guidance in EPRI-TR-1025286^(REF 1) and meets the intent of NRC NTTF Recommendation 2.3.

The SWEL walkdown locations are summarized in Table 1, along with walk-by attributes. The final Point Beach Unit 1 SWEL is included in Attachment A.

The SWEL list was revised during the seismic walkdowns in September and October 2012 based on accessibility to anchorage. See Section 4 for details.

2 Process

The general process focuses first on building a Master Component List, with attributes to support the sample selection process (Section 3). Then a sample of Seismic Category I (CAT I) components is made for the SWEL to assure the five safety functions are represented along with a variety of systems, environments, and component types.

This process also includes identifying a set of plant locations around which the walkdown is organized (Section 4). The plant locations are also used to support the "walk-by" process to assess cable trays and ventilation ducts and the potential for seismic spatial interactions (Section 5).

Finally, Section 6 identifies several evaluations that support the identification of targets for the walkdown and the specific attributes that need to be examined.

Because the SWEL needs to address a number of attributes, the selection was performed and reviewed by a team that includes representatives from PRA, Operations, and Engineering. This was done systematically by performing a table-top virtual walkdown of each location to identify candidates for the SWEL with Operations as well as other issues (e.g., seismic-flood) that need to be inspected by the walk-by. Engineering then reviewed the SWEL, made additions and deletions. The SWEL was then reviewed by PRA with additional changes. This list was then reviewed and accepted by Operations and Engineering.

3 Master Component List

The SWEL was developed starting from the components list in the Point Beach internal events PRA^(REF 2) (SWEL 1-1 for Unit 1, SWEL 1-2 for Unit 2). This list contains risk important components from the internal events PRA (one of the attributes from the EPRI guidance). Other components were added that are implicitly modeled in the PRA (e.g., instrument racks, diesel starting air tanks, etc.).

This list addresses the five safety functions - reactivity control, RCS pressure control, RCS inventory control, decay heat removal, containment function - implicitly by including components from both core-damage-frequency (CDF) and large-early-release-frequency (LERF) sequences. The five safety functions are addressed further in Section 4.1 and are included in Attachment A.

This list was expanded to include components associated with the Spent Fuel Pool (SWEL 2). The guidance described these as "SFP SC1 (Seismic Category I) equipment and systems" and includes specifically components associated with SFP cooling. Per the guidance, the SFP structure is excluded from the walkdown. Thus, this added all SFP-related components that are Seismic Cat 1, including pumps, valves, heat exchangers, etc. In addition, the potential for rapid draindown of the SFP was evaluated (see Section 4.2). The conclusion of that evaluation was that there was one component that could lead to rapid draindown. The list was expanded to include this component.

Specific attributes were identified for each component to support the sample selection, as described below:

- *Seismic Class.* Each component in the master list was identified as CAT I or non-CAT I. The SWEL generally applies only to CAT I (with a few exceptions) since this is primarily a design-basis evaluation.
- *System.* For each component in the master list, the associated system was identified. This attribute is used to assure that the equipment selection includes a variety of types of systems.

- *Location.* For each component in the master list, the location was identified. The walkdowns is organized by plant location (see Section 4). This also assures that the equipment selection includes a variety of environments.
- *Equipment Class.* For each component in the master list, the “equipment class” was identified. The equipment classes are the 21 types of equipment identified in Appendix B of the EPRI guidance document (see Table 2). This attribute is used to assure that the equipment selection includes a variety of types of equipment.
- *New / Replacement Equipment.* Several pieces of equipment in the master list were identified as major new or replacement equipment in the last 15 years.
- *Equipment Enhanced from IPEEE.* As described in Section 6.1, several plant improvements were made as a result of the seismic portion of the IPEEE.
- *Safety Functions.* For each component in the master list, the associated safety function was identified (see Section 4.1, Screen #3).

4 Walkdown List (SWEL)

The SWEL was created by sampling from the Master Component List, using the attributes identified in Section 3. The final SWEL is contained in Attachment A.

First, plant locations are defined to support the walkdown. A list of 36 locations (buildings or sets of rooms) were identified that contain the primary components from most of the top ten risk-important systems, as well as the Spent Fuel Pool Heat Exchanger Area. Table 1 provides this list of potential walkdown locations. This focuses the walkdown on risk-important systems, consistent with the guidance to “... include consideration of the importance of the contribution to risk for the SSCs.”

Within these 36 locations, a total of 104 components were identified from the Master Component List (95 in SWEL 1-1 and 9 in SWEL 2). As shown in Attachment A, this process assured different component environments and equipment classes are represented. This sample was also reviewed by Operations and Engineering.

The SWEL list was revised during the seismic walkdowns in September and October 2012 based on accessibility of anchorage. The following modifications were made:

- 3 additions

W-085 was added to the Unit 1 SWEL1 and deleted from the Unit 2 SWEL1 to address a SWEL Peer Review comment that no air handling unit had been included in the Unit 1 SWEL. 1A-05 was added to the Unit 1 SWEL1 and deleted from the Unit 2 SWEL1 to address a SWEL Peer Review comment that no medium voltage switchgear had been included in the Unit 1 SWEL1. P-32A was added to the Unit 1 SWEL1 and deleted from the Unit 2 SWEL1 to address a

SWEL Peer Review comment that no vertical pumps had been included in the Unit 1 SWEL1.

- 4 deletions

The anchorage of 1A-06 could not be observed. MCC 1B-32 internals inspected could be performed safely with the MCC de-energized. The next scheduled down power was more than 2 years in the future. Rather than have a deferred item for more than 2 years, MCC 1B-32 was deleted from the SWEL. HX-12B and HX-12C were deleted from the Unit 1 SWEL1 and added to the Unit 2 SWEL1 based on SWEL Peer Reviewer comment that the Unit 2 SWEL1 did not have any heat exchangers included.

The final count of SWEL components for Unit 1 and the Spent Fuel Pool was 104.

4.1 Screening for SWEL 1

The screening process for SWEL 1 meets the requirements of the EPRI-TR as described below:

Screen #1 Seismic Category 1

Non-seismic-category 1 components are screened out of the Master Component List. This screening was performed using a Query in the NAMS database. If the NAMS field "Seismic_Category" had a "I" the component was included as Seismic Category I. The results of this Query are provided in J:\ShareData\PRA\ Seismic-Flood, Post Fukushima\SEL Seismic Equipment List - for PRA\Copy of Seismic I or 2_053012.xls.

Screen #2 Equipment or Systems

Components selected for the SWEL 1 were those that do not undergo regular inspection to confirm their configuration. Thus, CAT I structures and containment penetrations were excluded. As a result, the SWEL includes mechanical and electrical equipment plus tanks and heat exchangers.

Screen #3 Supports Five Safety Functions

The SWEL includes components from all five safety functions, as follows:

1. *Reactivity Control*

- Support systems (AC power, DC power).

2. *RCS Pressure Control*

- Secondary pressure control (ASDV)

3. *RCS Inventory Control*

- ECCS (SI pump, RH pump, SI MOVs, RH AOVs)
- Support systems (AC power, DC power, PAB Electrical Equipment Room ventilation, CC pumps & MOVs).

4. *Decay Heat Removal*

- Secondary heat removal (AFW pumps, AFW MOVs, ASDV);
- RHR shutdown cooling (RHR pump & MOVs, CC pumps & MOVs, SW pumps & MOVs, heat exchangers,);
- Support systems (AC power, DC power, PAB Electrical Equipment Room ventilation).

5. *Containment Function*

- Containment isolation (IA-3047 and IA-3048 valves, RH-720 valve)
- Containment spray injection (CS Pumps)
- Containment spray heat removal (CC pumps & MOVs, SW pump & MOVs)
- Support systems (CC pumps & MOVs, AC power, DC power).

Screen #4 Sample Considerations

The SWEL includes components from various systems, environments, and types:

- *System.* The SWEL includes components from a number of types of systems – power support systems (DG, 4160 VAC, 480 VAC), cooling support systems (SW, CC), ventilation systems (VNDG, VNBI), hot shutdown systems (AFW), ECCS (RH, SI), and spent fuel cooling (SF).
- *Environment.* The SWEL includes components from a number of locations in most of the major CAT I buildings on site – PAB, Control Bldg, DG Bldg, Unit 1 Containment, Unit 2 Containment and Circ Water Pumphouse. These locations involve different environments, from ventilation controlled areas (DG Bldg) to outside areas (Unit 2 Facade); from areas with normally running equipment (PAB) to areas with normally standby equipment (DG Bldg). These locations involve different environments related to elevation, from (-)19' elevation in the RHR pump rooms to (+)85' in the Unit 2 Facade.

- *Equipment Type.* The SWEL includes components from most of the 21 equipment classes. Table 2 provides a list of the 21 equipment classes. Attachment A shows the SWEL count by equipment class, with example components in each class. As noted, several classes had no CAT I equipment.

4.2 Screening for SWEL 2

The screening process for SWEL 2 meets the requirements of the EPRI-TR as described below:

Screen #1 Seismic Category 1

Non-seismic-category 1 components related to Spent Fuel Pool Cooling are screened out of the Master Component List. This screening was performed using a Query in the NAMS database. If the NAMS field "Seismic_Category" had a "1" the component was included as Seismic Category I. The results of this Query are provided in J:\ShareData\PRA\ Seismic-Flood, Post Fukushima\SEL Seismic Equipment List - for PRA\COPY of Seismic I or 2_053012.xls.

Screen #2 Equipment or Systems

Components selected for the SWEL 2 were those that do not undergo regular inspection to confirm their configuration. Thus, CAT I structures including the SF Pool were excluded. As a result, the SWEL includes mechanical and electrical equipment plus heat exchangers (as demonstrated in Screen #3, "equipment type" below).

Screen #3 Sample Considerations

The SWEL 2 includes components from a variety of systems, environments, and types:

- *System.* The systems in SWEL 2 include SF (spent fuel) system and SW (cooling to SF heat exchangers).
- *Environment.* The SWEL 2 includes components are all located in the Spent Fuel Pool Heat Exchanger area of the PAB.
- *Equipment Type.* The SWEL 2 includes components from three of the 21 equipment classes. Manual valves were not included since they are not on the list of 21 equipment classes to be considered, are passive devices with no active components and are seismically rugged components. Check valves were not included since they are not on the list of 21 equipment classes to be considered, and are seismically rugged components. One manual valve was included due to draindown considerations.

Screen #4 Rapid Draindown

The EPRI guidance requires assessment of the potential for SFP rapid draindown, specifically the identification of SFP penetrations below about 10 feet above the top of the fuel assemblies. The only penetrations the SFP below this level is the fuel transfer tubes used to move fuel from containment to the SFP and the fuel transfer canal drain. During normal operation, the tubes are isolated by a blind flange on the containment side and a manual valve on the Fuel Storage Bldg side. The blind flange is a passive structural member that is judged to be out of scope for this evaluation.

The fuel transfer canal drain is a 4 inch drain located on the bottom of the spent fuel pool. The drain pipe is isolated by a normally closed manual valve, SF-00785B. Since this has the potential to be a rapid draindown path, valve SF-00758B has been included in the SWEL 2.

There are two 10" pipe sleeves embedded in the center spent fuel pool wall. Since these pipes are embedded in concrete and do not penetrate the spent fuel pool wall, they are not considered rapid draindown paths.

Calculation 2005-0037, Rev. 0 ^(REF 6), "Spent Fuel Pool Anti-Siphon Provisions", concluded that the geometry of the Spent Fuel Pool cooling piping prevents siphoning of the fuel pool below the elevation that is 21' 11" above the top of active fuel. In the event of a break in the discharge line, enough air is provided by the tail pipe to break the siphon. The suction line will not drain the SPF below the minimum water level because the suction line termination is at an elevation higher than the minimum water level elevation. Spent fuel pool cooling piping is not considered a rapid draindown path.

The EPRI guidance includes "determine how pool sloshing would reduce the initial volume of water in the SFP during a seismic event." This is required only if components related to rapid draindown were identified that could not be inspected.

5 Walk-By Table

Area walk-bys will be performed in each area that contains an item on SWEL 1 or SWEL 2. Each location will also be subject to a walk-by, an examination (in less detail) of the other PRA components as well as an inspection for other seismic issues:

- Several other passive component types: cable trays & ventilation ducts.
- Seismic-induced fire. This includes all flammable materials in each location such as hydrogen lines, gas bottles (acetylene, hydrogen), and hazardous/flammable material stored in the location.

- Seismic-induced flood. This includes flood/spray sources (tanks, piping) originating in each location, based on the Internal Flood PRA. Note, the sources of interest are only those originating in the location, not those coming from another location (that will be addressed in the seismic/flood analysis, if needed).
- Spatial interactions (2 / 1). This includes adverse physical interaction due to proximity, failing of other components or structures (e.g., cranes), and flexibility of attached lines and cables.

Table 1 provides an initial assessment for each location to assist the walk-by process.

6 Evaluations

The following evaluations were performed prior to the walkdown to assess specific issues that may add to the walkdown scope or the inspection criteria.

6.1 IPEEE Vulnerabilities

The seismic assessment performed for the Point Beach IPEEE Report^(REF 3) and A-46 Report^(REF 4) was reviewed for any seismic vulnerabilities identified. Several plant improvements were made in response to seismic analysis in the IPEEE and A-46 walkdowns. A list of the outlier resolution is provided in Table 3.

6.2 Configuration Verification

The EPRI guidance identifies two types of inspection for the walkdown: (a) visual inspection and (b) configuration verification. Visual inspection is typically what is performed in a walkdown, looking for obvious degraded conditions in equipment anchorage. However, configuration verification is a more involved inspection consistent with the existing plant documentation of the design basis. This is required in at least 50% of the SWEL items with anchorage. To ensure compliance, Point Beach interpreted this requirement as applying to SWEL1-1, SWEL1-2 and SWEL2. In other words, 50% of the SWEL1-1 items, 50% of the SWEL1-2 items and 50% of the SWEL2 items would require anchorage verification.

SWEL1-1 has 95 components. 26 of these components are MOVs, AOVs or SOVs which do not have anchorage. This leaves 50% of (95-26), or 35 components to be included in configuration verification.

SWEL2 has 9 components. 5 of these components are MOVs, AOVs, SOVs or manual valves which do not have anchorage. This leaves 50% of (9-5), or 2 components to be included in configuration verification.

For the components which received configuration verification, the design basis was reviewed and the key attributes included in the walkdown forms to assist the inspection.

6.3 New Equipment

The EPRI Guidance directs that the SWEL should include a “robust sampling of the major new or replacement equipment installed within the past 15 years (i.e., since the approximate completion of the seismic IPEEE evaluation)”. New and replacement equipment has been included as identified in Attachment A.

7 References

- (1) EPRI 025286, “Seismic Walkdown Guidance,” June 2012.
- (2) Point Beach PRA, 4.04, December 2011.
- (3) GENERIC LETTER 88-20, SUPPLEMENT 4 (TAC NOS. 74452 AND 74453) SUMMARY REPORT ON INDIVIDUAL PLANT EXAMINATION OF EXTERNAL EVENTS FOR SEVER ACCIDENT VULNERABILITIES POINT BEAC NUCLEAR PLANT, UNITS 1 AND 2, June 1995.
- (4) USNRC GENERIC LETTER 87-02, USI A-46 RESOLUTION, SEISMIC EVALUATION REPORT, Rev. 1, June 1996.
- (5) NRC SER on Point Beach IPEEE, September 1999.
- (6) Calculation 2005-0037, Revision 0, “Spent Fuel Pool Anti-Siphon Provisions”

TABLE 1 SWEL Walkdown Locations Unit 1

Walk By Area	Walk By Area Description	Cable Trays	HVAC Ductwork	2/1	Flood Source	Flame Source	IPEEE Components Modified
1	8/CB/AFP RM 1P-29 CUB, P-38A CUB	Y	Y	Y	SW,FP,CST		
2	1P-10A RESIDUAL HEAT REMOVAL PUMP ROOM	N	N	N			RHR PMP
3	-5/PAB/EAST WALL OVHD	N	N	N			
4	35/PAB/D-106 ROOF	N	Y	N	SW		
5	26/PAB/NORTH	Y	Y	Y	SW		
6	35/PAB/D-105 BATT RM	N	N	N		H2	
7	26/PAB/INVERT RM WEST	N	N	N			
8	46/PAB/CC HX AREA	Y	Y	Y	SW		CCW SURGE TANK
9	26/CB/CSR	Y	Y	N			CABLE TRAYS, XFRMRS, B03/4, INVERTRS C-PNLS
10	44/CB/CR	Y	Y	N			2C-41, C-75, 1C-105
13	8/PAB/PIPEWAY #1	Y	N	N			
14	8/PAB/WEST	Y	N	Y	SW		
15	8/PAB/U1 1B-32 AREA	Y	N	Y	FP		
17	8/PAB/U1 1P-2A CHG PUMP RM	N	N	Y			
18	8/PAB/U1 OUTSIDE 1P-2C CHG PUMP RM	Y	N	Y			
19	8/PAB/SI/CS PUMP AREA	Y	Y	Y	FP		P-14 PUMPS, SI VLVS
20	8/PAB/CC PUMP AREA	Y	Y	Y	FP		P-11 PUMPS
21	8/CB/VSG RM	Y	N	N			D-07, D-08
24	46/PAB/SFP HX AREA	Y	N	Y	SW		

Walk By Area	Walk By Area Description	Cable Trays	HVAC Ductwork	Z/1	Flood Source	Flame Source	IPEEE Components Modified
26	28/DGB/G-01/2 FOTP RM	N	N	N	FP	FO	
27	South 8/CWPH/SW BLDG	Y	N	Y	SW,FP,CW	FO	
28	North 8/CWPH/SW BLDG	Y	N	Y	SW,FP,CW	FO	
33	50/DGB/G-03 RADTR RM	N	N	N			
34	50/DGB/G-03 FAN RM	N	N	N			
37	28/DGB/G-03 SWGR RM	Y	N	N			
38	28/DGB/G-03 RM	N	N	Y		FO	
39	26/PAB/C-59 AREA	Y	Y	Y	SW		2B-42
41	8/PAB/1P-53 AFP RM	N	N	N	SW,CST		
42	8/CB/G-01 RM	Y	N	Y	SW	FO	BA EVAP BLOCK WALL REMOVED
43	1P-10B RESIDUAL HEAT REMOVAL PUMP ROOM	N	N	N			RHR PMP
47	26/PAB/INVERT RM WEST	N	N	N			
53	66/U1C/NORTH	Y	Y	Y	SW		
54	66/U1C/NE QTR	Y	Y	Y	SW		
55	21/U1C/SW QTR	Y	Y	Y	SW		
56	46/U1C/SW QTR	Y	Y	Y	SW		
57	21/U1C	Y	Y	Y	SW		
58	46/U1C/SEAL TABLE	Y	Y	Y	SW		

Table 2 Classes of Equipment (from EPRI Appendix B, Table B-1)

#	Equipment Class	Explanation of Equipment Class	Example PB Components
0	Other	All other component types	SF-00785B
1	Motor Control Centers and Wall-Mounted Contactors	480V MCC	1B-39
2	Low Voltage Switchgear and Breaker Panels	480V switchgear (unit-sub), 125VDC switchgear	2B-03
3	Medium Voltage, Metal-Clad Switchgear	4kV to 13.8kV switchgear	1A-05
4	Transformers	Unit-sub dry transformer	1X-13
5	Horizontal Pumps	--	1P-10A
6	Vertical Pumps	--	P-032A
7	Pneumatic-Operated Valves	AOV	1RH-00624
8	Motor-Operated Valves & Solenoid-Operated Valves	MOV, SOV	1CV-00112B
9	Fans	Ventilation fan	W-184B
10	Air Handlers	--	W-085
11	Chillers	AC unit	none
12	Air Compressors	--	none
13	Motor Generators	MG set	none
14	Distribution Panels & Automatic Transfer Switches	120VAC and 125VDC panel	D-64
15	Battery Racks	125VDC vital battery	D-06
16	Battery Chargers and Inverters	125VDC vital battery charger, vital inverter	D-07
17	Engine Generators	Diesel generator	G-02
18	Instrument Racks	--	RK-35
19	Temperature Sensors	--	none
20	Instrumentation and Control Panels	Skid panels, skid-mounted control panel	C-035
21	Tanks & Heat Exchangers	--	T-012 HX-013A

Table 3 IPEEE and A-46 Outlier Resolution

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
1	I	0	CV	2F-39A	RCP SEAL WATER INJECTION FILTER	O - Anchor nuts are not seated. Not an operability concern. EWR, 6/20/96 - EWR 96-040 assigned	The nuts for the caste in place anchors are not fully seated.	This is not an operability concern because the attached pipe has sufficient flexibility to accommodate the displacement of the filter. The nuts will be sealed or washers installed to close up the gaps. The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	WO 9815435 completed 11/6/98. Removed existing nuts, added washers and torqued down new nuts on all 4 anchors.	SQ-001530 completed
2	A,I	1	480V	2B-42	480V MOTOR CONTROL CENTER PAB SAFEGUARDS	O - The connecting bolt that connects the double P1000 to the strut that is anchored to the wall has either loose or missing fastening nuts. T. Dykstra to submit MWR to check tightness, tighten & replace hardware. WO 9411729. Maintenance to assist with bolt tightness checks 2/20/95. WO submitted to replace missing hardware.	The connecting bolt that connects the double P1000 to the strut that is anchored to the wall has either loose or missing fastening nuts.	The MCC is considered seismically operable because the other top supports are sufficient to resist overturning. The bolts will be check tight and any missing hardware replaced.	WO 9606365, completed 11/13/96 checked the connecting bolts tight and replaced any missing hardware.	SQ-001250 resolves the outlier.
3	A,I	2	480V	1B-03	480V SAFEGUARDS LOAD CENTER	O - ANCHORAGE INSUFFICIENT. Weld spacing is to large. Every 3rd cabinet in some cases. TROLLEY HOIST needs to be clamped in place. T. Dykstra to submit separate EWRs for weld and trolley hoist.	The anchorage weld spacing is to large, every 3rd cabinet in some cases. The trolley hoist that rides along the top of the switchgear poses an interaction hazard.	There is sufficient anchorage capacity in the existing welds to carry the seismic anchorage loads. However, the switchgear was declared an outlier because it is not good engineering practice to transfer the seismic loading through the switchgear structure. The switchgear is considered seismically operable. Modification MR 95-005 is initiated to install new anchorage. The trolley hoist will be evaluated.	MR 95-005 installed new anchorage (WO 9700600). EWR 96-042 evaluated breaker handling trolley, EWR closed. MR 98-094 installed trolley stops.	SQ-001544, SQ-001531 completed
4	A,I	2	480V	2B-03	480V SAFEGUARDS LOAD CENTER	O - ANCHORAGE INSUFFICIENT. Weld spacing is to large. Every 3rd cabinet in some cases. TROLLEY HOIST needs to be clamped in place. T. Dykstra to submit separate EWRs for weld and trolley hoist.	The anchorage weld spacing is to large, every 3rd cabinet in some cases. The trolley hoist that rides along the top of the switchgear poses an interaction hazard.	There is sufficient anchorage capacity in the existing welds to carry the seismic anchorage loads. However, the switchgear was declared an outlier because it is not good engineering practice to transfer the seismic loading through the switchgear structure. The switchgear is considered seismically operable. Modification MR 95-005 is initiated to install new anchorage. The trolley hoist will be evaluated.	MR 95-006 installed new anchorage (WO 9705903). EWR 96-042 evaluated breaker handling trolley, EWR closed. MR 98-095 installed trolley stops.	SQ-001588, SQ-001532 completed

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
5	A,I	2	480V	1B-04	480V SAFEGUARDS LOAD CENTER	O - ANCHORAGE INSUFFICIENT, Weld spacing is to large. Every 3rd cabinet in some cases. TROLLEY HOIST needs to be clamped in place. T. Dykstra to submit separate EWRs for weld and trolley hoist.	The anchorage weld spacing is to large, every 3rd cabinet in some cases. The trolley hoist that rides along the top of the switchgear poses an interaction hazard.	There is sufficient anchorage capacity in the existing welds to carry the seismic anchorage loads. However, the switchgear was declared an outlier because it is not good engineering practice to transfer the seismic loading through the switchgear structure. The switchgear is considered seismically operable. Modification MR 95-005 is initiated to install new anchorage. The trolley hoist will be evaluated.	MR 95-005 installed new anchorage. EWR 96-042 assigned to evaluated breaker handling trolley. EWR closed. MR 98-094 installed trolley stops.	SQ-001545, SQ-001535 complete
6	A,I	2	480V	2B-04	480V SAFEGUARDS LOAD CENTER	O - ANCHORAGE INSUFFICIENT, Weld spacing is to large. Every 3rd cabinet in some cases. TROLLEY HOIST needs to be clamped in place. Cub 2B-00-32B-2B-04 has loose material, should remove it. T. Dykstra to submit separate EWRs for weld and trolley hoist.	The anchorage weld spacing is to large, every 3rd cabinet in some cases. The trolley hoist that rides along the top of the switchgear poses an interaction hazard.	There is sufficient anchorage capacity in the existing welds to carry the seismic anchorage loads. However, the switchgear was declared an outlier because it is not good engineering practice to transfer the seismic loading through the switchgear structure. The switchgear is considered seismically operable. Modification MR 95-005 is initiated to install new anchorage. The trolley hoist will be evaluated.	MR 95-006 installed new anchorage. EWR 96-042 assigned to evaluated breaker handling trolley. EWR closed. MR 98-095 installed trolley stops.	SQ-001589, SQ-001536 completed
7	A,I	3	RP	2C-41	ROD CTL MG/REACTOR TRIP BKR SWITCHGEAR CTL PANEL	O - NOT ANCHORED. MR in process. MR 94-045. Candice Curtis	The cabinet is not anchored.	The relay review showed that there were no essential Reactor Protection System relays located in the cabinet. Any failure of 2C-41 is expected to cause the reactor trip breakers to open, therefore in the safe direction. Modification request MR 94-045 will install new anchorage.	MR 94-045 installed new anchorage. Accepted 11/7/95.	SQ-001537 completed
8	A,I	4	4.16KV	1X-13	B-03 STATION SERVICE TRANSFORMER	O - ANCHORED WITH FRICTION CLIPS. MR in process. MR 94-012	The transformer anchorage uses friction clips which is not covered by the GIP.	The friction clips provide adequate capacity to withstand the PBNP SSE, because the friction coefficient exceeds the seismic demand level. The anchorage will be upgrade under modification MR 94-012.	MR 94-012 installed new anchorage - accepted 4/16/96.	SQ-001703 completed
9	A,I	4	4.16KV	2X-13	B-03 STATION SERVICE TRANSFORMER	O - ANCHORED WITH FRICTION CLIPS. MR in process MR 94-013	The transformer anchorage uses friction clips which is not covered by the GIP.	The friction clips provide adequate capacity to withstand the PBNP SSE, because the friction coefficient exceeds the seismic demand level. The anchorage will be upgrade under modification MR 94-012.	MR 94-013 installed new anchorage - accepted 11/3/95.	SQ-001800 completed
10	A,I	4	4.16KV	1X-14	B-04 STATION SERVICE TRANSFORMER	O - ANCHORED WITH FRICTION CLIPS. MR in process. MR 94-012	The transformer anchorage uses friction clips which is not covered by the GIP.	The friction clips provide adequate capacity to withstand the PBNP SSE, because the friction coefficient exceeds the seismic demand level. The anchorage will be upgrade under modification MR 94-012.	MR 94-012 installed new anchorage - accepted 4/16/96.	SQ-001799 completed
11	A,I	4	4.16KV	2X-14	B-04 STATION SERVICE TRANSFORMER	O - ANCHORED WITH FRICTION CLIPS. MR in process. MR 94-013	The transformer anchorage uses friction clips which is not covered by the GIP.	The friction clips provide adequate capacity to withstand the PBNP SSE, because the friction coefficient exceeds the seismic demand level. The anchorage will be upgrade under modification MR 94-012.	MR 94-013 installed new anchorage - accepted 11/3/95.	SQ-001801 completed

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
12	A,I	5	RH	1P-10A	RESIDUAL HEAT REMOVAL PUMP	O - Anchorage failed	The pump anchorage has less than GIP minimum required edge distance, resulting in anchorage failure when evaluated in accordance with the GIP.	The pump anchorage was analyzed in accordance with ACI 349-80 Appendix B and shown to have sufficient capacity.	S&A Calc 91C2696-C-008 uses guidelines from ACI-349-80 to show pump anchorage adequate	SQ-1842 completed.
13	A,I	5	RH	1P-10B	RESIDUAL HEAT REMOVAL PUMP	O - Anchorage failed	The pump anchorage has less than GIP minimum required edge distance, resulting in anchorage failure when evaluated in accordance with the GIP.	The pump anchorage was analyzed in accordance with ACI 349-80 Appendix B and shown to have sufficient capacity.	S&A Calc 91C2696-C-008 uses guidelines from ACI-349-80 to show pump anchorage adequate	SQ-1802 completed.
14	A,I,C	5	CC	1P-11A	COMPONENT COOLING WATER PUMP	O - ANCHOR	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-009 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1804 completed.
15	A,I,C	5	CC	1P-11B	COMPONENT COOLING WATER PUMP	O - ANCHOR	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-009 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1803 completed.
16	A,I	5	SI	1P-14A	CONTAINMENT SPRAY PUMP	O - Failed Anchorage Calc PIPE LOAD ON SUCTION NOZZLES	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-019 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1805 completed.
17	A,I	5	SI	2P-14A	CONTAINMENT SPRAY PUMP	O - Failed Anchorage Calc PIPE LOAD ON SUCTION NOZZLES	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-019 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1807 completed.
18	A,I	5	SI	1P-14B	CONTAINMENT SPRAY PUMP	O - Failed Anchorage Calc PIPE LOAD ON SUCTION NOZZLES	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-019 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1806 completed.
19	A,I	5	SI	2P-14B	CONTAINMENT SPRAY PUMP	O - Failed Anchorage Calc PIPE LOAD ON SUCTION NOZZLES	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-019 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1828 completed.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
20	A.I	6	SW	P-32A	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1808 completed.
21	A.I	6	SW	P-32B	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1809 completed.
22	A.I	6	SW	P-32C	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1810 completed.
23	A.I	6	SW	P-32D	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1811 completed.
24	A.I	6	SW	P-32E	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1812 completed.
25	A.I	6	SW	P-32F	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1813 completed.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
26	A.I.V	7	CS	1CS-466	HX-1A SG FEEDWATER REGULATOR CONTROL	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and it sub-components.	The function of the valve is to close to isolate feed to the S/Gs. The valve is not required to shut during the 30 second period of strong motion. However, it is desired to have it shut during the 72 hour recovery period. As a back up to the valve failing to close, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001814 update complete.
27	A.I.V	7	CS	2CS-466	HX-1A SG FEEDWATER REGULATOR CONTROL	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and it sub-components.	The function of the valve is to close to isolate feed to the S/Gs. The valve is not required to shut during the 30 second period of strong motion. However, it is desired to have it shut during the 72 hour recovery period. As a back up to the valve failing to close, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001815 update complete.
28	A.I.V	7	CS	1CS-476	HX-1B SG FEEDWATER REGULATOR CONTROL	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and it sub-components.	The function of the valve is to close to isolate feed to the S/Gs. The valve is not required to shut during the 30 second period of strong motion. However, it is desired to have it shut during the 72 hour recovery period. As a back up to the valve failing to close, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001816 update complete.
29	A.I.V	7	CS	2CS-476	HX-1B SG FEEDWATER REGULATOR CONTROL	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and it sub-components.	The function of the valve is to close to isolate feed to the S/Gs. The valve is not required to shut during the 30 second period of strong motion. However, it is desired to have it shut during the 72 hour recovery period. As a back up to the valve failing to close, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001817 update complete.
30	A.I.V	7	CS	1CS-480	HX-1A SG REGULATOR CONTROL BYPASS	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and it sub-components.	The valve is normally close and must remain closed to isolate feed to the S/Gs. Therefore, during the 30 second period of strong motion, the valve is not required to change state. It is not likely that the block wall interaction would cause the valve to open. As a back up to the valve inadvertently opening, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001818 update complete.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
31	A,I,V	7	CS	2CS-480	HX-1A SG REGULATOR CONTROL BYPASS	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and its sub-components.	The valve is normally closed and must remain closed to isolate feed to the S/Gs. Therefore, during the 30 second period of strong motion, the valve is not required to change state. It is not likely, that the block wall interaction would cause the valve to open. As a back up to the valve inadvertently opening, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001819 update complete.
32	A,I,V	7	CS	1CS-481	HX-1B SG REGULATOR CONTROL BYPASS	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and its sub-components.	The valve is normally closed and must remain closed to isolate feed to the S/Gs. Therefore, during the 30 second period of strong motion, the valve is not required to change state. It is not likely, that the block wall interaction would cause the valve to open. As a back up to the valve inadvertently opening, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001820 update complete.
33	A,I,V	7	CS	2CS-481	HX-1B SG REGULATOR CONTROL BYPASS	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and its sub-components.	The valve is normally closed and must remain closed to isolate feed to the S/Gs. Therefore, during the 30 second period of strong motion, the valve is not required to change state. It is not likely, that the block wall interaction would cause the valve to open. As a back up to the valve inadvertently opening, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001821 update complete.
34	I,V,RG	7	RM	1RM-3200A	RE-211/RE-212 MONITOR RETURN	O - Based on visual inspection, the building the RMs are located in is not anchored. Need to check any drawings. 1 OF 4 ANCHOR BOLTS MISSING. Need to determine which ISRS would be applicable	The valve is located in a climate control hut that has no visible base anchorage.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	12/28/98 - EWR 96-044 complete. ID'd the anchorage. S&L completed calc. Calculation resolves outlier.	SQ-001985 resolves this outlier
35	I,V,RG	7	RM	2RM-3200A	RE-211/RE-212 MONITOR RETURN	O - Based on visual inspection, the building the RMs are located in is not anchored. Need to check any drawings.	The valve is located in a climate control hut that has no visible base anchorage.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	12/28/98 - EWR 96-044 complete. ID'd the anchorage. S&L completed calc. Calculation resolves outlier.	SQ-001986 resolves this outlier

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
36	I,V,RG	7	RM	1RM-3200B	RE-211/RE-212 MONITOR SUPPLY	O - Based on visual inspection, the building the RMs are located in is not anchored. Need to check any drawings. 1 OF 4 ANCHOR BOLTS MISSING. Need to determine which ISRS would be applicable	The valve is located in a climate control hut that has no visible base anchorage.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	12/28/98 - EWR 96-044 complete. ID'd the anchorage. S&L completed calc. Calculation resolves outlier.	SQ-001987 resolves this outlier
37	I,V,RG	7	RM	2RM-3200B	RE-211/RE-212 MONITOR SUPPLY	O - Based on visual inspection, the building the RMs are located in is not anchored. Need to check any drawings.	The valve is located in a climate control hut that has no visible base anchorage.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	12/28/98 - EWR 96-044 complete. ID'd the anchorage. S&L completed calc. Calculation resolves outlier.	SQ-001988 resolves this outlier
38	A,I	7	SC	1SC-959	RHR LOOP SAMPLE ISOLATION	O - Valve is only restrained by 2 U-bolts in friction. The valve is on a 3/8" sample line. Should have operator support or analysis on load bearing capacity of U-bolts	The AOV body is mounted to a support shelf by 2 U-bolts in friction. The valve is mounted on a 3/8" line. If the U-bolts slip, the potential exists for the line to be overstress.	This valve is normally closed and is required to stay closed in the event of an SSE. The U-bolt support will be analyzed and if required a valve operator support will be installed.	EWR - 6/20/96 - EWR Submitted, MR 96-035 assigned to install operator support. (DNC) WO 9817131. Installation complete.	SQ-001771 resolves this outlier
39	A,I,V	7	SI	1SI-839A	T-34A SI ACCUM OUTLET TO SI TEST LINE ISOLATION	O - The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection. Anchorage evaluation will be done. 7/25/94 - Support frame modified during U1R21. MR 93-047	The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection.	The support frame anchorage was modified during the same U1R21 refueling outage under MR 93-047	Fixed, MR 93-047. Accepted 4/29/94	SQ-001641 resolves outlier, completed
40	A,I,V	7	SI	2SI-839A	T-34A SI ACCUM OUTLET TO SI TEST LINE ISOLATION	O - UNSUPPORTED OPERATOR - MODIFIED U2R19 - Supported operators MWR 935398	The AOV was mounted on a 3/4" line with the valve operator unsupported	The valve was determined to be seismically inoperable. The operator was supported that same refueling out under MWR 935398	Fixed, MWR 935398 - completed 10/22/93	SQ-001631 resolves outlier, completed
41	A,I,V	7	SI	1SI-839B	SI A COLD LEG TO SI TEST LINE ISOLATION	O - The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection. Anchorage evaluation will be done. 7/25/94 - Support frame modified during U1R21. MR 93-047	The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection.	The support frame anchorage was modified during the same U1R21 refueling outage under MR 93-047	Fixed, MR 93-047. Accepted 4/29/94	SQ-001642 resolves outlier.
42	A,I,V	7	SI	2SI-839B	SI A COLD LEG TO SI TEST LINE ISOLATION	O - UNSUPPORTED OPERATOR - MODIFIED U2R19 - Supported operators MWR 935398	The AOV was mounted on a 3/4" line with the valve operator unsupported	The valve was determined to be seismically inoperable. The operator was supported that same refueling out under MWR 935398	Fixed, MWR 935398 - completed 10/22/93	SQ-001632 resolves outlier. Completed

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
43	A,I,V	7	SI	1SI-839C	T-34B SI ACCUM OUTLET TO SI TEST LINE ISOLATION	O - The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection. Anchorage evaluation will be done. 7/25/94 - Support frame modified during U1R21. MR 93-047	The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection.	The support frame anchorage was modified during the same U1R21 refueling outage under MR 93-047	Fixed, MR 93-047. Accepted 4/29/94	SQ-001643 resolves outlier. Completed
44	A,I,V	7	SI	2SI-839C	T-34B SI ACCUM OUTLET TO SI TEST LINE ISOLATION	O - UNSUPPORTED OPERATOR - MODIFIED U2R19 - Supported operators MWR 935398	The AOV was mounted on a 3/4" line with the valve operator unsupported	The valve was determined to be seismically inoperable. The operator was supported that same refueling out under MWR 935398	Fixed, MWR 935398 - completed 10/22/93	SQ-001633 resolves outlier. completed
45	A,I,V	7	SI	1SI-839D	SI B COLD LEG TO SI TEST LINE ISOLATION	O - The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection. Anchorage evaluation will be done. 7/25/94 - Support frame modified during U1R21. MR 93-047	The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection.	The support frame anchorage was modified during the same U1R21 refueling outage under MR 93-047	Fixed, MR 93-047. Accepted 4/29/94	SQ-001644 resolves outlier. Completed
46	A,I,V	7	SI	2SI-839D	SI B COLD LEG TO SI TEST LINE ISOLATION	O - UNSUPPORTED OPERATOR - MODIFIED U2R19 - Supported operators MWR 935398	The AOV was mounted on a 3/4" line with the valve operator unsupported	The valve was determined to be seismically inoperable. The operator was supported that same refueling out under MWR 935398	Fixed, MWR 935398 - completed 10/22/93	SQ-001634 resolves outlier. Completed
47	I,V	7	SI	1SI-844A	T-34A SI ACCUMULATOR DRAIN TO T-16 RCDT	O - Within 1/2" of concrete wall. Valve on 1" line . Recommend brace on yoke. 7/25/94 - Added operator support during U1R21 MR 94-031	The valve is within 1/2" of concrete wall. Valve on 1" line .	An operator support was installed during the same U1R21 refueling outage under modification MR 94-031.	Fixed, MR 94-031 - Accepted 4/25/94	SQ-001645 resolves outlier. Completed
48	I,V	7	SI	1SI-844B	T-34B SI ACCUMULATOR DRAIN TO T-16 RCDT	O - Valve operator support is not anchored to the floor. 7/25/94 - Modified operator support during U1R21 MR 94-031	The valve operator support is not anchored to the floor.	The valve support was mounted during the same U1R21 under MR 94-031	Fixed, MR 94-031 - Accepted 4/25/94	SQ-001646 resolves outlier. Completed
49	I,V,RG	7	SI	1SI-846	T-34A/B SI ACCUM NITROGEN INLET CONTROL	O - 36" offset on 1.25" line. Because of pipe support configuration, potential for pipe overstress.	The AOV offset of 36" < 45" allowable offset for a 1" line. However, because of the pipe support configuration, there is a potential for pipe overstress.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria. Modification request MR 94-066*B is initiated to upgrade the support of the 1" line.	(MR 94-066*B is incorrect) MR 95-059 installed a check valve, relief valve and regulator in the line during U1R23. S&L analysis WE-100165. Stresses are above allowable but below operability. CR 98-2401 created. 2/8/99: CR action (MAV) to do an analysis. MR 00-009 removed existing support and added two new supports.	SQ-001951 completed
50	I,V,RG	7	SI	2SI-846	T-34A/B SI ACCUM NITROGEN INLET CONTROL	O - 36" offset on 1.25" line. Because of pipe support configuration, potential for pipe overstress. Valve is considered operable - attached conduit will stabilize valve.	The AOV offset of 36" < 45" allowable offset for a 1" line. However, because of the pipe support configuration, there is a potential for pipe overstress.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria. Modification request MR 94-066*B is initiated to upgrade the support of the 1" line.	MR 94-066 was installed during U2R21. The pipe was moved to eliminate rubbing on adjacent pipe. New supports were installed on the valve operator and on each side of the valve. S&L analysis WE-200118, Rev. 0	SQ-001829 completed

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
51	I,V	7	SI	2SI-957	T-34A/B SI ACCUM NITROGEN HEADER VENT CONTROL	O - Yoke U-bolt missing, MWR submitted 7/25/94 - U-bolt to be installed U2R20 10/18/94 - U-Bolt installed 10/7/94 WO 935298	The valve operator yoke U-bolt was missing.	The valve was considered seismically operable based on a calculation that showed the pipe stress was < 2Sy. The valve operator U-bolt was installed during the next refuelling outage under Word Order 935298	Fixed, WO 935298 installed a new U-bolt. Completed 10/10/94	SQ-001635 resolves outlier. Completed
52	I,RG	7	WG	1WG-1786	T-16 RCDT VENT	O - Even though 24" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported.	Even though 24" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	EWR 96-049 assigned - valves have been as-built, 9/3/98. Need to draft sketch for valve supports. 4/1/99 - MR 96-035 will install operator support. WO 9904473. Installation complete.	SQ-001775 resolves this outlier
53	I,RG	7	WG	2WG-1786	T-16 RCDT VENT	O - Even though 15" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported. Check offset, 1WG-1786 offset measured at 24" EWR	The AOV offset of 15" < 45" allowable offset for a 1" line. However, because of the pipe support configuration, there is a potential for pipe overstress.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	EWR 96-050 assigned - valves have been as-built, 9/3/98. Need to draft sketch for valve supports. 4/1/99 - MR 96-035 will install operator support. WO 9904476. Installation complete.	SQ-001777 resolves this outlier
54	I,RG	7	WG	1WG-1787	T-16 RCDT VENT	O - Even though 24" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported.	Even though 24" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	EWR 96-049 assigned - valves have been as-built, 9/3/98. Need to draft sketch for valve supports. 4/1/99 - MR 96-035 will install operator support. WO 9904473. Installation complete.	SQ-001776 resolves this outlier
55	I,RG	7	WG	2WG-1787	T-16 RCDT VENT	O - Even though 15" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported. Check offset, 1WG-1787 offset measured at 24" EWR	The AOV offset of 15" < 45" allowable offset for a 1" line. However, because of the pipe support configuration, there is a potential for pipe overstress.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	EWR 96-050 assigned - valves have been as-built, 9/3/98. Need to draft sketch for valve supports. 4/1/99 - MR 96-035 will install operator support. WO 9904476. Installation complete.	SQ-001778 resolves this outlier
56	A,I	8	SI	1SI-878A	P-15B SI PUMP R-1 REACTOR VESSEL INJECTION	O - SRT review of pipe analysis Evaluated - Stress report Accession # - WE-100104	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The pipe analysis, Accession # - WE-100104, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001647 resolves outlier.
57	A,I	8	SI	2SI-878A	P-15B SI PUMP R-1 REACTOR VESSEL INJECTION	O - Valve body not shimmed. MSA evaluated. Considered acceptable. Accession # - WE-200084	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The piping analysis, Accession # - WE-200084, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001636 resolves outlier.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
58	A,I	8	SI	1SI-878B	P-15A SI PUMP LOOP B INJECTION	O - SRT review of pipe analysis Evaluated - Stress report Accession # - WE-100104	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The pipe analysis, Accession # - WE-100104, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001648 resolves outlier.
59	A,I	8	SI	2SI-878B	P-15A SI PUMP LOOP B INJECTION	O - Valve body not shimmed. MSA evaluated. Considered acceptable. Accession # - WE-200084	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The piping analysis, Accession # - WE-200084, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001637 resolves outlier.
60	A,I	8	SI	1SI-878C	P-15B SI PUMP R-1 REACTOR VESSEL INJECTION	O - SRT review of pipe analysis Evaluated - Stress report Accession # - WE-100104	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The pipe analysis, Accession # - WE-100104, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001649 resolves outlier.
61	A,I	8	SI	2SI-878C	P-15B SI PUMP R-1 REACTOR VESSEL INJECTION	O - Valve body not shimmed. MSA evaluated. Considered acceptable. Accession # - WE-200084	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The piping analysis, Accession # - WE-200084, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001638 resolves outlier.
62	A,I	8	SI	1SI-878D	P-15A SI PUMP LOOP A INJECTION	O - SRT review of pipe analysis Evaluated - Stress report Accession # - WE-100104	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The pipe analysis, Accession # - WE-100104, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001650 resolves outlier.
63	A,I	8	SI	2SI-878D	P-15A SI PUMP LOOP A INJECTION	O - Valve body not shimmed. MSA evaluated. Considered acceptable. Accession # - WE-200084	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The piping analysis, Accession # - WE-200084, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001639 resolves outlier.
64	A,I	10	VNAFW	HX-66	Auxiliary Feed Pump Area Cooler	O - Rubber isolators fail. They do not have sufficient shear and tension capacity to transfer the anchor loads to the concrete expansion anchors.	The air handling unit is mounted on rubber vibration isolators. The anchorage calculation concluded that the rubber isolators had insufficient capacity to transfer the anchorage loads to the concrete expansion anchors.	HX-66 is on the SSEL to maintain SW system integrity. The air handling and air cooling function is not required. The SW system engineer judged that a break in the attached 2" SW line would not significantly impact service water to other essential loads. The function of the air handling unit will be evaluated to determine if an anchorage upgrade is required.	EWR 96-046 assigned. MR 97-104 installed replacement vibration isolators. Accepted 2/28/98.	SQ-001672. Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
65	A,I	10	VNAFW	HX-66A	Auxiliary Feed Pump Area Cooler	O - The Spring Isolator base plate yields.	The air handling unit is mounted on spring vibration isolators. The anchorage calculation determined that the spring isolator base plate will yield.	HX-66A is on the SSEL to maintain SW system integrity. The air handling and air cooling function is not required. The SW system engineer judged that a break in the attached 2" SW line would not significantly impact service water to other essential loads. The function of the air handling unit will be evaluated to determine if an anchorage upgrade is required.	EWR 96-047 assigned. MR 98-127 initiated. (RE: DNC) 2/11/99 - Need WO. WO 9808637 is replacing HX-66A cooling coils. Work complete.	SQ-001888 Outlier is resolved.
66	A,I	10	SW	HX-98	RESIDUAL HEAT REMOVAL PUMP AREA COOLING COIL	O - Mounted on Neoprene pads. Pads need further eval per GIP Section 4.4. Evaluation by S&A? 5/22/95 - During the bolt tightness check on 2/20/95, the concrete expansion anchors for the left rear rubber vibration isolator were found to be never installed	The air handling unit is mounted on rubber vibration isolators. The anchorage calculation concluded that the rubber isolators had insufficient capacity to transfer the anchorage loads to the concrete expansion anchors.	HX-98 is on the SSEL to maintain SW system integrity. The air handling and air cooling function is not required. The SW system engineer judged that a break in the attached 2 1/2" SW line would not significantly impact service water to other essential loads. The function of the air handling unit will be evaluated to determine if an anchorage upgrade is required.	EWR 96-048 assigned. MR 97-105 installed. WO 9807185 replaced HX-98 cooling coils.	SQ-001841. Outlier is resolved.
67	A,I	10	VNRC	1W-4A	CONTAINMENT CAVITY COOLING FAN	O - No anchorage. Anchored during U1R21 by TCM and ARB. MR 94-032.	The air handling unit was found unanchored. O- No anchorage Anchored during U1R21 by TCM and ARB. MR 94-032.	The unit was anchored during that same U1R21 outage under modification MR 94-032.	Fixed, MR 94-032 installed new anchorage - 4/25/94.	SQ-001651 resolves outlier.
68	A,I	10	VNRC	1W-4B	CONTAINMENT CAVITY COOLING FAN	O - No anchorage. Anchored during U1R21 by TCM and ARB. MR 94-032.	The air handling unit was found unanchored. O- No anchorage Anchored during U1R21 by TCM and ARB. MR 94-032.	The unit was anchored during that same U1R21 outage under modification MR 94-032.	Fixed, MR 94-032 installed new anchorage - 4/25/94.	SQ-001652 resolves outlier.
69	A,I,H	11	VNCSR	HX-38A1,A2,A3	CABLE SPREADING ROOM AIR CONDITIONING UNIT	O - No Anchorage. Motor on steel isolation springs. ISRS exceeds RS. New component 7/13/94. It is the parent component of HX-38A1, HX-38A2 and HX-38A3. Equipment class changed from 21 to 11	The chiller unit is not anchored, the compressor motors are on springs, and the seismic demand exceeds 1.5 x BS at the low frequency peak.	The chiller is on the SSEL to maintain SW integrity. A leak in the SW pipe would not significantly affect SW flow to other essential loads. The HVAC room is designed to handle that flooding from a SW break. The chill water cooling function of the unit is not required. The function of the chiller unit will be evaluated to determine if an anchorage upgrade is required.	EWR 96-052 assigned. Chiller HX-038A replaced. MR 97-048'B installed new heat exchangers.	SQ-001957 Outlier is resolved.
70	A,I,H	11	VNCR	HX-38B1,B2,B3,B4	CONTROL ROOM AIR CONDITIONING UNIT	O - No Anchorage, Motor on steel isolation springs. ISRS exceeds RS. New component 7/13/94. It is the parent component of HX-38B1, HX-38B2, HX-38B3 and HX-38B4. Equipment class changed from 21 to 11	The chiller unit is not anchored, the compressor motors are on springs, and the seismic demand exceeds 1.5 x BS at the low frequency peak.	The chiller is on the SSEL to maintain SW integrity. A leak in the SW pipe would not significantly affect SW flow to other essential loads. The HVAC room is designed to handle that flooding from a SW break. The chill water cooling function of the unit is not required. The function of the chiller unit will be evaluated to determine if an anchorage upgrade is required.	EWR 96-051 assigned. Chiller HX-038B replaced. MR 97-049'C installed new heat exchangers.	SQ-001962 Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
71	A,I	12	DA	K-4B	G-02 EDG Starting Air Compressor Motor or Diesel	O - Loose hand crank resting against it which may pose an interaction hazard. 4/21/95 - a hand crank mount has been installed on the wall adjacent to the compressor	A loose hand crank was resting against the air compressor posing an interaction hazard.	Hand crank installed on a bracket on the wall adjacent to the air compressor	Hand crank installed on a bracket on the wall adjacent to the air compressor	SQ-001822 Outlier is resolved.
72	A,I	16	125V	D-07	STATION BATTERY CHARGER	O - Interaction, CABINET IS NOT TIED TO ADJACENT CABINET, ALSO BLOCK WALL MAY GOVERN HCLPF. EWR submitted 2/4/94 for CSE to bolt battery charger to adjacent switchgear. MR 94-048	The battery charger is not attached to the adjacent switchgear.	The battery charger does not contain essential relays, and there are 3 switchgear cubicles between the battery charger and switchgear cubicle that contains the essential relays. Therefore, the battery charger and the switchgear are considered seismically operable. Modification Request MR 94-048 has been initiated to bolt these together.	MR 94-048 bolted D-07 to the old 2A-05. WO 9904504.	SQ-001938 Outlier is resolved.
73	A,I	16	125V	D-08	STATION BATTERY CHARGER	O - Interaction, CABINET IS NOT TIED TO ADJACENT CABINET, ALSO BLOCK WALL MAY GOVERN HCLPF. EWR submitted 2/4/94 for CSE to bolt battery charger to adjacent switchgear. MR 94-048	The battery charger is not attached to the adjacent switchgear.	The battery charger does not contain essential relays, and there are 3 switchgear cubicles between the battery charger and switchgear cubicle that contains the essential relays. Therefore, the battery charger and the switchgear are considered seismically operable. Modification Request MR 94-048 has been initiated to bolt these together.	MR 94-048 bolted D-08 to 1A-05. WO 9504505.	SQ-001939 Outlier is resolved.
74	A,I	16	Y	DY-0A	RED 125V DC/120V AC ALTERNATE INVERTER	O - Interaction; Mounted directly adjacent to 1C-167. The cabinets are not fastened together. P-REPORT	The outlier is an interaction. DY-0A is mounted directly adjacent to 1C-167. The cabinets are not fastened together.	The inverter does not contain any essential relays. It is IEEE 344-1975 qualified. It is considered seismically operable based on there being no instances of inverter failure due to impact in the earthquake experience database. The inverter will be fastened to the adjacent cabinet.	MR 96-037 assigned to move inverter to create a gap between inverter and relay cabinet. WO 9805184. Installation complete.	SQ-001867 Outlier is resolved.
75	A,I	16	Y	DY-0B	BLUE 125V DC/120V AC ALTERNATE INVERTER	O - Interaction; Mounted directly adjacent to 2C-156. The cabinets are not fastened together. P-REPORT	The outlier is an interaction. DY-0B is mounted directly adjacent to 2C-157. The cabinets are not fastened together.	The inverter does not contain any essential relays. It is IEEE 344-1975 qualified. It is considered seismically operable based on there being no instances of inverter failure due to impact in the earthquake experience database. The inverter will be fastened to the adjacent cabinet.	MR 96-037*A assigned to move inverter to create a gap between inverter and relay cabinet. WO 9805185. Installation complete	SQ-001868 Outlier is resolved.
76	A,I,RG	19	RC	2TE-450B	RC LOOP A HOT LEG TEMPERATURE RTD	O - Impinging on insulation. Does thermal expansion while hot accommodate seismic displacements? EWR submitted for MSA inspection/evaluation EWR 94-056. EWR determined that interaction was a problem, Calc N-94-168. MR 95-021 initiated to replace TE.	The temperature element is impinging on insulation. It must be determined if thermal expansion while hot accommodate seismic displacements.	An engineering evaluation showed that thermal expansion did not accommodate the expected seismic displacements. Modification request MR 95-021 is initiated to replace TE with a shorter one.	MR 95-021 initiated to replace TE with a bent unit. Scheduled for U2R23 (RE: PHB) Replacement TE installed U2R23	SQ-001570 Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
77	A,I,RG	19	RC	2TE-450D	RC LOOP A HOT LEG TEMPERATURE RTD	O - Impinging on insulation. Does thermal expansion while hot accommodate seismic displacements? EWR submitted for MSA inspection/evaluation. EWR 94-056 EWR determined that interaction was a problem, Calc N-94-168. MR 95-021 initiated to replace TE.	The temperature element is impinging on insulation. It must be determined if thermal expansion while hot accommodate seismic displacements.	An engineering evaluation showed that thermal expansion did not accommodate the expected seismic displacements. Modification request MR 95-021 is initiated to replace TE with a shorter one.	MR 95-021 initiated to replace TE with a bent unit. Scheduled for U2R23 (RE: PHB) Replacement TE installed U2R23	SQ-001571 Outlier is resolved.
78	I	19	RH	1TE-622	HX-11A RHR HX OUTLET TEMPERATURE RTD	O - Interaction. Pinned against pipe support. Support has a 2" gap so pipe could move and shear or bend element. Needs EWR.	The outlier concern is interaction. The TE is pinned against a pipe support. The support has a 2" gap so pipe could move and shear or bend element.	The piping analysis shows that the maximum expected pipe displacement at the TE is .13". Therefore only slight bending of the TE is expected and it is considered seismically operable. The temperature element will be rotated to removed the interaction concern. The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	MR 96-036 assigned. MR 96-036 was cancelled. WO 9607885 repositioned the TE and conduit and secured w/ Loctite. (RE: Andy Hoy) Completed 7/21/97	SQ-001823 Outlier is resolved.
79	A,I,RG	20	MMS	C-01-1(2)C-04	MAIN CONTROL BOARDS	O - Interaction, adjacent supply cabinets not secured. EWR submitted. 7/25/94 - Supply cabinets secured. 1/18/95 - MR 94-021 installed 6/9/94 resolves interaction concern. Item identified during MCB walkdown 12/90 - Overhead lights and duct above control room restrained by chains or light metal straps that are sometimes hooked with open ended hooks. SRT not concerned that duct or lights pose a structural hazard, however, they may pose an operator (human injury) hazard.	An adjacent supply cabinet posed a spatial interaction hazard.	The supply cabinet was attached to the back of 2C-03 under modification MR 94-021.	Fixed, MR 94-021 bolted supply cabinets to the back of 1C-03 and 2C-03.	SQ-001824 Outlier is resolved.
80	A,I	20	IOPS	1C-75	TURBINE IOPS MAIN TRIP PANEL	O - Doors are not positively latched. T. Dykstra to submit MWR after inspection. 6/19/95 - Need to discuss with Steve Bowe to see if he would rather install different handles or have I&C start using the key lock to latch the door. 9/23/96 - WO 9607849	O - Doors are not positively latched.	The cabinet does not contain any essential relays, and the doors are fairly light weight therefore, significant damage is not expected to occur. I & C will be contacted to determine if the existing door latch can be used or whether a new handle would be preferred.	WO 9607849 installed new handle - completed 1/20/97	SQ-001825 Outlier is resolved.
81	A,I	20	IOPS	2C-75	TURBINE IOPS MAIN TRIP PANEL	O - Doors are not positively latched. T. Dykstra to submit MWR after inspection. 6/19/95 - Need to discuss with Steve Bowe to see if he would rather install different handles or have I&C start using the key lock to latch the door. 9/23/96 - WO 9607849	The doors are not positively latched.	The cabinet does not contain any essential relays, and the doors are fairly light weight therefore, significant damage is not expected to occur. I & C will be contacted to determine if the existing door latch can be used or whether a new handle would be preferred.	WO 9607850 installed new handle - completed 12/7/96	SQ-001826 Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
82	A,I	20	MMS	1C-105-114	PLANT PROCESS I&C CABINETS	O - 1C-105 door binding, not secured. Interaction - Supply cabinet interference EWR submitted. 1/18/95 - MR 94-021 installed 6/9/94 resolves interaction concern.	The door on 1C-105 was identified as binding and not being secured, allowing it to impact the cabinet,door binding. A adjacent supply cabinet poses and interaction concern.	The cabinet was bolted to the back of 1C-03 under MR 94-021. The door binding was checked by an I&C technician. The door does bind, but the binding does not prevent the door from closing. Technicians must use an extra effort to ensure the door is shut.	Fixed, MR 94-021 bolted supply cabinet to the back of 1C-03. Checked door binding with I&C technician. The door does bind, but the binding does not prevent the door from closing. Technicians must use an extra effort to ensure the door is shut.	SQ-001827 completed.
83	A,I	20	MMS	2C-105-114	PLANT PROCESS I&C CABINETS	O - Interaction - Supply cabinet interference EWR submitted. 1/18/95 - MR 94-021 installed 6/9/94 resolves interaction concern.	An adjacent supply cabinet posed a spatial interaction hazard.	The supply cabinet was attached to the back of 2C-03 under modification MR 94-021.	Fixed, MR 94-021 bolted supply cabinet to the back of 2C-03. Accepted 7/28/94	SQ-001830 completed.
84	A,I	20	RP	1C-115-133	PLANT PROCESS I&C CABINETS	O - Interaction - Table in SE corner should be secured or moved. EWR submitted. 1/18/95 - MR 94-021 installed 6/9/94 resolves interaction concern.	An adjacent supply cabinet posed a spatial interaction hazard.	The supply cabinet was attached to the back of 1C-03 under modification MR 94-021.	Fixed, MR 94-021 bolted supply cabinet to the back of 1C-03. Accepted 7/28/94	SQ-001831 completed.
85	A,I	20	RP	1C-151-155	RP TRAIN A RELAY CABINETS	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage. Needs EWR	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-007 will upgrade the anchorage.	MR 95-007 upgraded the anchorage - accepted 4/15/96	SQ-001832 Outlier is resolved.
86	A,I	20	RP	2C-151-155	RP TRAIN A RELAY CABINETS	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage. Needs EWR	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-008 will upgrade the anchorage.	MR 95-008 upgraded the anchorage. Outlier Resolved	SQ-001604 Outlier is resolved.
87	A,I	20	ESF	1C-156-157	SAFEGUARDS TRAIN A RELAY CABINETS	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage.	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-011 will upgrade the anchorage.	MR 95-011 cancelled, work combined with MR 95-007. MR 95-007 upgraded the anchorage - accepted 4/15/96	SQ-001524 completed.
88	A,I	20	ESF	2C-156-158	SAFEGUARDS TRAIN A RELAY CABINETS	O - Interaction: Mounted directly adjacent to inverter DY-OB. The cabinets are not fastened together. P-REPORT Provide Mod Package	The outlier is an Interaction. The cabinets are mounted directly adjacent to inverter DY-OB. The cabinets are not fastened together.	No "bad actor" relays are located in the cabinets. The relays in the cabinets have a seismic capacity of at least 4 g's. Therefore, they are considered seismically operable. The cabinet will be fastened to the adjacent inverter.	MR 96-037*A assigned to move inverter to create a gap between inverter and relay cabinet. WO 9805184. Installation complete.	SQ-001870 Outlier is resolved.
89	A,I	20	ESF	1C-158/166/167	SAFEGUARDS TRAIN B AND MISC RELAY CABINETS	O - Interaction: Mounted directly adjacent to inverter DY-OA. The cabinets are not fastened together. P-REPORT Provide Mod Package	The outlier is an Interaction. The cabinets are mounted directly adjacent to inverter DY-OA. The cabinets are not fastened together.	No "bad actor" relays are located in the cabinets. The relays in the cabinets have a seismic capacity of at least 4 g's. Therefore, they are considered seismically operable. The cabinet will be fastened to the adjacent inverter.	MR 96-037 assigned to move inverter to create a gap between inverter and relay cabinet. WO 9805185. Installation complete	SQ-001869 Outlier is resolved.
90	A,I	20	RP	1C-161-165	RP TRAIN B RELAY LOGIC CABINET (RED)	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage. Needs EWR	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-009 will upgrade the anchorage.	MR 95-009 cancelled, work combined with MR 95-007. MR 95-007 upgraded the anchorage - accepted 4/15/96	SQ-001843 Outlier is resolved.
91	A,I	20	RP	2C-161-165	RP TRAIN B RELAY CABINETS	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage. Needs EWR	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-010 will upgrade the anchorage.	MR 95-010 cancelled, work combined with MR 95-008. MR 95-008 upgraded the anchorage. Outlier Resolved.	SQ-001605 Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
92	A,I	20	ESF	2C-166-167	SAFEGUARDS TRAIN B AND MISC RELAY CABINETS	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage. Overhead light S-clamp needs to be clamped down. Needs EWR	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-012 will upgrade the anchorage.	MR 95-012 cancelled - work transferred to MR 95-008. MR 95-008 upgrade the anchorage, accepted 10/25/95. WO 96-0001(completed 5/3/96) inspected for open S-hooks on lighting in the CSR. 5 open S-hooks found and all were closed.	SQ-001833 Outlier is resolved.
93	A,I	20	COMP	C-178-179	COMPUTER INPUT MUX	O - Line Printer adjacent to cabinet	Line Printer, LP-300, is kept on the floor adjacent to the cabinet.	C-178-179 are computer cabinets contain primarily solid state and circuit board components. There are no essential relays in the cabinets. The cabinets are considered seismically operable. I&C will store the printer in a different location and have it adjacent to the cabinets only when being used.	12/30/98 - Have inspected the Computer Room on numerous occasions since the USI A-46 walkdown. The printer has been relocated. No interaction hazards were identified.	SQ-001834 Outlier is resolved.
94	A,I,C	21	RH	2HX-11A	RESIDUAL HEAT REMOVAL HEAT EXCHANGER	O - Base bolt nuts not seated. 1/4" to 3/8" gaps. Not an operability concern since HX is top supported in both lateral directions.	The cast in place anchor bolt nuts are not fully seated. There are 1/4" to 3/8" gaps between the nut and the HX foot.	Not an operability concern since HX is top supported in both lateral directions.	EWR 96-053 assigned. WO 9815436 initiated to inspect / replace anchor bolt nuts. WO complete	SQ-001835 Outlier is resolved.
95	A,I,C	21	CC	1T-12	COMPONENT COOLING SURGE TANK	O - Oversized anchor bolt holes (2.25" x 1.18") identified from WEST 685J114. Anchor bolts are 1" diameter. Too much clearance to say seismic load is transferred to enough anchor bolts.	The saddle anchorage on both ends of the tank has oversized anchor bolt holes (2.25" x 1.18") identified from WEST 685J114. The anchor bolts are 1" diameter. Therefore, there is too much clearance to say seismic load is transferred evenly to enough anchor bolts	There are large washers between the anchorage nut and the oval holes. Therefore, some load will be transferred to all of the anchor bolts. In addition, the attached piping will help in restraining the tank. Therefore, the tanks are considered seismically operable. The anchorage will be upgraded with a structural member between the tank base and the anchor bolt.	MR 94-091°C installed 1/2" steel plate under each of the nuts on the south side of the tank. The plate is welded to the saddle. The installation was checked 12/3/97	SQ-001836 Outlier is resolved.
96	A,I,C	21	CC	2T-12	COMPONENT COOLING SURGE TANK	O - Oversized anchor bolt holes (2.25" x 1.18") identified from WEST 685J114. Anchor bolts are 1" diameter. Too much clearance to say seismic load is transferred to enough anchor bolts.	The saddle anchorage on both ends of the tank has oversized anchor bolt holes (2.25" x 1.18") identified from WEST 685J114. The anchor bolts are 1" diameter. Therefore, there is too much clearance to say seismic load is transferred evenly to enough anchor bolts	There are large washers between the anchorage nut and the oval holes. Therefore, some load will be transferred to all of the anchor bolts. In addition, the attached piping will help in restraining the tank. Therefore, the tanks are considered seismically operable. The anchorage will be upgraded with a structural member between the tank base and the anchor bolt.	MR 94-091°C installed 1/2" steel plate under each of the nuts on the south side of the tank. The plate is welded to the saddle. The installation was checked 12/3/97	SQ-001837 Outlier is resolved.
97	A,I	21	SI	1T-13	REFUELING WATER STORAGE TANK W/6 IMMERSION HTRS	O - ANALYSIS/REINFORCEMENT 7/25/94 - Received DRAFT analysis from S&A showing RWST has sufficient capacity.	The tank does not pass the screening criteria of Section 7 of the GIP.	The tank has been analyzed using a finite element analysis [23].	In WE NRC RAI response NPL 97-0450, page 5 of 22, WE stated that the design margin from the A-46 analysis is not sufficient. EWR 97-169 assigned. MR 99-040 upgraded the RWST.	SQ-001999 resolves this outlier

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
98	A,I	21	SI	2T-13	REFUELING WATER STORAGE TANK W/6 IMMERSION HTRS	O - ANALYSIS/REINFORCEMENT 7/25/94 - Received DRAFT analysis from S&A showing RWST has sufficient capacity.	The tank does not pass the screening criteria of Section 7 of the GIP.	The tank has been analyzed using a finite element analysis [23].	In WE NRC RAI response NPL 97-0450, page 5 of 22, WE stated that the design margin from the A-46 analysis is not sufficient. EWR 97-169 assigned. MR 99-041 upgraded RWST. MR 00-0052 replaced tank vent FME screen with a new screen.	SQ-001909 Outlier is resolved.
99	A,I	21	DA	T-61F	G-02 EDG STARTING AIR RECEIVER	O - Anchor - cracked grout	The grout under the foot of one of the air receiver tank legs is cracked.	An inspection subsequent to the seismic verification walkdown found a steel spacer plate under the leg of the tank. Therefore the grout is not structural and the tank is considered seismically operable. The leg will be re-grouted.	WO- 9501221 completed 5/23/97 - Installed new grout	SQ-001838 resolves the outlier
100	A,I	22		AUX8FTAREA	PAB 8' Cable & Conduit Raceways		LAR 9 is an OUTLIER because it does not meet the requirements of Section 8.0 of the GIP. See S&A's LAR - Cable Tray and Conduit Supports Report, 91C2696-C-018.		Work completed under MR 96-022. Post installation walkdown complete. WO 9808941	SQ-001714 resolves the outlier
101	A,I	22		SPREADINGRM	CSR Cable & Conduit Raceways		LAR 3 & LAR 4 are OUTLIER(s) because it does not meet the requirements of Section 8.0 of the GIP. See S&A's LAR - Cable Tray and Conduit Supports Report, 91C2696-C-018.		MR 96-080 created to upgrade cable tray supports in the CSR (RE: DNC). Installation complete	SQ-001881 Outlier is resolved.
102	A,I	22		U1C21FTAREA	U1C 21' Cable & Conduit Raceways	O - Loose base clip angle	One outlier was noted on the floor-to-ceiling hanger east of the access hatch near location 8 (as marked on liner wall). The base clip angle on one side is loose and should be tightened.		DNC & TJD1 inspected & tightened the base clip angle 6/4/98. The CEA turned in < 1/4 turn and satisfied the requirements of a tightness check.	SQ-001388 resolves outlier
103	A,I	22		U1C46FTAREA	U1C 46' Cable & Conduit Raceways	O - Cables not tied to tray	(1) Vertical trays 1VR01 and 1VQ01 had large cable bundles (aka "pigtailed") from wall penetrations that were not tied to vertical tray and are free to swing, see figure 12.		Resolved during U1R24. Verified during walkdown. WO 9808624	SQ-001549 resolves outlier
104	A,I	22		U1C46FTAREA	U1C 46' Cable & Conduit Raceways	O - Cables not tied to tray	(2) Horizontal tray 1VA04 at penetration has cable pigtail hanging out of tray and not restrained to or within the tray. There appears to be other tray bundles with similar problems behind it, see figure 13.		Resolved during U1R24. Verified during walkdown. WO 9808624	SQ-001549 resolves outlier

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
105	A,I	22		U2C46FTAREA	U2C 46" Cable & Conduit Raceways	O - Cables not tied to tray	There is an isolated vertical cable tray which has no plastic ties and the cables appear to be hanging out of it, hence it is an outlier, see figure 18.		Resolved during U2R23, WO 9713098. Verified during walkdown.	SQ-001640 resolves outlier
106	A,I	1	480V	1B-32	480V MOTOR CONTROL CENTER PAB SAFEGUARDS	SAT - O- End cabinet on right hand side, base channel CEA fastening nuts are loose. Need to be tightened. T. Dykstra to develop CEA torque tightness procedure, Al Beyer to review. Then submit WO to do torque tightness check. WO 9411729. Maintenance			4/20/95 - Attempt to turn the nut during the bolt tightness test was unsuccessful. Application of torque > installation torque was not desirable due to possibility of breaking the bolt. Since the bolt is loaded in shear only, this is considered acceptable	NOT AN OUTLIER - Resolved in the anchorage analysis on the original SEWS
107	A,I,RG	3	4.16KV	1A-05	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	SAT - O-WELD QUALITY IN QUESTION, Recommend thorough weld inspection. T. Dykstra to check with QA about weld inspections			Weld inspection completed, used results to adjust anchorage capacity in the anchorage calculation.	NOT AN OUTLIER - resolved w/ weld inspection and anchorage calc.
108	A,I,RG	3	4.16KV	2A-05	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	SAT - O-WELD QUALITY IN QUESTION, Recommend thorough weld inspection. T. Dykstra to check with QA about weld inspections			Weld inspection completed, used results to adjust anchorage capacity in the anchorage calculation.	NOT AN OUTLIER - resolved w/ weld inspection and anchorage calc.
109	A,I,RG	3	4.16KV	1A-06 (old)	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	PO - Not fastened to adjacent D-08 battery charger. WELD QUALITY IN QUESTION, Recommend thorough weld inspection. T. Dykstra to check with QA about weld inspections. 11/7/94 - Renamed to 1A-06 (old). The old 1A-05 and old 1A-06 will be hard tied together			MR 94-048 connected cabinets together. WO 9904505.	SQ-001939 Outlier is resolved.
110	A,I,RG	3	4.16KV	2A-06 (old)	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	PO - Not fastened to adjacent D-07 battery charger. WELD QUALITY IN QUESTION, Recommend thorough weld inspection. T. Dykstra to check with QA about weld inspections. 11/7/94 - Renamed to 1A-06 (old). The old 1A-05 and old 1A-06 will be hard tied together			MR 94-048 connected cabinets together. WO 9904504.	SQ-001938 Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
111	I,RG	7	SC	1SC-966A	PZR STEAM SAMPLE CONTAINMENT ISOLATION	PO - Valve on 3/8" tubing. Valve body clamped to support shelf by 2 U-bolts. May not be able to resist moment. Need material 11/11/94 Update - Material info provided to S&A. Valve status changed to Outlier based on walkdown 7/26/94. SRT recommends operator support	The AOV body is mounted to a support shelf by 2 U-bolts in friction. The valve is mounted on a 3/8" line. If the U-bolts slip, the potential exists for the line to be overstress.	This valve was not declared an outlier. This valve is normally closed and is required to stay closed in the event of an SSE. Rather than analyzing the U-bolt support's capacity, the SRT recommended installing an operator support as a prudent fix. The U	MR 96-035 installed operator supports.	SQ-001772 resolves this issue
112	I,RG	7	SC	1SC-966B	PZR LIQUID SAMPLE CONTAINMENT ISOLATION	PO - Valve on 3/8" tubing. Valve body clamped to support shelf by 2 U-bolts. May not be able to resist moment. Need material 11/11/94 Update - Material info provided to S&A. Valve status changed to Outlier based on walkdown 7/26/94. SRT recommends operator support	The AOV body is mounted to a support shelf by 2 U-bolts in friction. The valve is mounted on a 3/8" line. If the U-bolts slip, the potential exists for the line to be overstress.	This valve was not declared an outlier. This valve is normally closed and is required to stay closed in the event of an SSE. Rather than analyzing the U-bolt support's capacity, the SRT recommended installing an operator support as a prudent fix. The U	MR 96-035 installed operator supports.	SQ-001773 resolves this issue
113	A,I,RG	7	SC	1SC-966C	RC HOT LEG SAMPLE	PO - Valve on 3/8" tubing. Valve body clamped to support shelf by 2 U-bolts. May not be able to resist moment. Need material 11/11/94 Update - Material info provided to S&A. Valve status changed to Outlier based on walkdown 7/26/94. SRT recommends operator support	The AOV body is mounted to a support shelf by 2 U-bolts in friction. The valve is mounted on a 3/8" line. If the U-bolts slip, the potential exists for the line to be overstress.	This valve was not declared an outlier. This valve is normally open and is required to close in the event of an SSE. Rather than analyzing the U-bolt support's capacity, the SRT recommended installing an operator support as a prudent fix. The U1 configuration	MR 96-035 installed operator supports.	SQ-001774 resolves this issue
114	A,I,V	7	SI	2SI-897B	SI TEST LINE RETURN SECOND OFF ISOLATION	SAT - O - Attached copper lines too stiff. T. Dykstra to evaluate failure if copper line breaks. Valve currently gagged open during normal operation. P-MAT 11/11/94 Update - Valve walked down again 9/26/94. SRT confirmed that copper line was too stiff			Resolved	NOT AN OUTLIER - Resolved on original SEWS
115	A,I,C	8	CC	1CC-815	T-12 CC SURGE TANK EMERGENCY MAKEUP WATER INLET	PO - pipe has insufficient supports - 11/11/94 update - STATUS changed to outlier. Valves also identified as having insufficient pipe support adjacent to valve during the CCW Upgrade piping walkdowns. PO - 3g required to qualify valve yoke. Trapeze supports may allow valve yoke to swing resulting in possible pipe failure			NOT AN OUTLIER - CCW Upgrade identified these valves as having insufficient support. - MR 94-091 installed valve support. Verified installation 12/3/97	NOT AN OUTLIER - Resolved on original SEWS
116	A,I,C	8	CC	2CC-815	T-12 CC SURGE TANK EMERGENCY MAKEUP WATER INLET	PO - pipe has insufficient supports - 11/11/94 update - STATUS changed to outlier. Valves also identified as having insufficient pipe support adjacent to valve during the CCW Upgrade piping walkdowns. PO - 3g required to qualify valve yoke. Trapeze supports may allow valve yoke to swing resulting in possible pipe failure			NOT AN OUTLIER - CCW Upgrade identified these valves as having insufficient support. - MR 94-091 installed valve support. Verified installation 12/3/97	NOT AN OUTLIER - Resolved on original SEWS

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
117	A,I	8	SW	SW-2832A-S	K-3A SA COMPRESSOR INLET SOLENOID	SAT - O-Attached conduit is very flexible and should be restrained. Check with Frank Mueller about SW piping replacement. Rewalked 10/26/94 by SR St Amour and W Djordjevic. Determined flexibility was not a problem.			Resolved	NOT AN OUTLIER - Resolved on original SEWS
118	A,I	15	125V	D-05	125V DC STATION BATTERY	SAT - O-SPACER, Need battery cell type information. EWR submitted 2/4/94 for ESE to install styrofoam bead spacers. 7/25/94 - EWR cancelled. T. Dykstra to submit MWR to install spacers. 1/18/95 - Qual report shows batteries shake table tested in same			Resolved	NOT AN OUTLIER - Resolved on original SEWS
119	A,I	15	125V	D-06	125V DC STATION BATTERY	SAT - O-SPACER. EWR submitted 2/4/94 for ESE to install styrofoam bead spacers. 7/25/94 - EWR cancelled. T. Dykstra to submit MWR to install spacers. 1/18/95 - Qual report shows batteries shake table tested in same configuration at PBNP. No addition			Resolved	NOT AN OUTLIER - Resolved on original SEWS
120	A,I	15	125V	D-305	SWING STATION BATTERY	SAT - O-SPACER. EWR submitted 2/4/94 for ESE to install styrofoam bead spacers. 7/25/94 - EWR cancelled. T. Dykstra to submit MWR to install spacers. 1/18/95 - Qual report shows batteries shake table tested in same configuration at PBNP. No addition			Resolved	NOT AN OUTLIER - Resolved on original SEWS
121	A,I,C	18	CC	FI-643	K-1A WASTE GAS COMP CC RETURN FLOW INDICATOR	SAT - O-Anchor Bolted to Block Wall - no thru bolts T. Dykstra to check scope of block wall program. Tug tested by B.O. Sasman & W. Djordjevic 7/94 OK.			Resolved	NOT AN OUTLIER - Resolved on original SEWS
122	A,I,C	18	CC	FI-645	K-1B WASTE GAS COMP CC RETURN FLOW INDICATOR	SAT - O-Anchor Bolted to Block Wall - no thru bolts T. Dykstra to check scope of block wall program. Tug tested by B.O. Sasman & W. Djordjevic 7/94 OK.			Resolved	NOT AN OUTLIER - Resolved on original SEWS
123	I,RG	18	AF	LT-4039	T-24B CST LEVEL TRANSMITTER	O - Interaction, POTENTIAL FOR BLOCK WALL TO FALL ON COMPONENT. T. Dykstra to evaluate function of LT. 1/18/95 - LTs removed from A-46 list. Still IPEEE and RG 1.97.			Deleted from SSEL	Deleted from SSEL
124	I,RG	18	AF	LT-4040	T-24A CST LEVEL TRANSMITTER	O - Interaction, POTENTIAL FOR BLOCK WALL TO FALL ON COMPONENT. T. Dykstra to evaluate function of LT. 1/18/95 - LTs removed from A-46 list. Still IPEEE and RG 1.97.			Deleted from SSEL	Deleted from SSEL

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
125	I,RG	18	AF	LT-4041	T-24B CST LEVEL TRANSMITTER	O - Interaction, POTENTIAL FOR BLOCK WALL TO FALL ON COMPONENT. T. Dykstra to evaluate function of LT. 1/18/95 - LTs removed from A-46 list. Still IPEEE and RG 1.97.			Deleted from SSEL	Deleted from SSEL
126	I,RG	18	AF	LT-4038	T-24A CST LEVEL TRANSMITTER	O - Interaction, POTENTIAL FOR BLOCK WALL TO FALL ON COMPONENT. T. Dykstra to evaluate function of LT. 1/18/95 - LTs removed from A-46 list. Still IPEEE and RG 1.97.			Deleted from SSEL	Deleted from SSEL
127	A,I	18	RP	2PT-469	HX-1A SG PRESSURE TRANSMITTER	SAT - O-Interaction - Insufficient slack on inlet tube. T. Dykstra to submit MWR 11/11/94 Update - 9/26/94 walkdown by SRT did tug test on all 6 PT's in PAB 46' elevation east of SFP. Concluded that robust stanchions were rigid enough to prevent difference			Resolved	NOT AN OUTLIER - Resolved on original SEWS
128	A,I	18	RP	2PT-482	HX-1A SG STEAM PRESSURE TRANSMITTER	SAT - O-Interaction - Insufficient slack on inlet tube. T. Dykstra to submit MWR 11/11/94 Update - 9/26/94 walkdown by SRT did tug test on all 6 PT's in PAB 46' elevation east of SFP. Concluded that robust stanchions were rigid enough to prevent difference			Resolved	NOT AN OUTLIER - Resolved on original SEWS
129	I,RG	18	SI	1PT-936	T-34B SI ACCUMULATOR PRESSURE TRANSMITTER	SAT - resolved using Unistrut deflection calc. O - Cable tray support within 3/4" of PT			Resolved on SEWS using a Unistrut deflection calc.	NOT AN OUTLIER - Resolved on original SEWS
130	A,I,C	18	SC	1RK-20	PRIMARY PLANT SAMPLE ROOM RACK	SAT - O - Interim outlier until anchorage is checked. Interaction - adjacent sample sink has no visible anchorage			4/25/95 - phone conversation with Wally Djordjevic - determined that since the only function of the rack was to support flow indicator and that the sample tubing is isolated upstream of rack and there is no requirement to operate the valves on the rack.	NOT AN OUTLIER - Resolved on original SEWS
131	A,I,C	18	SC	2RK-20	PRIMARY PLANT SAMPLE ROOM RACK	SAT - O - Interim outlier until anchorage is checked. Interaction - adjacent sample sink has no visible anchorage			4/25/95 - phone conversation with Wally Djordjevic - determined that since the only function of the rack was to support flow indicator and that the sample tubing is isolated upstream of rack and there is no requirement to operate the valves on the rack.	NOT AN OUTLIER - Resolved on original SEWS

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
132	A.I	20	RP	2C-115-133	PLANT PROCESS I&C CABINETS	PO - Interaction - Supply cabinet interference. EWR submitted. 1/18/95 - MR 94-021 installed. 6/9/94 resolves interaction concern. 6/28/96 - W/O 9503622 replaced missing CEA bolt in 2C-130.			Fixed, MR 94-021 bolted supply cabinet to the back of 2C-03.	SQ-001839 completed.

ATTACHMENT A Seismic Walkdown Equipment List Unit 1 & SFP (SWEL)

SWEL	RISK	N E W	UNIT	SYS CODE	EQUIP CLASS	WALK BY AREA	EQUIP #	EQUIP NAME	1	2	3	4	5	TRN	IPEEE Equip. Enhanced	LOCATION DESC
SWEL1-1	Y		1	AF	5	1	1P-029	AUX FEEDWATER TURBINE-DRIVEN PUMP	X	X		X		A		8/CB/AFP RM 1P-29 CUB
SWEL1-1			0	AF	5	1	P-038A	AUX FEEDWATER MOTOR-DRIVEN PUMP	X	X	X			A		8/CB/AFP RM P-38A CUB
SWEL1-1	Y		1	AF	7	1	1AF-04002	1P-29 AFP MINI RECIRC CONTROL	X	X		X		A		8/CB/AFP RM 1P-29 CUB
SWEL1-1			0	AF	7	1	AF-04007	P-38A SSGP MINI RECIRC CONTROL	X	X		X		A		8/CB/AFP RM P-38A CUB
SWEL1-1			0	AF	7	1	AF-04012	P-38A SSGP DISCHARGE CONTROL	X	X		X		A		8/CB/AFP RM P-38A CUB
SWEL1-1		Y	0	125V	14	1	D-63	125V DC DISTRIBUTION PANEL	X	X	X	X	X	A		8/CB/AFP RM 1P-29 CUB 1RK-89
SWEL1-1			0	AF	18	1	RK-25A	P-38A SSGP INSTRUMENTATION RACK	X	X				A		8/CB/AFP RM P-38A CUB
SWEL1-1		Y	1	AF	21a	1	1T-212	1P-29 AFP MINI RECIRC IA 1AF-4002 BACKUP ACCUMULATOR	X	X		X		A		8/CB/AFP RM
SWEL1-1			1	AF	8a	1	1AF-04000	1P-29 AFP DISCHARGE 1HX-1B SG INLET ISOLATION MOV	X	X		X		A		8/CB/AFP RM 1P-29 CUB
SWEL1-1			1	AF	8a	1	1AF-04001	1P-29 AFP DISCHARGE 1HX-1A SG INLET ISOLATION MOV	X	X		X		A		8/CB/AFP RM 1P-29 CUB
SWEL1-1			1	AF	8a	1	1AF-04006	1P-29 AFP SUCTION FROM SERVICE WATER	X	X		X		A		8/CB/AFP RM 1P-29 CUB
SWEL1-1			0	AF	8a	1	AF-04009	P-38A SSGP SUCTION FROM SERVICE WATER	X	X		X		A		8/CB/AFP RM P-38A CUB
SWEL1-1		Y	0	AF	8a	1	AF-04023	P-38A SSGP DISCHARGE TO 1HX-1A STEAM GENERATOR	X	X		X		A		8/CB/AFP RM P-38A CUB
SWEL1-1			1	MS	8b	1	1MS-02090	1P-29 AFP BEARING COOLING INLET	X	X		X		A		8/CB/AFP RM
SWEL1-1	Y		1	480V	2	9	1B-03	480V SAFEGUARDS LOAD CENTER	X	X	X	X	X	A	X	26/CB/CSR
SWEL1-1	Y		1	480V	2	9	1B-04	480V SAFEGUARDS LOAD CENTER	X	X	X	X	X	B	X	26/CB/CSR
SWEL1-1	Y		1	480V	4	9	1X-13	1B-03 STATION SERVICE TRANSFORMER	X	X	X	X	X	A	X	26/CB/CSR
SWEL1-1	Y		1	480V	4	9	1X-14	1B-04 STATION SERVICE TRANSFORMER	X	X	X	X	X	B	X	26/CB/CSR
SWEL1-1			1	Y	14	9	1Y-203	WHITE 120V INVERTER DISTRIBUTION PANEL	X	X	X	X	X	A		26/CB/CSR WEST WALL
SWEL1-1		Y	0	125V	14	9	D-12	125V DC DISTRIBUTION PANEL	X	X	X	X	X	A		26/CB/CSR EAST
SWEL1-1	Y	Y	0	125V	14	9	D-14	125V DC DISTRIBUTION PANEL	X	X	X	X	X	B		26/CB/CSR EAST
SWEL1-1			1	Y	16	9	1DY-01	RED 125V DC/120V AC INVERTER	X	X	X	X	X	A		26/CB/CSR
SWEL1-1			0	Y	16	9	DY-0B	BLUE 125V DC/120V AC ALTERNATE INVERTER	X	X	X	X	X	B	X	26/CB/CSR
SWEL1-1	Y		1	SW	7	8	SW-00012A	HX-12A CC HX OUTLET TEMPERATURE CONTROL				X		0		46/PAB/CC HX AREA
SWEL1-1	Y		0	SW	7	8	SW-00012B	HX-12B CC HX OUTLET TEMPERATURE CONTROL				X		0		46/PAB/CC HX AREA
SWEL1-1	Y	Y	0	SW	7	8	SW-00012C	HX-12C CC HX OUTLET TEMPERATURE CONTROL				X		0		46/PAB/CC HX AREA
SWEL1-1			1	CC	19	8	1TE-00621	HX-12A/B CC HX OUTLET HEADER TEMPERATURE RTD	X	X		X		0		46/PAB/CC HX AREA
SWEL1-1	Y		1	CC	21a	8	1T-012	COMPONENT COOLING SURGE TANK	X	X		X		0		46/PAB/CC HX AREA
SWEL1-1		Y	1	CC	21b	8	1HX-012A	COMPONENT COOLING WATER HEAT EXCHANGER	X	X		X		0		46/PAB/CC HX AREA
SWEL1-1			1	MS	8a	8	1MS-02019	HX-1B SG HEADER P-29 AFP STEAM SUPPLY MOV	X	X		X	X	A		46/PAB/BAST AREA S
SWEL1-1			1	MS	8a	8	1MS-02020	HX-1A SG HEADER P-29 AFP STEAM SUPPLY MOV	X	X		X	X	A		46/PAB/BAST AREA S
SWEL1-1			1	Y	14	10	1-43/Y-01	1Y-01 RED 120V AC VITAL INST PNL PWR SUP TRANSFER SW	X	X	X	X	X	A		44/CB/CR WEST
SWEL1-1			1	Y	14	10	1-43/Y-02	1Y-02 BLUE 120V AC VITAL INST PNL PWR SUP TRANSFER SW	X	X	X	X	X	B		44/CB/CR WEST
SWEL1-1		Y	0	125V	14	10	D-16	125V DC DISTRIBUTION PANEL	X	X	X	X	X	B		44/CB/CR SOUTH
SWEL1-1	Y	Y	0	125V	14	10	D-17	125V DC DISTRIBUTION PANEL	X	X	X	X	X	A		44/CB/CR SOUTH
SWEL1-1		Y	0	125V	14	10	D-18	125V DC DISTRIBUTION PANEL	X	X	X	X	X	B		44/CB/CR NORTH
SWEL1-1			1	MMS	20	10	1C-105	SECONDARY SYSTEM POWER SUPPLIES PANEL	X	X		X		0		44/CB/CR
SWEL1-1		Y	0	FO	5	26	P-206A	G-01 EDG FUEL OIL TRANSFER PUMP	X	X	X	X	X	A		28/DGB/G-01/2 FOTP RM
SWEL1-1		Y	0	DG	9	33	W-181A1	G-03 EDG HX-265A RADIATOR FAN	X	X	X	X	X	B		50/DGB/G-03 RADTR RM

SWEL	RISK	N E W	UNIT	SYS CODE	EQUIP CLASS	WALK BY AREA	EQUIP #	EQUIP NAME	1	2	3	4	5	TRN	IPEEE Equip. Enhanced	LOCATION DESC
SWEL1-1		Y	0	DG	9	33	W-181A2	G-03 EDG HX-265A RADIATOR FAN	X	X	X	X	X	B		50/DGB/G-03 RADTR RM
SWEL1-1	Y	Y	0	VNDG	9	34	W-183B	G-03 EDG RM SMALL CAPACITY EXHAUST FAN	X	X	X	X	X	B		50/DGB/G-03 FAN RM
SWEL1-1	Y	Y	0	VNDG	9	34	W-183C	G-03 EDG RM LARGE CAPACITY EXHAUST FAN	X	X	X	X	X	B		50/DGB/G-03 FAN RM
SWEL1-1		Y	0	125V	14	37	D-28	G-03 EDG DC DISTRIBUTION PANEL	X	X	X	X	X	B		28/DGB/G-03 SWGR RM
SWEL1-1	Y	Y	0	DG	17	38	G-03	EMERGENCY DIESEL GENERATOR	X	X	X	X	X	B		28/DGB/G-03 RM
SWEL1-1		Y	0	DG	20	37	C-081	G-03 EDG CONTROL PANEL	X	X	X	X	X	B		28/DGB/G-03 SWGR RM
SWEL1-1		Y	0	DA	21a	38	T-170A	G-03 EDG STARTING AIR RECEIVER	X	X	X	X	X	B		28/DGB/G-03 RM
SWEL1-1	Y		0	DG	17	42	G-01	EMERGENCY DIESEL GENERATOR	X	X	X	X	X	A		8/CB/G-01 RM
SWEL1-1			0	VNDG	20	42	C-032	G-01 EDG EXHAUST FAN CONTROL PANEL	X	X	X	X	X	A		8/CB/G-01 RM S WALL
SWEL1-1			0	DG	20	42	C-034	G-01 EDG ALARM AND ELECTRICAL PANEL	X	X	X	X	X	A		8/CB/G-01 RM W WALL
SWEL1-1			0	DG	20	42	C-034A	G-01 EDG LOCAL TRANSFER PANEL	X	X	X	X	X	A		8/CB/G-01 RM W WALL
SWEL1-1			0	DG	20	42	C-078	G-01 EDG DC POWER TRANSFER CONTROL PANEL	X	X	X	X	X	A		8/CB/G-01 RM W WALL
SWEL1-1			0	FO	21a	42	T-031A	G-01 DIESEL GENERATOR DAY TANK	X	X	X	X	X	A		8/CB/G-01 RM
SWEL1-1			0	DA	21a	42	T-060B	G-01 EDG STARTING AIR RECEIVER (RIGHT BANK)	X	X	X	X	X	A		8/CB/G-01 RM
SWEL1-1			0	DA	21a	42	T-060C	G-01 EDG STARTING AIR RECEIVER (RIGHT BANK)	X	X	X	X	X	A		8/CB/G-01 RM
SWEL1-1			0	DA	21a	42	T-060E	G-01 EDG STARTING AIR RECEIVER (LEFT BANK)	X	X	X	X	X	A		8/CB/G-01 RM
SWEL1-1			0	DA	21a	42	T-060F	G-01 EDG STARTING AIR RECEIVER (LEFT BANK)	X	X	X	X	X	A		8/CB/G-01 RM
SWEL1-1			0	FO	8a	42	FO-03930	T-31A G-01 EDG DAY TANK INLET SECOND OFF ISOLATION	X	X	X	X	X	A		8/CB/G-01 RM
SWEL1-1		Y	2	480V	1	47	2B42-4212B	2B4212B-B811M (D-109) CHGR NRM/ALT XFR SWITCH CONTACTOR	X	X	X	X	X	B		26/PAB/INVERT RM WEST
SWEL1-1			0	VNBI	10	4	W-085	PAB BATTERY AND INVERTER ROOM VENT FAN	X	X	X	X	X	A		35/PAB/D-106 ROOF
SWEL1-1			1	Y	14	7	1-83/DY-03	1DY-03 WHITE INVERTER STATIC TRANSFER SWITCH	X	X	X	X	X	A		26/PAB/INVERT RM WEST
SWEL1-1			0	125V	14	7	D-03	125V DC DISTRIBUTION PANEL	X	X	X	X	X	A		26/PAB/INVERT RM WEST
SWEL1-1	Y		1	4.16KV	3	21	1A-05	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	X	X	X	X	X	A		8/CB/VSG RM
SWEL1-1		Y	0	125V	15	6	D-105	125V DC STATION BATTERY	X	X	X	X	X	A		35/PAB/D-105 BATT RM
SWEL1-1			1	Y	16	7	1DY-03	WHITE 125V DC/120V AC INVERTER	X	X	X	X	X	A		26/PAB/INVERT RM WEST
SWEL1-1			0	125V	16	7	D-107	D-105 DC STATION BATTERY CHARGER	X	X	X	X	X	A		26/PAB/INVERT RM WEST
SWEL1-1			0	Y	16	7	DY-0C	WHITE 125V DC/120V AC INVERTER	X	X	X	X	X	A		26/PAB/INVERT RM WEST
SWEL1-1			0	VNBI	20	5	C-022	BATTERY ROOM HVAC CONTROL PANEL	X	X	X	X	X	A		26/PAB/NORTH
SWEL1-1		Y	1	480V	1	14	1B312A-B855B	1P-10A RHR PUMP NORMAL/ALT TRANSFER SWITCH	X	X	X	X	X	A		8/PAB/COL P-11
SWEL1-1	Y		1	CC	5	20	1P-011A	COMPONENT COOLING WATER PUMP	X	X				A		8/PAB/CC PUMP AREA
SWEL1-1			1	SI	5	19	1P-014A	CONTAINMENT SPRAY PUMP						X	A	8/PAB/SPRAY PUMP AREA
SWEL1-1			1	SI	5	19	1P-014B	CONTAINMENT SPRAY PUMP						X	B	8/PAB/SPRAY PUMP AREA
SWEL1-1	Y		1	SI	5	19	1P-015A	SAFETY INJECTION PUMP	X	X	X	X	X	A		8/PAB/SI PUMP AREA
SWEL1-1	Y	Y	1	AF	5	41	1P-053	UNIT 1 AUX FEEDWATER MOTOR-DRIVEN PUMP	X	X				B		8/PAB/1P-53 AFP RM
SWEL1-1		Y	1	AF	21a	41	T-224B	1AF-4073B/1AF-4074B AFP RECIRC ISOLATION IA ACCUMULATOR	X	X				B		8/PAB/1P-53 AFP RM
SWEL1-1		Y	1	AF	8a	41	1AF-04067	1P-53 AFP SERVICE WATER SUPPLY ISOLATION	X	X				B		8/PAB/1P-53 AFP RM
SWEL1-1			1	SI	8a	19	1SI-00825A	T-13 RWST OUTLET TO P-15A/B SI PUMP	X	X	X	X	X	A		8/PAB/SPRAY PUMP AREA
SWEL1-1			1	SI	8a	19	1SI-00825B	T-13 RWST OUTLET TO P-15A/B SI PUMP	X	X	X	X	X	B		8/PAB/SPRAY PUMP AREA
SWEL1-1	Y		1	SI	8a	19	1SI-00857A	HX-11A RHR HX OUTLET TO P-15A SI PUMP SUCTION	X	X	X	X	X	A		8/PAB/SI PUMP AREA
SWEL1-1	Y		1	SI	8a	19	1SI-00896A	P-15A SI PUMP SUCTION	X	X	X	X	X	A		8/PAB/SI PUMP AREA
SWEL1-1		Y	1	AF	8b	41	AF-04073B	1P-53 AFP RECIRCULATION ISOLATION	X	X				B		8/PAB/1P-53 AFP RM
SWEL1-1	Y		1	CV	5	17	1P-002A	CHARGING PUMP (Pump Only as Pressure Boundary)	X	X	X			A		8/PAB/U1 CHG PUMP RM

SWEL	RISK	N E W	UNIT	SYS CODE	EQUIP CLASS	WALK BY AREA	EQUIP #	EQUIP NAME	1	2	3	4	5	TRN	IPEEE Equip. Enhanced	LOCATION DESC
SWEL1-1			1	CV	7	13	1CV-00142	CHARGING LINE FLOW CONTROL	X	X		X		0		8/PAB/PIPEWAY #1
SWEL1-1	Y		1	CV	8a	18	1CV-00112B	1P-2A-C CHARGING PUMP REFUELING WATER SUCTION	X	X		X		A		8/PAB/U1 CHG PUMP AREA
SWEL1-1	Y		1	SI	8a	13	1SI-00866A	COLD LEG INJECTION LINE ISOLATION	X	X	X	X	X	A		8/PAB/PIPEWAY #1
SWEL1-1	Y		1	SI	8a	13	1SI-00866B	CORE DELUGE INJECTION LINE ISOLATION	X	X	X	X	X	B		8/PAB/PIPEWAY #1
SWEL1-1	Y		1	RH	5	2	1P-010A	RESIDUAL HEAT REMOVAL PUMP	X	X	X	X	X	A	X	-19/PAB
SWEL1-1	Y		1	RH	5	43	1P-010B	RESIDUAL HEAT REMOVAL PUMP	X	X	X	X	X	B	X	-19/PAB
SWEL1-1			1	RH	7	3	1RH-00624	HX-11A RHR HX OUTLET CONTROL	X	X	X	X	X	A		-5/PAB/EAST WALL OVHD
SWEL1-1			1	RH	7	3	1RH-00625	HX-11B RHR HX OUTLET CONTROL	X	X	X	X	X	B		-5/PAB/EAST WALL OVHD
SWEL1-1			1	VNCC	9	53	W-001A1	CONTAINMENT ACCIDENT RECIRCULATION FAN						X	A	66/U1C/NORTH
SWEL1-1			1	PACV	19	54	TE-03292	EL 66' U1C TEMPERATURE ELEMENT					X	0		66/U1C/NE QTR
SWEL1-1			1	SI	21a	55,56	T-034A	SAFETY INJECTION ACCUMULATOR	X	X	X			A		21/U1C/SW QTR
SWEL1-1			1	CV	21b	57	HX-004	EXCESS LETDOWN HEAT EXCHANGER					X	0		21/U1C
SWEL1-1	Y		0	SW	6	27	P-032A	SERVICE WATER PUMP	X			X		A	X	8/CWPH/SW BLDG
SWEL1-1			1	SI	8a	58	SI-00852A	LOW HEAD SI CORE DELUGE ISOLATION					X	A		46/U1C/SEAL TABLE
SWEL2			0	SF	5	24	P-012B	SPENT FUEL COOLING PUMP						B		46/PAB/SFP HX AREA
SWEL2			0	SF	5	24	P-012A	SPENT FUEL COOLING PUMP						A		46/PAB/SFP HX AREA
SWEL2			0	SF	21b	24	HX-013B	SPENT FUEL POOL HEAT EXCHANGER						B		46/PAB/SFP HX AREA
SWEL2			0	SF	21b	24	HX-013A	SPENT FUEL POOL HEAT EXCHANGER						A		46/PAB/SFP HX AREA
SWEL2			0	SW	8a	24	SW-02930B	HX-13B SFP HX OUTLET						B		46/PAB/SFP HX AREA
SWEL2			0	SW	8a	24	SW-02930A	HX-13A SFP HX OUTLET						A		46/PAB/SFP HX AREA
SWEL2			0	SW	8a	24	SW-02927B	HX-13B SFP HX INLET						B		46/PAB/SFP HX AREA
SWEL2			0	SW	8a	24	SW-02927A	HX-13A SFP HX INLET						A		46/PAB/SFP HX AREA
SWEL2			0	SW	0	14	SF-00785B	P-9 HUT RECIRC PUMP SUCTION FROM TRANSFER CANAL						B		8/PAB/P-9 HUT AREA WEST

ATTACHMENT B Classes of Equipment Unit 1 and SFP

Classes of Equipment		SWEL1 Unit 1	SWEL2
0	Other	0	1
1	MCCs and wall-mounted contactors	2	0
2	Low voltage switchgear and break panels	2	0
3	Medium voltage, metal-clad switchgear	1	0
4	Transformers	2	0
5	Horizontal pumps	11	2
6	Vertical pumps	1	0
7	Fluid-operated valves	9	0
8a	MOVs	17	4
8b	SOVs	2	0
9	Fans	5	0
10	Air handlers	1	0
11	Chiller	0	0
12	Air Compressors	0	0
13	Motor Generators	0	0
14	Distribution panels and Auto Transfer Switches	12	0
15	Batteries and Racks	1	0
16	Battery chargers and inverters	5	0
17	Engine Generators	2	0
18	Instrument Racks	1	0
19	Temperature sensors	2	0
20	Instrumentation and Control panels	7	0
21 a	Tanks	10	0
21 b	Heat exchangers	2	2
	TOTAL	95	9

Note: There are no Chillers, Air Compressors and Motor Generators at Point Beach Unit 1 which are Seismic Category I. Therefore, none of these classes of equipment were included in the SWEL.

C

Seismic Walkdown Checklists (SWCs)

Table C-1. Summary of Seismic Walkdown Checklists

Equipment ID	Equip Class	Equipment Description	Equipment Location	Area Walkby No.	Anchorage Check ¹
1-43/Y-01	14	1Y-01 RED 120V AC VITAL INST PNL PWR SUP TRANSFER SW	44/CB/CR WEST	10	N
1-43/Y-02	14	1Y-02 BLUE 120V AC VITAL INST PNL PWR SUP TRANSFER SW	44/CB/CR WEST	10	N
1-83/DY-03	14	1DY-03 WHITE INVERTER STATIC TRANSFER SWITCH	26/PAB/INVERT RM WEST	7	N
1A-05	3	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	8/CB/VSG RM	21	N
1AF-04000	8	1P-29 AFP DISCHARGE 1HX-1B SG INLET ISOLATION MOV	8/CB/AFP RM 1P-29 CUB	1	N/A
1AF-04001	8	1P-29 AFP DISCHARGE 1HX-1A SG INLET ISOLATION MOV	8/CB/AFP RM 1P-29 CUB	1	N/A
1AF-04002	7	1P-29 AFP MINI RECIRC CONTROL	8/CB/AFP RM 1P-29 CUB	1	N/A
1AF-04006	8	1P-29 AFP SUCTION FROM SERVICE WATER	8/CB/AFP RM 1P-29 CUB	1	N/A
1AF-04067	8	1P-53 AFP SERVICE WATER SUPPLY ISOLATION	8/PAB/1P-53 AFP RM	41	N/A
1B-03	2	480V SAFEGUARDS LOAD CENTER	26/CB/CSR	9	N
1B-04	2	480V SAFEGUARDS LOAD CENTER	26/CB/CSR	9	N
1B312A-B855B	1	P-10A RHR PUMP NORMAL/ALT TRANSFER SWITCH	8/PAB/COL P-11	14	Y
1C-105	20	SECONDARY SYSTEM POWER SUPPLIES PANEL	44/CB/CR	10	N
1CV-00112B	8	1P-2A-C CHARGING PUMP REFUELING WATER SUCTION	8/PAB/U1 CHG PUMP AREA	18	N/A
1CV-00142	7	CHARGING LINE FLOW CONTROL	8/PAB/PIPEWAY #1	13	N/A
1DY-01	16	RED 125V DC/120V AC INVERTER	26/CB/CSR	9	Y
1DY-03	16	WHITE 125V DC/120V AC INVERTER	26/PAB/INVERT RM WEST	7	N
1HX-012A	21	COMPONENT COOLING WATER HEAT EXCHANGER	46/PAB/CC HX AREA	8	Y
1MS-02019	8	HX-1B SG HEADER P-29 AFP STEAM SUPPLY MOV	46/PAB/BAST AREA S	8	N/A
1MS-02020	8	HX-1A SG HEADER P-29 AFP STEAM SUPPLY MOV	46/PAB/BAST AREA S	8	N/A
1MS-02090	8	1P-29 AFP BEARING COOLING INLET	8/CB/AFP RM	1	N/A
1P-002A	5	CHARGING PUMP (Pump Only as Pressure Boundary)	8/PAB/U1 CHG PUMP RM	17	Y
1P-010A	5	RESIDUAL HEAT REMOVAL PUMP	-19/PAB	2	Y
1P-010B	5	RESIDUAL HEAT REMOVAL PUMP	-19/PAB	43	Y
1P-011A	5	COMPONENT COOLING WATER PUMP	8/PAB/CC PUMP AREA	20	Y

Equipment ID	Equip Class	Equipment Description	Equipment Location	Area Walkby No.	Anchorage Check ¹
1P-014A	5	CONTAINMENT SPRAY PUMP	8/PAB/SPRAY PUMP AREA	19	Y
1P-014B	5	CONTAINMENT SPRAY PUMP	8/PAB/SPRAY PUMP AREA	19	Y
1P-015A	5	SAFETY INJECTION PUMP	8/PAB/SI PUMP AREA	19	Y
1P-029	5	AUX FEEDWATER TURBINE-DRIVEN PUMP	8/CB/AFP RM 1P-29 CUB	1	Y
1P-053	5	UNIT 1 AUX FEEDWATER MOTOR-DRIVEN PUMP	8/PAB/1P-53 AFP RM	41	N
1RH-00624	7	HX-11A RHR HX OUTLET CONTROL	-5/PAB/EAST WALL OVHD	3	N/A
1RH-00625	7	HX-11B RHR HX OUTLET CONTROL	-5/PAB/EAST WALL OVHD	3	N/A
1SI-00825A	8	T-13 RWST OUTLET TO P-15A/B SI PUMP	8/PAB/SPRAY PUMP AREA	19	N/A
1SI-00825B	8	T-13 RWST OUTLET TO P-15A/B SI PUMP	8/PAB/SPRAY PUMP AREA	19	N/A
1SI-00857A	8	HX-11A RHR HX OUTLET TO P-15A SI PUMP SUCTION	8/PAB/SI PUMP AREA	19	N/A
1SI-00866A	8	COLD LEG INJECTION LINE ISOLATION	8/PAB/PIPEWAY #1	13	N/A
1SI-00866B	8	CORE DELUGE INJECTION LINE ISOLATION	8/PAB/PIPEWAY #1	13	N/A
1SI-00896A	8	P-15A SI PUMP SUCTION	8/PAB/SI PUMP AREA	19	N/A
1T-012	21	COMPONENT COOLING SURGE TANK	46/PAB/CC HX AREA	8	N
1T-212	21	1P-29 AFP MINI RECIRC IA 1AF-4002 BACKUP ACCUMULATOR	8/CB/AFP RM	1	Y
1TE-00621	19	HX-12A/B CC HX OUTLET HEADER TEMPERATURE RTD	46/PAB/CC HX AREA	8	N/A
1X-13	4	1B-03 STATION SERVICE TRANSFORMER	26/CB/CSR	9	Y
1X-14	4	1B-04 STATION SERVICE TRANSFORMER	26/CB/CSR	9	Y
1Y-203	14	WHITE 120V INVERTER DISTRIBUTION PANEL	26/CB/CSR WEST WALL	9	Y
2B42-4212B	1	2B4212B-B811M (D-109) CHGR NRM/ALT XFR SWITCH CONTACTOR	26/PAB/C-59 AREA 2B-42	47	N
AF-04007	7	P-38A SSGP MINI RECIRC CONTROL	8/CB/AFP RM P-38A CUB	1	N/A
AF-04009	7	P-38A SSGP SUCTION FROM SERVICE WATER	8/CB/AFP RM P-38A CUB	1	N/A
AF-04012	7	P-38A SSGP DISCHARGE CONTROL	8/CB/AFP RM P-38A CUB	1	N/A
AF-04023	8	P-38A SSGP DISCHARGE TO 1HX-1A STEAM GENERATOR	8/CB/AFP RM P-38A CUB	1	N/A
AF-04073B	8	1P-53 AFP RECIRCULATION ISOLATION	8/PAB/1P-53 AFP RM	41	N/A
C-022	20	BATTERY ROOM HVAC CONTROL PANEL	26/PAB/NORTH	5	Y
C-032	20	G-01 EDG EXHAUST FAN CONTROL PANEL	8/CB/G-01 RM S WALL	42	N
C-034	20	G-01 EDG ALARM AND ELECTRICAL PANEL	8/CB/G-01 RM W WALL	42	Y
C-034A	20	G-01 EDG LOCAL TRANSFER PANEL	8/CB/G-01 RM W WALL	42	Y
C-078	20	G-01 EDG DC POWER TRANSFER CONTROL PANEL	8/CB/G-01 RM W WALL	42	Y

Equipment ID	Equip Class	Equipment Description	Equipment Location	Area Walkby No.	Anchorage Check ¹
C-081	20	G-03 EDG CONTROL PANEL	28/DGB/G-03 SWGR RM	37	Y
D-03	14	125V DC DISTRIBUTION PANEL	26/PAB/INVERT RM WEST	7	N
D-105	15	125V DC STATION BATTERY	35/PAB/D-105 BATT RM	6	Y
D-107	16	D-105 DC STATION BATTERY CHARGER	26/PAB/INVERT RM WEST	7	N
D-12	14	125V DC DISTRIBUTION PANEL	26/CB/CSR EAST	9	Y
D-14	14	125V DC DISTRIBUTION PANEL	26/CB/CSR EAST	9	Y
D-16	14	125V DC DISTRIBUTION PANEL	44/CB/CR SOUTH	10	N
D-17	14	125V DC DISTRIBUTION PANEL	44/CB/CR SOUTH	10	N
D-18	14	125V DC DISTRIBUTION PANEL	44/CB/CR NORTH	10	N
D-28	14	G-03 EDG DC DISTRIBUTION PANEL	28/DGB/G-03 SWGR RM	37	N
D-63	14	125V DC DISTRIBUTION PANEL	8/CB/AFP RM 1P-29 CUB 1RK-89	1	N
DY-0B	16	BLUE 125V DC/120V AC ALTERNATE INVERTER	26/CB/CSR	9	Y
DY-0C	16	WHITE 125V DC/120V AC INVERTER	26/PAB/INVERT RM WEST	7	N
FO-03930	8	T-31A G-01 EDG DAY TANK INLET SECOND OFF ISOLATION	8/CB/G-01 RM	42	N/A
G-01	17	EMERGENCY DIESEL GENERATOR	8/CB/G-01 RM	42	Y
G-03	17	EMERGENCY DIESEL GENERATOR	28/DGB/G-03 RM	38	N
HX-013A	21	SPENT FUEL POOL HEAT EXCHANGER	46/PAB/SFP HX AREA	24	Y
HX-013B	21	SPENT FUEL POOL HEAT EXCHANGER	46/PAB/SFP HX AREA	24	Y
P-012A	5	SPENT FUEL COOLING PUMP	46/PAB/SFP HX AREA	24	Y
P-012B	5	SPENT FUEL COOLING PUMP	46/PAB/SFP HX AREA	24	Y
P-032A	6	SERVICE WATER PUMP	8/CWPH/SW BLDG	27	N
P-038A	5	AUX FEEDWATER MOTOR-DRIVEN PUMP	8/CB/AFP RM P-38A CUB	1	Y
P-206A	5	G-01 EDG FUEL OIL TRANSFER PUMP	28/DGB/G-01/2 FOTP RM	26	N/A
RK-25A	18	P-38A SSGP INSTRUMENTATION RACK	8/CB/AFP RM P-38A CUB	1	N
SF-00785B	0	P-9 HUT RECIRC PUMP SUCTION FROM TRANSFER CANAL	8/PAB/P-9 HUT AREA WEST	14	N/A
SW-00012A	7	HX-12A CC HX OUTLET TEMPERATURE CONTROL	46/PAB/CC HX AREA	8	N/A
SW-00012B	7	HX-12B CC HX OUTLET TEMPERATURE CONTROL	46/PAB/CC HX AREA	8	N/A
SW-00012C	7	HX-12C CC HX OUTLET TEMPERATURE CONTROL	46/PAB/CC HX AREA	8	N/A
SW-02927A	8	HX-13A SFP HX INLET	46/PAB/SFP HX AREA	24	N/A
SW-02927B	8	HX-13B SFP HX INLET	46/PAB/SFP HX AREA	24	N/A
SW-02930A	8	HX-13A SFP HX OUTLET	46/PAB/SFP HX AREA	24	N/A
SW-02930B	8	HX-13B SFP HX OUTLET	46/PAB/SFP HX AREA	24	N/A
T-031A	21	G-01 DIESEL GENERATOR DAY TANK	8/CB/G-01 RM	42	Y
T-060B	21	G-01 EDG STARTING AIR RECEIVER (RIGHT BANK)	8/CB/G-01 RM	42	Y
T-060C	21	G-01 EDG STARTING AIR RECEIVER (RIGHT BANK)	8/CB/G-01 RM	42	Y
T-060E	21	G-01 EDG STARTING AIR RECEIVER (LEFT BANK)	8/CB/G-01 RM	42	Y

Equipment ID	Equip Class	Equipment Description	Equipment Location	Area Walkby No.	Anchorage Check ¹
T-060F	21	G-01 EDG STARTING AIR RECEIVER (LEFT BANK)	8/CB/G-01 RM	42	Y
T-170A	21	G-03 EDG STARTING AIR RECEIVER	28/DGB/G-03 RM	38	N
T-224B	21	1AF-4073B/1AF-4074B AFP RECIRC ISOLATION IA ACCUMULATOR	8/PAB/1P-53 AFP RM	41	Y
W-085	10	PAB BATTERY AND INVERTER ROOM VENT FAN	35/PAB/D-106 ROOF	4	Y
W-181A1	9	G-03 EDG HX-265A RADIATOR FAN	50/DGB/G-03 RADTR RM	33	N
W-181A2	9	G-03 EDG HX-265A RADIATOR FAN	50/DGB/G-03 RADTR RM	33	N
W-183B	9	G-03 EDG RM SMALL CAPACITY EXHAUST FAN	50/DGB/G-03 FAN RM	34	N
W-183C	9	G-03 EDG RM LARGE CAPACITY EXHAUST FAN	50/DGB/G-03 FAN RM	34	N

(1) See report Section 5.2.1 for definitions.

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1-43/Y-01

Equipment Class: (14) Distribution Panels

Equipment Description: 1Y-01 RED 120V AC VITAL INST PNL PWR SUP TRANSFER SW

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 44.00 ft, CR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | | |
|----|--|----------------|
| 1. | Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?
<i>Mounted to steel frame which is mounted to masonry wall with 4 through bolts.</i> | No |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors?
<i>Cracks not visible due to plaster.</i> | Not Applicable |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | | |
|----|--|-----|
| 7. | Are soft targets free from impact by nearby equipment or structures? | Yes |
|----|--|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1-43/Y-01

Equipment Class: (14) Distribution Panels

Equipment Description: 1Y-01 RED 120V AC VITAL INST PNL PWR SUP TRANSFER SW

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead gaitronics speaker GAIS-0046B secured with 1/4" bolts - OK
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached to same wall.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1-43/Y-02

Equipment Class: (14) Distribution Panels

Equipment Description: 1Y-02 BLUE 120V AC VITAL INST PNL PWR SUP TRANSFER SW

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 44.00 ft, CR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | | |
|----|--|----------------|
| 1. | Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?
<i>Panel is attached to a steel frame with four (4) screws which is thru bolted to the masonry wall.</i> | Yes |

Interaction Effects

- | | | |
|----|--|-----|
| 7. | Are soft targets free from impact by nearby equipment or structures? | Yes |
|----|--|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1-43/Y-02

Equipment Class: (14) Distribution Panels

Equipment Description: 1Y-02 BLUE 120V AC VITAL INST PNL PWR SUP TRANSFER SW

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
*Overhead ceiling tiles and HVAC are judged to be acceptable.
Attached to seismically qualified masonry wall.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached to 1Y-02 on same frame.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1-83/DY-03

Equipment Class: (14) Distribution Panels

Equipment Description: 1DY-03 WHITE INVERTER STATIC TRANSFER SWITCH

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 26.00 ft, INVERT RM WEST

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1-83/DY-03

Equipment Class: (14) Distribution Panels

Equipment Description: 1DY-03 WHITE INVERTER STATIC TRANSFER SWITCH

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
South side panel of DY-0C in contact with electrical fitting elbow of enclosure on top of equipment. This issue has been entered into the station corrective action process.

Cabinet door was not opened.

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/17/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1A-05

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4.16 KV BUS SWITCHGEAR (SAFEGUARDS)

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, VSG RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per SEWS SQ-000031. Verified by D. Carter and M. Nielsen on 9/20/12 for 1A52-57, 1A52-58, 1A52-59, 1A52-60, 1A52-66. Remaining cubicles were verified by D. Carter and N. Juraydini on 9/21/12.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1A-05

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4.16 KV BUS SWITCHGEAR (SAFEGUARDS)

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
*Overhead raceways are well supported.
Overhead light fixture S-hooks are closed.* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
All cubicles were opened. No mounting or seismic interaction concerns observed. Yes

Comments

Seismic Walkdown Team: D. Carter & M. Nielsen on 9/20/12 and N. Juraydini & D. Carter - 9/21/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1AF-04000

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-29 AFP DISCHARGE 1HX-1B SG INLET ISOLATION MOV

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 1P-29 CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1AF-04000

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-29 AFP DISCHARGE 1HX-1B SG INLET ISOLATION MOV

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead cable trays, conduits, and pipes judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter, S. Kahl, & C. McDonald - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1AF-04001

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-29 AFP DISCHARGE 1HX-1A SG INLET ISOLATION MOV

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 1P-29 CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1AF-04001

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-29 AFP DISCHARGE 1HX-1A SG INLET ISOLATION MOV

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead cable trays, conduits, and pipes judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage?
Flexible conduits are judged to be acceptable. Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter, S. Kahl, & C. McDonald - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1AF-04002

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: 1P-29 AFP MINI RECIRC CONTROL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 1P-29 CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1AF-04002

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: 1P-29 AFP MINI RECIRC CONTROL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Flexible conduit in contact with solenoid valve judged to not be of concern.
Conduit will not move sufficiently to negatively impact valve.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead cable trays, conduits, pipes, and light fixtures judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Tubing and flexible conduits are judged to be acceptable.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: J. Buboltz, D. Carter, & S. Kahl - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1AF-04006

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-29 AFP SUCTION FROM SERVICE WATER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 1P-29 CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1AF-04006

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-29 AFP SUCTION FROM SERVICE WATER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead cable trays, conduits, pipes, and light fixtures judged to be acceptable.
- Spare cable coil for WR 94050677 adequately supported with sling and tucked into conduit.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter, S. Kahl, & C. McDonald - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1AF-04067

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-53 AFP SERVICE WATER SUPPLY ISOLATION

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, 1P-53 AFP RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1AF-04067

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-53 AFP SERVICE WATER SUPPLY ISOLATION

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead piping is well-supported and judged to be acceptable.
3' x 3' masonry wall used to fill opening in east wall are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits and tubing judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen – 10/3/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1B-03

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V SAFEGUARDS LOAD CENTER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1B-03

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V SAFEGUARDS LOAD CENTER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead raceways are well-supported and judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Lower middle mounting bolt on lower back of Panel 15 is missing and found on base angle at back of Panel 16. Judged to be of no seismic concern.
This issue has been entered into the station corrective action process.
Doors opened. No internal mounting or interaction issues observed.

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1B-04

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V SAFEGUARDS LOAD CENTER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
6 of 10 bolts with washer plates not welded (rear side). Total 18 anchor bolts per side. This issue has been entered into the station corrective action process.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Visible cracks on rear side, parallel to panel, concentric with bolt lines, through 13 of 18 anchor bolts. This issue has been entered into the station corrective action process.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1B-04

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V SAFEGUARDS LOAD CENTER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead raceways well supported. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
*Opened 1B00-17L - observed loose stickies but judged to be acceptable.
Opened 1B00-17A, 1B52-21A, 1B00-24A, 1B00-24B-1B04, 1B52-22B-1B04,
1B52-21B, 1B00-20B-1B04, 1B00-19B-1B04, 1B00-17C-1B04, 1B52-18C-1B04, 1B00-19C-1B04.
Rear panels not opened.
Internal components well mounted.
Nearby scaffolds are well restrained.*

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1B312A-B855B

Equipment Class: (1) Motor Control Centers

Equipment Description: P-10A RHR PUMP NORMAL/ALT TRANSFER SWITCH

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, COL P-11

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Crack on east side > 6" from anchor and judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per SEWS SQ-000635.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1B312A-B855B

Equipment Class: (1) Motor Control Centers

Equipment Description: P-10A RHR PUMP NORMAL/ALT TRANSFER SWITCH

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
No masonry. Conduit above and nearby judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
All attached conduits are rigid. Attached to same wall. Therefore, no relative movement. Judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Unknown
Panel not opened. Completion of seismic walkdown deferred.

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1C-105

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: SECONDARY SYSTEM POWER SUPPLIES PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 44.00 ft, CR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors?
<i>Concrete floor not visible due to carpet.</i> | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1C-105

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: SECONDARY SYSTEM POWER SUPPLIES PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
No soft targets.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Cannot view ceiling due to obstruction by egg crate and ceiling tiles.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Panel attached to adjacent cabinet. Panel north side doors opened. No seismic concerns. South side of panel not accessible. Internal components were accessible from north side.

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1CV-00112B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-2A-C CHARGING PUMP REFUELING WATER SUCTION

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, U1 CHG PUMP AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1CV-00112B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-2A-C CHARGING PUMP REFUELING WATER SUCTION

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead duct, cable tray, conduit, and fire protection lines are judged to be acceptable. A masonry wall is located adjacent to the door to the facade. Wall 4-20 (Reference Dwg. M-302) was walked down and reviewed under GL 80-1 I (Appendix D of Masonry Walkdown Report) as being non-safety related.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: R. LaPlante & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1CV-00142

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CHARGING LINE FLOW CONTROL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, PIPEWAY #1

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1CV-00142

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CHARGING LINE FLOW CONTROL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures, conduits, duct, and pipes are all well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible. Attached tubing is very flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes
1/4" tube from valve to 11/P-142 has long span and is very flexible. Judged to be acceptable. May want to add support for equipment betterment.

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: R. LaPlante & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1DY-01

Equipment Class: (16) Inverters

Equipment Description: RED 125V DC/120V AC INVERTER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
*Anchorage per MR 84-227*A, SK-BLDG-0065/84-228, sheets 4 & 5.*

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1DY-01

Equipment Class: (16) Inverters

Equipment Description: RED 125V DC/120V AC INVERTER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead raceways are well-supported and judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
Panel was not opened. Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1DY-03

Equipment Class: (16) Inverters

Equipment Description: WHITE 125V DC/120V AC INVERTER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 26.00 ft, INVERT RM WEST

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Minor cracking in grout pad judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1DY-03

Equipment Class: (16) Inverters

Equipment Description: WHITE 125V DC/120V AC INVERTER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead conduits and light fixtures judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
Cabinet door was not opened. Yes

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1HX-012A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING WATER HEAT EXCHANGER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, CC HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Minor cracking in grout pad at north end judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage per SQ-001167.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1HX-012A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING WATER HEAT EXCHANGER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Flexible conduit for 1TIC-621A is coiled between support at heat exchanger is judged to not be a seismic concern.

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MS-02019

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-1B SG HEADER P-29 AFP STEAM SUPPLY MOV

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, BAST AREA S

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MS-02019

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-1B SG HEADER P-29 AFP STEAM SUPPLY MOV

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead cable trays and conduits are well-supported and judged to be acceptable.
- Emergency Light EL-47 on south wall above valve is well-secured and judged to be acceptable.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MS-02020

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-1A SG HEADER P-29 AFP STEAM SUPPLY MOV

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, BAST AREA S

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MS-02020

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-1A SG HEADER P-29 AFP STEAM SUPPLY MOV

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead cable trays and conduits are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MS-02090

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-29 AFP BEARING COOLING INLET

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MS-02090

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-29 AFP BEARING COOLING INLET

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
B on conduit approximately 1/8" from plastic cover on valve. All will move together and are judged to be acceptable. Short section of tube from valve to solenoid. Relatively high load on tube due to solenoid and LB fitting. SRT unable to conclude tubing will not leak. This issue has been entered into the station corrective action process.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Cable trays, conduits, and pipes all judged to be acceptable.
Overhead light fixtures judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits and tubing are flexible and judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/17/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-002A

Equipment Class: (5) Horizontal Pumps

Equipment Description: CHARGING PUMP (Pump Only as Pressure Boundary)

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, U1 CHG PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per SEWS SQ-000048.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-002A

Equipment Class: (5) Horizontal Pumps

Equipment Description: CHARGING PUMP (Pump Only as Pressure Boundary)

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead pipes, HVAC ducts, and conduit are all acceptable. One light over the pump has clamp that is oriented such that clamp is resisting dead load. Identified and corrected. This issue has been entered into the station corrective action process.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit and tubing are flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes
Abandoned cables tie wrapped to support. They will not interact causing damage to the pump.

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: R. LaPlante & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-010A

Equipment Class: (5) Horizontal Pumps

Equipment Description: RESIDUAL HEAT REMOVAL PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, -19.00 ft, ALL

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per drawings C-250, Rev. 8, C-343, Rev. 5 and C-240, Rev. 6.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-010A

Equipment Class: (5) Horizontal Pumps

Equipment Description: RESIDUAL HEAT REMOVAL PUMP

Oiler and tubes are all acceptable.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Conduits and pipes above area adequately supported.

There is a ground cable support above that has a damaged horizontal Unistrut channel at the ceiling. The Unistrut is attached with at least one anchor and the support is also attached with a diagonal brace which is anchored to the ceiling. The loads on the support are small. The support is judged to be supported adequately as to not fall and interact with the pump.

There is a masonry wall in the equipment opening leading into the cubicle. The size of the masonry it is judged to not pose a seismic interaction concern with the pump.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduits are flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-010B

Equipment Class: (5) Horizontal Pumps

Equipment Description: RESIDUAL HEAT REMOVAL PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, -19.00 ft, ALL

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Six 5/8" CIP anchors per SEWS SQ-000057 and drawings C-240, Rev. 6, C-243, Rev. 5, and C-250, Rev. 8.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-010B

Equipment Class: (5) Horizontal Pumps

Equipment Description: RESIDUAL HEAT REMOVAL PUMP

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures?

<i>Oiler judged to be acceptable.</i> | Yes |
| 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
<i>Adjacent small, wide masonry wall judged to be acceptable.</i>

<i>Overhead conduit and trolley beam judged to be acceptable.</i> | Yes |
| 9. Do attached lines have adequate flexibility to avoid damage?

<i>Piping adequately flexible due to bends.</i>

<i>Flexible conduits judged to be acceptable.</i> | Yes |
| 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? | Yes |

Other Adverse Conditions

- | | |
|--|-----|
| 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? | Yes |
|--|-----|

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by:	Detailed signed records of the checklists are available at the site.	Date:	_____
_____		_____	

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-011A

Equipment Class: (5) Horizontal Pumps

Equipment Description: COMPONENT COOLING WATER PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, CC PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per drawings C-250, Rev. 8, C-240, Rev. 6, C-242, Rev. 7.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-011A

Equipment Class: (5) Horizontal Pumps

Equipment Description: COMPONENT COOLING WATER PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Oilers are protected with metal screen and are judged to be acceptable.
Site glasses are judged to be acceptable.
No interaction concerns.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

*Overhead cable trays, conduit, and pipes are judged to be acceptable.
Fire protection hood is secure.
No masonry.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

*Attached conduit is flexible.
Tubing has bends and is judged to be acceptable.*

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-014A

Equipment Class: (5) Horizontal Pumps

Equipment Description: CONTAINMENT SPRAY PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SPRAY PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per drawings C-240, Rev. 6, C-242, Rev. 7, C-250, Rev. 8.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-014A

Equipment Class: (5) Horizontal Pumps

Equipment Description: CONTAINMENT SPRAY PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Tube in contact with CC pipe and judged to be acceptable.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead HVAC, conduits, and pipes are judged to be acceptable.

Light above has chain tie wrapped to lift up. Chain is continuous. Tie wraps should be removed.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit is flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-014B

Equipment Class: (5) Horizontal Pumps

Equipment Description: CONTAINMENT SPRAY PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SPRAY PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Six 7/8" CIP anchors per SQ-0000070 and drawings C-242, Rev. 7 and C-250, Rev. 8.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-014B

Equipment Class: (5) Horizontal Pumps

Equipment Description: CONTAINMENT SPRAY PUMP

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
SI lines and CC lines judged to be acceptable.
Overhead light fixtures and conduits judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached piping and tubing adequately flexible due to bends.
Flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-015A

Equipment Class: (5) Horizontal Pumps

Equipment Description: SAFETY INJECTION PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SI PUMP AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per SEWS SQ-000074.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-015A

Equipment Class: (5) Horizontal Pumps

Equipment Description: SAFETY INJECTION PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Oilers on pump are acceptable.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead pipes, fire protection line, cable trays, duct, conduit, and light fixtures are judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit is flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-029

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUX FEEDWATER TURBINE-DRIVEN PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 1P-29 CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage per drawings C-196, Rev. 9 and C-178, Rev. 6.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-029

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUX FEEDWATER TURBINE-DRIVEN PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Several oilers and site glasses on pump. No interaction concerns.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead cable trays, conduits, pipes, and light fixtures judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: J. Buboltz & C. McDonald - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-053

Equipment Class: (5) Horizontal Pumps

Equipment Description: UNIT 1 AUX FEEDWATER MOTOR-DRIVEN PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, 1P-53 AFP RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1P-053

Equipment Class: (5) Horizontal Pumps

Equipment Description: UNIT 1 AUX FEEDWATER MOTOR-DRIVEN PUMP

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead piping and duct is well-supported and judged to be acceptable.
3' x 3' masonry wall used to fill opening in east wall are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits and piping judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/3/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1RH-00624

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-11A RHR HX OUTLET CONTROL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, -5.00 ft, EAST WALL OVHD

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1RH-00624

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-11A RHR HX OUTLET CONTROL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures and conduit are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes
Valve operator close to conduit will not interact causing loss of function or significant damage.

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
There is sufficient space so that the tube close to operator will not interact.
Tube close to valve yoke has flexibility and will not damage.

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1RH-00625

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-11B RHR HX OUTLET CONTROL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, -5.00 ft, EAST WALL OVHD

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1RH-00625

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-11B RHR HX OUTLET CONTROL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixture and piping are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Tubing has adequate flexibility due to bends.
Flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00825A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: T-13 RWST OUTLET TO P-15A/B SI PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SPRAY PUMP AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00825A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: T-13 RWST OUTLET TO P-15A/B SI PUMP

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead pipes, HVAC duct, and conduit are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00825B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: T-13 RWST OUTLET TO P-15A/B SI PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SPRAY PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00825B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: T-13 RWST OUTLET TO P-15A/B SI PUMP

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
SI lines, RMV lines, and other piping judged to be acceptable.
Overhead conduits and HVAC ducts judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00857A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-11A RHR HX OUTLET TO P-15A SI PUMP SUCTION

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SI PUMP AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00857A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-11A RHR HX OUTLET TO P-15A SI PUMP SUCTION

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead pipes, light fixtures, cable trays, and HVAC are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00866A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: COLD LEG INJECTION LINE ISOLATION

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, PIPEWAY #1

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
-

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00866A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: COLD LEG INJECTION LINE ISOLATION

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures, nearby piping, and nearby cable trays are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes
CV pipe is located about 2" away. Pipe is laterally supported and will not interact.

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: R. LaPlante & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00866B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: CORE DELUGE INJECTION LINE ISOLATION

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, PIPEWAY #1

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00866B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: CORE DELUGE INJECTION LINE ISOLATION

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Conduits, CV line, and SI line all judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00896A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-15A SI PUMP SUCTION

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SI PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1SI-00896A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-15A SI PUMP SUCTION

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Long Unistrut support cantilevered from wall supporting conduits MOV1896A & MOV1896B. Support provides lateral restraint only. Conduit vertical support from above is adequate. Deflection in the east-west direction is judged to be acceptable.
- Other overhead pipes, conduit, and HVAC ducts are judged to be acceptable.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1T-012

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING SURGE TANK

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, CC HX AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1T-012

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING SURGE TANK

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead conduits are well supported and judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Brown & N. Juraydini - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1T-212

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: 1P-29 AFP MINI RECIRC IA 1AF-4002 BACKUP ACCUMULATOR

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage per sketches SK-EC13507-S02, dated 5/20/2010 and SK-EC13507-S03, dated 5/20/2010.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1T-212

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: 1P-29 AFP MINI RECIRC IA 1AF-4002 BACKUP ACCUMULATOR

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead cable trays, conduits, pipes, and light fixtures judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: J. Buboltz, D. Carter, & S. Kahl - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1TE-00621

Equipment Class: (19) Temperature Sensors

Equipment Description: HX-12A/B CC HX OUTLET HEADER TEMPERATURE RTD

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, CC HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1TE-00621

Equipment Class: (19) Temperature Sensors

Equipment Description: HX-12A/B CC HX OUTLET HEADER TEMPERATURE RTD

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Brown - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1X-13

Equipment Class: (4) Transformers

Equipment Description: 1B-03 STATION SERVICE TRANSFORMER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage per SQ-000038.

6. *NE plate has north-south bolt spacing of 12-1/2", which is less than the 13" minimum. ECR #96-0037 allows for 12-1/2" spacing. Therefore, acceptable.* Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1X-13

Equipment Class: (4) Transformers

Equipment Description: 1B-03 STATION SERVICE TRANSFORMER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Conduit and cable tray above are judged to be of no seismic concern.
Overhead light fixture has open S-hook on top connection. Scaffold in vicinity prevents interaction with equipment. Light fixture will not interact with equipment and cause a loss of function. Judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Not Applicable
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes
Scaffold nearby installed on 9/10/2012. Scaffold is adequately restrained to anchorages in vicinity. Scaffold has been evaluated by Engineering. Judged to be acceptable.

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/17/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1X-14

Equipment Class: (4) Transformers

Equipment Description: 1B-04 STATION SERVICE TRANSFORMER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
SE baseplate: NW bolt spacing 12 ¼" & 12 ½"

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per calculation 95-0168 Rev. 2. Spacing with ¼" on SE plate. Other plates per SK-MR-94-012.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1X-14

Equipment Class: (4) Transformers

Equipment Description: 1B-04 STATION SERVICE TRANSFORMER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead raceways well supported. Yes
9. Do attached lines have adequate flexibility to avoid damage?
Lines run directly to adjacent to 1B04. Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
Nearby scaffold is well restrained. Yes

Comments

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1Y-203

Equipment Class: (14) Distribution Panels

Equipment Description: WHITE 120V INVERTER DISTRIBUTION PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage per SQ-000701.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1Y-203

Equipment Class: (14) Distribution Panels

Equipment Description: WHITE 120V INVERTER DISTRIBUTION PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Cable trays and conduits above are acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Lines are attached to same wall and judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
FACP-6 in vicinity is well-anchored and judged to be acceptable.

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B42-4212B

Equipment Class: (1) Motor Control Centers

Equipment Description: 2B4212B-B811M (D-109) CHGR NRM/ALT XFR SWITCH CONTACTOR

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 26.00 ft, NORTH

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B42-4212B

Equipment Class: (1) Motor Control Centers

Equipment Description: 2B4212B-B811M (D-109) CHGR NRM/ALT XFR SWITCH CONTACTOR

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures and conduits judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Rigid conduits attached to supports mounted on same wall; judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Panel opened. Internal components are well-mounted and judged to be acceptable.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/3/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04007

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: P-38A SSGP MINI RECIRC CONTROL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM P-38A CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04007

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: P-38A SSGP MINI RECIRC CONTROL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
S-hook at east end of overhead light fixture is open. Conduit and tube in vicinity prevent light fixture from interacting with valve during a seismic event. Judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Tubing, pipes, and flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter, S. Kahl, & C. McDonald - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04009

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-38A SSGP SUCTION FROM SERVICE WATER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM P-38A CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04009

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-38A SSGP SUCTION FROM SERVICE WATER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits, cable trays, and light fixtures are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter, S. Kahl - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04012

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: P-38A SSGP DISCHARGE CONTROL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM P-38A CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04012

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: P-38A SSGP DISCHARGE CONTROL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Chain on valve wheel could contact and damage valve gauge. Relocated chain to resolve issue.

Flexible hose in contact with tube judged not to be of concern.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead conduits, pipes, and light fixtures are judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Flexible pipe for air to diaphragm.

Tube and flexible conduit are judged to be acceptable.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter, S. Kahl, & C. McDonald - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04023

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-38A SSGP DISCHARGE TO 1HX-1A STEAM GENERATOR

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM P-38A CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04023

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-38A SSGP DISCHARGE TO 1HX-1A STEAM GENERATOR

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Small (3' high, 2' long) masonry wall judged to be acceptable.
Overhead conduits and pipes are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & S. Kahl - 9/17/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04073B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-53 AFP RECIRCULATION ISOLATION

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, 1P-53 AFP RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04073B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 1P-53 AFP RECIRCULATION ISOLATION

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead conduits are judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage?
Flexible conduits are judged to be acceptable. Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/3/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-022

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: BATTERY ROOM HVAC CONTROL PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 26.00 ft, NORTH

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchored to wall with four 3/8" CEAs. Per SQ-001086. Verified by NJ and DNC on 10/4/12.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-022

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: BATTERY ROOM HVAC CONTROL PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Open S-hook at north end of overhead light fixture is not closed. Light fixture is 8' long, would not impact panel if it were to fall from S-hook. Judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Unknown
Panel not opened. Completion of seismic walkdown deferred.

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/18/2012 and D. Carter and N. Juraydini - 10/4/12

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-032

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-01 EDG EXHAUST FAN CONTROL PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-01 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Some gouging at lower left anchor bolt. Overall anchorage is judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-032

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-01 EDG EXHAUST FAN CONTROL PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Unknown
Panels require tools to open and were not opened. Completion of seismic walkdown deferred.

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-034

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-01 EDG ALARM AND ELECTRICAL PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-01 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage per Drawing PBC-226, Rev. 0</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-034

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-01 EDG ALARM AND ELECTRICAL PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
12'-6" span of cable tray between supports is judged to be acceptable.
Exhaust fans W-12A and W-12B are well-supported and judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
Panel opened. No internal mounting or interaction concerns. Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-034A

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-01 EDG LOCAL TRANSFER PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-01 RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage per SQ-001089.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-034A

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-01 EDG LOCAL TRANSFER PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways and pipes are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
All lines are supported on the same wall. Therefore, there will be no relative movement between the cabinet and the attached conduits.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Panel opened. No internal mounting or interaction concerns.

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-078

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-01 EDG DC POWER TRANSFER CONTROL PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-01 RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage per SQ-001097.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-078

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-01 EDG DC POWER TRANSFER CONTROL PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead raceways and pipes are well-supported and judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
Panel opened. No internal mounting or interaction concerns. Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-081

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-03 EDG CONTROL PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, G-03 SWGR RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Crack at east end of panel judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per Calculation N-94-031, Rev. 0.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-081

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-03 EDG CONTROL PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead ductwork and light fixtures well supported.
9. Do attached lines have adequate flexibility to avoid damage? Not Applicable
Lines enter panel through floor.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Unknown
Engine Control Cubicle, Metering Cubicle, and Voltage Regulator Exciter Cubicle opened on 10/3/2012. No internal mounting or interaction concerns. Viewed by DNC and NJ. Did not open transformer cubicles due to electrical hazard. Completion of seismic walkdown deferred.

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/2/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-03

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 26.00 ft, INVERT RM WEST

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors?
<i>Minor cracking in grout judged to be acceptable.</i> | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-03

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits and junction boxes are well-supported and judged to be acceptable. NE anchor bolt on Junction Box TB-21 with minor lack of thread engagement; judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Short span flexible conduit located 18" above floor on north side of panel. Judged acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Cabinet was not opened.

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-105

Equipment Class: (15) Batteries on Racks

Equipment Description: 125V DC STATION BATTERY

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 35.00 ft, D-105 BATT RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>SQ-000712 states that each frame is bolted to baseplate with four 1/2" bolts. These are visible and judged to be acceptable. This installation matches that of drawing M-7742, Rev. 3, which shows 4 holes for the mounting bolts in each frame, and Note 2 states that the holes for the mounting bolts are 9/16" holes in each frame.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?
<i>SQ-000712 states that each baseplate is anchored to the floor with six 1" expansion anchors. These are not visible.</i> | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-105

Equipment Class: (15) Batteries on Racks

Equipment Description: 125V DC STATION BATTERY

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
| 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
<i>Overhead conduits and cable trays are well-supported and judged to be acceptable.</i> | Yes |
| 9. Do attached lines have adequate flexibility to avoid damage? | Yes |
| 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? | Yes |

Other Adverse Conditions

- | | |
|--|-----|
| 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? | Yes |
|--|-----|

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-107

Equipment Class: (16) Inverters

Equipment Description: D-105 DC STATION BATTERY CHARGER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 26.00 ft, INVERT RM WEST

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Minor lack of thread engagement at SW anchor judged to be acceptable.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Minor cracking in grout pad judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-107

Equipment Class: (16) Inverters

Equipment Description: D-105 DC STATION BATTERY CHARGER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead conduits and light fixtures judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Cabinet doors opened. No internal mounting or interaction concerns.

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-12

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
*Anchorage per SQ-000657 and sketch SK-MR97-014*F, Sheet 2, Rev. 1.*

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-12

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead box mounted to ceiling with unknown attachment. Conduits below protect panel from interaction. Judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Cabinet was not opened - approximately 18 screws to open top and bottom panel.

Comments

Seismic Walkdown Team: D. Carter, N. Juraydini - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-14

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Panel mounted to 4 Unistrut P-1000 channels on wall. Each Unistrut is mounted with 2 – 3/8" expansion anchors. Calculation 2000-0024, Rev. 1 identifies mounting with additional center anchors in top and bottom Unistrut channels; these anchors are not accessible.
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Verified per Calculation 2000-0024, Rev. 1, which conservatively ignored the center anchors in the top and bottom Unistrut channels.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-14

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways and ductwork well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
*Rigid conduits attached to same wall as panel.
Flexible conduits are also used.*
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Panel not opened.

Comments

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-16

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 44.00 ft, CR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware?
<i>Can view three anchors in top left and right and bottom left. Judged to be acceptable.</i> | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-16

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead ceiling tiles, conduit, and HVAC are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached lines are mounted to the same wall.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Did not open panel.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-17

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 44.00 ft, CR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
Concrete wall not visible due to plaster.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-17

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

No soft targets.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead not visible due to egg crate and ceiling tiles.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached to same wall.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-18

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 44.00 ft, CR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware?
<i>4 - 3/8" bolts observed.</i> | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-18

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead ceiling tiles, HVAC, conduits, and light fixtures are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Did not open panel.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-28

Equipment Class: (14) Distribution Panels

Equipment Description: G-03 EDG DC DISTRIBUTION PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, G-03 SWGR RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
Minor surface corrosion on floor base plate judged to be acceptable.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-28

Equipment Class: (14) Distribution Panels

Equipment Description: G-03 EDG DC DISTRIBUTION PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Emergency light EL-107 above panel well mounted.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached lines through base of panel.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Did not open panel.

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-63

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 1P-29 CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Panel is bolted to Rack 1RK-89 with bolts to Unistrut. Rack is anchored with six - four bolt plates.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Minor cracking in rack grout pads. No cracking in structural slab. Anchors extend into structural slab, therefore there is no concern.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-63

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits, pipes, and HVAC ducts are well-supported and judged to be acceptable.
- Masonry wall on east side is seismically qualified.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
Conduits attached to same rack. No differential displacement between conduits and panel. Judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes
Chain for valve SW-135 is approximately 21" from panel judged not to be an interaction concern. Tube steel prevents chain from getting motion required to interact with the panel.

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
3" service water line (return) has condensation above 1SMS-2020, etc. mounted at the rear of the panel. Not of seismic concern.

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: DY-0B

Equipment Class: (16) Inverters

Equipment Description: BLUE 125V DC/120V AC ALTERNATE INVERTER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
*Anchorage verified per MR 84-228*A and SK-BLDG-0065/84-228 Sheets 4 & 5.*

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: DY-0B

Equipment Class: (16) Inverters

Equipment Description: BLUE 125V DC/120V AC ALTERNATE INVERTER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Adequate gap with 2C-156.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Panel not opened.

Comments

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: DY-0C

Equipment Class: (16) Inverters

Equipment Description: WHITE 125V DC/120V AC INVERTER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 26.00 ft, INVERT RM WEST

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Minor lack of thread engagement at NW and SW anchor bolts judged to be acceptable.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Minor cracking in grout judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: DY-0C

Equipment Class: (16) Inverters

Equipment Description: WHITE 125V DC/120V AC INVERTER

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
| 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
<i>Overhead conduits and light fixtures judged to be acceptable.</i> | Yes |
| 9. Do attached lines have adequate flexibility to avoid damage? | Yes |
| 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? | Yes |

Other Adverse Conditions

- | | |
|--|-----|
| 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
<i>South side panel of DY-0C in contact with electrical fitting elbow from 1-83/DY-03. This issue has been entered into the station corrective action process.</i> | Yes |
|--|-----|

Cabinet door was not opened.

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: FO-03930

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: T-31A G-01 EDG DAY TANK INLET SECOND OFF ISOLATION

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-01 RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: FO-03930

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: T-31A G-01 EDG DAY TANK INLET SECOND OFF ISOLATION

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
T-31A is well-supported. Pipes above are well supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduit is judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: G-01

Equipment Class: (17) Engine-Generators

Equipment Description: EMERGENCY DIESEL GENERATOR

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-01 RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
<i>Some surface rust.</i> | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors?
<i>Surface cracks observed on SW anchor and 3rd anchor from west end on South side. Judged to be acceptable due to depth of anchors and reinforcement in pad.</i> | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per SEWS SQ-000737.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: G-01

Equipment Class: (17) Engine-Generators

Equipment Description: EMERGENCY DIESEL GENERATOR

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead light fixtures, pipes, fire protection line, and trolley beams are judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: G-03

Equipment Class: (17) Engine-Generators

Equipment Description: EMERGENCY DIESEL GENERATOR

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, G-03 RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors?
<i>Minor chipping and cracks in grout judged to be acceptable.</i> | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: G-03

Equipment Class: (17) Engine-Generators

Equipment Description: EMERGENCY DIESEL GENERATOR

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached lines have flexible conduits and bellows.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HX-013A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER

Project: Point Beach SWEL 2

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, SFP HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Small amount of rust on west saddle base. No loss of section.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
East bolt spacing is not per drawing EC-36A-3, Job 12703, Rev. 3. Bolt spacing is 8", 9", 8" on west end. Drawing shows spacing of 9", 9", 9". Per calculation 91C2696-C-021 (spacing of 9, 9, 9 used), there is a safety factor of 42.5 on these anchors. Therefore, they are concluded to be capable of carrying the load. This issue has been entered into the station corrective action process.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HX-013A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
| 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
<i>Overhead pipes and conduit are judged to be acceptable.</i> | Yes |
| 9. Do attached lines have adequate flexibility to avoid damage? | Yes |
| 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? | Yes |

Other Adverse Conditions

- | | |
|--|-----|
| 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? | Yes |
|--|-----|

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HX-013B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER

Project: Point Beach SWEL 2

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, SFP HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | | |
|----|--|-----|
| 1. | Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchors at East end - 8 - 1 ¼
Spacing 7 ¾, 9 ¼, 7 ¾. Drawing EC-36A-3 Job 12703 Rev. 3 shows 9" spacing.
West end - 4 1 ¼" with nuts spacing 25"
Per calculation 91C2696-C-021 (spacing of 9, 9, 9 used), there is a safety factor of 42.5 on these anchors. Therefore, they are concluded to be capable of carrying the load. This issue has been entered into the station corrective action process.</i> | Yes |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HX-013B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduit, SW pipe, and SF lines are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes
*Pipe support nearby (touching insulation).
HX will not move enough to cause concern.*

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-012A

Equipment Class: (5) Horizontal Pumps

Equipment Description: SPENT FUEL COOLING PUMP

Project: Point Beach SWEL 2

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, SFP HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware?
<i>Second nut on SE anchor is not tight, but is not required.</i> | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors?
<i>Crack in pad near the center anchors. Detail shows anchors to pad. Pad doweled to the slab. Therefore, crack in pad is not a concern.</i> | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per drawing EC-36A-3 Job 12703, Rev. 3</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-012A

Equipment Class: (5) Horizontal Pumps

Equipment Description: SPENT FUEL COOLING PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
*Oiler on north side.
Chain for valve SF-1 currently touches conduit for P-012B. Could interact with oiler. This potential interaction has been resolved by tying off the chain to a support. This issue has been entered into the station corrective action process. Issue has been corrected.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
*No masonry.
Overhead conduit and pipes are well supported.
Adjacent HX is well supported.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-012B

Equipment Class: (5) Horizontal Pumps

Equipment Description: SPENT FUEL COOLING PUMP

Project: Point Beach SWEL 2

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, SFP HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | | |
|----|---|-----|
| 1. | Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors?
<i>Some cracking in pad by North-Middle anchor. Appears to be surface crack and judged to be acceptable.</i> | Yes |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per Drawing EC-36A-3, Job 12703.</i> | Yes |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-012B

Equipment Class: (5) Horizontal Pumps

Equipment Description: SPENT FUEL COOLING PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Oiler is judged to be acceptable.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead SW pipes, SF pipes, and conduits are judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit and pipes are flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-032A

Equipment Class: (6) Vertical Pumps

Equipment Description: SERVICE WATER PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CWPH, 8.00 ft, SW BLDG

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-032A

Equipment Class: (6) Vertical Pumps

Equipment Description: SERVICE WATER PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Overhead hoist accepted per SEWS SQ-001808.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways and piping well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Overhead trolley control pendant wedged between junction box and pump casing. This issue has been entered into the station corrective action process.

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-038A

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUX FEEDWATER MOTOR-DRIVEN PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM P-38A CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | | |
|----|--|-----|
| 1. | Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage per drawings C-196, Rev. 9, C-178, Rev. 6.</i> | Yes |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-038A

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUX FEEDWATER MOTOR-DRIVEN PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Several site glasses. No impact concerns.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead conduits, pipes, and cables trays are well-supported and judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Pipes and flexible conduits are judged to be acceptable.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-206A

Equipment Class: (5) Horizontal Pumps

Equipment Description: G-01 EDG FUEL OIL TRANSFER PUMP

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, G-01

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Anchorage to concrete is not accessible. Observed pump mounting bolts are acceptable.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
Mounting bolts are judged to be acceptable.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-206A

Equipment Class: (5) Horizontal Pumps

Equipment Description: G-01 EDG FUEL OIL TRANSFER PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

No soft targets.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead piping, area heater, and light fixtures are well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit to motor is flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Nearby MCCs 1B-20 & 2B-30 are welded to embedded channels.

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: RK-25A

Equipment Class: (18) Instruments on Racks

Equipment Description: P-38A SSGP INSTRUMENTATION RACK

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM P-38A CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
-

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: RK-25A

Equipment Class: (18) Instruments on Racks

Equipment Description: P-38A SSGP INSTRUMENTATION RACK

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead cable trays, conduits, and pipes judged to be acceptable.
Masonry wall in vicinity is seismically qualified.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Tubing and flexible conduits judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SF-00785B

Equipment Class: (0) Other

Equipment Description: P-9 HUT RECIRC PUMP SUCTION FROM TRANSFER CANAL

Project: Point Beach SWEL 2

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, P-9 HUT AREA WEST

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SF-00785B

Equipment Class: (0) Other

Equipment Description: P-9 HUT RECIRC PUMP SUCTION FROM TRANSFER CANAL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures, SF pipes. HVAC duct, and conduits judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Not Applicable
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-00012A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-12A CC HX OUTLET TEMPERATURE CONTROL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, CC HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-00012A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-12A CC HX OUTLET TEMPERATURE CONTROL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached tubing has adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-00012B

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-12B CC HX OUTLET TEMPERATURE CONTROL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, CC HX AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-00012B

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-12B CC HX OUTLET TEMPERATURE CONTROL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits and ductwork are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached tubing has adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-00012C

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-12C CC HX OUTLET TEMPERATURE CONTROL

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, CC HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-00012C

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-12C CC HX OUTLET TEMPERATURE CONTROL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached tubing has adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02927A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-13A SFP HX INLET

Project: Point Beach SWEL 2

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, SFP HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02927A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-13A SFP HX INLET

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead pipes and conduit are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02927B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-13B SFP HX INLET

Project: Point Beach SWEL 2

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, SFP HX AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02927B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-13B SFP HX INLET

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
| 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
<i>Pipes and lights overhead are acceptable.</i> | Yes |
| 9. Do attached lines have adequate flexibility to avoid damage?
<i>Flexible conduit attached to valve.</i> | Yes |
| 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? | Yes |

Other Adverse Conditions

- | | |
|--|-----|
| 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? | Yes |
|--|-----|

Comments

Seismic Walkdown Team: *D. Carter & D. Nuttall on 10/2/12*

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02930A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-13A SFP HX OUTLET

Project: Point Beach SWEL 2

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, SFP HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02930A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-13A SFP HX OUTLET

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead pipes, conduit, and light fixtures and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02930B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-13B SFP HX OUTLET

Project: Point Beach SWEL 2

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, SFP HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02930B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-13B SFP HX OUTLET

Interaction Effects

- 7. Are soft targets free from impact by nearby equipment or structures? Yes

- 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Pipes and conduit overhead are adequately supported.

- 9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduit attached to valve.

- 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

- 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter and D. Nuttal on 10/2/12

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-031A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-01 DIESEL GENERATOR DAY TANK

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-01 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Tank is mounted to steel frame with 5/8" diameter bolts and the frame is mounted with 1" thru bolts and one anchorage welded to tan embed plate. Calculation N-90-043, Rev. 1, Attachment 2 shows analysis for 5/8" mounting bolts for tank and 1" thru bolts for the attachment of the frame to the wall. Therefore, the plant documentation is confirmed.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-031A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-01 DIESEL GENERATOR DAY TANK

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits and pipes are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached tubing has adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-060B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-01 EDG STARTING AIR RECEIVER (RIGHT BANK)

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-01 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage per SQ-001194.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-060B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-01 EDG STARTING AIR RECEIVER (RIGHT BANK)

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits and pipes are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-060C

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-01 EDG STARTING AIR RECEIVER (RIGHT BANK)

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-01 RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage per SQ-001195.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-060C

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-01 EDG STARTING AIR RECEIVER (RIGHT BANK)

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits and pipes are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-060E

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-01 EDG STARTING AIR RECEIVER (LEFT BANK)

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-01 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage per SQ-001197.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-060E

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-01 EDG STARTING AIR RECEIVER (LEFT BANK)

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead conduits and pipes are well-supported and judged to be acceptable. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-060F

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-01 EDG STARTING AIR RECEIVER (LEFT BANK)

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-01 RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage per SQ-001198.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-060F

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-01 EDG STARTING AIR RECEIVER (LEFT BANK)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Relief valve DA-3055F is in close proximity (approx. 1") to day tank T-31A support. Judged to be acceptable.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead conduits and pipes are well-supported and judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-170A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-03 EDG STARTING AIR RECEIVER

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, G-03 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Tank mounted to wall with U-bolt around tank to frame which is welded to embedded plates.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-170A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-03 EDG STARTING AIR RECEIVER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Nearby area unit heater HX-271C well supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

Lines attached to same wall as tank.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-224B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: 1AF-4073B/1AF-4074B AFP RECIRC ISOLATION IA ACCUMULATOR

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, 1P-53 AFP RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Minor cracking in grout judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Four 1-9/16" flat-to-flat bolts mount tank to baseplate. Six 3/8" base plate anchor bolts. Anchorage per sketch SK-EC13402-S02, Rev. 0.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-224B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: 1AF-4073B/1AF-4074B AFP RECIRC ISOLATION IA ACCUMULATOR

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Instrument rack in vicinity well-mounted and judged to be acceptable.

Anchorage of MCC B-33 not accessible.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead ductwork and raceways are well-supported and judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Flexibility of attached lines verified per ECN 15186.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/3/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-085

Equipment Class: (10) Air Handlers

Equipment Description: PAB BATTERY AND INVERTER ROOM VENT FAN

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 35.00 ft, D-106 ROOF

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Fan is welded to embedded base plate.
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
Minor surface corrosion on west side of anchorage judged to be acceptable.
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage per SQ-000607.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-085

Equipment Class: (10) Air Handlers

Equipment Description: PAB BATTERY AND INVERTER ROOM VENT FAN

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits and ducts well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Did not open access door to check mounting to skid.

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/18/2012

West side of equipment not fully accessible.

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-181A1

Equipment Class: (9) Fans

Equipment Description: G-03 EDG HX-265A RADIATOR FAN

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 50.00 ft, G-03 RADTR RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Mounted with 4 bolts on steel frame which is anchored to floor.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Front anchorage accessible only. Minor cracks in grout judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-181A2

Equipment Class: (9) Fans

Equipment Description: G-03 EDG HX-265A RADIATOR FAN

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 50.00 ft, G-03 RADTR RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Mounted with 4 bolts on steel frame which is anchored to floor.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Front anchorage accessible only. Minor cracks in grout judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-181A2

Equipment Class: (9) Fans

Equipment Description: G-03 EDG HX-265A RADIATOR FAN

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-183B

Equipment Class: (9) Fans

Equipment Description: G-03 EDG RM SMALL CAPACITY EXHAUST FAN

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 50.00 ft, G-03 FAN RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
Anchorage embedded in concrete per drawing 6704-E-222403, Rev. 5, Detail 3.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Observed crack is judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-183B

Equipment Class: (9) Fans

Equipment Description: G-03 EDG RM SMALL CAPACITY EXHAUST FAN

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Nearby emergency light EL-121 well mounted.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead conduit and light fixtures well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit is flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-183C

Equipment Class: (9) Fans

Equipment Description: G-03 EDG RM LARGE CAPACITY EXHAUST FAN

Project: Point Beach 1 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 50.00 ft, G-03 FAN RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
Anchorage embedded in concrete per drawing 6704-E-222403, Rev. 5, Detail 3.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-183C

Equipment Class: (9) Fans

Equipment Description: G-03 EDG RM LARGE CAPACITY EXHAUST FAN

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduit, piping and light fixtures well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

D

Area Walk-By Checklists (AWCs)

Table D-1. Summary of Area Walk-By Checklists

Area Walk-By#	Description	Equipment ID
AWB 1	Control Building El. 8' AFW Pump Room - South End from Fire Wall to South Wall	1AF-04000
		1AF-04001
		1AF-04002
		1AF-04006
		1MS-02090
		1P-029
		1T-212
		AF-04007
		AF-04009
		AF-04012
		AF-04023
		D-63
		P-038A
RK-25A		
AWB 2	PAB EL -19' RHR Pump 1P10A Cubicle	1P-010A
AWB 3	PAB EL -5'	1RH-00624
		1RH-00625
AWB 4	PAB El. 26' North End Outside of Inverter Room Roof	W-085
AWB 5	PAB El. 26' North End Outside of West Inverter Room	C-022
AWB 6	PAB El. 26' D-105 Battery Rack Room	D-105
AWB 7	PAB El. 26' West Inverter Room	1-83/DY-03
		1DY-03
		D-03
		D-107
		DY-0C

Area Walk-By#	Description	Equipment ID
AWB 8	PAB El. 46' CCW Heat Exchanger Room	1MS-02019
		1MS-02020
		SW-00012C
		1T-012
		1HX-012A
		SW-00012A
		SW-00012B
		1TE-00621
AWB 9	Control Building El. 26' Cable Spreading Room	1B-03
		1B-04
		1DY-01
		1X-13
		1X-14
		1Y-203
		D-12
		D-14
		DY-0B
AWB 10	Control Building El. 44' Control Room	1-43/Y-01
		1-43/Y-02
		1C-105
		D-16
		D-17
		D-18
AWB 13	PAB El. 8' Pipeway #1	1CV-00142
		1SI-00866A
		1SI-00866B
AWB 14	PAB El. 8' West End	1B312A-B855B
		SF-00785B
AWB 15	PAB EL 8' by 1B-32	Note A
AWB 17	PAB El. 8' Charging Pump 1P-002A Cubicle	1P-002A
AWB 18	PAB EL 8' By U1 Facade Door	1CV-00112B
AWB 19	PAB EL 8' By SI & CS Pumps	1P-014A
		1P-014B
		1P-015A
		1SI-00825A
		1SI-00825B
		1SI-00857A
		1SI-00896A
AWB 20	PAB EL 8' By CC Pumps	1P-011A
AWB 21	CB EL 8' Vital Switchgear Room	1A-05

Area Walk-By#	Description	Equipment ID
AWB 24	PAB EL. 46' SFP HX Area	HX-013A
		HX-013B
		P-012A
		P-012B
		SW-02927A
		SW-02927B
		SW-02930A
		SW-02930B
AWB 26	DGB EL. 28' Oil Transfer Pump Room	P-206A
AWB 27	Pump House El. 8'. South Room.	P-032A
AWB 33	DGB EL 50' G-03 RADTR RM	W-181A1
		W-181A2
AWB 34	DGB EI 50' G-03 Fan Room	W-183B
		W-183C
AWB 37	DGB EI 28' G-03 Switchgear Room	C-081
		D-28
AWB 38	Diesel Building El. 28' G-03 Room	G-03
		T-170A
AWB 41	PAB El. 8 Central Area Near AFW Pump Rooms	1AF-04067
		1P-053
		AF-04073B
		T-224B
AWB 42	CB EL 8' G-01 Room	C-032
		C-034
		C-034A
		C-078
		FO-03930
		G-01
		T-031A
		T-060B
		T-060C
		T-060E
		T-060F
AWB 43	PAB El. 1P-10B Cubicle	1P-010B
AWB 47	PAB El. 26 East Inverter Room	2B42-4212B
AWB 48	PAB El. 26' Near 1B-42, 2B-42	Note A

Note A: An area walk-by was performed for this area prior to removal of affected equipment from the SWEL. The area walk-by was still included in the report.

Status: Y N U

Area Walk-By Checklist (AWC)

Area Walk-by 01: Control Building El. 8' AFW Pump Room - South
Location (Bldg, Elev, Room/Area): End from Fire Wall to South Wall

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Duct above D63 panel has strap support and is just above P1000 Unistrut. Cantilevers extend out approximately 3 feet. Duct has Pittsburgh joint fitting and judged to be acceptable. Duct does not have lateral supports at free end. Suggest adding lateral support. Unistrut below prevents duct from interacting with equipment below.
Nitrogen bottles are well secured.
Temporary cable coil is well supported.
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Area Walk-by 01: Control Building El. 8' AFW Pump Room - South

Location (Bldg, Elev, Room/Area): End from Fire Wall to South Wall
temporary installations (e.g., scaffolding, lead shielding)?

Fire suppression rolling rack, ladder, and toolbox are adequately restrained.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 02: PAB EL -19' RHR Pump 1P10A Cubicle

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
See 1P10A SWC for ground cable support issue.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
*Copper pipe by duct is close to support and judged to be acceptable.
Copper pipe by trolley beam support is about 1' away. Therefore not a seismic interaction concern. The copper pipe is in contact with a duct. No seismic concern.*
 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 02: PAB EL -19' RHR Pump 1P10A Cubicle

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 03: PAB EL -5' in Vicinity of 1RH-624

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Instrument pipe (1 1/16" OD) behind valve 1RH-716B has long horizontal cantilever (64"). First support clamp is loose. Pipe sitting on pipe support. Pipe is socket welded. Will not interact with soft targets and pipe is rugged and judged to be acceptable. Pipe support should be fixed and support on cantilever end should be considered.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Piping welded and no fire protection piping.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
No sources.

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Cabinet and tool box stored in area where they will not interact with equipment.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 03: PAB EL -5' in Vicinity of 1RH-624

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Area Walk-by 04: PAB El. 26' North End East Inverter Room Roof D-
Location (Bldg, Elev, Room/Area): 106 Roof

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
West anchorage of W-085 not accessible.
East anchorage of W-086 not accessible.
Anchorage north of W-085 and W-086 not accessible.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead systems are well-supported and judged to be acceptable.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Service-water pipes are well-supported and judged to be acceptable.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Area Walk-by 04: PAB El. 26' North End East Inverter Room Roof D-

Location (Bldg, Elev, Room/Area): 106 Roof

Temporary conduit mounted on floor judged to be acceptable.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & C. McDonald - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Area Walk-by 05: PAB EI 26' North End Outside of West Inverter

Location (Bldg, Elev, Room/Area): Room - near C-022

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Support for CV-2I/P-111 and CV-2I/P-110A has 2 of 4 nuts without full thread engagement. Judged to be acceptable.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead raceways, HVAC, and piping are well-supported and judged to be acceptable.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
Masonry wall above and behind 2CV-351. This issue has been entered into the station corrective action process.

Gaitronics speaker in contact with service-water line insulation above Panel 2Y-31. Judged to not be of concern.

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Area Walk-by 05: PAB EI 26' North End Outside of West Inverter

Location (Bldg, Elev, Room/Area): Room - near C-022

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Fire extinguisher 03-26-0-025 mounted on hook north C-22 judged to be acceptable.
Operations radio placed unsecured on Panel 2Y-41. No soft targets below. Judged to be acceptable.
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & C. McDonald - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 06: PAB El. 26' D-105 Battery Rack Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead raceways are well-supported and judged to be acceptable.

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Eyewash station is well-supported and has its cover secured. Judged to be acceptable.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Eyewash station is well-supported and has its cover secured. Judged to be acceptable.

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 06: PAB El. 26' D-105 Battery Rack Room

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & C. McDonald - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 07: PAB El. 26' West Inverter Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead conduits and light fixtures are well-supported and judged to be acceptable.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 07: PAB El. 26' West Inverter Room

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & C. McDonald - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 08: PAB El. 46' CCW Heat Exchanger Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Nuts for south post support for 1T-6A not fully tightened. This issue has been entered into the station corrective action process.

Lack of thread engagement for nuts at supports below RS-SH-10. Judged acceptable.

Lack of thread engagement for nuts at support near valve 1MS-2020. Judged acceptable.

Lack of thread engagement for nuts at support at M-3-5-17-F94. Judged acceptable.
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 08: PAB El. 46' CCW Heat Exchanger Room

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes
Masonry wall at north wall of room seismically acceptable. See Drawing SK-C-206, Rev. 3, SKC-170, rev. 2 and SKC-171, rev. 2.

Comments

Seismic Walkdown Team: D. Brown & N. Juraydini - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 09: Control Building El. 26' Cable Spreading Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Gaps between clamps and baseplates for conduits 1S071, 1S216, and 1S218 above Panel 2Y203. Judged to be of no seismic concern.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead raceways and HVAC ducts are well-supported and judged to be acceptable.

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
S-hook on light near 1X-13 is open. Not an interaction concern. This issue has been entered into the station corrective action process.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Service-water pipes are well-supported and judged to be acceptable.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Ladders placed on building bracing below 1Y-204 and Y-204 could come into contact with conduits 1S079 and 2S080. Judged to be of no seismic concern.

Scaffolds near 1X-13 and east of 1B03 are judged to be of no seismic concern.

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 09: Control Building El. 26' Cable Spreading Room

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/21/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 10: Control Building El. 44' Control Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?
Egg crate on acoustical ceiling tiles lightweight and do not affect equipment. Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?
No water sources. Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?
No combustibles. Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?
Storage units secured to control board. Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 10: Control Building El. 44' Control Room

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini on 9/20/12

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 13: PAB El. 8' Pipeway #1

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?
Repeater tie-wrapped all to conduit above 1PI-131A & 1PI-124A; it is judged to be acceptable. Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?
Piping to area heater is threaded and flexible and judged to be acceptable. No spray hazards in the area. Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?
No sources. Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 13: PAB El. 8' Pipeway #1

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Review Team: D. Carter & M. Nielsen on 9/20/12

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 14: PAB El. 8' West End

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?
No fire protection. All pipe welded. Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?
No sources. Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 14: PAB El. 8' West End

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 15: PAB EL 8' by 1B-32

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
Gai-tronics Speaker close to instrument tubes. Tubes are rugged and it appears the speaker will not cause loss of pressure boundary. Recommend moving speaker away from tubing and tightening bolts. This issue has been entered into the station corrective action process.
Conduits 1RE104 and 1RE104A near tubes. Will not interact due to conduit stiffness and support location.

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Fire protection lines with threaded fittings are well supported. No concern.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
No sources.

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 15: PAB EL 8' by 1B-32

Scaffold clamp about 1/2" from 1P-2A-Z and about 4' off of floor scaffold #816. No engineering evaluation of condition. Unlikely to interact but should be moved. Repaired immediately. Scaffold has been removed. Verified on 10/6/12.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & R. LaPlante on 9/18/12.

Seismic Walkdown Team: R. LaPlante & D. Carter - 9/18/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 17: PAB El. 8 1P-002A Cubicle

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Several pipe supports anchors have less than full thread engagement. Judged to be acceptable.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Some abandoned cable is coiled and hanging in the room. No seismic interaction concerns.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
All pipe is welded. No flooding concerns.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
No sources

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 17: PAB El. 8 1P-002A Cubicle

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Review Team: D. N. Carter & R. LaPlante on 9/18/12

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 18: PAB EL 8' By U1 Facade Door

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
A masonry wall (west wall) is located adjacent to the door to the facade. Wall 4-20 (Reference Dwg. M-302) was walked down and reviewed under GL 80-11 (Appendix D of Masonry Walkdown Report) as being non-safety related. Due to configuration of the wall (short span and relatively large thickness) it is judged not to be a concern for interaction with seismically qualified components.
Sheet rock firewall on east side of cubicle seismically analyzed per calculation 2000-0031, Rev. 1.

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
By penetration M-7-4-19-W27, three conduits close to each other. May interact but will continue to function.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Fire protection piping in room has thread fittings and well supported, so judged to be acceptable. Two branch lines have Victaulic fittings. One branch supported beyond fitting and judged to be acceptable. Other branch is short, straight cantilever and judged to be acceptable.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
No sources.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 18: PAB EL 8' By U1 Facade Door

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: R. LaPlante & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 19 PAB EL 8' BY SI & CS PUMPS

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Some minor lack of thread engagement judged to be acceptable.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
1/4" tube for 1SI881A has long span between supports of about 10', resulting in very flexible tubing. Suggest added support. This issue has been entered into the station corrective action process.

At the west end, flexible pipe from SI-917A appears to be bearing on some Unistrut clamps at about 10' from the floor. One end is free and not secure behind 1FE-661. Could dislodge from clamps and interact with item below. No soft targets directly below. 1FIT-661 off to the side. This issue has been entered into the station corrective action process.

Conduit for valve 2SI-825C is attached to flange of structural steel pipe hanger with clamp oriented incorrectly. Attached adequately to cable tray JG08 and will not fall. This issue has been entered into the station corrective action process.

Copper IA pipe attached to structural steel hanger with clamp oriented incorrectly. At bottom of hanger support for copper pipe spans 2' horizontally to adequate support. There is sufficient vertical support. Clamps provide lateral support. Judged to be acceptable. This issue has been entered into the station corrective action process.
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 19 PAB EL 8' BY SI & CS PUMPS

-
- | | | |
|----|---|-----|
| 5. | Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?
<i>Fire protection lines in area are threaded and well supported. Judged to be acceptable.</i> | Yes |
| 6. | Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?
<i>No sources.</i> | Yes |
| 7. | Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?
<i>Scaffold above 2P-14B looks to be well built and tied off.</i> | Yes |
| 8. | Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?
<i>Two lights in corridor area are attached to steel with magnets. Appear to be strongly attached.</i> | Yes |

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/20/2012

Evaluated by:	Detailed signed records of the checklists are available at the site.	Date:	

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 20 PAB EL 8' By CC Pumps

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Overhead pipe support attached to ceiling on NW corner of room has several questions. Support is structural member (W shape) with weak axis resisting DL welded to a four bolt anchor plate at each end. One anchor is absent on South plate. The west flange and about 1/2 of the web are notched in three places. Shackle attached to SW anchor on North plate. Can not tell how it is secured. No seismic concern. This issue has been entered into the station corrective action process.

All other anchorage is OK.
 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Fire protection piping is well supported.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 20 PAB EL 8' By CC Pumps

-
- | | | |
|------|--|-----|
| 6. | Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?
<i>No sources.</i> | Yes |
|
 | | |
| 7. | Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? | Yes |
|
 | | |
| 8. | Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? | Yes |

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/20/2012

Evaluated by:	Detailed signed records of the checklists are available at the site.	Date:	_____
	_____		_____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 21: CB EL 8' Vital Switchgear Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
*No anchorage issues identified for accessible equipment.
Gaps between conduit clamps and baseplate at T4041, 2S227, S011, D07-7, S291, S292, and D09SW3. No immediate seismic concerns.*

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead raceways well supported. Conduit G-02-2 resting on conduit above rear of 2A52-69. No immediate seismic concern.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
S hook for light fixture above 1B-49 slightly open. No concerns observed.

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
SW line in south end of room is well incased in full length sleeve.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 21: CB EL 8' Vital Switchgear Room

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/21/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 24: PAB EL. 46' SFP HX AREA

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
Anchorage on tank support for T-161A are small. East anchors are in oversized holes. Northwest anchors seem to have more surface rust. Appears to be OK now, but should be cleaned and evaluated. This issue has been entered into the station corrective action process.
 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Drain tube attached to cable with clamps and oriented incorrectly. No seismic interaction concerns since there is no soft targets in the vicinity.
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
Abandoned support in SW corner of room. Will not cause damage to adjacent pipe and is judged to be acceptable.
 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Welded pipe supports. No concerns.
 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Scaffold at west end screw jacked to steel above and close to several pipes. Sufficiently braced with no interaction concerns.

Scaffold fence is tied off at HX-13B base and tied to pipe support base and is judged to be acceptable.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 24: PAB EL. 46' SFP HX AREA

EL. 66' above:

Plastic drum labeled T-161C is sitting on grating above. Restrained to handrail with a plate on E-W direction. Not well restrained in N-S direction. Possible flood sources. Drum had only resins inside about one third full. Judged to be acceptable.

Reactor engineering and RP cabinets are stored up against handrail on south side of HX area. Handrail on edge of slab. File cabinet, monitors, etc. could be potential items that could interact with equipment below.

Pipe coming off 1T-161C (about 1"SS) attached to HR with light conduit type support. Not attached to P1000 supports (cantilever from structural steel) in two locations before it turns vertical and connected to header.

Misc. loose items on top of 1T-161C which could fall off tank during seismic event.

Radio and chargers on outside of HR restrained with tie wraps.

No soft targets below in are where items could interact.

These issues have been entered into the station corrective action process.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

Yes

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 26: DGB EL. 28' OIL TRANSFER PUMP ROOM

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Overhead piping, light fixtures, area heaters, and MCCs 1B-30 & 2B-30 are all well supported.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
Area heater HX-271B is approximately 1/2" from pipe and is judged to be acceptable.

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Fire protection piping is well supported.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
Fire protection piping above MCC 1B-30 is well supported.

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 26: DGB EL. 28' OIL TRANSFER PUMP ROOM

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 27: Pump House El. 8'. South Room.

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Missing NW anchor bolt on pipe support plate west of P-31A. This issue has been entered into the station corrective action process.

Missing anchor bolt on base plate NW of P-31A for chlorination line. This issue has been entered into the station corrective action process.
 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
Corrosion on P-31A base plate and pipe support base plate west of P-31A. This issue has been entered into the station corrective action process.
 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead raceways are well supported.
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Overhead piping is well supported.
 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Overhead hoist control pendant noted on P-32A SWC.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 27: Pump House El. 8'. South Room.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 9/20/2012

Pump House El. 8'. South Room.

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 33: DGB EL 50' G-03 RADTR RM

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 33: DGB EL 50' G-03 RADTR RM

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

DGB EL 50' G-03 RADTR RM

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 34: DGB EI 50' G-03 FAN RM

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Piping well supported.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
No concerns.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 34: DGB EI 50' G-03 FAN RM

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

DGB EI 50' G-03 FAN RM

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 37: DGB EI 28' G-03 SWGR RM

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Overhead fan W-185A well supported.
Emergency lights well mounted.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead ductwork well supported.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
No water sources.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 37: DGB EI 28' G-03 SWGR RM

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

DGB EI 28' G-03 SWGR RM

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 38: Diesel Building El. 28' G-03 Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Fire Protection piping well supported.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 38: Diesel Building El. 28' G-03 Room

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes
Overhead crane is well supported. Crane control pendant is well secured.
-

Comments

Seismic Review Team: N. Juraydini & M. Nielsen on 10/1/12

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 41: PAB El. 8 Central Area

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Anchorage of MCC B-33 not accessible.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
Air operator of 1AF-4073A is 1/2" from conduit at wall. Operator is judged to be acceptable since the pipe is supported near the valve to the same wall. Furthermore, the pipe segments on each side of the valve are short and therefore have a relatively high torsional stiffness and are judged to not be capable of causing the pipe to rotate and the air operator to displace by 1/2".
 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Overhead piping is well-supported and judged to be acceptable.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 41: PAB El. 8 Central Area

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen – 10/3/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 42: CB EL 8' G-01 ROOM

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Fire protection piping is rod hung. Only lateral support is at G-02 wall. Rod hangers above G-01 are short and may absorb a higher portion of the lateral load. It is uncertain if the fire protection piping would leak during a seismic event. This issue has been entered into the station corrective action process.
 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
No sources.

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 42: CB EL 8' G-01 ROOM

-
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 43: Near 1P-10B Cubicle

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead conduits, tubing, and HVAC ducts judged to be acceptable.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 43: Near 1P-10B Cubicle

-
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 47: PAB El. 26 West End Near 2B42-4212B

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead conduits judged to be acceptable.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 47: PAB El. 26 West End Near 2B42-4212B

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 10/3/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 48: PAB El. 26' Near 1B-42, 2B-42

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
C-59, C-180, C-180A, and C-181 panels were not opened.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Cable tray spans between C-180 and C-181 are sagging; judged to not be of seismic concern. This issue has been entered into the station corrective action process.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Unanchored tool cabinet judged to not be of seismic concern.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 48: PAB El. 26' Near 1B-42, 2B-42

-
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 10/3/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

E

Plan for Future Seismic Walkdown of Inaccessible Equipment

Completion of the walkdowns for nine (9) items must be deferred due to accessibility. Four items require opening energized equipment and five items require a refueling outage. Table E-1 summarizes the reasons each item is inaccessible during normal plant operation. PBNP CRs have been written to identify these deferred components and to provide a schedule the future Seismic Walkdowns for these items.

Table E-1. Summary of Inaccessible Equipment

Component ID	Location	Description	Reason for Inaccessibility	Scheduled Completion
W-001A1	Unit 1 Containment	Containment Accident Recirculation Fan	Access to containment is restricted during plant operation.	Spring, 2013
TE-03292	Unit 1 Containment	EL 66' U1C Temperature Element	Access to containment is restricted during plant operation.	Spring, 2013
T-034A	Unit 1 Containment	Safety Injection Accumulator	Access to containment is restricted during plant operation.	Spring, 2013
HX-004	Unit 1 Containment	Excess Letdown Heat Exchanger	Access to containment is restricted during plant operation.	Spring, 2013
SI-00852A	Unit 1 Containment	Low Head Si Core Deluge Isolation	Access to containment is restricted during plant operation.	Spring, 2013
C-022	26/PAB/North	Battery Room Hvac Control Panel	Equipment energized	3 rd Qtr. 2014
1B312A-B855B	8/PAB/Col P-11	P-10A RHR Pump Normal/ALT Transfer Switch	Equipment energized	Spring, 2013
C-081	28/DGB/G-03 SWGR Rm	G-03 EDG Control PANEL	Equipment energized	2 nd Qtr. 2013
C-032	8/CB/G-01 Rm South Wall	G-01 EDG Exhaust Fan Control Panel	Equipment energized	3 rd Qtr. 2014

F

Peer Review Report

**Peer Review Report for the Seismic
Walkdown Inspection of Point Beach
Nuclear Plant (NRC Near Term Task Force
(NTTF) Recommendation 2.3)**

Point Beach Nuclear Plant

November 2012

Prepared by Douglas P. Brown 11/23/12
Douglas P. Brown (PR Team Lead) Date

Reviewed by S.E. Guokas by telecon 11/23/12
S. E. Guokas (PRA Group) Douglas P. Brown Date
11/23/12

1. INTRODUCTION

This report documents the peer review of the seismic walkdowns performed for Point Beach Nuclear Plant in September and October 2012, in support of the NRC Near Term Task Force (NTTF) Recommendation 2.3. This document describes the peer review team and process (Section 3), the peer review of the SWEL selection (Section 4), and the peer review of the seismic walkdown (Section 5).

The peer review was performed consistent with Section 6 of the EPRI-TR-1025286 ^(REF 1) guidance document and addresses the following specific activities:

- Review of the selection of components for the Seismic Walkdown Equipment List (Section 4)
- Review of a sample of the checklists prepared for the Seismic Walkdowns & Area Walk-Bys (Section 5.1)
- Review of any licensing basis evaluations (Section 5.2)
- Review of the decisions for entering the potentially adverse conditions in to the plant's Corrective Action Program (Section 5.2)
- Review of the final submittal report (Section 6).

2. BACKGROUND

This peer review covers three portions of the seismic walkdown: (a) the preparation of the SWEL, (b) the actual walkdown, and (c) the final submittal report.

The Seismic Walkdown Equipment List (SWEL) was prepared in the summer of 2012 and finalized in November, 2012, based on revisions that occurred during the walkdowns. Section 4 describes the process of peer reviewing the SWEL.

The vast majority of the seismic walkdowns occurred September 17 through September 21 and October 1 through October 5. The peer review is described and documented in Section 5 of this report.

Two entire areas – the containments – were deferred for each unit for completion during each following respective outage - see Appendix E for a *Plan for Future Seismic Walkdown of Inaccessible Equipment*. This allowed the walkdown to occur with less radiation exposure to the walkdown team. *Inspection deferrals for Unit 1 and Unit 2* Containments are being tracked in NAMS Action Tracking system.

There are also nine (9) other components that are being deferred. They have partially complete Seismic Walkdown Checklists. The SWCs could not be completed since they are electrical panels and are required to be opened in order to inspect the panel internals for 'Other Adverse Conditions'. These items are also being tracked in Appendix E as well as the NAMS Action Tracking System.

3. PEER REVIEW TEAM & PROCESS

The Point Beach (PBN) Peer Review Team consisted of individuals from PBN operations, civil engineering, licensing, and PRA as well as structural/seismic engineers from Stevenson & Associates. These individuals participated in phases of preparation, performance, and peer review of the seismic walkdowns. This section documents the peer review process and how the Peer Review Team interacted with the Seismic Walkdown Engineering Teams.

3.1 Peer Review Team

The affiliation, role, and qualifications for each Peer Review Team member are summarized in the following table.

Name	Group	Role *	Qualifications **
Rick Merkes	PBN Operations	SWEL co-preparer	(e)(f)
Douglas P. Brown	PBN Civil Engineering	Peer Review Team Leader SWE SWEL co-preparer	(b) (c) (g)
David N. Carter	Stevenson & Assoc. (consultant eng.)	SWE Team #1 Leader SWE PR	(b) (c) (g)
Nabil Juraydini	Stevenson & Assoc. (consultant eng.)	SWE Team #2 Leader SWE PR	(b) (c) (g)
Stanley E. Guokas	PBN PRA Group	PR Team PBN – SWEL Preparer	(d)
Russ Severson	DAEC PRA Group	SWEL PR	(d)
T. K. Ram	Stevenson & Assoc. (consultant eng.)	SWEL PR	(b) (c) (g)
Jeffery Buboltz	PBN Civil Engineering	SWE Team Member SWE PR	(b) (c) (g)
Scott Kahl		SWE Team Member SWE PR	(b) (c) (g)
Richard L. LaPlante		SWE Team Member SWE PR	(b) (c) (g)
Coreen A. McDonald		SWE Team Member SWE PR	(b) (c) (g)
Mark C. Nielsen		SWE Team Member SWE PR License Basis PR	(b) (c) (g)
Dave J. Nuttall		SWE Team Member SWE PR License Basis PR	(b) (c) (g)

Notes:

* Role: PR (peer review), SWEL (seismic walkdown equipment list), SWE (seismic walkdown engineer)

** Qualifications:

- (a) Completed EPRI NTF 2.3 Seismic Walkdown Training
- (b) Seismic engineering experience
- (c) Degree in mechanical engineering or civil/structural engineering
- (d) Seismic PRA / IPEEE experience

- (e) Knowledge of plant operations, documentation
- (f) Plant Operations member
- (g) Completed *SQUG Walkdown Screening and Seismic Evaluation Training Course*

3.2 Peer Review Process

PR Team Lead

Doug Brown served as the Peer Review Team Lead. In that role, he was responsible for coordinating the peer review and assembling this report. As described below, he also performed some additional roles as part of the walkdown team and checklist PR. He also participated in the SWEL preparation, so he was not part of that PR process. That is, even though he was a SWEL co-preparer, the SWEL was independently reviewed and he did not partake in any of the SWEL PR. Therefore, performing as the lead peer review is considered acceptable.

SWEL Preparation

The SWEL was prepared by S. Guokas, who is a PBN PRA engineer, with familiarity with the PBN IPEEE Report and the PBN PRA model. Additional input into the SWEL was provided by a plant staff structural/seismic engineer (D. P. Brown), and a Plant Operations representative (R. Merkes).

The SWEL was Peer Reviewed by a team that included a PRA engineer (R. Severson), and a seismic engineer (T. K. Ram).

Seismic Walkdown

The primary seismic walkdown was conducted with two teams, each with two qualified structural/seismic engineers. A contractor engineer served as Team Leader of each team. The second team member was an available PBN SWE or the two contract engineers worked together as one team.

The Peer Review of the walkdowns consisted of a Peer Review Team Lead with Operations and PRA knowledge, and structural/seismic engineers. The structural/seismic engineers made up the SWE teams, but also served to peer review each other's work. The Peer Review Team Lead also participated in a few of the walkdowns for logistical support. The ultimate judgments regarding licensing basis were made by qualified Point Beach structural engineers.

- Seismic Walkdown Engineers (SWE):
 - SWE Team #1 – D. N. Carter (team lead),
 - SWE Team #2 – N. Juraydini (team lead),
 - SWE Team member – D. P. Brown
 - SWE Team member - J. Buboltz

- SWE Team member – S. Kahl
- SWE Team member – R. L. LaPlante
- SWE Team member – C. A. McDonald
- SWE Team member – M. C. Nielsen
- SWE Team member – D. J. Nuttall
-
- PR Team – Doug Brown (PR Team Leader), Stan Guokas
- Licensing Basis Reviewers – M. C. Nielsen, Dave J. Nuttall
- IPEEE Reviewers – S. Guokas

Final Report

The final seismic walkdown report was prepared by the Stevenson & Assoc. consultants, with review by Point Beach representatives from Operations, design structural engineering, and PRA.

- Preparers– D. N. Carter, N. Juraydini
- Reviewers – D. P. Brown, S. E. Guokas

4. PEER REVIEW – SELECTION OF COMPONENTS FOR SWEL

The purpose of this section is to describe the process to perform the peer review of the selected components that were included in the Seismic Walkdown Equipment List (SWEL). This peer review was based on review of the SWEL Selection Report ^(REF 2 & 3).

The guidance in Section 3: *Selection of SSCs* of the EPRI Technical Report ^(REF 1) was used as the basis for this review. Specifically, this peer review utilized the checklist in Appendix F: *Checklist for Peer Review of SSC Selection of the EPRI Technical Report* in Reference 1. Attachment 1 of this peer review report documents the completed checklist.

This peer review determined that the SSCs selected for the SWEL 1 seismic walkdowns represent a diverse sample of equipment required to perform the five safety functions and to meet the sample selection attributes, including:

- Various types of systems
- Major new and replacement equipment
- Various types of equipment
- Various environments
- Equipment enhanced based on the findings of the IPEEE
- Risk insight consideration

For SWEL 2 development, the peer review determined that spent fuel related items were adequately considered and were appropriately included or excluded.

This peer review resulted in no additional findings. All peer review comments requiring resolution were incorporated prior to completion of the SWEL Selection Report.

This peer review concludes that the process for selecting SSCs to be included on the Seismic Walkdown Equipment List appropriately followed the process outlined in Reference 1. It is further concluded that the SWEL sufficiently represents a broad population of plant Seismic Category 1 equipment and systems to meet the objectives of the NRC 50.54(f) Letter.

5. PEER REVIEW – SEISMIC WALKDOWN

The peer review of the seismic walkdown was performed by the Walkdown Team members on November 20. The Peer Review was performed as a group discussion, with all members participating.

5.1 Review of Sample Checklists & Area Walk-bys

The peer review meeting consisted of a review of thirty (30) randomly selected Seismic Walkdown Checklist (SWCs) representing thirty (30) pieces of equipment. Also, nine (9) Area Walk-by Checklists (AWCs) were randomly selected.

Table 5-1 lists the sample of 30 components from the Seismic Walkdown Checklist (SWC) that were discussed in the peer review meeting. These samples represent about 15% of the total SWEL population of 190 components that were completed. The sample includes a variety of types of components (heat exchanger, fluid-operated valve, motor operated valve, horizontal pump, vertical pump, tank, instrument rack, fan, low voltage switchgear, medium voltage switchgear, battery and rack, distribution panel, diesel generator, and control panel)

Table 5-1 also lists the sample of 9 areas from the Area Walk-by Checklist (AWC) that were discussed in the peer review. These samples represent about 18% of the total AWC population of 48 areas.

During the Peer Review discussion of components and areas during the following topics were addressed:

- Adequate license basis evaluation of adjacent components that are not tied together, but are touching. The evaluation should have addressed sensitive components inside both of the components, not just local deformation affects.
- There were a few checklists that it was noted the answer to the checklist question was incorrect, such as being answered as 'Not Applicable', when the answer should have been 'Yes'.
- Discussion about why an inverter panel was not opened for internal inspection. It was determined that there were more than just a few fasteners holding the front panel on and therefore the panel was not easily accessible.
- Seismic scaffolding – On the first day of the walkdowns, the entire Walkdown Team went as a group. It was noted that there was a scaffold nearby the component being walked down. The documentation package for the scaffold was checked to ensure the scaffold had been evaluated for potential interaction with the nearby component.
- Discussion about overhead support that the WD team had evaluated as being acceptable as-is. Therefore further evaluation is not required, and an AR did was not required for the condition.

- Discussion about pump oiler and potential interaction from overhead support. That support and overhead support are separated by several feet horizontally and therefore interaction is not a concern.
- There were several discussions about adjacent masonry walls.
- There was discussion about a spray interaction and why it was not noted on the SWC. The SWCs do not address spray interactions. Spray interactions are addressed on AWCs.
- Some valves located on Primary Auxiliary Building (PAB) 8 foot elevation are partially concealed by checkered floor plate. When needed, the SWEs had the floor plates lifted so that inspection of the valve could be completed.
- Discussion about why the SWEs are not required to evaluate pipe supports. Pipe supports were addressed in response to NRC Bulletin BL 79-14, *Seismic Analyses for As-Built Safety Related Piping Systems*.
- Discussion about less than full thread engagement. AR not required as thread engagement was short by only one thread and the SWEs determined the existing thread engagement is adequate.
- Discussion about a wall that is made of sheet rock and steel studs. It has been determined that the wall was designed considering seismic forces.
- Victaulic fittings were discussed. Follow-up evaluation of Victaulic fittings found that pipes with these fittings are well supported and that the fittings are acceptable.
- Discussion about thread engagement on existing Wej-it anchor bolts. Anchor bolts are for a trolley beam. Since trolley beam would not be evaluated with the trolley fully loaded, concurrent with a seismic event. Trolley beam need only be evaluated for dead weight concurrent with a seismic event.

5.2 Review of Licensing Basis Evaluations & Corrective Action Process

The final report includes tables of anomalies that were identified during the PBNP seismic walkdown inspection and how they were addressed. The list was reviewed by the peer review team, and it was found that a thorough and reasonable process was used to address each item on the list. There were no added comments offered by the review team, except that a typographical error was found in one Condition Report (CR). The CR indicated that the tube in question was 1/4" OD, but the tube that was analyzed by the seismic review team 3/8" OD. The peer review team walked down the tube in question and verified that the tube was 3/8" OD as was analyzed. The peer review team updated the CR to show the correct tube diameter.

6. REVIEW FINAL SUBMITTAL REPORT & SIGN-OFF

The final submittal report has been reviewed by Point Beach representatives from structural engineering, and the PRA Group, and found to meet the requirements of the EPRI 1025286 – Seismic Walkdown Guidance ^(REF. 1).

7. REFERENCES

1. EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, June 2012.
2. Point Beach Report, *Selection of the Seismic Walkdown Equipment List (SWEL) for the Requirement 2.3 Walkdown, Unit 1*, November 2012.
3. Point Beach Report, *Selection of the Seismic Walkdown Equipment List (SWEL) for the Requirement 2.3 Walkdown, Unit 2*, November 2012.

Table 5-1: Table of Sample Components from Seismic Walkdown Checklist (SWC) and Area Walk-by (AWB)

Walkdown Team		Equipment Identification	Walkby Area Identification
NJ	JJB	1-83/DY-03	
DNC	NJ	1A-05	
DNC	JJB	1AF-04002	
DNC	NJ	1B-03	
DNC	NJ	1C-105	
NJ	JJB	1DY-03	
DNC	MCN	1P-010A	
DNC	DJN	1P-014B	
DNC	DJN	1RH-00625	
SDK	JJB	AF-04023	
DNC	NJ	C-078	
DNC	DJN	D-16	
DNC	DN	G-01	
DNC	CAM	RK-25A	
NJ	MCN	SW-00012C	
DNC	NJ	T-060E	
NJ	SDK	W-181A1	
DNC	NJ	2B-39	
DNC	DJN	D-06	
NJ	RLL	2DY-02	
DNC	DJN	2IA-03048	
DNC	DJN	2SI-00825B	
DPB	MCN	2TE-00621	
DNC	DJN	D-02	
DNC	NJ	FO-03931	
NJ	SDK	P-032D	
NJ	JJB	SW-02869	

NJ	RLL	T-171A	
DNC	DJN	HX-013B	
NJ	CAM		AWB 5
DNC	NJ		AWB 11
DNC	RLL		AWB 16
DNC	RLL		AWB 18
DNC	MCN		AWB 20
NJ	CAM		AWB 23
NJ	SDK		AWB 28
NJ	SDK		AWB 34
DNC	DJN		AWB 40

Peer Review Checklist for SWEL Point Beach Unit 1

Instructions for Completing Checklist

This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (SWEL) in accordance with Section 6: Peer Review. The space below each question in this checklist should be used to describe any findings identified during the peer review process and how the SWEL may have changed to address those findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Were the five safety functions adequately represented in the SWEL 1 selection? Y N
Appropriate equipment has been included to maintain the five safety functions.
-

2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:

- a. Various types of systems? Y N
Various system types have been included (e.g., Aux Feed, Charging, RHR, CCW, Containment Spray, SI, and support systems such as DG, Load Centers, Distribution Panels, and HVAC).

- b. Major new and replacement equipment? Y N
New or Replace" equipment are included in the list.

- c. Various types of equipment? Y N
Second peer reviewer comments satisfactorily resolved as follows: 1. SWEL 1 revised to add equipment classes 3 and 6; 2. Note added to Attachment B of the SWEL selection report providing justification for the absence of equipment classes 11, 12, and 13.

- d. Various environments? Y N
Appropriate environments have been included (e.g., Containment, DG, and Control buildings)

- e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program? Y N
Included as indicated in the column, "IPEEE Enhancement."

Peer Review Checklist for SWEL Point Beach Unit 1

-
- f. Were risk insights considered in the development of SWEL 1? Y N
A checkmark in the risk column indicates the equipment being risk significant.

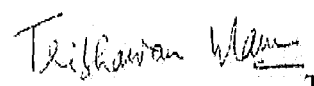
3. For SWEL 2:

- a. Were spent fuel pool related items considered, and if applicable included in SWEL 2? Y N
Second peer reviewer comments satisfactorily resolved as follows: Justification for not including manual and check valves that are unrelated to rapid draindown scenario is provided in the SWEL selection report, section 4.2, "Screening for SWEL 2," (Screen #3 Sample Considerations (Equipment Type)).
- b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2? Y N
Yes, it has been in section 4.2 of the SWEL selection report.

4. Provide any other comments related to the peer review of the SWELs.

-
5. Have all peer review comments been adequately addressed in the final SWEL? Y N

Peer Reviewer #1:  Russ Severson Date: 11/16/12

Peer Reviewer #2:  T. K. Ram Date: 11/16/12

Peer Review Checklist for SWEL Point Beach Unit 2

Instructions for Completing Checklist

This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (SWEL) in accordance with Section 6: Peer Review. The space below each question in this checklist should be used to describe any findings identified during the peer review process and how the SWEL may have changed to address those findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Were the five safety functions adequately represented in the SWEL 1 selection? Y N
Appropriate equipment has been included to maintain the five safety functions.
-

2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:

- a. Various types of systems? Y N
Various system types have been included (e.g., Aux Feed, Charging, RHR, CCW, SW, SI, and support systems such as DG, Load Centers, Distribution Panels, and HVAC).

- b. Major new and replacement equipment? Y N
New or Replace" equipment are included in the list.

- c. Various types of equipment? Y N
Second peer reviewer comments satisfactorily resolved as follows: 1. SWEL 1 revised to add equipment classes 10, 19, and 21b; 2. Note added to Attachment B of the SWEL selection report providing justification for the absence of equipment classes 11, 12, and 13.

- d. Various environments? Y N
Appropriate environments have been included (e.g., DG, SWGR, and SW buildings)

- e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program? Y N
Included as indicated in the column, "IPEEE Enhancement."

Peer Review Checklist for SWEL Point Beach Unit 2

f. Were risk insights considered in the development of SWEL 1? Y N
A checkmark in the risk column indicates the equipment being risk significant.


3. For SWEL 2:

a. Were spent fuel pool related items considered, and if applicable included in SWEL 2? Y N
N/A (SWEL 2 has been included in Unit 1 selection and not included here)

b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2? Y N
N/A (See item 3 a above)

4. Provide any other comments related to the peer review of the SWELs.

5. Have all peer review comments been adequately addressed in the final SWEL? Y N

Peer Reviewer #1:  Russ Severson Date: 11/16/12

Peer Reviewer #2:  T. K. Ram Date: 11/16/12

ENCLOSURE 2

**NEXTERA ENERGY POINT BEACH, LLC
POINT BEACH NUCLEAR PLANT, UNITS 1 AND 2**

**NEXTERA ENERGY POINT BEACH, LLC RESPONSE TO 10 CFR 50.54(F)
REQUEST FOR INFORMATION REGARDING NEAR-TERM TASK FORCE
RECOMMENDATION 2.3, SEISMIC**

**SEISMIC WALKDOWN REPORT
POINT BEACH NUCLEAR PLANT, UNIT 2
12Q0114-R-002
REVISION 0**

SEISMIC WALKDOWN REPORT

**IN RESPONSE TO THE 50.54(f) INFORMATION REQUEST REGARDING
FUKUSHIMA NEAR-TERM TASK FORCE RECOMMENDATION 2.3: SEISMIC**

for the

POINT BEACH NUCLEAR PLANT UNIT 2

NRC Docket No. 50-301

NextEra Energy
Point Beach Nuclear Plant
6610 Nuclear Road
Two Rivers, WI 54241

12Q0114-R-002
Revision 0

Prepared by:
Stevenson & Associates
1661 Feehanville Dr., Suite 150
Mt. Prospect, IL 60056

Submittal Date
November 2012

Contents

List of Tables	i
Executive Summary.....	ii
1 Introduction.....	1
1.1 Background	1
1.2 Plant Overview	1
1.3 Approach.....	1
2 Seismic Licensing Basis.....	2
3 Personnel Qualifications	4
3.1 Overview	4
3.2 Project Personnel.....	4
3.3 Equipment Selection Personnel	5
3.4 Seismic Walkdown Engineers.....	5
3.5 Licensing Basis Reviewers	5
3.6 IPEEE Reviewers.....	5
3.7 Peer Review Team.....	5
3.8 Additional Personnel	5
4 Selection of SSCs.....	6
5 Seismic Walkdowns and Area Walk-Bys.....	7
5.1 Overview	7
5.2 Seismic Walkdowns	7
5.3 Area Walk-Bys	13

Contents (cont'd.)

6	<i>Licensing Basis Evaluations</i>	21
7	<i>IPEEE Vulnerabilities Resolution Report</i>	22
8	<i>Peer Review</i>	23
9	<i>References</i>	24
A	<i>Project Personnel Resumes and SWE Certificates</i>	A-1
	A.1 Introduction	A-1
	A.2 Resumes & Certifications	A-2
B	<i>SWEL Selection Report</i>	B-1
C	<i>Seismic Walkdown Checklists (SWCs)</i>	C-1
D	<i>Area Walk-By Checklists (AWCs)</i>	D-1
E	<i>Plan for Future Seismic Walkdown of Inaccessible Equipment</i>	E-1
F	<i>Peer Review Report</i>	F-1

List of Tables

<u>Table</u>	<u>Section</u>
Table 3-1. Personnel Roles.....	3.2
Table 5-1. Anchorage Configuration Confirmation	5.2
Table 5-2. Issues Identified during Seismic Walkdowns	5.2
Table 5-3. Issues Identified during Area Walk-Bys	5.3

Executive Summary

The purpose of this report is to provide information as requested by the Nuclear Regulatory Commission (NRC) in its 50.54(f) letter issued to all power reactor licensees and holders of construction permits in active or deferred status (Ref. 5). In particular, this report provides information requested to address Enclosure 3, Recommendation 2.3: Seismic, of the 50.54(f) letter (Ref. 5).

The 50.54(f) letter requires, in part, all U.S. nuclear power plants to perform seismic walkdowns to identify and address degraded, non-conforming, or unanalyzed conditions and to verify the current plant configuration is within the current seismic licensing basis. This report documents the seismic walkdowns performed at Point Beach Nuclear Plant (PBNP) Unit 2 in response, in part, to the 50.54(f) letter issued by the NRC.

The Nuclear Energy Institute (NEI), supported by industry personnel, cooperated with the NRC to prepare guidance for conducting seismic walkdowns as required in the 50.54(f) letter, Enclosure 3, Recommendation 2.3: Seismic (Ref. 5). The guidelines and procedures prepared by NEI and endorsed by the NRC were published through the Electric Power Research Institute (EPRI) as EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012; henceforth, referred to as the "EPRI guidance document" (Ref. 1). NextEra/PBNP has utilized this NRC-endorsed guidance as the basis for the seismic walkdowns and this report (Ref. 1).

The EPRI guidance document was used to perform the engineering walkdowns and evaluations described in this report. In accordance with the EPRI guidance document, the following topics are addressed in the subsequent sections of this report.

- Seismic Licensing Basis
- Personnel Qualifications
- Selection of Structures, Systems, and Components (SSC)
- Seismic Walkdowns and Area Walk-Bys
- Seismic Licensing Basis Evaluations
- Individual Plant Examination for External Events (IPEEE) Vulnerabilities Resolution Report
- Peer Review

Seismic Licensing Basis

The Seismic Licensing Basis is briefly described in Section 2 of this report. The safe shutdown earthquake for the PBNP site is 0.12g horizontal ground acceleration and 0.08g vertical ground acceleration (Ref. 2).

Personnel Qualifications

Personnel qualifications are discussed in Section 3 of this report. The personnel who performed the key activities required to fulfill the objectives and requirements of the 50.54(f) letter are qualified and trained as required in the EPRI guidance document (Ref. 1).

Selection of SSCs

Selection of SSCs is discussed in Section 4 of this report. The process used to select the items that were included in the overall Seismic Walkdown Equipment List (SWEL) is described in detail in the EPRI guidance document, Section 3: Selection of SSCs (Ref. 1).

Seismic Walkdowns and Area Walk-Bys

Section 5, Appendix C, and Appendix D of this report documents the equipment Seismic Walkdowns and the Area Walk-Bys. The online seismic walkdowns for PBNP Unit 2 were performed September 17-21 and October 1-3, 2012. During the majority of the walkdown activities, the walkdown team consisted of two 2-person Seismic Walkdown Engineer (SWE) teams.

The seismic walkdown team performed the inspection of 91 of the 95 components on the SWEL (comprised of SWEL 1). A partial walkdown was performed for four (4) pieces of equipment. The walkdown could not be completed for these equipment due to accessibility issues given energized equipment. The four (4) remaining Unit 2 items will be walked down during a unit outage or another time when the equipment is accessible, as appropriate. Anchorage verification was required for a minimum of 31 components (Ref. 1). A total of 37 anchorage configurations were confirmed to be installed in accordance with the station documentation.

During the seismic walkdowns at PBNP Unit 2, Condition Reports (CRs) were issued for a variety of issues as summarized in Table 5-2 and 5-3. After evaluation through the Corrective Action Program (CAP), it was determined that none of the conditions identified in the CRs were adverse seismic conditions.

Seismic Licensing Basis Evaluations

Conditions identified during the walkdowns were documented on the Seismic Walkdown Checklists, Area Walk-by Checklists, and then entered into the CAP. For those conditions that required an evaluation, seismic licensing basis evaluations were completed and documented within the CR. Tables 5-2 and 5-3 in the report provide the CR, a summary of the condition, and the action completion status.

IPEEE Vulnerabilities

IPEEE vulnerabilities are addressed in Section 7 of this report. All identified IPEEE vulnerabilities have been resolved.

Peer Reviews

The Peer Review of the checklists consisted of a group discussion. The group was made up of all walkdown team members. Some of the team members participated by teleconference. The walkdown team members are all engineers, mostly civil engineers. Appendix F of this report contains a summary of the Peer Review. The Peer Review determined that the objectives and requirements of the 50.54(f) letter are met.

Furthermore, it was concluded by the peer reviews that the efforts completed and documented within this report are in accordance with the EPRI guidance document.

Summary

Seismic walkdowns have been completed at PBNP Unit 2 in accordance with the NRC endorsed walkdown methodology. All potentially degraded, nonconforming, or unanalyzed conditions identified as a result of the seismic walkdowns have been entered into the CAP.

Evaluations of the identified conditions are complete and documented within the CAP. These evaluations determined the Seismic Walkdowns resulted with no adverse anchorage conditions, no adverse seismic spatial interactions, and no other adverse seismic conditions associated with the items on the SWEL. Similarly, the Area Walk-Bys resulted with no adverse seismic conditions associated with other SSCs located in the vicinity of the SWEL item(s).

The Seismic Walkdowns identified several minor issues. The Seismic Walkdowns identified no degraded, nonconforming, or unanalyzed conditions that resulted in operability concerns for the affected equipment. No planned or newly identified protection or mitigation features have resulted from the efforts to address the 50.54(f) letter.

Follow-on activities required to complete the efforts to address Enclosure 3 of the 50.54(f) letter include inspection of eight (8) items deferred due to inaccessibility. Area Walk-Bys will be completed, as required, during these follow-on activities.

1

Introduction

1.1 BACKGROUND

In response to Near-Term Task Force (NTTF) Recommendation 2.3, the Nuclear Regulatory Commission (NRC) issued a 10 CFR 50.54(f) letter (Ref. 5) requesting that all licensees perform seismic walkdowns to identify and address plant degraded, non-conforming, or unanalyzed conditions, with respect to the current seismic licensing basis. The Nuclear Energy Institute (NEI), through the Electric Power Research Institute (EPRI), prepared industry guidance to assist licensees in responding to this NRC request. The industry guidance document, EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012 (Ref. 1), was endorsed by the NRC on May 31, 2012. NextEra Energy Point Beach Nuclear Plant (PBNP) has committed to using this NRC-endorsed guidance as the basis for these walkdowns and this report.

1.2 PLANT OVERVIEW

PBNP Unit 2 consists of a pressurized water reactor (PWR) generating unit located in Two Creeks, Wisconsin. PBNP has a containment building of concrete construction with a carbon steel liner. The unit was originally rated at 1518.5 MWt power, and has been updated to 1800 MWt. PBNP began commercial operation in October, 1972 (Ref. 2, Section 1.0). PBNP used the Seismic Qualification Utility Group (SQUG) Generic Implementation Procedure (GIP) method to resolve Unresolved Safety Issue (USI) A-46.

1.3 APPROACH

The EPRI Seismic Walkdown Guidance (Ref. 1) was used for the PBNP seismic walkdowns and evaluations described in this report. In accordance with Reference 1, the following topics are addressed in the subsequent sections of this report:

- Seismic Licensing Basis
- Personnel Qualifications
- Selection of Structures, Systems, and Components (SSC)
- Seismic Walkdowns and Area Walk-Bys
- Licensing Basis Evaluations
- Individual Plant Examination of External Events (IPEEE) Vulnerabilities Resolution Report
- Peer Review

2

Seismic Licensing Basis

The licensing basis for Seismic Class I equipment at PBNP is defined in the Updated Final Safety Analysis Report (UFSAR) (Ref. 2), Appendix A.5. Site design ground motion response spectra for the Safe Shutdown Earthquake (SSE) are provided in UFSAR Figure A.5-2. Damping values for Seismic Class I SSCs are listed in UFSAR Table A.5-2.

The equipment at PBNP is classified as recommended by TID-7024, "Nuclear Reactors and Earthquakes" August, 1963 (Ref. 7) and G. W. Housner "Design of Nuclear Power Reactors Against Earthquakes" (Ref. 8). The UFSAR defines Seismic Class I as, "Those structures and components including instruments and controls whose failure might cause or increase the severity of a loss-of-coolant accident or result in an uncontrolled release of excessive amounts of radioactivity. Also, those structures and components vital to safe shutdown and isolation of the reactor."

All components, systems, and structures classified as Class I are designed in accordance with the following criteria:

1. Primary steady state stresses, when combined with the seismic stresses resulting from a response spectrum normalized to a maximum ground acceleration of 0.04g in the vertical direction and 0.06g in the horizontal direction simultaneously, are maintained within the allowable stress limits accepted as good practice and, where applicable, set forth in the appropriate design standards, e.g., ASME Boiler and Pressure Vessel Code, USAS B31.1 Code for Pressure Piping, ACI 318 Building Code Requirements for Reinforced Concrete, and AISC Specifications for the Design and Erection of Structural Steel for buildings.
2. Primary steady state stresses when combined with the seismic stress resulting from a response spectrum normalized to a maximum ground acceleration of 0.08g acting in the vertical direction and 0.12g acting in the horizontal direction simultaneously, are limited so that the function of the component, system or structure shall not be impaired as to prevent a safe and orderly shutdown of the plant.

The spectrum response curves for the equipment inside the building are generated by the time history technique of seismic analysis. The sample earthquake utilized is that recorded at Olympia, Washington 45N-120W on April 13, 1949. The originally recorded earthquake is scaled to that of .06g. Essentially, the curves are generated by applying the recorded earthquake to a single degree of freedom system, for which the values for damping and natural frequency are varied. Some averaging of the curves is provided to smooth out the erratic response of the earthquake's random behavior. At the high frequency end of the curve, the acceleration levels converge to the peak input value at the location inside the building. Table A.5-2 (in the UFSAR) gives the damping factors used in the design of components and structures.

PBNP performed a verification of seismic adequacy of equipment per NRC Generic Letter 87-02. Section A.5.6.1 states the following for evaluation of existing plant equipment:

“Seismic adequacy evaluation of then-existing plant equipment necessary to bring the plant to, and maintain it in, a safe shutdown condition during the first 72 hours following a safe shutdown earthquake (SSE) was performed in response to Generic Letter (GL) 87-02. Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue (USI) A-46. This was done using the SQUG Generic Implementation Procedure (GIP) for Verification of Nuclear Plant Equipment, Revision 2. For these evaluations, safe shutdown was defined as the reactor subcritical with a minimum shutdown margin between 1% and 2.77% and the reactor coolant average temperature at or greater than 540°F.”

Additionally, Section A.5.6.2 of the UFSAR states the following relative to seismic design and verification of modified, new, and replacement equipment:

“Modified, new, or replacement equipment classified as Seismic Class I may be seismically designed and verified (after installation) for seismic adequacy using seismic experience data in accordance with a methodology developed by the Seismic Qualification Utility Group and approved by the NRC as documented in both of the following:

1. Seismic Qualification Utility Group (SQUG), “Generic Implementation Procedure (GIP) for Seismic Verification of Nuclear Plant Equipment”, Revision 2, Corrected February 14, 1992; as modified by
2. U. S. Nuclear Regulatory Commission, “Supplement No. 1 to Generic Letter (GL) 87-02 that Transmits Supplemental Safety Evaluation Report No. 2 (SSER No. 2) on SQUG Generic Implementation Procedure, Revision 2, as Corrected on February 14, 1992 (GIP-2)”, May 22, 1992.

The scope of equipment to which the SQUG methodology above may be applied includes certain classes of active mechanical and electrical equipment as specified in the SQUG GIP, electrical relays, cable trays and conduit, heat exchangers, and tanks (modification of existing tanks only).”

Per Section 5.1.1.5 of the UFSAR, the containment is designed to meet the requirements of American Concrete Institute (ACI) Building Code 318-63 (Ref. 9) and the 1963 version of the American Institute of Steel Construction (AISC) Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings (Ref. 10).

Per Appendix D, Section D.1, the Diesel Generator Building is designed in accordance with ACI 318-89 (Ref. 11) and the 9th Edition of the AISC Manual of Steel Construction (Ref. 12).

In various locations in the UFSAR, reference is made to (United States of America Standard) USAS B31.1-67 (Ref. 13) for piping design.

3

Personnel Qualifications

3.1 OVERVIEW

This section of the report identifies the personnel that participated in the NTTF Recommendation 2.3 Seismic Walkdown efforts. A description of the responsibilities of each Seismic Walkdown participant's role(s) is provided in Section 2 of the EPRI Seismic Walkdown Guidance (Ref. 1). Resumes for the personnel that contributed to the seismic walkdown and/or peer review provided in Appendix A provide detail on each person's qualifications for his or her role.

3.2 PROJECT PERSONNEL

Table 3-1 below summarizes the names and corresponding roles of personnel who participated in the NTTF Recommendation 2.3 Seismic Walkdown effort.

Table 3-1. Personnel Roles

Name	Equipment Selection	Plant Operations	Seismic Walkdown Engineer (SWE)	Licensing Basis Reviewer	IPEEE Reviewer	Peer Reviewer
Point Beach Nuclear Plant (NextEra Energy)						
S. Guokas	X				X	X
R. Merkes	X	X				
D. Brown	X		X			X
D. Nuttall			X	X		X
J. Buboltz			X			X
M. Nielsen			X	X		X
C. McDonald			X			X
R. LaPlante			X			X
S. Kahl			X			X
Duane Arnold Energy Center (NextEra Energy)						
R. Severson					X	X
Stevenson & Assoc.						
D. Carter			X			X
N. Juraydini			X			X
T. K. Ram						X

3.3 EQUIPMENT SELECTION PERSONNEL

The SWEL was developed by the PBNP Probabilistic Risk Assessment (PRA) Group, and was reviewed by Operations and Design Engineering.

3.4 SEISMIC WALKDOWN ENGINEERS

The seismic walkdown teams (SWT) consisted of nine SWEs, two from Stevenson and Associates (S&A) and seven from PBNP. The SWTs were led by S&A with support from PBNP. Resumes are included in Appendix A.

S&A is recognized internationally as a leading seismic consultant to the nuclear industry and as a regular contributor to the advancement of earthquake engineering knowledge through funded research projects. The professional staff has expertise and capabilities in earthquake engineering, structural dynamics, and structural design. S&A has performed seismic evaluations of US nuclear power plants, using either Seismic PRA or Seismic Margin Assessment, to address NRC IPEEE for over 35 US and European plants.

3.5 LICENSING BASIS REVIEWERS

The Licensing Basis Reviews were performed by the SWEs from PBNP.

3.6 IPEEE REVIEWERS

The IPEEE reviewer was the preparer of the SWEL and the preparer of the PBNP IPEEE submittal.

3.7 PEER REVIEW TEAM

The Peer Reviewer Team is listed, along with their roles and qualifications, in the Peer Review Report included in Appendix F.

3.8 ADDITIONAL PERSONNEL

Various Operations personnel also provided support to the walkdown by reviewing the list of components for accessibility and accompanying the SWTs to open electrical cabinets and panels.

4

Selection of SSCs

The Seismic Walkdown Equipment List is documented in the SWEL Selection Report, provided in Appendix B. This report describes how the SWEL was developed to meet the requirements of the EPRI Seismic Walkdown Guidance (Ref. 1). The final SWEL is included in the SWEL Selection Report in Appendix B.

5

Seismic Walkdowns and Area Walk-Bys

5.1 OVERVIEW

The PBNP Seismic Walkdowns and Area Walk-Bys were conducted by two 2-person teams of trained SWEs, in accordance with the EPRI Seismic Walkdown Guidance (Ref. 1). The majority of the walkdowns occurred on September 17-21, and October 1-3, 2012.

5.2 SEISMIC WALKDOWNS

The Seismic Walkdowns focused on the seismic adequacy of the items on the SWEL as provided in Attachment A of the SWEL report which is contained in Appendix B of this report. The Seismic Walkdowns also evaluated the potential for nearby SSCs to cause adverse seismic interactions with the SWEL items. The Seismic Walkdowns focused on the following adverse seismic conditions associated with the subject item of equipment:

- Adverse anchorage conditions
- Adverse seismic spatial interactions
- Other adverse seismic conditions

The results of the Seismic Walkdowns have been documented on the Seismic Walkdown Checklist (SWC) provided in the EPRI guidance document, Appendix C. Seismic Walkdowns were performed and a SWC prepared for 91 of the 95 items identified on the PBNP Unit 2 SWEL 1. The completed SWCs are provided in Appendix C of this report.

Seismic walkdowns are deferred for four (4) items, and additional inspections are required for four (4) items, until safe access conditions can be provided. These items could not be walked down during the 180-day period following the issuance of the 10CFR50.54(f) letter due to their being inaccessible because of the electrical safety hazards posed while the equipment is operating. SWCs for the four (4) items that require additional walkdowns are included in Appendix C with the status indicated as "unknown". Appendix E of this report identifies the inaccessible equipment along with the plan for future Seismic Walkdowns.

The following subsections describe the approach followed by the SWEs to identify potentially adverse anchorage conditions, adverse seismic interactions, and other adverse seismic conditions during the Seismic Walkdowns.

Drawings and other plant records are cited in some of the SWCs, but are not included with the SWCs because they are readily retrievable documents through the station's document management system.

5.2.1 Adverse Anchorage Conditions

Guidance for identifying anchorage that could be degraded, non-conforming, or unanalyzed relied on visual inspections of the anchorage and verification of anchorage configuration. Details for these two types of evaluations are provided in the following two subsections.

The evaluation of potentially adverse anchorage conditions described in this subsection applies to the anchorage connections that attach the identified item of equipment to the civil structure on which it is mounted. For example, the welded connections that secure the base of a Motor Control Center (MCC) to the steel embedment in the concrete floor would be evaluated in this subsection. Evaluation of the connections that secure components within the MCC is covered later in the subsection "Other Adverse Seismic Conditions."

Visual Inspections

The purpose of the visual inspections was to identify whether any of the following potentially adverse anchorage conditions were present:

- Bent, broken, missing, or loose hardware
- Corrosion that is more than mild surface oxidation
- Visible cracks in the concrete near the anchors
- Other potentially adverse seismic conditions

Based on the results of the visual inspection, the SWEs judged whether the anchorage was potentially degraded, non-conforming, or unanalyzed. The results of the visual inspection were documented on the SWC, as appropriate. If there was clearly no evidence of degraded, nonconforming, or unanalyzed conditions, then it was indicated on the checklist and a licensing basis evaluation was not necessary. However, if it was not possible to judge whether the anchorage is degraded, nonconforming, or unanalyzed, then the condition was entered into the CAP as a potentially adverse seismic condition.

Additionally, any significant comments are noted on the SWCs. Drawings and other plant design documents are cited in some of the SWCs, but they are not included with the SWCs because they are readily available in the plant's electronic document management system.

Anchorage Configuration Confirmation

As required by the EPRI Seismic Walkdown Guidance (Ref.1, page 4-3), at least 50% of the items were confirmed to be anchored consistent with design documents. Line-mounted equipment (e.g., valves mounted on pipelines without separate anchorage) was not evaluated for anchorage adequacy and was not counted in establishing the 50% sample size.

Examples of documentation that was considered to verify that the anchorage installation configurations are consistent with the plant documentation include the following:

- Drawings
- Calculations

- SQUG Walkdown Seismic Evaluation Work Sheets (SEWS)

Table C-1 indicates the anchorage verification status for components as follows:

N/A: components that are line-mounted and/or are not anchored to the civil structure and therefore do not count in the anchorage confirmation total.

Y: components that are anchored to the civil structure which were confirmed to be consistent with design drawings and/or other plant documentation

N: components which had anchorage but were not chosen for anchorage configuration confirmations.

See Table 5-1 below for the accounting of the 50% anchorage configuration confirmations, and the individual SWC forms in Appendix C for the specific documents used in each confirmation.

Table 5-1. Anchorage Configuration Confirmation

Total SWEL Items	SWEL Items without Anchorage (N/A)	Minimum Required to Confirm	Total Items Confirmed
A	B	$(A - B) / 2$	
91	29	31	37

5.2.2 Adverse Seismic Spatial Interactions

An adverse seismic spatial interaction is the physical interaction between the SWEL item and a nearby SSC caused by relative motion between the two during an earthquake. An inspection was performed in the area adjacent to and surrounding the SWEL item to identify any seismic interaction conditions that could adversely affect the capability of that SWEL item to perform its intended safety-related functions.

The three types of seismic spatial interaction effects that were considered are:

- Proximity
- Failure and falling of SSCs (Seismic II over I)
- Flexibility of attached lines and cables

Detailed guidance for evaluating each of these types of seismic spatial interactions is described in the EPRI guidance document, Appendix D: Seismic Spatial Interaction.

The SWEs exercised their judgment to identify seismic interaction hazards. Section 5.2.5 provides a summary of issues identified during the Seismic Walkdowns.

5.2.3 Other Adverse Seismic Conditions

In addition to adverse anchorage conditions and adverse seismic interactions, described above, other potentially adverse seismic conditions that could challenge the seismic adequacy of a SWEL item could have been present. Examples of the types of conditions that could pose potentially adverse seismic conditions include the following:

- Degraded conditions
- Loose or missing fasteners that secure internal or external components to equipment
- Large, heavy components mounted on a cabinet that are not typically included by the original equipment manufacturer
- Cabinet doors or panels that are not latched or fastened
- Other adverse conditions

Any identified other adverse seismic conditions are documented on the items' SWC and Table 5-2, as applicable.

5.2.4 Issues Identified during Seismic Walkdowns

Table 5-2 provides a summary of issues identified during the equipment Seismic Walkdowns. The equipment Seismic Walkdowns resulted with a total of six (6) concerns identified and each of these was entered into the station's CAP. All of the identified concerns were assessed and it was concluded that the condition would not prevent the associated equipment from performing its safety-related function(s). None of the conditions identified by the SWEs during the equipment Seismic Walkdowns were concluded to be adverse seismic conditions.

Table 5-2: Table of Actions Resulting from Seismic Walkdown Inspection

Equipment ID	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
P-032D	Corrosion observed on the base plate.	X			NextEra Engineering evaluated the corrosion and determined minor and would not affect the design function of the pump. CR initiated.	Closed. Will be tracked through structures monitoring program.
P-032E	Corrosion observed on the base plate.	X			NextEra Engineering evaluated the corrosion and determined minor and would not affect the design function of the pump. CR initiated	Closed. Will be tracked through structures monitoring program.
2MS-02090	A section of tubing is supporting the solenoid and attached flexible conduit fitting. The solenoid and the fitting are relatively heavy compared to the capacity of the tubing supporting them.			X	NextEra Engineering determined from P&ID drawings that a loss of air to the valve results in the valve going to a safe position. Initiated CR.	Being tracked in the CAP.
2P-002C	The pump is anchored with eight 1" cast in place bolts. The Drawing C-240 shows the anchors as 1" Wejit type expansion anchor. The SQUG SEWS prepared for the USI A-46 program also indicates that the anchors are 1" Wejit type.		X		Cast in place anchors have greater capacity than Wejit expansion anchors. Based on this, the as installed condition is not a seismic concern. CR initiated.	Being tracked in the CAP.

Table 5-2: Table of Actions Resulting from Seismic Walkdown Inspection

Equipment ID	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
2B-03	Rear bottom panel is missing a mounting bolt.	X			The walkdown team determined that the missing bolt does not adversely affect the seismic capability of the equipment. The bolt is one of many that attach the rear panel to the frame. Initiated CR.	Work request initiated to install the bolt.
D26	Two crank handles in vicinity are loosely hung from bolts in the concrete wall.			X	NextEra Engineering determined that the panel contains no sensitive items.	Closed

5.3 AREA WALK-BYS

The purpose of the Area Walk-Bys is to identify potentially adverse seismic conditions associated with other SSCs located in the vicinity of the SWEL items. Vicinity is generally defined as the room containing the SWEL item. If the room is very large (e.g., Turbine Hall), then the vicinity is identified based on judgment, e.g., on the order of about 35 feet from the SWEL item. This walk-by area is described on AWC, shown in Appendix D of this report. A total of 25 AWCs were completed for PBNP Unit 2. It is noted that additional AWCs will be completed, as required, as deferred and supplemental inspections are completed.

The key examination factors that were considered during Area Walk-Bys include the following:

- Anchorage conditions (if visible without opening equipment)
- Significantly degraded equipment in the area
- A visual assessment (from the floor) of cable/conduit raceways and HVAC ducting (e.g., condition of supports or fill conditions of cable trays)
- Potentially adverse seismic interactions including those that could cause flooding, spray, and fires in the area
- Other housekeeping items that could cause adverse seismic interaction (including temporary installations and equipment storage)
- Scaffold construction was inspected to verify they were not a seismic interaction concern.
- Seismic housekeeping was examined to verify that items would not move and interact with seismically qualified equipment.

The Area Walk-Bys are intended to identify adverse seismic conditions that are readily identified by visual inspection, without necessarily stopping to open cabinets or taking an extended look. If a potentially adverse seismic condition was identified during the Area Walk-By, then additional time was taken, as necessary, to evaluate adequately whether there was an adverse condition and to document any findings.

The results of the Area Walk-Bys are documented on the AWCs included in Appendix D of this report. A separate AWC was filled out for each area inspected. A single AWC was completed for areas where more than one SWEL item was located.

Additional details for evaluating the potential for adverse seismic interactions that could cause flooding, spray, or fire in the area are provided in the following two subsections.

Seismically-Induced Flooding/Spray Interactions

Seismically-induced flooding/spray interactions are the effect of possible ruptures of vessels or piping systems that could spray, flood or cascade water into the area where SWEL items are located. This type of seismic interaction was considered during the IPEEE program.

One area of particular concern to the industry is threaded fire protection piping with long unsupported spans. If adequate seismic supports are present or there are isolation valves near the tanks or charging sources, flooding may not be a concern. Numerous

failures have been observed in past earthquakes resulting from sprinkler head impact. Less frequent but commonly observed failures have occurred due to flexible headers and stiff branch pipes, non-ductile mechanical couplings, seismic anchor motion and failed supports.

Examples where seismically-induced flooding/spray interactions could occur include the following:

- Fire protection piping with inadequate clearance around fusible-link sprinkler heads
- Non-ductile mechanical and threaded piping couplings can fail and lead to flooding or spray of equipment
- Long, unsupported spans of threaded fire protection piping
- Flexible headers with stiffly supported branch lines
- Non-Seismic Category I tanks

The SWEs exercised their judgment to identify only those seismically-induced interactions that could lead to flooding or spray.

Seismically-Induced Fire Interactions

Seismically-induced fire interactions can occur when equipment or systems containing hazardous/flammable material fail or rupture. This type of seismic interaction was considered during the IPEEE program. Those prior evaluations were considered, as applicable, as information for the Area Walk-Bys.

Examples where seismically-induced fire interactions could occur include the following:

- Hazardous/flammable material stored in inadequately anchored drums, inadequately anchored shelves, or unlocked cabinets
- Natural gas lines and their attachment to equipment or buildings
- Bottles containing acetylene or similar flammable chemicals
- Hydrogen lines and bottles

Another example where seismically-induced fire interaction could occur is when there is relative motion between a high voltage item of equipment (e.g., 4160 volt transformer) and an adjacent support structure when they have different foundations. This relative motion can cause high voltage busbars, which pass between the two, to short out against the grounded bus duct surrounding the busbars and cause a fire.

The SWEs exercised their judgment to identify only those seismically-induced interactions that could lead to fires. No such interactions were found in PBNP, Unit 2.

5.3.1 Issues Identified during Area Walk-bys

None of the anomalies or issues identified by the SWEs during the area walk-bys was ultimately judged to be "Potentially Adverse Seismic Conditions" because in all cases it was concluded that the anomaly or issue would not prevent the equipment from performing its safety-related function. Table 5-3 at the end of this section shows 19 issues identified in the Area Walk-bys.

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 9	An S-Hook supporting a light fixture was observed to be opened.	X			In the judgment of the walkdown team, the light fixture would not fall and interact with any seismically qualified equipment. Initiated CR.	Work request initiated to repair.
AWB 11	The G-02 diesel room contains threaded fire protection piping that is supported from threaded rod hangers. The fire protections system is only laterally supported at a connection to a fire protection header which comes into the room through a wall. The lines are supported off various lengths threaded rods that are typically attached to a shell type anchor in the concrete ceiling. On the west end, the fire protection line and a sprinkler head are relatively close to the room fans. The Seismic Walkdown Team was unable to conclude that the fire protection pipe and sprinkler head would not move and interaction with the fans. In addition, the team could not conclude that the fire protection line would not deflect in a manner that would cause the threaded fittings to leak.			X	NextEra Engineering performed a walkdown and determined that much of the area is not susceptible to issues do to spray. A preliminary evaluation was performed for the piping at the west end of the room and it was determined that the piping is within code allowable stresses and will not leak. This preliminary evaluation was considered a bounding case and thus the remaining piping will not leak. Initiated CR.	Being tracked in the CAP.

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 19	A 3/8" tube for valve 1SI-881A has a long span (~10') and is very flexible.	X			The walkdown team judged that the tube was not an interaction hazard and would deflect but not break in a seismic event. A preliminary calculation of the tubing spans showed that the tubing will not overstress. Initiated CR.	Work request initiated to repair.
AWB 19	On the west wall there is a flexible pipe from SI-917A that appears to bearing on some conduit clamps. The hose could dislodge from the clamps and interact with items below.	X			The walkdown team determined that the condition was not a seismic concern. There were no soft targets immediately below. Initiated CR.	Work request initiated to repair.
AWB 19	A conduit for valve 2SI-825C is attached to the flange of a vertical hanger with clamps oriented such that they are resisting dead load with friction. Clamps should be re-orientated.	X			The conduit is attached to nearby cable tray JG08 and will not fall. Initiated CR.	Work request initiated to repair.

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 19	A copper instrument air pipe is attached to a vertical hanger with clamps oriented such that they are resisting dead load with friction. The clamps should be reoriented.	X			The bottom support of the pipe is oriented correctly. There is a support in the horizontal run at the top of the riser. Based on this the pipe is judged not to fall. Initiated CR.	Work Request initiated to repair.
AWB 19	There are two lights in the area that are attached to structural steel with magnets. It is suggested that the magnets be backed up with lanyards to assure they will not fall.	X			The lights were tug tested and determined to be adequately supported. Initiated CR.	Closed
AWB 20	A pipe support in the north west corner of the room was observed to have potential deficiencies. The support is a structural member (W shape) with the weak axis resisting dead load welded to a four bolt anchor plate at each end. One of the anchors on the south plate is missing. The west flange of the support and about ½ of the web are notched in three places. There is a shackle on the south west anchor on the north plate.	X			The walkdown team judged it to be acceptable since the support is lightly loaded. CR initiated.	Being tracked in the CAP.
AWB 27	There is a missing anchor bolt on the pipe support west of P-31A	X			Previously identified and evaluated in CR.	Work Request initiated to repair.
AWB 27	There is a missing anchor bolt on the base plate north west of P-31A for a chlorination line.	X			Previously identified and evaluated in CR.	Work Request initiated to repair.

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 27	There is corrosion on P-31A and P-31B base plates.	X			Corrosion evaluated by NextEra Engineering and determined to minor surface corrosion and not a concern. CR initiated.	Closed. Will be tracked through structures monitoring program.
AWB 28	There is a missing anchor bolt on the base plate northwest of P-35A.	X			Determined not to be a seismic concern due to ruggedness of the overall assembly. CR initiated.	Work Request initiated to repair.
AWB 28	The bottom anchor bolt for W-002A is not fully engaged.	X			NextEra Engineering evaluated the condition and determined that the fan is not required to be seismically qualified. The remaining anchorage was determined to be sufficient anchorage to prevent seismic interaction with seismically qualified equipment. CR initiated.	Work Request initiated to repair.

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 28	There is loose grout at the northeast corner below SW-13.	X			Determined to have no adverse affect on the design function of the support since it is not in the bearing area of the base plate. CR initiated.	Work Request initiated to repair.
AWB 29	A conduit support on the southwest corner of K-3B has one missing bolt and one loose nut.	X			Due to the light load on the support and the remaining anchorage it was determined to be acceptable. CR initiated.	Work Request initiated to repair.
AWB 29	There are is a 1" gap in the grout pad on T-33A.	X			It was determined that there is sufficient grout for the bases to perform their design function. CR initiated.	Closed
AWB 29	The west nut on T-033A does not have full thread engagement.	X			The top of the bolt is about 2 to3 three threads below the top of the nut. The seismic walkdown team judged that this is sufficient to carry the required loads.	Closed

Table 5-3: Table of Actions Resulting from Area Walk-by Inspections

Area	Potentially Adverse Seismic Condition	Degraded	Non-conforming	Unanalyzed	Action Taken to Address the Condition	Current Status
AWB 39	The platform just east of the Main Steam Safety Valve is not anchored to the slab. In some cases there are anchor with no nuts, in other cases there are no anchors at all.	X			The permanent platform just south of the elevator shaft will prevent the platform from overturning during a seismic event. Other components in the area will prevent the platform from moving. CR initiated.	Work Request initiated to repair.
AWB 44	One of the four anchor bolts on a support for the valve stem extender is missing. Three of the four bolts are installed.	X			Due to the location of the valve stem extender and the presences of the three remain bolts, it is not a seismic interaction concern. CR initiated.	Work Request initiated to repair.

6

Licensing Basis Evaluations

Potentially adverse conditions identified during the walkdowns were documented on the Seismic Walkdown and Area Walk-By Checklists, as appropriate, and entered into the CAP.

7

IPEEE Vulnerabilities Resolution Report

The seismic assessments performed for the PBNP IPEEE Report (Ref. 4) and A-46 Report (Ref. 14) was reviewed for any seismic vulnerabilities identified. Several plant improvements were made in response to seismic assessments in the IPEEE and A-46 walkdowns. A list of the outlier resolutions is provided in Table 3 of the SWEL Report included in Appendix B.

8

Peer Review

The Peer Review Report is included as Appendix F. This includes the peer review of the SWEL selection, peer review of the seismic walkdown, and peer review of this report.

9

References

Reference drawings related to SWEL items are provided in the Seismic Walkdown Checklists and if applicable, in the Area-Walkdown Checklists.

1. EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012.
2. Point Beach Final Safety Analysis Report (UFSAR), Dated 2012.
3. WE Letter VPNPD-95-056 from Bob Link to NRC Document Control Desk dated June 30, 1995, "Dockets 50-266 and 50-301, Generic Letter 88-20, Supplement 4 (TAC NOS. 74452 and 74453), Summary Report on Individual Plant Examination of External Events for Severe Accident Vulnerabilities, Point Beach Nuclear Plant, Units 1 and 2"
4. Point Beach Report REP-0699, "Point Beach Nuclear Plant Individual Plant Examination of External Events for Severe Accident Vulnerabilities Summary Report" dated June 30, 1995.
5. NRC (E Leeds and M Johnson) Letter to All Power Reactor Licensees et al., "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendation 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," Enclosure 2.3, "Recommendation 2.3: Seismic," dated March 12, 2012.
6. NRC Letter from Beth A. Wetzel to Michael B. Sellman, dated September 15, 1999, "Point Beach Nuclear Plant, Units 1 and 2 – Review of Individual Plant Examination of External Events (IPEEE) Submittal (TAC NOS. M83661 AND M83662)"
7. TID-7024, Nuclear Reactors and Earthquakes", August 1963
8. G. W. Housner, "Design of Nuclear Power Reactors Against Earthquakes" Proceedings of the Second World Conference on Earthquakes Engineering, Vol. 1, Japan 1960.
9. ACI 318-63, Building Code Requirements for Reinforced Concrete
10. AISC Specification for the Design, Fabrication, and Erection of Structural Steel for Buildings, April, 1963.
11. ACI 318-89, Building Code Requirements for Reinforced Concrete

12. AISC Manual of Steel Construction, 9th Edition.
13. USAS B31-1-1967, Power Piping
14. USNRC Generic Letter 87-02, USI A-46 Resolution, Seismic Evaluation Report, Rev. 1, June 1996.

A

Project Personnel Resumes and SWE Certificates

A.1 INTRODUCTION

Resumes and certificates from the EPRI Walkdown Training Course for the personnel that contributed to the seismic walkdown and/or peer review are included in this Appendix.

A.2 RESUMES & CERTIFICATIONS

DOUGLAS P. BROWN

SUMMARY Over thirty two years of experience includes a diversity of civil engineering aspects such as researching and writing technical documents, procurement related activities and structural design. Competent in codes such as AISC and AWS. Computer literate with experience on numerous software programs. SQUG certified.

EXPERIENCE

Technical Documents

- Assembled, compiled and published design criteria.
- Researched and wrote procurement specifications and coordinated requirements with other technical disciplines e.g. electrical and mechanical engineering departments.
- Researched and wrote maintenance manuals for plant roads, drainage systems and roofs
- Wrote procedures for collection of field data
- Assessed QAIQC findings and nonconformance reports and issued responses specifying appropriate actions to be taken by responsible personnel.
- Reviewed wastewater treatment facility modifications for acceptability. Reviewed, collated and evaluated field data sheets.
- Developed manhour estimates for Civil engineering for budget negotiations. Evaluated plant equipment and generated engineering reports. Investigated fuel cleanliness and issued an engineering report.
- Point Beach Nuclear Plant Seismic Qualification Program Responsible Engineer

Design Calculations

- Performed calculations for the design/evaluation of structural beams, columns, connections and anchor bolts
- Evaluated existing structures using various load case combinations including seismic load cases by means of structural calculations.
- Performed analysis of plane frames and trusses, and space frames and trusses using various computer programs such as STARDYNE and GTSTRUDL
- Executed structural calculations for the design of equipment foundations and equipment access platforms
- Calculated storm runoff and drainage flow estimates for sizing of drainage culverts.
- Calculated cut and fill estimates for fill material to be used in construction of an industrial plant

DOUGLAS P. BROWN

Page 2

Procurement

- Assembled purchase requisitions.
- Oversaw and provided guidance for procurement activities for civil engineering department.

Field Engineering

- Researched applicable drawings, procedures and criteria to be used by craft personnel for installation/modification of structures.
- Assembled and wrote work plans to provide instructions to craft personnel for performing and documenting their work.
- Interfaced with craft and design engineering to resolve problems regarding installation/modification of structures.

WORK HISTORY

2007-Present **Next Era Energy** (formerly Florida Power & Light Energy – Point Beach
2001-2007 **Nuclear Management Co.**, Senior Engineer
1998-2001 **DUKE ENGINEERING & SERVICES**, Engineer
1997-1998 **RAYTHEON ENGINEERS AND CONSTRUCTORS**, Consulting Engineer
1996- 1997 **SELF-EMPLOYED**, Painting contractor
1993-1995 **RAYTHEON ENGINEERS AND CONSTRUCTORS**(formerly Ebasco Constructors, Inc.), Spring City, TN, Field Engineer 1
1991-1993 **EBASCO SERVICES, INC.**, Spring City, TN, Senior Engineer
1987-1991 **EBASCO SERVICES, INC.**, Spring City, TN, Engineer
1984-1987 **EBASCO SERVICES, INC.**, Stuart, FL, Engineer
1981-1984 **EBASCO SERVICES, INC.**, Elma, WA, Senior Associate Engineer
1979-1981 **EBASCO SERVICES, INC.**, Jericho, NY, Associate Engineer
1978-1979 **EBASCO SERVICES, INC.**, Jericho, NY, Assistant Engineer

EDUCATION

Bachelor of Engineering (Civil), City College of New York, NY, 1978

CERTIFICATES

Engineer-In-Training - Washington State No. 11 134

COMPUTER SKILLS

- Structural Analysis Programs: STARDYNE, GT STRUDL, BASEPLATE 11
- CAD: AutoCAD LT, DesignCAD 3D, Generic CADD, MicroStation

- Word Processing: Word Perfect (DOS & Windows) • Database: DBase III, Foxpro • Spreadsheet., Lotus 1-2-3
- Operating Systems: DOS, Windows



JEFFREY J. BUBOLTZ, P.E.

EDUCATION

Milwaukee School of Engineering, Milwaukee, Wisconsin
B.S. Architectural Engineering; May 1992
Major G.P.A. 3.26 (4.0)
Studies Included: Construction Practices and Management, Concrete Design, Estimating, Foundation Design, Structural Analysis, and Steel Design.

**WORK
EXPERIENCE**

NextEra Energy Point Beach LLC, Two Rivers, WI
Senior Rapid Response Engineer
May 2011- present

Responsible for emergent structural engineering issues at the plant. This includes the engineering work and the required paperwork for the NRC.
Projects/Accomplishments include:
Successfully completed Systems Training which is a requirement to be an engineer at the plant. Systems teaches all aspects of the nuclear plant and the operations of the plant.

Foth Production Solutions, Green Bay, WI
Lead Structural Engineer
May 2006- May 2011

Responsible for reviewing project requirements, writing proposals, working with designers, managing project schedule and budget, and issuing final construction documents.
Projects include:
Structural Transition Leader: After being awarded engineering services for major paper mill in Pennsylvania, traveled to site to lead the structural group. Also was the site contact for all structural work and worked with Foth engineers and outside consultants to complete work. Participated in the interview process to find a permanent on-site leader.
Structural Audit: Completed field work to observe all areas of paper mill to identify structural deficiencies. Used clients CBA to complete repairs based on severity of damage which included engineering the repairs and working with contractors to complete the repairs.
On-Site Structural Engineer: Worked with on site contractor and plant personnel in almost every department to assist with new projects, repair projects, shutdown repair work, and maintenance work.

STS Consultants, Ltd., Green Bay, WI
Project Engineer
June 2004 – April 2006

Responsible for leading and supporting civil/structural design projects involving concrete repair, steel reinforcing of structures and dock wall design for private and public sectors. Project manager for dock wall projects coordinating permits with the WDNR and Corps of Engineers.
Projects include:
Coke Tower Repair: Designed temporary platforms for contractors to work from to make repairs to coke tower concrete platform. Also assisted to

develop brackets to lift the coke tower so repairs could be made to the concrete base.

Dock Walls: Designed the supports and connections for public and private dock walls. Worked with clients to obtain funding for the projects. Also worked as project manager developing project manuals, schedule, change orders, and coordination with the contractor.

Kocken & Associates, DePere, WI

Structural Engineer

May 2003 – June 2004

Responsible for the design of equipment supports, bridge cranes, foundations, and platforms. Worked with vendors on equipment layouts and obtaining certified drawings. Also responsible for shop drawing review.

Projects include:

Green Field Paper Mill: Supplemental structural design of waste paper storage, de-ink, paper machine, and converting buildings; and utility supports.

Baisch Engineering, Kaukauna, WI

Structural Engineer

March 1996 – April 2003

Responsible for leading and supporting civil/structural design effort related to site development, building structural systems and foundations, foundations for independently supported equipment support systems, and other structures such as tanks, exhaust stacks, platforms, and towers.

Projects include:

Mill Structural Survey: Evaluation, analysis, and design related to capacity of existing structures and design to enable structures to meet existing and new loads. Project included analysis of truss system over supercalender and winder to carry crane loads and reinforcement required to enable existing mezzanine to be used for material storage.

Starch Silo Foundation: Design of foundation for new starch silo (82' tall x 14' diameter). Poor organic soil, tight space, and cost considerations made for a challenging spread foundation design.

Screw Press Installation: Install a new screw press in an existing building. Modified existing building by removing portions of second level to install new press and crane system.

Paper Machine Rebuild: Convert dry crepe machine to a swing machine capable of tissue and towel. New foundation for pressure screen over u-drain.

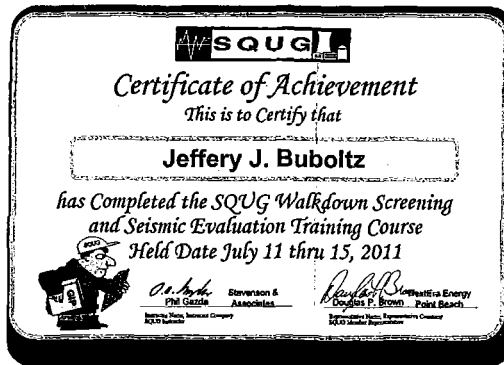
Replaced motors and reinforced floors for increased loads. Design based on keeping machine in operation during construction.

**COMPUTER
KNOWLEDGE**

Enercalc, SAFE, RISA, Word, and Excel

INTERESTS

Golf, Boating, Fishing, and Family



Stanley E. Guokas
PROFESSIONAL ENGINEER

SUMMARY

- Experienced in HRA, fault tree analysis, event tree analysis, data analysis, common cause, HAZOP's, what-if, checklist, FMEA and FMECA.
- Knowledgeable in use of PRA tools including NUPRA, WINNUPRA, SAPPHIRE/IRRAS, CAFTA, ORAM-Sentinel and support codes.
- Twenty two years experience in Safety and Probabilistic Risk Assessments.
- Lead experience in PRA.
- Qualified for root cause evaluations.

EXPERIENCE AND QUALIFICATIONS

Probabilistic Risk Assessment - Performs PRA tasks for various PRA projects including data analysis at Point Beach, Quad Cities, Lungmen and Clinton, fault tree development at Angra, Quad Cities, Clinton, Dresden and LaSalle, event tree development at Quad Cities, Point Beach and Angra, HRA at Point Beach and Quad Cities, Angra and Lungmen, common cause failure at Quad Cities and Point Beach, independent peer review of PRA for maintenance rule at Kewaunee, Braidwood and Prairie Island, internal flooding at Point Beach and Quad Cities, PRA analysis to support maintenance rule at Point Beach, Fire analysis at Point Beach, initiating event frequency analysis at Quad Cities and Point Beach, risk ranking of equipment at Quad Cities, Point Beach and Kewaunee, developed and tested ORAM-Sentinel model for Quad Cities, LaSalle and Dresden, PRA analyses to support diesel-generator AOT extensions, PRA analysis to support reduced test frequency on safety related components, Safety Monitor implementation projects at D. C. Cook. Prepared PRA notebooks and summary reports for Quad Cities, Lungmen and Point Beach. Performed software testing on 32 PRA software applications and developed installation CIDs with instructions for upgrading software on computers. Developed top logic models for Point Beach Units 1 and 2, Quad Cities Units 1 and 2, and Clinton.

Developed RG 1.200 compliant Point Beach PRAs for Internal Events, High Winds and Internal Flooding.

Performed IPE and IPEEE analysis and submittals to the NRC for Point Beach. Developed External events analysis for Point Beach including fire, external flood, high winds and tornados.

Hazard's analyst for Yucca Mountain. Developing specification for single failure proof cranes and electric locomotives. Evaluating scenarios for equipment damage, lost production time and worker/public hazards. Preparing methodology for assigning dollar value to risk profile.

Stanley E. Guokas

Page 2

Developed the Lungmen Final Safety Analysis Report – Probabilistic Risk Assessment Section, a risk informed FSAR. Resolved comments from previous draft. Made the document traceable and transparent. Developed system descriptions for the FSAR, reviewed and provided corrections to fault trees, corrected basic events file and common cause failure calculations, reviewed and commented on event trees, reviewed shutdown PRA and provided comments on fault trees, HEPs, fire analysis, event trees and data analysis. Created fault trees and draft system notebooks for the FIN 5 GE project. Reviewed event trees for the BWR owner’s group. Completed parts count, FMECA and Fault Tree analysis on variable speed drive for reactor coolant pumps.

Updated Point Beach FSAR to be consistent with licensing basis and design basis documentation. Prepared, presented and had accepted thirty-three 50.59’s in support of this effort. When completed, the FSAR, licensing basis and design basis documentation all matched.

Provided hazardous chemical reviews at Presque Isle Power Plant and Port Washington Power Plant as required by EPA and OSHA. As lead, had to assemble team, prepare for review, document review and obtain buy-in from team members, plant staff and management. Reviews met EPA and OSHA requirements. Recommendations led to significant cost reductions at both locations.

Performed root cause evaluation at Point Beach for inadvertent loss of reactor coolant while at reduced inventory. Evaluation clearly identified cause and enabled viable solutions to be implemented. Evaluation included development of TAP-ROOT model, obtaining background information, interviews and final report.

Developed weak link analysis for Point Beach motor operated valves. Needed individual analysis for each type of valve. Used MATHCAD to develop models for motor operators and valves which provided information that was verifiable, retrievable, and easy to use for parametric studies.

Performed system analysis using fault tree methodology to determine reliability of modification to the service water system at Point Beach. Determined modification would reduce reliability of service water system as proposed. Used fault tree methodology to determine modifications which would improve system reliability and reduce cost. Modification cost was reduced by \$5,000,000 over initial design.

Performed PRA in support of Security at Point Beach. Developed methodology which identified potential weaknesses in the security plan through use of fault trees. Enabled security and operations to redeploy to critical areas based on compromised conditions and provided direction to operations on how to safely shut down the units after loss of equipment.

Stanley E. Guokas

Page 3

Project Manager – Project manager for cradle to grave management of more than 40 modifications to Point Beach Nuclear Plant. Modified reactor internals, instrument air, main and extraction steam, low and high pressure steam turbines, air and motor operated valves, moisture separator reheaters, feedwater heaters, turbine lube oil, turbine bearings, hydrogen coolers, turbine oil lift system, chemical sampling panels, HVAC for battery rooms, electrical equipment rooms and control room. Cognizant engineer for analytical, and design issues relevant to Point Beach Nuclear Plant. Responded to Generic Letters and Information Notices from NRC and INPO. Provided design calculations when required to support continued operation of Point Beach. Performed 50.59 reviews in support of modifications. Provided budget analysis, capital vs. expense advisories, specifications, recommended modifications, implementation, commissioning and closeout of modification packages.

EDUCATION

University of Wisconsin
Bachelor of Science, Nuclear Engineering, 1974

LICENSING AND CERTIFICATIONS

Professional Engineer, State of Wisconsin

Scott D. Kahl, P.E.
Sr. Project Engineer

Current Employer

Point Beach Nuclear Plant
Two Rivers, Wisconsin
October 2008 - Present

Education

North Dakota State
University
B.S., Civil Engineering,
1998
Emphasis: Structures

Registration

PROFESSIONAL ENGINEER:
WISCONSIN, 2006
MINNESOTA, 2006

Civil Engineer:
California, 2002

Professional

ASCE

Computer Skills

RISA3D, MathCAD,
Enercalc, Excel and
Word, AutoCAD

Activities

Habitat for Humanity
ATC-20 Certified
Co-Founder of PGJ
Foundation

Areas of Experience

Serves as Sr. Project Engineer in the Civil/Structures group with more than 13 years of progressively responsible experience in the field of Civil/Structural and power piping.

Responsibilities include Structures Monitoring Program Owner, IWL responsible engineer, safety evaluations, engineering analysis, condition reports, modifications, lead shielding and fall protection packages and structural inspections. Acted as temporary Civil/Mechanical Project Engineering Supervisor for Capital Projects Group.

Past Work Experience:

STS | AECOM *Project Engineer*

October 2005-October 2008

Responsibilities included structural evaluation, non-destructive testing, seismic and structural design on simple to complex engineering projects. Extensive experience in seismic design in steel and wood structures. Experience also includes project management, deriving and maintaining the budget and schedule, preparation of construction documents, construction administration and overseeing technical and nontechnical staff. Engineer of record on multiple projects with seismic design and detailing requirements.

Dominion Energy Kewaunee – Polar Crane Kewaunee, Wisconsin
Performed a structural engineering analysis and evaluation on the box girder for the 235-ton Polar Crane. RISA 3D was utilized for the finite element analysis.

Dominion Energy Kewaunee – ISFSI Kewaunee, Wisconsin
Structural rebar observation on the mat slab reinforcement for the Independent Spent Fuel Storage Installation project. Verified the reinforcement was placed as per the construction documents.

Lambeau Field Green Bay, Wisconsin
Derived the bowl seating area concrete condition assessment program, evaluated the pre-cast concrete seating elements through the use of drilled power samples which determined the depth of carbonation and chloride ion penetration, half-cell potential testing to measure the in-situ driving force for electrochemical corrosion and corrosion-rate monitoring to measure in-situ rate of reinforcing steel loss.

Infinity Tower Dubai, UAE
Responsible for the evaluation of the cross-lot braces supporting the failed sheet pile wall. RISA 3D was utilized to analyze the ordinary moment frames resisting the stability demands from the braces.

CTA Subway Evaluation Chicago, Illinois
Responsible for the evaluation of two subway tunnels in downtown Chicago. The first tunnel had a 3-foot slurry wall located 18 feet away from the tunnel's edge with an anticipated movement of 2 3/8-inch, the tunnel was analyzed to evaluate induced stresses due to slurry wall deflection. The second tunnel was below an attached parking ramp for a 39-story, 350-unit apartment tower and was evaluated for the increased vertical demands. Both tunnels were evaluated following an ASD approach utilizing RISA 3D.

Scott D. Kahl, P.E.
Sr. Project Engineer

DASSE Design, Inc. San Francisco, California
Project Engineer

January 1999-October 2005

Don Callejon K-8 School

Santa Clara, California

Derived project budget and schedule, responsible for the production of construction documents, calculations, specifications, client interaction, construction administration activities, management of staff engineers and drafting personnel. This \$16.5M campus included three wood construction and two wood/steel hybrid buildings. The hybrid buildings included SMRFs to resist the wind and seismic lateral forces.

Morgan Hill Courthouse

Morgan Hill, California

Responsible for all facets of the project design, management of team members and budget for the two story \$15M county courthouse supported by a steel superstructure with concrete fill over metal deck and SCBFs.

Horace Mann Elementary

San Jose, California

Designed and detailed the CMU bearing and shear wall multi-purpose building for Horace Mann Elementary School, a \$16.2M project and winner of the 2004 Concrete Masonry Design Award.

Patterson Middle School

Patterson, California

Designed, detailed and performed construction administration for the \$16.3 million, 10 building middle school campus with Wood Shear Walls and Ordinary Moment Resistant Frames.

Dublin Fire Stations #17 and #18

Dublin, California

Managed project budget, schedule, production of construction documents, calculations, drafting personnel and client interaction on two Fire Stations supported by CMU and Wood bearing shear walls with an OMRF at the apparatus bay.

McCarthy Construction, San Francisco, California

Summer 1998

Engineer Intern

- Reviewed shop drawings, RFIs, change orders.
- Calculated quantity takeoffs on various projects for the Senior Estimator.

Weir/Andrewson Associates, San Rafael, California

Summer 1997

Structural Engineer Intern

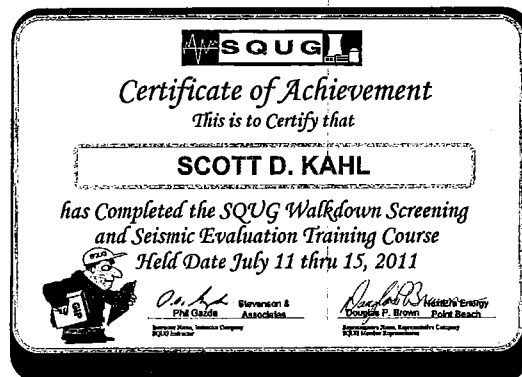
- Derived roof, deck and retaining wall design calculations.
- Developed proposals and design fixes for construction errors.

American Engineering Testing, St. Paul, Minnesota

Summer & Fall 1996

Engineer Technician Intern

- Monitored quality control on construction projects
- Performed laboratory tests on concrete cylinders, blocks, and core samples.



Richard L. LaPlante

Work Experiences

Point Beach Nuclear Plant

Next Era Energy, Two Rivers, WI

Sr. Engineer – Civil/Mechanical Design Engineering July 2008 - Present

- Provided day to day support of emergent issues as they arose to ensure continued safe operation of the in service units (including operability reviews) -- with a focus on piping and structural issues
- Addressed corrective actions for the Structural group on a range of issues (including seismic), with a focus on piping systems
- Provided reviews of modifications to site systems, structures, and components, including seismic reviews of equivalencies
- Supported Engineering inspections by external regulators
- Completed evaluations, calculations, drawings, etc. necessary to support design installations
- Provided rapid support to various departments during the site refueling outages

Greenheck Fan Corp., Schofield, WI

Sr. Product Development Engineer – Testing Services April 2005 – June 2008

- Independently managed projects that utilized FEA and CFD to aid in the research and development for various engineering departments. This included design and oversight of special requests necessary to achieve specific performance, and analysis of new product development options.
- Responsible for providing analyses on various fans to assist in diagnosing field problems/failures, as well as testing to ensure safe operation of fans under specified design conditions.
- Provided input and oversight of testing in the structural test lab. Used insight to address and resolve various problems as they arose and aided in test plan development.
- Provided general computer aided analysis and structural design support to the various design groups throughout the company.

Product Development Engineer - CVI November 2003 – April 2005

- Assisted in the testing and implementation of the AX fan product line into production including expedited testing and submission of data for third party classification.
- Responsible for addressing daily manufacturing issues and resolving production problems.
- Managed several projects that modified component design to gain efficiency and cost savings
- Other tasks included performing vibration testing and troubleshooting, handling of UL product issues, providing structural design support through finite element analysis, etc.

Skills/Training

Completed the SQUG Walkdown Screening and Seismic Evaluation Training Course (July 2011)

Completed Bentley AutoPIPE vendor training program

Completed Greenheck's Design for Excellence Course

Completed Greenheck's Project Management Course through UW-Stevens Point

Completed Fluent CFD and Algor FEA training seminars

Attended and completed various fan design related seminars (including Metals Fracture and Failure, Plastic Material Selection, Wind Load Analysis, Seismic Design)

Experience using IronCAD, Autodesk Inventor, and AutoCAD

Previous experience with MathCAD, Matlab

Education

University of Wisconsin-Platteville, Platteville, WI

Graduation Date: May 2003

Bachelor of Science in Mechanical Engineering (ABET Accredited)

Mechanical Design Emphasis Cumulative GPA: 3.9/4.0

Education Achievements and Honors

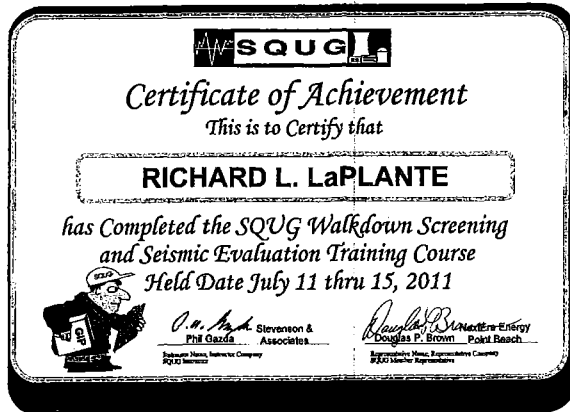
Completed Fundamentals of Engineering Exam

Chancellor's List 5 Semesters, Dean's List 8 Semesters

Wisconsin Academic Excellence Award/Scholarship

Member of Phi Eta Sigma, Alpha Lambda Delta, Pi Tau Sigma, Tau Beta Pi, and Phi Kappa Phi honor societies

References upon Request



Coreen McDonald

Objective

To obtain an Design Engineering Position in the Nuclear Utility Industry.

Education

Architectural Technology: Associate Degree 2005
Northwest Wisconsin Technical College, Green Bay, WI.

Civil Engineering: Bachelor of Science 1985
Michigan Technological University, Houghton, MI.

Professional Experience

Next Era Energy, Two Rivers Wisconsin August 2007- Present
Civil/ Structural Design Engineer
Engineer II

- Preparer of Minor Modification in the Design Engineering Group
- Rigging Evaluation
- Floor Loading Checks
- Anchor Bolt Evaluations
- Safe Load Path Issues
- Seismic Issues or Evaluations
- Lead Shielding Evaluation
- Fall Protection Concerns
- Ground Water Issues

Somerville Inc., Green Bay Wisconsin May 2005- November 2006
Structural Drafter/Detailer

- Preparer of all structural foundation, floor and roof plans with details and schedules for a 50 person A/E firm.

Unified School District of DePere 2002-2004
Substitute High School Math Teacher

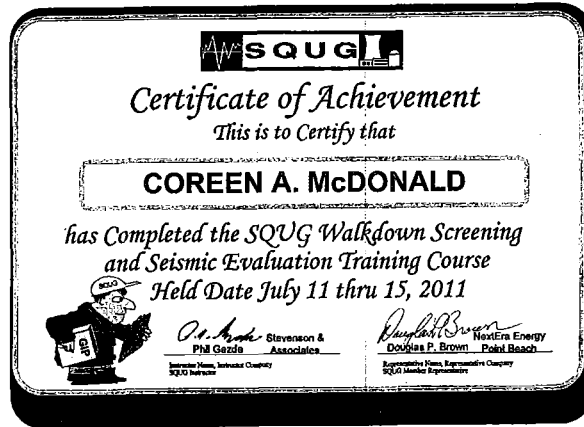
Bublitz/Spancrete Inc 1986-1987
Drafter/Detailer

- Drawing and detailing precast concrete floor systems

Accreditations

- Engineer in Training (EIT) 1986

References Available Upon Request



Mark C. Nielsen, P.E.

Summary

Three and one-half years of experience in design engineering at a nuclear power plant.

Twenty years of experience in applications engineering, technical sales and project engineering for the paper industry.

Thirteen years of experience in structural/civil design engineering and in the engineering management of major industrial projects. This experience includes projects in the mining and metals, pulp and paper, petrochemical, and manufacturing industries.

Work Experience

Nuclear Engineer – Senior Point Beach Nuclear Power Plant, Two Rivers, WI	2009 to Present (3 ½ years)
--	--------------------------------

Provided engineering support for nuclear power plant operations, maintenance, and outages.

- Engineering support includes: structural/civil design and analysis, walkdowns, recommendations, condition evaluations, inspections, prepare 50.59 screenings, repairs, rigging analysis, and the design of jigs and fixtures.
- Completed the SQUG Walkdown Screening and Seismic Evaluation Training Course.
- Major Engineering Qualifications: Prepare Calculations and Engineering Evaluations, Prepare 50.59 Screenings, Rigging Evaluator, Aging Management Program Owner.

Screening Applications Manager J&L Fiber Services, Green Bay, WI	2005 to 2009 (3 ½ years)
---	-----------------------------

Provided engineering analysis and technical support for screen cylinder and rotor sales to the paper industry.

- Analyzed existing pulp screening systems to identify problem areas and to find opportunities for improvement. Made recommendations and prepared proposals based upon the findings.
- Prepared interactive process flow models for both existing and new systems. These models were utilized both as a basis for system design and as tool for presenting recommendations to the customer.
- Conceived and developed sophisticated spreadsheet-based design tools (utilizing VBA code) that automated and simplified process and design calculations.
- Prepared and conducted training seminars for mill personnel.

Regional Product Manager Andritz, Inc., Green Bay, WI Regional Sales Manager Fiedler, LP, Green Bay, WI (Fiedler was acquired by Andritz in 2003.)	1993 through 2004 (11 ½ years)
---	-----------------------------------

Sold screen cylinders and rotors to paper mills in the Midwest Region. Provided technical support to the mills both before and after the sale.

- Audited and inspected existing paper mill screening systems to evaluate system efficiency and to determine the mechanical condition of the equipment.

Mark C. Nielsen, P.E.

Page 2

- Measured existing equipment and prepared engineering sketches to be used for the manufacture of replacement components.

Regional Sales Manager Kleinewefers – Paper Converting, Green Bay, WI Project Engineer Kleinewefers Corporation, Enfield, CT	1987 to 1993 (6 years)
---	---------------------------

- Technical sales representative for soft calenders, and roll finishing systems to paper mills. Gave technical presentations and prepared detailed technical proposals for offered equipment.
- Project engineer for supercalender, soft calender, and roll finishing projects. My responsibilities began with the initial customer contact and continued through the proposal, contract negotiation, engineering, installation, and start-up stages of the project.
- Prepared conceptual designs and proposals for roll finishing systems.

Senior Engineer V Brown and Root, Inc., Houston, TX	1985 through 1986 (2 years)
--	--------------------------------

Participated in the engineering of projects in the pulp and paper industry.

- Modified the structural design of an existing facility for a major paper machine rebuild. Provided engineering support at the mill site during the construction phase of the project.
- Prepared structural designs for the modification of a paper machine and associated facilities.
- Coordinated the design effort for a finishing and shipping facility

Senior Civil Engineer Sohio Construction Company, San Francisco, CA	1981 through 1984 (3 ½ years)
--	----------------------------------

- Directed, monitored and approved the work of engineering consultants in their design of petroleum production facilities for Prudhoe Bay, Alaska.
- Prepared standard specifications and design criteria. Provided conceptual design input.

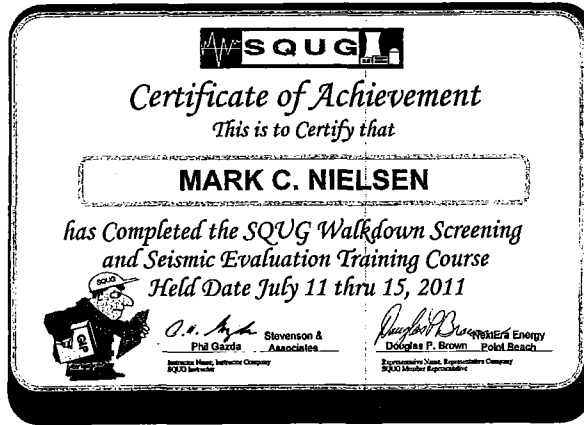
Senior Engineer Brown and Root, Inc., Houston, TX	1974 to 1981 (7 years)
--	---------------------------

Initially designed and later managed the design of major industrial structures, primarily in the mining and metals industries. Held responsible positions on a variety of projects and supervised as many as eighteen engineers and designers.

- Directed the structural design of a 200' x 400' process building for a soda ash plant.
- Supervised the structural/civil design of a major expansion of a fiberglass insulation plant.

Education and Professional

- B.S. Civil Engineering, Brigham Young University, 1974
- Registered Professional Engineer



DAVE J. NUTTALL, P.E.

Resume

05-1986 BSCE with honors from **Michigan Technological University**, Houghton, MI
Area of focus: Structural analysis and design of wood, concrete, and steel.

06-1986 thru 10-1986 – **Enterprise Engineering Consultants, Inc.** Peshtigo, WI
Structural analysis and design of glu laminated timber for structures around the world

12-1986 thru 05-1999 – **Alta Engineering Ltd.** Senior Project Engineer – Rolling Meadows, IL
First employee of a start up consulting Firm servicing dozens of Architects & Developers
Structural analysis and design of commercial, retail, educational, industrial, medical, municipal, recreational, & residential structures
Initiated CAD department. Converted office computers from DOS to Windows and added a network and file server (1998-1999)
Engineer of Record for IKEA store in Schaumburg – At the time (1999), one of the largest retail stores in North America.

Analysis:

Concrete: caissons, grade beams, structural 1-way and 2-way slabs, retaining walls, basement walls

Steel: Composite construction, beams, columns, bar joist, joist girders, plastic design, steel decking, moment frames

Masonry: Walls, pilasters, composite brick/block construction, bond beams, empirical design, reinforced masonry

Wood: Timber design, glu lam design, LVL design, PSL design, joist, trusses, stick built framing, balloon framing

Software:

RAM – Structural analysis and design – including lateral wind and *seismic modules (1999)*

AutoCad – versions 10 thru 14

Enercalc – Structural Analysis and Design

05-1999 thru 06-2000 – **Brander Construction Technology** Senior Engineer – Green Bay, WI
Pulp & Paper building renovation – Georgia Pacific Plant on Green Bay's east side
Forensic analysis
Expert witness testimony

06-2000 thru 11-2006 – **Somerville, Inc.** Senior Engineer – Green Bay, WI
Structural analysis and design of commercial, educational, medical, industrial, municipal, recreational, & residential structures
Engineered the President's proposed circular Bay Front house out of reinforced concrete using insulated concrete forms (ICF).

Analysis:

Concrete: caissons, grade beams, structural 1-way and 2-way slabs, retaining walls, basement walls

Steel: Composite construction, beams, columns, bar joist, steel decking, moment frames

Masonry: Walls, pilasters, composite brick/block construction, bond beams, empirical design, reinforced masonry

Wood: Timber design, glu lam design, LVL design, PSL design, joist, trusses, stick built framing, balloon framing

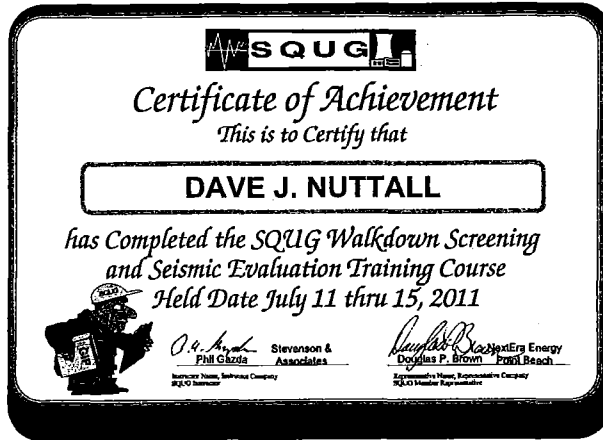
Software:

RAM – Structural analysis and design – including lateral wind and *seismic modules.*

AutoCad – version 2000

Enercalc – Structural Analysis and Design

01-2007 thru Present – **Point Beach Nuclear Power Plant** Senior Engineer, Two Rivers, WI
Civil Group – 2007 thru 2008 – *designed seismic conduit supports for the charging pump MOD*
Minor MODs group – 2009 thru present



Russ Severson
Senior Engineer
Duane Arnold Energy Center

SUMMARY

27 years of nuclear industry experience, with the last 6 years in the application of probabilistic risk assessment (PRA) technology including upgrading the internal event PRA model to meet industry standards.

WORK EXPERIENCE

1993-Present Senior Engineer –Duane Arnold Energy Center, operated by NextEra Energy

Probabilistic Risk Assessment Engineer (May 2006- Present)

Tasks performed:

- Responsible for the technical progress of the upgraded DAEC internal events PRA model to meet the Regulatory Guide 1.200 standard. Was technical lead for the project which included directing the upgrade of the accident sequences, system fault trees, applying a different Human Reliability Analysis process by implementing the HRA calculator, and upgraded the failure rate data and implemented a different common cause. Arranged and lead system manager and operations personnel interviews that included use of the simulator and an operations crew to evaluate different accident sequences.
- Participated as a peer in the full R.G. 1.200 Peer Review of the River Bend Station in 2011.
- Performed many significance determination, missed surveillance and plant mode change evaluations.

ISI/Repair and Replacement Engineer (2001- April 2006) and IST Engineer (1996-2005)

Tasks performed:

- Became the primary author of the site's fourth ISI 10 Year program update and regulatory submittal. The submittal updated from the 1989 Edition ASME B&PV Code, Section XI to the 2001 Edition through 2003 Addenda.
- Successfully implemented risk-informed ISI for Class 1 and 2 piping welds using the EPRI methodology. Successfully implemented VIP-75 augmented piping inspection program with Hydrogen Water Chemistry and Nobel Water Chemistry to significantly reduce the required number of inspections for the augmented IGSCC program.
- Primary author of the site's 4th Interval IST 10 Year Program update and regulatory submittal. The submittal updated the 1988 OM 6 & 10 Code to the 2001 O&M IST Code. Demonstrated job performance through aggressive corrective action resulting no or a low number of components on increased frequency testing, and never more than one pump on increased surveillance for many years.
- Was responsible for the site's Repair and Replacement Program, including authoring the majority of the code reconciliations and NIS-2 forms for two plant cycles. Primary author of the NIS-1 report for two refueling cycles.

Erosion Corrosion and Flow Accelerated Corrosion Lead (1996-2000) and IST Engineer (1996-2005)

Tasks performed:

- Wrote and implemented a trending software program used site wide for maintaining In-service Testing (IST) data.
- Successfully implemented new technologies such as Trace Chrome testing and Digital Radiography for the Flow Accelerated Corrosion and Service Water Corrosion Program.

Senior Plant Performance Engineer (1993-1995)

Tasks performed:

- Wrote and implemented Maintenance Rule software trending program site wide, where this software is still used today.

- Wrote and implemented Site wide trending program that combined Vibration, Lubrication Oil Analysis, and Thermography results. In 1995, INPO representative claimed this implementation was the first successful integration of these technologies in the industry, although many utilities had tried previously.
- Specified the technical details for the original purchase of the process computer PI-Server software.
- Successfully completed PEPSE training and tracked Plant Performance including identifying operational impact of leaking valves (megawatt loss determination).
- Managed the software certification process by serving as the QA Software Certification Committee Chairman for over a year at the site.

1992-1993 Site Lead – Life Cycle Engineering, Charleston, SC

Typical duties:

I was the site lead for installation of a client server PC-based trending program at Dresden Nuclear Power Station. Successfully designed the system and managed a site team at the station for determining the critical trend parameters for 14 different systems.

1989-1992 Lead Engineer - GENSYS Corporation, Bannockburn, IL

Typical duties:

I managed a team of four to develop preventive and predictive maintenance bases documents by performing reliability centered maintenance evaluations on systems at H.B. Robinson, SC and Fort Calhoun Station, NE. Successful work created many contract extensions.

At Fort Calhoun station wrote heat exchanger tests that extrapolate normal operating conditions to design conditions for safety related heat exchangers. Successfully justified the need for a full flow test line for the Auxiliary Feedwater System.

1985-1989 Plant Performance Engineer - Duane Arnold Energy Center, Palo IA

Typical duties:

Started the Rotating Machinery Vibration program on-site, including providing capability for transient data collection, phase and dual spectrum data capability.

Directed the design and testing of the remote vibration monitoring system with shaft crack potential for the Reactor Recirculation pumps.

Implemented an IST and advanced vibration analysis trending program.

Responsible for IST Program including authoring correspondence between site and NRC.

Performed 10 CFR Appendix J Leak Rate Testing including setting up and assisting in the performance of two different Integrated Leak Rate tests.

EDUCATION

Bachelor of Science in Mechanical Engineering, University of North Dakota, May 1985

David Carter, P.E, S.E.

Stevenson & Associates

DAVID N. CARTER

PROFESSIONAL EXPERIENCE

April, 1998-Present Wisconsin Electric, Point Beach Nuclear Plant (On loan from Stevenson & Associates)

Point Beach Nuclear Plant is located in Wisconsin between Milwaukee and Green Bay on Lake Michigan. Worked as Seismic Qualification Engineer responsible for performing seismic evaluations of plant equipment as well as providing input to procurement documents and reviewing seismic qualification reports for new plant equipment. Also worked as Design Engineer preparing and managing various plant modifications. Modifications included reinforcement of RWST anchorage, new HELB barriers and vent paths, new firewall, platform and foundation modifications. The modification preparations included preparing design change documents, 50.59 safety evaluations and calculations as well as assisting in resolution of installation problems.

December, 1997-April, 1998 Stevenson & Associates

Stevenson & Associates is a consulting engineering firm. Work includes design and analysis of building structures and components.

April, 1995-December, 1997 ComEd, Zion Station

Zion Station is a nuclear power plant that is owned and operated by ComEd, an electric utility serving northern Illinois. Member of design engineering group as a Senior Structural Engineer. Work included the scoping, cost estimating, design and preparation of design documents for various plant modifications. Prepared 50.59 safety evaluations for various plant modifications. Member of the Zion Seismic Review Team that implemented the SQUG program. Performed SQUG walkdowns and assessments. Proposed and implemented upgrades to SQUG outliners. Attended and completed the SQUG SCE Training.

April, 1984-April, 1995 Sargent & Lundy Engineers

Sargent & Lundy is a consulting engineering firm that specializes in the design and modification of power plants. Work included the design and analysis of building structures and support components on fossil and nuclear power plants. Assignment highlights include the following:

- Member of modification design project team at Zion Station.
- Member of Zion project team in Sargent and Lundy Chicago office for approximately two years. Worked on various modifications for Zion Station as a Senior Engineer in the Structural Engineering Division. Design activities included preparation, review or approval of design calculations, design documents such as engineering change notices and design criteria documents. Supervised up to four other engineers.
- Member of a design team working on the design of two new nuclear units located in Korea (Yonggwang 3&4). The design was done in the offices of Korea Power Engineering Corporation located in Seoul, Korea. Responsibilities included the design of the structural steel for the turbine building. The assignment involved working with and providing guidance for engineers from the Korean engineering company. The work also involved the preparation of design procedures, procurement specifications, and design calculations as well as the review of design drawings and shop drawings. The length of this assignment was approximately four years.

- Member of a group of engineers that worked on a weld evaluation program at Watts Bar Nuclear Power Station. The assignment included the evaluation of various weld discrepancies on structural steel connections and component supports. This assignment lasted one year.
- Member of various project teams which worked on the design of modifications for fossil and nuclear power plants. Projects include Dresden, Quad Cities, Byron, Braidwood Stations (Commonwealth Edison Co.), and Parish Station (Houston Lighting and Power). Work included the assessment of masonry walls, design of component supports, design of hot air ducts, evaluation of structural steel framing for final loads and preparation of study and design reports. Responsibilities also included the preparation and review of design documents, letters, supervising other engineers, and meeting with clients.

September, 1980-March 1984 **American Bridge Division - United States Steel Corp.**

American Bridge was a consulting engineering firm whose main client was U.S. Steel. They specialized in the design and modification of steel mill buildings. Assignments included the following:

- Design of various modifications to blast furnaces.
- Member of group of engineers whose function was to inspect existing mill buildings, prepare a report of findings and recommend repairs. Included in this assignment was the preparation of design drawings showing the recommended repairs. This assignment lasted approximately one year.
- Loaned to Sargent and Lundy Engineers to assist in the design of component supports and the final load evaluation on Byron Nuclear Power Station. This assignment totaled approximately 16 months.

EDUCATION

Syracuse University, L. C. Smith College of Engineering; Bachelor of Science Degree in Civil Engineering. Graduated Cum Laude.

PROFESSIONAL AFFILIATIONS

Licensed Professional Engineer in State of Minnesota
Licensed Structural Engineer in State of Illinois
Licensed Professional Engineer in State of Wisconsin



NABIL JURAYDINI

EXPERIENCE HIGHLIGHTS

Over 25 years of broad experience in the nuclear industry. Work highlights include: structural analysis; structural dynamic analysis; evaluation of steel and concrete structures; pipe stress analysis; high energy line break, seismic qualification of mechanical and electrical equipment; and use of SQUG methodology.

PROFESSIONAL EXPERIENCE

Stevenson & Associates

Chicago, IL
April 1998 – Present

Perform engineering and project engineering activities on a broad scope of projects. Typical engineering activities include:

- structural dynamic analysis
- seismic equipment qualification
- reinforced concrete analysis
- finite element analysis
- post tensioning tendons evaluations
- pipe stress analysis
- components & supports evaluations, modification and/or design
- SQUG walkdowns and evaluations
- plant walkdowns

Projects include:

- Point Beach:
 - Modification of decontamination structure to handle NUHOMS casks.
 - Design of new crane system for handling the new blowdown heat exchangers.
 - Design of supporting structure for new generator output breakers.
 - Analysis and modification of tanks and for seismic loads.
 - Review reports for the seismic qualification of equipment.
 - Perform SQUG walkdowns.
- Kewaunee:
 - Replace the reactor building equipment handling crane.
 - Design of tornado missile shield to protect pipes.
 - Perform review of seismic reports for new ICCMS system components.
- Prairie Island:
 - Evaluate the Turbine, Auxiliary, and Old service Building steel structures for tornado loads.
 - Perform pipe stress analysis for Main Steam, Steam to Auxiliary Feedwater Pumps, and Steam to Moisture Separator Reheaters.
- Ft. Calhoun:
 - Perform pipe stress analysis for the Main Steam line.
 - Perform pipe stress analysis to determine high energy line break and crack locations for the following lines: Feedwater, Steam to Auxiliary Feedwater Pumps, Steam Generator Blowdown, and Auxiliary Steam.
- Monticello
 - Design missile barrier for the DG exhaust pipe.
 - Evaluate the Admin. Bldg. for tornado loads.

NABIL JURAYDINI

- Braidwood & Byron
 - Review reports for the seismic qualification of equipment.
 - Perform post tensioning tendon evaluations.
- Dresden & Quad Cities
 - Develop median-centered response spectra for Reactor-Auxiliary-Turbine Bldgs.
 - Review reports for the seismic qualification of equipment.

**Northeast Utilities
Engineer**

Waterford, CT
May 1995 – March 1998

Mechanical/Civil Design Engineering Group

- Lead Seismic Engineer: Prepared, reviewed, and approved seismic requirements for purchase specifications for mechanical and electrical equipment. Reviewed and approved vendor supplied analysis and test reports which documented the seismic qualification of mechanical, electrical, and I&C equipment. Interfaced with the vendor to clarify and resolve qualification issues. Prepared, reviewed and approved seismic qualification documentation for plant modifications.
- SQUG/G.L. 87-02/USI A-46 Project Engineer: Reviewed and approved seismic adequacy evaluations for A-46 equipment in accordance with the SQUG Generic Implementation Procedure.
- Participated in the EPRI Task Force on the Generic Technical Evaluations for Replacement Items (G-STERI). Contributed in preparing evaluations for inclusion in the Task Force G-STERI evaluations report.
- High Energy Line Break Project Engineer: Set project direction. Established manpower levels, budget requirements, and schedule. Approved calculations.
- Supported the different plant groups, such as Procurement, Work Planning, Construction Services, and Maintenance with a customer service oriented approach.
- Managed out-sourced activities. Reviewed proposals. Identified project deliverables and tracked project completion.
- Established high quality standards for in-house and out-sourced project deliverables.

NABIL JURAYDINI

VECTRA Technologies, Inc. (formerly Impell Corp.)
Engineer

Fort Worth, TX
December 1987-June 1993 & April 1994-October 1994

Seismic Equipment Qualification Group

- Prepared, checked and reviewed calculations which documented the dynamic analysis and qualification of tanks, vessels, valves, and mechanical and electrical equipment, at CPSES Units 1 & 2, for seismic loads.
- Reviewed and approved vendor supplied analysis and test reports which documented the seismic qualification of mechanical, electrical, and I&C equipment. Interfaced with the vendor to clarify and resolve qualification issues.
- Developed finite element models, using computer programs including ANSYS and STRUDL aided in the equipment qualification process.
- Performed stress-strain analysis on the reactor containment steel liner with respect to the reinforced concrete structure, at CPSES Unit 2.
- Prepared an original calculation for the qualification of concrete tank wall pipe penetrations.
- Completed on schedule the qualification of concrete anchorages and pedestals of various mechanical equipment. This job required continuous interface with other engineering disciplines.
- Headed and completed on schedule the evaluation of concrete tanks and liners, including the piping support anchorages in the tanks.

Other duties included:

- Supervised a staff of four engineers; determined task forecasting and scheduling. Allocated work assignments; checked, reviewed, and ensured on-schedule completion of work.
- Coordinated day-to-day operations in the absence of the Managing Project Engineer.
- Trained new employees; conducted performance evaluations.
- Interfaced with technical auditors in response to inquiries.
- Participated in the project efficiency task.

Prudence/Rate Case Support, December 1989-June 1990

- Prepared white papers on various topics in substantiation of the TU Electric CPSES Unit 1 rate case.
- Researched various topics in preparation for depositions, or in response to third party allegations.
- Responded to audit questions or requests for information.
- Conducted conversations/interviews with personnel involved in past activities under review.
- Prepared chronological histories of projects.

NABIL JURAYDINI

Spent Fuel High Density Racks, June 1990-October 1990

Reevaluated the concrete structure and foundation of the Spent Fuel Pool at CPSES Units 1 & 2 for the increased rack weights. Designed the rack handling crane, evaluated the impact of NRC documents, and wrote related sections of the licensing report.

Cable Tray Hanger Project, November 1987-December 1989

- Prepared, checked, and reviewed engineering calculations which modeled, analyzed and evaluated, the structural integrity of the cable tray hangers and systems at CPSES Unit 1 per the requirements of design documents, the AISC Code and quality assurance manuals.
- Used extensively the computer program P-DELTA STRUDL for structural dynamics analysis and base plate analysis.
- Prepared design change drawings for structural modifications required as a result of technical evaluations, and performed engineering site walkdowns for field measurements.
- Developed computer spreadsheets for use in lieu of hand calculations, resulting in increased efficiency and reduction in error.

**UNIVERSITY OF MICHIGAN
Assistant Engineer**

Ann Arbor, MI
September 1986-June 1987

Assisted in drafting plans to remodel University offices and laboratories; communicated with occupants to determine needs.

EDUCATION

**TEXAS CHRISTIAN UNIVERSITY
Master of Business Administration
Major: Finance/Accounting**

Fort Worth, TX
December 1993

**UNIVERSITY OF MICHIGAN
Master of Science
Major: Civil/Structural Engineering**

Ann Arbor, MI
December 1986

**AMERICAN UNIVERSITY OF BEIRUT
Bachelor of Engineering
Major: Civil Engineering**

Beirut, Lebanon
June 1985



Tribhawan Ram, P.E.

Tribhawan Ram

EDUCATION:

B.S. - Electrical Engineering, Punjab University, India, 1972
M.S. - Electrical Engineering, University of Cincinnati, 1977
M.S. - Nuclear Engineering, University of Cincinnati, 1982
M.B.A. - Bowling Green State University, 1996

PROFESSIONAL REGISTRATION:

State of Ohio

PROFESSIONAL HISTORY:

Stevenson & Associates, Inc., Senior Engineer, 2011 - present
Public Service Electric & Gas Co., Senior Plant Systems Engineer, Hancock Bridge, NJ, 2007 - 2011
Entergy Corporation, Plymouth, Massachusetts, Senior Design Engineer, 2002-2007
Various Companies, Contract Consulting Project Engineer, 1996 - 2002
Public Service Electric & Gas Co., Senior Staff Engineer, Hancock Bridge, NJ, 1983-1990
Toledo Edison Co., Toledo, Ohio, Senior Assistant Engineer, Associate Engineer, 1978-1983

PROFESSIONAL EXPERIENCE:

- Electrical and Controls Design Engineering
- Plant Systems Engineering
- Transformer and Relay(s) Spec Developer
- Plant Modification Engineering
- Systems and Component Test Engineering
- Factory Testing Witness
- 6 Month BWR Systems Engineering Training
- ETAP Trained
- Arc Flash IEEE 1584 Trained

Mr. Ram has over 28 years of electrical project, design and systems engineering experience in US nuclear plants. As part of the Seismic Margin Analysis (SMA) team, in 2012, Mr. Ram is leading the electrical engineering EPRI methodology effort to perform Post-Fukushima relay list development and evaluation to support Safe Shutdown Equipment List (SSEL), including relay functional screening and chatter analysis, for Taiwan nuclear plants (both PWR and BWR). In this effort, he is preparing the final reports including recommendations to replace any bad actor relays. Mr. Ram is preparing proposals to replace these bad actors including modification package development for field replacement of these relays. He has prepared proposals to lead similar forthcoming relay evaluation efforts for several Westinghouse plants in the USA. Mr. Ram has either prepared or peer reviewed the Seismic Walkdown Equipment Lists (SWEL 1 & 2) for several Exelon Plants.



As a senior plant systems engineer, Mr. Ram has: 1. Developed several test plans for modification packages for the replacement of low and medium voltage circuit breakers (ABB K-Line to Square D Masterpact; GE Magneblast to Wyle Siemens) and for the replacement of the entire Pressurizer Heater Bus switchgear; 2. Personally been involved in execution of these test plans during refueling outages; 3. Witnessed factory testing of Pressurizer Heater Bus Switchgear; 4. Interfaced with NRC in their biennial Component Design Basis Inspections (CDBI); Interfaced with INPO in their biennial evaluations; 5. Developed and executed Performance Centered Maintenance (PCM) strategies for Motor Control Centers (MCCs) and low and medium voltage circuit breakers and switchgear; 6. Developed and executed margin improvement strategies for pressurizer heater busses, for twin units, through obtaining funds and then equipment replacement; 7. Developed refueling outage scoping for low and medium voltage circuit breakers and MCCs through working with outage group, maintenance, operations, and work MGMT; 8. Resolved breaker grease hardening issue for ABB K-Line breakers, over a two year period, through working with maintenance and work MGMT in implementing accelerated overhauls with better grease; 9. Trained operations and engineering personnel in the Engaging People and Behavior Change process, as part of a case study team and; 10. Resolved day to day operations and maintenance issues with systems of responsibility (low and medium voltage systems)

Mr. Ram has regularly participated in the EPRI annual circuit breaker user group conferences; at the 2011 meeting, he made a presentation on circuit breaker as found testing vis-à-vis protection of equipment, cables, and containment penetrations, and selective coordination preservation.

As a Senior Design Engineer, Mr. Ram has: 1. Developed specifications and procured 345/4.16/4.16 kV and 23/4.16/4.16 kV transformers (ranging up to \$1.25 million); 2. Prepared a modification package to install the 23 kV/4.16 kV/4.16 kV transformer, including leading the project team to get this transformer successfully installed, tested, and placed in service; 3. Developed ETAP scenarios and performed load flow studies to successfully support the 2006 INPO evaluation; 4. Performed arc flash calculations per IEEE 1584 methodology for 4 kV, 480V Load Centers, and MCCs, enabling a justification of reduced arc flash rated clothing, thereby allowing conversion of OUTAGE PMs into ONLINE PMs and; 5. Performed single point system vulnerability analysis.

As a Consulting Lead Project Engineer, Mr. Ram was heavily involved in resolution of the USI A-46 for several plants. He performed an extensive review of dozens of control circuits for relay chattering issues. To replace bad relay actors, Mr. Ram developed and/or supervised the development of many modification packages including: selection of replacement relays (both protective and auxiliary); preparation of relay testing specification with civil engineering input; working with and visiting seismic testing facilities for relay qualification and; developing pre and post installation instructions including test procedures. He worked closely with teams consisting of maintenance, operations, and work MGMT during the development and implementation of these projects. Besides the A-46 issue, Mr. Ram first developed and then was personally involved in the implementation of modification packages consisting of Cable, Conduit, Circuit Breaker and motor starter (contactor) replacements.

The following provides a list of USI A-46 resolution projects:

- Northeast Utilities – Millstone Station
- Consumers Power Co. - Palisades Nuclear Station
- Boston Edison Co. - Pilgrim Nuclear Power Station
- Commonwealth Edison Company- Dresden Station, Quad Cities Station

B

SWEL Selection Report

This appendix includes the SWEL selection report.

Selection of the Seismic Walkdown Equipment List (SWEL) for the Requirement 2.3 Walkdown

Point Beach Nuclear Plant

Unit 2

Prepared by ... Stan Guokas (PRA Group), November 2012

Signature *S. E. Guokas* Date 11-19-12

Reviewed by ... Rick Merkes (Operations), November 2012

Signature *R. Merkes* Date 11-21-12

Reviewed by ... Doug Brown (Engineering), November 2012

Signature *Douglas R. Brown* Date 11/22/12

1 Introduction

This document summarizes the process for selecting the components to be included in the seismic walkdown equipment list (SWEL). This process is consistent with guidance in EPRI-TR-1025286^(REF 1) and meets the intent of NRC NTF Recommendation 2.3.

The SWEL walkdown locations are summarized in Table 1, along with walk-by attributes. The final Point Beach SWEL is included in Attachment A.

The SWEL list was revised during the seismic walkdowns in September and October 2012 based on accessibility to anchorage. See Section 4 for details.

2 Process

The general process focuses first on building a Master Component List, with attributes to support the sample selection process (Section 3). Then a sample of Seismic Category I (CAT I) components is made for the SWEL to assure the five safety functions are represented along with a variety of systems, environments, and component types.

This process also includes identifying a set of plant locations around which the walkdown is organized (Section 4). The plant locations are also used to support the "walk-by" process to assess cable trays and ventilation ducts and the potential for seismic spatial interactions (Section 5).

Finally, Section 6 identifies several evaluations that support the identification of targets for the walkdown and the specific attributes that need to be examined.

Because the SWEL needs to address a number of attributes, the selection was performed and reviewed by a team that includes representatives from PRA, Operations, and Engineering. This was done systematically by performing a table-top virtual walkdown of each location to identify candidates for the SWEL with Operations as well

as other issues (e.g., seismic-flood) that need to be inspected by the walk-by. Engineering then reviewed the SWEL, made additions and deletions. The SWEL was then reviewed by PRA with additional changes. This list was then reviewed and accepted by Operations and Engineering.

3 Master Component List

The SWEL was developed starting from the components list in the Point Beach internal events PRA^(REF 2) (SWEL 1-1 for Unit 1, SWEL 1-2 for Unit 2). This list contains risk important components from the internal events PRA (one of the attributes from the EPRI guidance). Other components were added that are implicitly modeled in the PRA (e.g., instrument racks, diesel starting air tanks, etc.).

This list addresses the five safety functions - reactivity control, RCS pressure control, RCS inventory control, decay heat removal, containment function - implicitly by including components from both core-damage-frequency (CDF) and large-early-release-frequency (LERF) sequences. The five safety functions are addressed further in Section 4.1 and are included in Attachment A.

This list was expanded to include components associated with the Spent Fuel Pool (SWEL 2). The guidance described these as "SFP SC1 (Seismic Category I) equipment and systems" and includes specifically components associated with SFP cooling. Per the guidance, the SFP structure is excluded from the walkdown. Thus, this added all SFP-related components that are Seismic Cat 1, including pumps, valves, heat exchangers, etc. In addition, the potential for rapid draindown of the SFP was evaluated (see Section 4.2). The conclusion of that evaluation was that there are no components that could lead to rapid draindown. Thus, the list did not need to be expanded beyond SC1 SSCs. SWEL 2 has been included in the Unit 1 Selection Report.

Specific attributes were identified for each component to support the sample selection, as described below:

- *Seismic Class.* Each component in the master list was identified as CAT I or non-CAT I. The SWEL generally applies only to CAT I (with a few exceptions) since this is primarily a design-basis evaluation.
- *System.* For each component in the master list, the associated system was identified. This attribute is used to assure that the equipment selection includes a variety of types of systems.
- *Location.* For each component in the master list, the location was identified. The walkdowns is organized by plant location (see Section 4). This also assures that the equipment selection includes a variety of environments.
- *Equipment Class.* For each component in the master list, the "equipment class" was identified. The equipment classes are the 21 types of equipment identified in Appendix B of the EPRI guidance document (see Table 2). This attribute is used to assure that the equipment selection includes a variety of types of equipment.

- *New / Replacement Equipment.* Several pieces of equipment in the master list were identified as major new or replacement equipment in the last 15 years.
- *Equipment Enhanced from IPEEE.* As described in Section 6.1, several plant improvements were made as a result of the seismic portion of the IPEEE.
- *Safety Functions.* For each component in the master list, the associated safety function was identified (see Section 4.1, Screen #3).

4 Walkdown List (SWEL)

The SWEL was created by sampling from the Master Component List, using the attributes identified in Section 3. The final SWEL is contained in Attachment A.

First, plant locations are defined to support the walkdown. A list of 29 locations (buildings or sets of rooms) were identified that contain the primary components from most of the top ten risk-important systems for Unit 2. Table 1 provides this list of potential walkdown locations. This focuses the walkdown on risk-important systems, consistent with the guidance to "... include consideration of the importance of the contribution to risk for the SSCs."

Within these 29 locations, a total of 95 components were identified from the Master Component List (95 in SWEL 1-2). As shown in Attachment A, this process assured different component environments and equipment classes are represented. This sample was also reviewed by Operations and Engineering.

The SWEL list was revised during the seismic walkdowns in September and October 2012 based on accessibility of anchorage. The following modifications were made:

- 7 deletions

The D-31 and D-41 125 VDC distribution panels were examined, but the bolts could not be observed. The anchorage of 2A-06 could not be observed. MCCs 1B-42 and 2B-42 internals inspected could be performed safely with the MCCs de-energized. The next scheduled down power was more than 2 years in the future. Rather than have a deferred item for more than 2 years, MCCs 1B-42 and 2B-42 were deleted from the SWEL. 1A-05 was added to the Unit 1 SWEL1 and deleted from the Unit 2 SWEL1 to address a SWEL Peer Review comment that no medium voltage switchgear had been included in the Unit 1 SWEL1. P-32A was added to the Unit 1 SWEL1 and deleted from the Unit 2 SWEL1 to address a SWEL Peer Review comment that no vertical pumps had been included in the Unit 1 SWEL1.

- 4 additions

Unit 2 RHR pump 2P-10B was added.

2TE-621, HX-12B and HX-12C were added to the Unit 2 SWEL1 based on SWEL Peer Reviewer Comments that heat exchangers and temperature sensors had not been included in the Unit 2 SWEL1. HX-12B and HX-12C were removed from the Unit 1 SWEL1.

The final count of SWEL components for Unit 2 was 95.

4.1 Screening for SWEL 1

The screening process for SWEL 1 meets the requirements of the EPRI-TR as described below:

Screen #1 Seismic Category 1

Non-seismic-category 1 components are screened out of the Master Component List. This screening was performed using a Query in the NAMS database. If the NAMS field "Seismic_Category" had a "I" the component was included as Seismic Category I. The results of this Query are provided in J:\ShareData\PRA\ Seismic-Flood, Post Fukushima\SEL Seismic Equipment List - for PRA\Copy of Seismic I or 2_053012.xls.

Screen #2 Equipment or Systems

Components selected for the SWEL 1 were those that do not undergo regular inspection to confirm their configuration. Thus, CAT I structures and containment penetrations were excluded. As a result, the SWEL includes mechanical and electrical equipment plus tanks and heat exchangers.

Screen #3 Supports Five Safety Functions

The SWEL includes components from all five safety functions, as follows:

1. *Reactivity Control*
 - Support systems (AC power, DC power).
2. *RCS Pressure Control*
 - Secondary pressure control (ASDV)
3. *RCS Inventory Control*
 - ECCS (SI pump, RH pump, SI MOVs, RH AOVs)
 - Support systems (AC power, DC power, PAB Electrical Equipment Room ventilation, CC pumps & MOVs).
4. *Decay Heat Removal*
 - Secondary heat removal (AFW pumps, AFW MOVs, ASDV);
 - RHR shutdown cooling (RHR pump & MOVs, CC pumps & MOVs, SW pumps & MOVs, heat exchangers,);
 - Support systems (AC power, DC power, PAB Electrical Equipment Room ventilation).
5. *Containment Function*
 - Containment isolation (IA-3047 and IA-3048 valves, RH-720 valve)

- Containment spray injection (CS Pumps)
- Containment spray heat removal (CC pumps & MOVs, SW pump & MOVs)
- Support systems (CC pumps & MOVs, AC power, DC power).

Screen #4 Sample Considerations

The SWEL includes components from various systems, environments, and types:

- *System.* The SWEL includes components from a number of types of systems – power support systems (DG, 4160 VAC, 480 VAC), cooling support systems (SW, CC), ventilation systems (VNDG, VNBI), hot shutdown systems (AFW), ECCS (RH, SI), and spent fuel cooling (SF).
- *Environment.* The SWEL includes components from a number of locations in most of the major CAT I buildings on site – PAB, Control Bldg, DG Bldg, Unit 1 Containment, Unit 2 Containment and Circ Water Pumphouse. These locations involve different environments, from ventilation controlled areas (DG Bldg) to outside areas (Unit 2 Facade); from areas with normally running equipment (PAB) to areas with normally standby equipment (DG Bldg). These locations involve different environments related to elevation, from (-)19' elevation in the RHR pump rooms to (+)85' in the Unit 2 Facade.
- *Equipment Type.* The SWEL includes components from most of the 21 equipment classes. Table 2 provides a list of the 21 equipment classes. Attachment A shows the SWEL count by equipment class, with example components in each class. As noted, several classes had no CAT I equipment.

4.2 Screening for SWEL 2

SWEL 2 was included in the Point Beach Unit 1 SWEL Selection Report and will not be repeated here.

5 Walk-By Table

Area walk-bys will be performed in each area that contains an item on SWEL 1. Each location will also be subject to a walk-by, an examination (in less detail) of the other PRA components as well as an inspection for other seismic issues:

- Several other passive component types: cable trays & ventilation ducts.
- Seismic-induced fire. This includes all flammable materials in each location such as hydrogen lines, gas bottles (acetylene, hydrogen), and hazardous/flammable material stored in the location.
- Seismic-induced flood. This includes flood/spray sources (tanks, piping) originating in each location, based on the Internal Flood PRA. Note, the sources of interest are only those originating in the location, not those coming from another location (that will be addressed in the seismic/flood analysis, if needed).

- Spatial interactions (2 / 1). This includes adverse physical interaction due to proximity, failing of other components or structures (e.g., cranes), and flexibility of attached lines and cables.

Table 1 provides an initial assessment for each location to assist the walk-by process.

6 Evaluations

The following evaluations were performed prior to the walkdown to assess specific issues that may add to the walkdown scope or the inspection criteria.

6.1 IPEEE Vulnerabilities

The seismic assessment performed for the Point Beach IPEEE Report^(REF 3) and A-46 Report^(REF 4) was reviewed for any seismic vulnerabilities identified. Several plant improvements were made in response to seismic analysis in the IPEEE and A-46 walkdowns. A list of the outlier resolution is provided in Table 3.

6.2 Configuration Verification

The EPRI guidance identifies two types of inspection for the walkdown: (a) visual inspection and (b) configuration verification. Visual inspection is typically what is performed in a walkdown, looking for obvious degraded conditions in equipment anchorage. However, configuration verification is a more involved inspection consistent with the existing plant documentation of the design basis. This is required in at least 50% of the SWEL items with anchorage. To ensure compliance, Point Beach interpreted this requirement as applying to SWEL1-1, SWEL1-2 and SWEL2. In other words, 50% of the SWEL1-1 items, 50% of the SWEL1-2 items and 50% of the SWEL2 items would require anchorage verification.

SWEL1-2 has 95 components. 30 of these components are MOVs, AOVs or SOVs which do not have anchorage. This leaves 50% of (95-30), or 33 components to be included in configuration verification.

For the components which received configuration verification, the design basis was reviewed and the key attributes included in the walkdown forms to assist the inspection.

6.3 New Equipment

The EPRI Guidance directs that the SWEL should include a “robust sampling of the major new or replacement equipment installed within the past 15 years (i.e., since the approximate completion of the seismic IPEEE evaluation)”. New and replacement equipment has been included as identified in Attachment A.

7 References

- (1) EPRI 025286, “Seismic Walkdown Guidance,” June 2012.
- (2) Point Beach PRA, 4.04, December 2011.
- (3) GENERIC LETTER 88-20, SUPPLEMENT 4 (TAC NOS. 74452 AND 74453) SUMMARY REPORT ON INDIVIDUAL PLANT EXAMINATION OF

EXTERNAL EVENTS FOR SEVERE ACCIDENT VULNERABILITIES POINT
BEAC NUCLEAR PLANT, UNITS 1 AND 2, June 1995.

- (4) USNRC GENERIC LETTER 87-02, USI A-46 RESOLUTION, SEISMIC
EVALUATION REPORT, Rev. 1, June 1996.
- (5) NRC SER on Point Beach IPEEE, September 1999.
- (6) Calculation 2005-0037, Revision 0, "Spent Fuel Pool Anti-Siphon
Provisions"

TABLE 1 SWEL Walkdown Locations Unit 2

Walk By Area	Walk By Area Description	Cable Trays	HVAC Ductwork	2/1	Flood Source	Flame Source	IPEEE Components Modified
4	35/PAB/D-106 ROOF	N	Y	N	SW		
8	46/PAB/CC HX AREA	Y	Y	Y	SW		CCW SURGE TANK
9	26/CB/CSR	Y	Y	N			CABLE TRAYS, XFRMRS, B03/4, INVERTRS C-PNLS
11	8/CB/G-02 RM	Y	N	Y	SW	FO	
12	8/PAB/PIPEWAY #4	Y	N	N			
16	8/PAB/U2 2B-32 AREA	Y	N	Y	FP		
19	8/PAB/SI/CS PUMP AREA	Y	Y	Y	FP		P-14 PUMPS, SI VLVS
20	8/PAB/CC PUMP AREA	Y	Y	Y	FP		P-11 PUMPS
21	8/CB/VSG RM	Y	N	N			D-07, D-08
22	26/PAB/CENTRAL	Y	Y	Y	SW		
23	26/PAB/PIPEWAY #3	Y	N	N	SW		
25	85/U2F	Y	N	N			RWST ANCHOR, RM-3200A/B
27	South 8/CWPH/SW BLDG	Y	N	Y	SW,FP,CW	FO	
28	North 8/CWPH/SW BLDG	Y	N	Y	SW,FP,CW	FO	
29	8/CB/AIR COMP RM	Y	Y	Y	SW,FP		
30	8/CB/AFP RM 2P-29/P-38B CUB	Y	Y	Y	SW,FP,CST		
31	50/DGB/G-04 RADTR RM	N	N	N			
32	50/DGB/G-04 FAN RM	N	N	N			
35	28/DGB/G-04 SWGR RM	Y	N	N			

Walk By Area	Walk By Area Description	Cable Trays	HVAC Ductwork	Z/1	Flood Source	Flame Source	IPEEE Components Modified
36	28/DGB/G-04 RM	N	N	Y		FO	
39	26/PAB/C-59 AREA	Y	Y	Y	SW		2B-42
40	8/PAB/U2 2P-2C CHG PUMP RM	N	N	Y			
44	2P-10B RESIDUAL HEAT REMOVAL PUMP ROOM	N	N	N			RHR PMP
45	8/CB/D-06 BATT RM	N	N	N		H2	
46	26/PAB/CENTRAL	Y	Y	Y	SW		
48	26/PAB/C-59 AREA						
49	21/U2C/NW QTR	Y	Y	Y	SW		
50	46/U2C/NW QTR	Y	Y	Y	SW		
51	21/U2C/C-1 AIR LOCK AREA EAST	Y	Y	Y	SW		
52	46/U2C/SE QTR	Y	Y	Y			

Table 2 Classes of Equipment (from EPRI Appendix B, Table B-1)

#	Equipment Class	Explanation of Equipment Class	Example PB Components
0	Other	All other component types	SF-00785B
1	Motor Control Centers and Wall-Mounted Contactors	480V MCC	1B-39
2	Low Voltage Switchgear and Breaker Panels	480V switchgear (unit-sub), 125VDC switchgear	2B-03
3	Medium Voltage, Metal-Clad Switchgear	4kV to 13.8kV switchgear	1A-05
4	Transformers	Unit-sub dry transformer	1X-13
5	Horizontal Pumps	--	1P-10A
6	Vertical Pumps	--	P-032A
7	Pneumatic-Operated Valves	AOV	1RH-00624
8	Motor-Operated Valves & Solenoid-Operated Valves	MOV, SOV	1CV-00112B
9	Fans	Ventilation fan	W-184B
10	Air Handlers	--	W-085
11	Chillers	AC unit	none
12	Air Compressors	--	none
13	Motor Generators	MG set	none
14	Distribution Panels & Automatic Transfer Switches	120VAC and 125VDC panel	D-64
15	Battery Racks	125VDC vital battery	D-06
16	Battery Chargers and Inverters	125VDC vital battery charger, vital inverter	D-07
17	Engine Generators	Diesel generator	G-02
18	Instrument Racks	--	RK-35
19	Temperature Sensors	--	none
20	Instrumentation and Control Panels	Skid panels, skid-mounted control panel	C-035
21	Tanks & Heat Exchangers	--	T-012 HX-013A

Table 3 IPEEE and A-46 Outlier Resolution

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
1	I	0	CV	2F-39A	RCP SEAL WATER INJECTION FILTER	O - Anchor nuts are not seated. Not an operability concern. EWR, 6/20/96 - EWR 96-040 assigned	The nuts for the caste in place anchors are not fully seated.	This is not an operability concern because the attached pipe has sufficient flexibility to accommodate the displacement of the filter. The nuts will be seated or washers installed to close up the gaps. The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	WO 9815435 completed 11/6/98. Removed existing nuts, added washers and torqued down new nuts on all 4 anchors.	SQ-001530 completed
2	A,I	1	480V	2B-42	480V MOTOR CONTROL CENTER PAB SAFEGUARDS	O - The connecting bolt that connects the double P1000 to the strut that is anchored to the wall has either loose or missing fastening nuts. T. Dykstra to submit MWR to check tightness, tighten & replace hardware. WO 9411729. Maintenance to assist with bolt tightness checks 2/20/95. WO submitted to replace missing hardware.	The connecting bolt that connects the double P1000 to the strut that is anchored to the wall has either loose or missing fastening nuts.	The MCC is considered seismically operable because the other top supports are sufficient to resist overturning. The bolts will be checked tight and any missing hardware replaced.	WO 9606365, completed 11/13/96 checked the connecting bolts tight and replaced any missing hardware.	SQ-001250 resolves the outlier.
3	A,I	2	480V	1B-03	480V SAFEGUARDS LOAD CENTER	O - ANCHORAGE INSUFFICIENT, Weld spacing is to large. Every 3rd cabinet in some cases. TROLLEY HOIST needs to be clamped in place. T. Dykstra to submit separate EWRs for weld and trolley hoist.	The anchorage weld spacing is to large, every 3rd cabinet in some cases. The trolley hoist that rides along the top of the switchgear poses an interaction hazard.	There is sufficient anchorage capacity in the existing welds to carry the seismic anchorage loads. However, the switchgear was declared an outlier because it is not good engineering practice to transfer the seismic loading through the switchgear structure. The switchgear is considered seismically operable. Modification MR 95-005 is initiated to install new anchorage. The trolley hoist will be evaluated.	MR 95-005 installed new anchorage (WO 9700600). EWR 96-042 evaluated breaker handling trolley. EWR closed. MR 98-094 installed trolley stops.	SQ-001544, SQ-001531 completed
4	A,I	2	480V	2B-03	480V SAFEGUARDS LOAD CENTER	O - ANCHORAGE INSUFFICIENT, Weld spacing is to large. Every 3rd cabinet in some cases. TROLLEY HOIST needs to be clamped in place. T. Dykstra to submit separate EWRs for weld and trolley hoist.	The anchorage weld spacing is to large, every 3rd cabinet in some cases. The trolley hoist that rides along the top of the switchgear poses an interaction hazard.	There is sufficient anchorage capacity in the existing welds to carry the seismic anchorage loads. However, the switchgear was declared an outlier because it is not good engineering practice to transfer the seismic loading through the switchgear structure. The switchgear is considered seismically operable. Modification MR 95-005 is initiated to install new anchorage. The trolley hoist will be evaluated.	MR 95-006 installed new anchorage (WO 9705903). EWR 96-042 evaluated breaker handling trolley. EWR closed. MR 98-095 installed trolley stops.	SQ-001588, SQ-001532 completed

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
5	A,I	2	480V	1B-04	480V SAFEGUARDS LOAD CENTER	O - ANCHORAGE INSUFFICIENT. Weld spacing is to large. Every 3rd cabinet in some cases. TROLLEY HOIST needs to be clamped in place. T. Dykstra to submit separate EWRs for weld and trolley hoist.	The anchorage weld spacing is to large, every 3rd cabinet in some cases. The trolley hoist that rides along the top of the switchgear poses an interaction hazard.	There is sufficient anchorage capacity in the existing welds to carry the seismic anchorage loads. However, the switchgear was declared an outlier because it is not good engineering practice to transfer the seismic loading through the switchgear structure. The switchgear is considered seismically operable. Modification MR 95-005 is initiated to install new anchorage. The trolley hoist will be evaluated.	MR 95-005 installed new anchorage. EWR 96-042 assigned to evaluated breaker handling trolley. EWR closed. MR 98-094 installed trolley stops.	SQ-001545, SQ-001535 complete
6	A,I	2	480V	2B-04	480V SAFEGUARDS LOAD CENTER	O - ANCHORAGE INSUFFICIENT. Weld spacing is to large. Every 3rd cabinet in some cases. TROLLEY HOIST needs to be clamped in place, Cub 2B-00-32B-2B-04 has loose material, should remove it. T. Dykstra to submit separate EWRs for weld and trolley hoist.	The anchorage weld spacing is to large, every 3rd cabinet in some cases. The trolley hoist that rides along the top of the switchgear poses an interaction hazard.	There is sufficient anchorage capacity in the existing welds to carry the seismic anchorage loads. However, the switchgear was declared an outlier because it is not good engineering practice to transfer the seismic loading through the switchgear structure. The switchgear is considered seismically operable. Modification MR 95-005 is initiated to install new anchorage. The trolley hoist will be evaluated.	MR 95-006 installed new anchorage. EWR 96-042 assigned to evaluated breaker handling trolley. EWR closed. MR 98-095 installed trolley stops.	SQ-001589, SQ-001536 completed
7	A,I	3	RP	2C-41	ROD CTL MG/REACTOR TRIP BKR SWITCHGEAR CTL PANEL	O - NOT ANCHORED. MR in process. MR 94-045. Candice Curtis	The cabinet is not anchored.	The relay review showed that there were no essential Reactor Protection System relays located in the cabinet. Any failure of 2C-41 is expected to cause the reactor trip breakers to open, therefore in the safe direction. Modification request MR 94-045 will install new anchorage.	MR 94-045 installed new anchorage. Accepted 11/7/95.	SQ-001537 completed
8	A,I	4	4.16KV	1X-13	B-03 STATION SERVICE TRANSFORMER	O - ANCHORED WITH FRICTION CLIPS. MR in process. MR 94-012	The transformer anchorage uses friction clips which is not covered by the GIP.	The friction clips provide adequate capacity to withstand the PBNP SSE, because the friction coefficient exceeds the seismic demand level. The anchorage will be upgrade under modification MR 94-012.	MR 94-012 installed new anchorage - accepted 4/16/96.	SQ-001703 completed
9	A,I	4	4.16KV	2X-13	B-03 STATION SERVICE TRANSFORMER	O - ANCHORED WITH FRICTION CLIPS. MR in process MR 94-013	The transformer anchorage uses friction clips which is not covered by the GIP.	The friction clips provide adequate capacity to withstand the PBNP SSE, because the friction coefficient exceeds the seismic demand level. The anchorage will be upgrade under modification MR 94-012.	MR 94-013 installed new anchorage - accepted 11/3/95.	SQ-001800 completed
10	A,I	4	4.16KV	1X-14	B-04 STATION SERVICE TRANSFORMER	O - ANCHORED WITH FRICTION CLIPS. MR in process. MR 94-012	The transformer anchorage uses friction clips which is not covered by the GIP.	The friction clips provide adequate capacity to withstand the PBNP SSE, because the friction coefficient exceeds the seismic demand level. The anchorage will be upgrade under modification MR 94-012.	MR 94-012 installed new anchorage - accepted 4/16/96.	SQ-001799 completed
11	A,I	4	4.16KV	2X-14	B-04 STATION SERVICE TRANSFORMER	O - ANCHORED WITH FRICTION CLIPS. MR in process. MR 94-013	The transformer anchorage uses friction clips which is not covered by the GIP.	The friction clips provide adequate capacity to withstand the PBNP SSE, because the friction coefficient exceeds the seismic demand level. The anchorage will be upgrade under modification MR 94-012.	MR 94-013 installed new anchorage - accepted 11/3/95.	SQ-001801 completed

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
12	A,I	5	RH	1P-10A	RESIDUAL HEAT REMOVAL PUMP	O - Anchorage failed	The pump anchorage has less than GIP minimum required edge distance, resulting in anchorage failure when evaluated in accordance with the GIP.	The pump anchorage was analyzed in accordance with ACI 349-80 Appendix B and shown to have sufficient capacity.	S&A Calc 91C2696-C-008 uses guidelines from ACI-349-80 to show pump anchorage adequate	SQ-1842 completed.
13	A,I	5	RH	1P-10B	RESIDUAL HEAT REMOVAL PUMP	O - Anchorage failed	The pump anchorage has less than GIP minimum required edge distance, resulting in anchorage failure when evaluated in accordance with the GIP.	The pump anchorage was analyzed in accordance with ACI 349-80 Appendix B and shown to have sufficient capacity.	S&A Calc 91C2696-C-008 uses guidelines from ACI-349-80 to show pump anchorage adequate	SQ-1802 completed.
14	A,I,C	5	CC	1P-11A	COMPONENT COOLING WATER PUMP	O - ANCHOR	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-009 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1804 completed.
15	A,I,C	5	CC	1P-11B	COMPONENT COOLING WATER PUMP	O - ANCHOR	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-009 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1803 completed.
16	A,I	5	SI	1P-14A	CONTAINMENT SPRAY PUMP	O - Failed Anchorage Calc PIPE LOAD ON SUCTION NOZZLES	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-019 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1805 completed.
17	A,I	5	SI	2P-14A	CONTAINMENT SPRAY PUMP	O - Failed Anchorage Calc PIPE LOAD ON SUCTION NOZZLES	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-019 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1807 completed.
18	A,I	5	SI	1P-14B	CONTAINMENT SPRAY PUMP	O - Failed Anchorage Calc PIPE LOAD ON SUCTION NOZZLES	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-019 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1806 completed.
19	A,I	5	SI	2P-14B	CONTAINMENT SPRAY PUMP	O - Failed Anchorage Calc PIPE LOAD ON SUCTION NOZZLES	The anchor J-bolts have an embedment < 16D as required by the GIP.	A calculation per ACI 318-63 and ACI 349-80 Appendix B shows that the pump anchorage has sufficient capacity.	S&A Calc 91C2696-C-019 uses the guidelines from ACI 318-63 and ACI 349-80 Appendix B to show that the pump anchorage has sufficient capacity.	SQ-1828 completed.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
20	A,I	6	SW	P-32A	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1808 completed.
21	A,I	6	SW	P-32B	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1809 completed.
22	A,I	6	SW	P-32C	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1810 completed.
23	A,I	6	SW	P-32D	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1811 completed.
24	A,I	6	SW	P-32E	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1812 completed.
25	A,I	6	SW	P-32F	SERVICE WATER PUMP	O - Anchorage/capacity check on bolts & studs, restraint of overhead trolley,	The pump extending casing is 34' long > the 20' allowable. The overhead crane poses an interaction hazard.	The pump is considered operable based on original design calculations. S&A calculation 91C2696-C-012 shows that the pump shaft stress is within allowable limits.	S&A Calc 91C2696-C-012 shows pump shaft stresses within limits. EWR 96-041 evaluated the overhead hoist. Concluded that the existing configuration does not present an interaction hazard to the SW pumps - completed 12/5/96.	SQ-1813 completed.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
26	A.I.V	7	CS	1CS-466	HX-1A SG FEEDWATER REGULATOR CONTROL	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and it sub-components.	The function of the valve is to close to isolate feed to the S/Gs. The valve is not required to shut during the 30 second period of strong motion. However, it is desired to have it shut during the 72 hour recovery period. As a back up to the valve failing to close, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001814 update complete.
27	A.I.V	7	CS	2CS-466	HX-1A SG FEEDWATER REGULATOR CONTROL	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and it sub-components.	The function of the valve is to close to isolate feed to the S/Gs. The valve is not required to shut during the 30 second period of strong motion. However, it is desired to have it shut during the 72 hour recovery period. As a back up to the valve failing to close, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001815 update complete.
28	A.I.V	7	CS	1CS-476	HX-1B SG FEEDWATER REGULATOR CONTROL	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and it sub-components.	The function of the valve is to close to isolate feed to the S/Gs. The valve is not required to shut during the 30 second period of strong motion. However, it is desired to have it shut during the 72 hour recovery period. As a back up to the valve failing to close, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001816 update complete.
29	A.I.V	7	CS	2CS-476	HX-1B SG FEEDWATER REGULATOR CONTROL	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and it sub-components.	The function of the valve is to close to isolate feed to the S/Gs. The valve is not required to shut during the 30 second period of strong motion. However, it is desired to have it shut during the 72 hour recovery period. As a back up to the valve failing to close, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001817 update complete.
30	A.I.V	7	CS	1CS-480	HX-1A SG REGULATOR CONTROL BYPASS	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and it sub-components.	The valve is normally close and must remain closed to isolate feed to the S/Gs. Therefore, during the 30 second period of strong motion, the valve is not required to change state. It is not likely that the block wall interaction would cause the valve to open. As a back up to the valve inadvertently opening, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001818 update complete.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
31	A,I,V	7	CS	2CS-480	HX-1A SG REGULATOR CONTROL BYPASS	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and its sub-components.	The valve is normally close and must remain closed to isolate feed to the S/Gs. Therefore, during the 30 second period of strong motion, the valve is not required to change state. It is not likely, that the block wall interaction would cause the valve to open. As a back up to the valve inadvertently opening, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001819 update complete.
32	A,I,V	7	CS	1CS-481	HX-1B SG REGULATOR CONTROL BYPASS	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and its sub-components.	The valve is normally close and must remain closed to isolate feed to the S/Gs. Therefore, during the 30 second period of strong motion, the valve is not required to change state. It is not likely, that the block wall interaction would cause the valve to open. As a back up to the valve inadvertently opening, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001820 update complete.
33	A,I,V	7	CS	2CS-481	HX-1B SG REGULATOR CONTROL BYPASS	O - Block Wall interaction	The valves are adjacent to a large unanalyzed block wall. The block wall poses an interaction hazard for the valve and its sub-components.	The valve is normally close and must remain closed to isolate feed to the S/Gs. Therefore, during the 30 second period of strong motion, the valve is not required to change state. It is not likely, that the block wall interaction would cause the valve to open. As a back up to the valve inadvertently opening, the operators can turn off the feed pumps and condensate pumps.	EWR - Functional Evaluation. 6/20/96 - EWR 96-043 assigned to document evaluation. Evaluation concluded that this valve is not required to be on the SSEL.	No walkdown required, SQ-001821 update complete.
34	I,V,RG	7	RM	1RM-3200A	RE-211/RE-212 MONITOR RETURN	O - Based on visual inspection, the building the RMs are located in is not anchored. Need to check any drawings. 1 OF 4 ANCHOR BOLTS MISSING. Need to determine which ISRS would be applicable	The valve is located in a climate control hut that has no visible base anchorage.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	12/28/98 - EWR 96-044 complete. ID'd the anchorage. S&L completed calc. Calculation resolves outlier.	SQ-001985 resolves this outlier
35	I,V,RG	7	RM	2RM-3200A	RE-211/RE-212 MONITOR RETURN	O - Based on visual inspection, the building the RMs are located in is not anchored. Need to check any drawings.	The valve is located in a climate control hut that has no visible base anchorage.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	12/28/98 - EWR 96-044 complete. ID'd the anchorage. S&L completed calc. Calculation resolves outlier.	SQ-001986 resolves this outlier

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
36	I,V,RG	7	RM	1RM-3200B	RE-211/RE-212 MONITOR SUPPLY	O - Based on visual inspection, the building the RMs are located in is not anchored. Need to check any drawings. 1 OF 4 ANCHOR BOLTS MISSING. Need to determine which ISRS would be applicable	The valve is located in a climate control hut that has no visible base anchorage.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	12/28/98 - EWR 96-044 complete. ID'd the anchorage. S&L completed calc. Calculation resolves outlier.	SQ-001987 resolves this outlier
37	I,V,RG	7	RM	2RM-3200B	RE-211/RE-212 MONITOR SUPPLY	O - Based on visual inspection, the building the RMs are located in is not anchored. Need to check any drawings.	The valve is located in a climate control hut that has no visible base anchorage.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	12/28/98 - EWR 96-044 complete. ID'd the anchorage. S&L completed calc. Calculation resolves outlier.	SQ-001988 resolves this outlier
38	A,I	7	SC	1SC-959	RHR LOOP SAMPLE ISOLATION	O - Valve is only restrained by 2 U-bolts in friction. The valve is on a 3/8" sample line. Should have operator support or analysis on load bearing capacity of U-bolts	The AOV body is mounted to a support shelf by 2 U-bolts in friction. The valve is mounted on a 3/8" line. If the U-bolts slip, the potential exists for the line to be overstress.	This valve is normally closed and is required to stay closed in the event of an SSE. The U-bolt support will be analyzed and if required a valve operator support will be installed.	EWR - 6/20/96 - EWR Submitted, MR 96-035 assigned to install operator support. (DNC) WO 9817131. Installation complete.	SQ-001771 resolves this outlier
39	A,I,V	7	SI	1SI-839A	T-34A SI ACCUM OUTLET TO SI TEST LINE ISOLATION	O - The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection. Anchorage evaluation will be done. 7/25/94 - Support frame modified during U1R21. MR 93-047	The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection.	The support frame anchorage was modified during the same U1R21refueling outage under MR 93-047	Fixed, MR 93-047. Accepted 4/29/94	SQ-001641 resolves outlier, completed
40	A,I,V	7	SI	2SI-839A	T-34A SI ACCUM OUTLET TO SI TEST LINE ISOLATION	O - UNSUPPORTED OPERATOR - MODIFIED U2R19 - Supported operators MWR 935398	The AOV was mounted on a 3/4" line with the valve operator unsupported	The valve was determined to be seismically inoperable. The operator was supported that same refueling out under MWR 935398	Fixed, MWR 935398 - completed 10/22/93	SQ-001631 resolves outlier, completed
41	A,I,V	7	SI	1SI-839B	SI A COLD LEG TO SI TEST LINE ISOLATION	O - The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection. Anchorage evaluation will be done. 7/25/94 - Support frame modified during U1R21. MR 93-047	The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection.	The support frame anchorage was modified during the same U1R21refueling outage under MR 93-047	Fixed, MR 93-047. Accepted 4/29/94	SQ-001642 resolves outlier.
42	A,I,V	7	SI	2SI-839B	SI A COLD LEG TO SI TEST LINE ISOLATION	O - UNSUPPORTED OPERATOR - MODIFIED U2R19 - Supported operators MWR 935398	The AOV was mounted on a 3/4" line with the valve operator unsupported	The valve was determined to be seismically inoperable. The operator was supported that same refueling out under MWR 935398	Fixed, MWR 935398 - completed 10/22/93	SQ-001632 resolves outlier. Completed

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
43	A,I,V	7	SI	1SI-839C	T-34B SI ACCUM OUTLET TO SI TEST LINE ISOLATION	O - The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection. Anchorage evaluation will be done. 7/25/94 - Support frame modified during U1R21. MR 93-047	The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection.	The support frame anchorage was modified during the same U1R21 refueling outage under MR 93-047	Fixed, MR 93-047. Accepted 4/29/94	SQ-001643 resolves outlier. Completed
44	A,I,V	7	SI	2SI-839C	T-34B SI ACCUM OUTLET TO SI TEST LINE ISOLATION	O - UNSUPPORTED OPERATOR - MODIFIED U2R19 - Supported operators MWR 935398	The AOV was mounted on a 3/4" line with the valve operator unsupported	The valve was determined to be seismically inoperable. The operator was supported that same refueling out under MWR 935398	Fixed, MWR 935398 - completed 10/22/93	SQ-001633 resolves outlier. completed
45	A,I,V	7	SI	1SI-839D	SI B COLD LEG TO SI TEST LINE ISOLATION	O - The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection. Anchorage evaluation will be done. 7/25/94 - Support frame modified during U1R21. MR 93-047	The Shot in concrete nails used for anchorage of the valve support frame are not covered in the GIP. They are considered to be seismically operable by inspection.	The support frame anchorage was modified during the same U1R21 refueling outage under MR 93-047	Fixed, MR 93-047. Accepted 4/29/94	SQ-001644 resolves outlier. Completed
46	A,I,V	7	SI	2SI-839D	SI B COLD LEG TO SI TEST LINE ISOLATION	O - UNSUPPORTED OPERATOR - MODIFIED U2R19 - Supported operators MWR 935398	The AOV was mounted on a 3/4" line with the valve operator unsupported	The valve was determined to be seismically inoperable. The operator was supported that same refueling out under MWR 935398	Fixed, MWR 935398 - completed 10/22/93	SQ-001634 resolves outlier. Completed
47	I,V	7	SI	1SI-844A	T-34A SI ACCUMULATOR DRAIN TO T-16 RCDT	O - Within 1/2" of concrete wall. Valve on 1" line . Recommend brace on yoke. 7/25/94 - Added operator support during U1R21 MR 94-031	The valve is within 1/2" of concrete wall. Valve on 1" line .	An operator support was installed during the same U1R21 refueling outage under modification MR 94-031.	Fixed, MR 94-031 - Accepted 4/25/94	SQ-001645 resolves outlier. Completed
48	I,V	7	SI	1SI-844B	T-34B SI ACCUMULATOR DRAIN TO T-16 RCDT	O - Valve operator support is not anchored to the floor. 7/25/94 - Modified operator support during U1R21 MR 94-031	The valve operator support is not anchored to the floor.	The valve support was mounted during the same U1R21 under MR 94-031	Fixed, MR 94-031 - Accepted 4/25/94	SQ-001646 resolves outlier. Completed
49	I,V,RG	7	SI	1SI-846	T-34A/B SI ACCUM NITROGEN INLET CONTROL	O - 36" offset on 1.25" line. Because of pipe support configuration, potential for pipe overstress.	The AOV offset of 36" < 45" allowable offset for a 1" line. However, because of the pipe support configuration, there is a potential for pipe overstress.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria. Modification request MR 94-066"B is initiated to upgrade the support of the 1" line.	(MR 94-066"B is incorrect) MR 95-059 installed a check valve, relief valve and regulator in the line during U1R23. S&L analysis WE-100165. Stresses are above allowable but below operability. CR 98-2401 created. 2/8/99: CR action (MAW) to do an analysis. MR 00-009 removed existing support and added two new supports.	SQ-001951 completed
50	I,V,RG	7	SI	2SI-846	T-34A/B SI ACCUM NITROGEN INLET CONTROL	O - 36" offset on 1.25" line. Because of pipe support configuration, potential for pipe overstress. Valve is considered operable - attached conduit will stabilize valve.	The AOV offset of 36" < 45" allowable offset for a 1" line. However, because of the pipe support configuration, there is a potential for pipe overstress.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria. Modification request MR 94-066"B is initiated to upgrade the support of the 1" line.	MR 94-066 was installed during U2R21. The pipe was moved to eliminated rubbing on adjacent pipe. New supports were installed on the valve operator and on each side of the valve. S&L analysis WE-200118, Rev. 0	SQ-001829 completed

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
51	I,V	7	SI	2SI-957	T-34A/B SI ACCUM NITROGEN HEADER VENT CONTROL	O - Yoke U-bolt missing, MWR submitted 7/25/94 - U-bolt to be installed U2R20 10/18/94 - U-Bolt installed 10/7/94 WO 935298	The valve operator yoke U-bolt was missing.	The valve was considered seismically operable based on a calculation that showed the pipe stress was < 2Sy. The valve operator U-bolt was installed during the next refueling outage under Word Order 935298	Fixed, WO 935298 installed a new U-bolt. Completed 10/10/94	SQ-001635 resolves outlier. Completed
52	I,RG	7	WG	1WG-1786	T-16 RCDD VENT	O - Even though 24" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported.	Even though 24" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	EWR 96-049 assigned - valves have been as-built, 9/3/98. Need to draft sketch for valve supports. 4/1/99 - MR 96-035 will install operator support. WO 9904473. Installation complete.	SQ-001775 resolves this outlier
53	I,RG	7	WG	2WG-1786	T-16 RCDD VENT	O - Even though 15" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported. Check offset, 1WG-1786 offset measured at 24" EWR	The AOV offset of 15" < 45" allowable offset for a 1" line. However, because of the pipe support configuration, there is a potential for pipe overstress.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	EWR 96-050 assigned - valves have been as-built, 9/3/98. Need to draft sketch for valve supports. 4/1/99 - MR 96-035 will install operator support. WO 9904476. Installation complete.	SQ-001777 resolves this outlier
54	I,RG	7	WG	1WG-1787	T-16 RCDD VENT	O - Even though 24" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported.	Even though 24" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	EWR 96-049 assigned - valves have been as-built, 9/3/98. Need to draft sketch for valve supports. 4/1/99 - MR 96-035 will install operator support. WO 9904473. Installation complete.	SQ-001776 resolves this outlier
55	I,RG	7	WG	2WG-1787	T-16 RCDD VENT	O - Even though 15" offset < 45" GIP allowable for a 1" there is a potential for pipe overstress in line 1"-WD-151R-1 because of how the 1" line is supported. Check offset, 1WG-1787 offset measured at 24" EWR	The AOV offset of 15" < 45" allowable offset for a 1" line. However, because of the pipe support configuration, there is a potential for pipe overstress.	The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	EWR 96-050 assigned - valves have been as-built, 9/3/98. Need to draft sketch for valve supports. 4/1/99 - MR 96-035 will install operator support. WO 9904476. Installation complete.	SQ-001778 resolves this outlier
56	A,I	8	SI	1SI-878A	P-15B SI PUMP R-1 REACTOR VESSEL INJECTION	O - SRT review of pipe analysis Evaluated - Stress report Accession # - WE-100104	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The pipe analysis, Accession # - WE-100104, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001647 resolves outlier.
57	A,I	8	SI	2SI-878A	P-15B SI PUMP R-1 REACTOR VESSEL INJECTION	O - Valve body not shimmed. MSA evaluated. Considered acceptable. Accession # - WE-200084	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The piping analysis, Accession # - WE-200084, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001636 resolves outlier.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
58	A,I	8	SI	1SI-878B	P-15A SI PUMP LOOP B INJECTION	O - SRT review of pipe analysis Evaluated - Stress report Accession # - WE-100104	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The pipe analysis, Accession # - WE-100104, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001648 resolves outlier.
59	A,I	8	SI	2SI-878B	P-15A SI PUMP LOOP B INJECTION	O - Valve body not shimmed. MSA evaluated. Considered acceptable. Accession # - WE-200084	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The piping analysis, Accession # - WE-200084, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001637 resolves outlier.
60	A,I	8	SI	1SI-878C	P-15B SI PUMP R-1 REACTOR VESSEL INJECTION	O - SRT review of pipe analysis Evaluated - Stress report Accession # - WE-100104	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The pipe analysis, Accession # - WE-100104, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001649 resolves outlier.
61	A,I	8	SI	2SI-878C	P-15B SI PUMP R-1 REACTOR VESSEL INJECTION	O - Valve body not shimmed. MSA evaluated. Considered acceptable. Accession # - WE-200084	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The piping analysis, Accession # - WE-200084, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001638 resolves outlier.
62	A,I	8	SI	1SI-878D	P-15A SI PUMP LOOP A INJECTION	O - SRT review of pipe analysis Evaluated - Stress report Accession # - WE-100104	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The pipe analysis, Accession # - WE-100104, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001650 resolves outlier.
63	A,I	8	SI	2SI-878D	P-15A SI PUMP LOOP A INJECTION	O - Valve body not shimmed. MSA evaluated. Considered acceptable. Accession # - WE-200084	The valve was supported by the valve operator but not the valve body. In addition, the gap between the valve body and the gravity support stanchion is not properly shimmed	The piping analysis, Accession # - WE-200084, shows that the valve will not be overstressed.	EWR 96-045 assigned to document resolution. NRC RAI asked for piping analysis. Resolved.	SQ-001639 resolves outlier.
64	A,I	10	VNAFW	HX-66	Auxiliary Feed Pump Area Cooler	O - Rubber isolators fail. They do not have sufficient shear and tension capacity to transfer the anchor loads to the concrete expansion anchors.	The air handling unit is mounted on rubber vibration isolators. The anchorage calculation concluded that the rubber isolators had insufficient capacity to transfer the anchorage loads to the concrete expansion anchors.	HX-66 is on the SSEL to maintain SW system integrity. The air handling and air cooling function is not required. The SW system engineer judged that a break in the attached 2" SW line would not significantly impact service water to other essential loads. The function of the air handling unit will be evaluated to determine if an anchorage upgrade is required.	EWR 96-046 assigned. MR 97-104 installed replacement vibration isolators. Accepted 2/28/98.	SQ-001672. Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
65	A,I	10	VNAFW	HX-66A	Auxiliary Feed Pump Area Cooler	O - The Spring isolator base plate yields.	The air handling unit is mounted on spring vibration isolators. The anchorage calculation determined that the spring isolator base plate will yield.	HX-66A is on the SSEL to maintain SW system integrity. The air handling and air cooling function is not required. The SW system engineer judged that a break in the attached 2" SW line would not significantly impact service water to other essential loads. The function of the air handling unit will be evaluated to determine if an anchorage upgrade is required.	EWR 96-047 assigned. MR 98-127 initiated. (RE: DNC) 2/11/99 - Need WO. WO 9808637 is replacing HX-66A cooling coils. Work complete.	SQ-001888 Outlier is resolved.
66	A,I	10	SW	HX-98	RESIDUAL HEAT REMOVAL PUMP AREA COOLING COIL	O - Mounted on Neoprene pads. Pads need further eval per GIP Section 4.4. Evaluation by S&A? 5/22/95 - During the bolt tightness check on 2/20/95, the concrete expansion anchors for the left rear rubber vibration isolator were found to be never installed	The air handling unit is mounted on rubber vibration isolators. The anchorage calculation concluded that the rubber isolators had insufficient capacity to transfer the anchorage loads to the concrete expansion anchors.	HX-98 is on the SSEL to maintain SW system integrity. The air handling and air cooling function is not required. The SW system engineer judged that a break in the attached 2 1/2" SW line would not significantly impact service water to other essential loads. The function of the air handling unit will be evaluated to determine if an anchorage upgrade is required.	EWR 96-048 assigned. MR 97-105 installed. WO 9807185 replaced HX-98 cooling coils.	SQ-001841. Outlier is resolved.
67	A,I	10	VNRC	1W-4A	CONTAINMENT CAVITY COOLING FAN	O - No anchorage Anchored during U1R21 by TCM and ARB. MR 94-032.	The air handling unit was found unanchored.O- No anchorage Anchored during U1R21 by TCM and ARB. MR 94-032.	The unit was anchored during that same U1R21 outage under modification MR 94-032.	Fixed, MR 94-032 installed new anchorage - 4/25/94.	SQ-001651 resolves outlier.
68	A,I	10	VNRC	1W-4B	CONTAINMENT CAVITY COOLING FAN	O - No anchorage Anchored during U1R21 by TCM and ARB. MR 94-032.	The air handling unit was found unanchored.O- No anchorage Anchored during U1R21 by TCM and ARB. MR 94-032.	The unit was anchored during that same U1R21 outage under modification MR 94-032.	Fixed, MR 94-032 installed new anchorage - 4/25/94.	SQ-001652 resolves outlier.
69	A,I,H	11	VNCSR	HX-38A1,A2,A3	CABLE SPREADING ROOM AIR CONDITIONING UNIT	O - No Anchorage, Motor on steel isolation springs. ISRS exceeds RS. New component 7/13/94. It is the parent component of HX-38A1, HX-38A2 and HX-38A3. Equipment class changed from 21 to 11	The chiller unit is not anchored, the compressor motors are on springs, and the seismic demand exceeds 1.5 x BS at the low frequency peak.	The chiller is on the SSEL to maintain SW integrity. A leak in the SW pipe would not significantly affect SW flow to other essential loads. The HVAC room is designed to handle that flooding from a SW break. The chill water cooling function of the unit is not required. The function of the chiller unit will be evaluated to determine if an anchorage upgrade is required.	EWR 96-052 assigned. Chiller HX-038A replaced. MR 97-048"B installed new heat exchangers.	SQ-001957 Outlier is resolved.
70	A,I,H	11	VNCR	HX-38B1,B2,B3,B4	CONTROL ROOM AIR CONDITIONING UNIT	O - No Anchorage, Motor on steel isolation springs. ISRS exceeds RS. New component 7/13/94. It is the parent component of HX-38B1, HX-38B2, HX-38B3 and HX-38B4. Equipment class changed from 21 to 11	The chiller unit is not anchored, the compressor motors are on springs, and the seismic demand exceeds 1.5 x BS at the low frequency peak.	The chiller is on the SSEL to maintain SW integrity. A leak in the SW pipe would not significantly affect SW flow to other essential loads. The HVAC room is designed to handle that flooding from a SW break. The chill water cooling function of the unit is not required. The function of the chiller unit will be evaluated to determine if an anchorage upgrade is required.	EWR 96-051 assigned. Chiller HX-038B replaced. MR 97-049"C installed new heat exchangers.	SQ-001962 Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
71	A,I	12	DA	K-4B	G-02 EDG Starting Air Compressor Motor or Diesel	O - Loose hand crank resting against it which may pose an interaction hazard. 4/21/95 - a hand crank mount has been installed on the wall adjacent to the compressor	A loose hand crank was resting against the air compressor posing an interaction hazard.	Hand crank installed on a bracket on the wall adjacent to the air compressor	Hand crank installed on a bracket on the wall adjacent to the air compressor	SQ-001822 Outlier is resolved.
72	A,I	16	125V	D-07	STATION BATTERY CHARGER	O - Interaction, CABINET IS NOT TIED TO ADJACENT CABINET, ALSO BLOCK WALL MAY GOVERN HCLPF. EWR submitted 2/4/94 for CSE to bolt battery charger to adjacent switchgear. MR 94-048	The battery charger is not attached to the adjacent switchgear.	The battery charger does not contain essential relays, and there are 3 switchgear cubicles between the battery charger and switchgear cubicle that contains the essential relays. Therefore, the battery charger and the switchgear are considered seismically operable. Modification Request MR 94-048 has been initiated to bolt these together.	MR 94-048 bolted D-07 to the old 2A-05. WO 9904504.	SQ-001938 Outlier is resolved.
73	A,I	16	125V	D-08	STATION BATTERY CHARGER	O - Interaction, CABINET IS NOT TIED TO ADJACENT CABINET, ALSO BLOCK WALL MAY GOVERN HCLPF. EWR submitted 2/4/94 for CSE to bolt battery charger to adjacent switchgear. MR 94-048	The battery charger is not attached to the adjacent switchgear.	The battery charger does not contain essential relays, and there are 3 switchgear cubicles between the battery charger and switchgear cubicle that contains the essential relays. Therefore, the battery charger and the switchgear are considered seismically operable. Modification Request MR 94-048 has been initiated to bolt these together.	MR 94-048 bolted D-08 to 1A-05. WO 9504505.	SQ-001939 Outlier is resolved.
74	A,I	16	Y	DY-0A	RED 125V DC/120V AC ALTERNATE INVERTER	O - Interaction; Mounted directly adjacent to 1C-167. The cabinets are not fastened together. P-REPORT	The outlier is an interaction. DY-0A is mounted directly adjacent to 1C-167. The cabinets are not fastened together.	The inverter does not contain any essential relays. It is IEEE 344-1975 qualified. It is considered seismically operable based on there being no instances of inverter failure due to impact in the earthquake experience database. The inverter will be fastened to the adjacent cabinet.	MR 96-037 assigned to move inverter to create a gap between inverter and relay cabinet. WO 9805184. Installation complete.	SQ-001867 Outlier is resolved.
75	A,I	16	Y	DY-0B	BLUE 125V DC/120V AC ALTERNATE INVERTER	O - Interaction; Mounted directly adjacent to 2C-156. The cabinets are not fastened together. P-REPORT	The outlier is an interaction. DY-0B is mounted directly adjacent to 2C-157. The cabinets are not fastened together.	The inverter does not contain any essential relays. It is IEEE 344-1975 qualified. It is considered seismically operable based on there being no instances of inverter failure due to impact in the earthquake experience database. The inverter will be fastened to the adjacent cabinet.	MR 96-037**A assigned to move inverter to create a gap between inverter and relay cabinet. WO 9805185. Installation complete	SQ-001868 Outlier is resolved.
76	A,I,RG	19	RC	2TE-450B	RC LOOP A HOT LEG TEMPERATURE RTD	O - Impinging on insulation. Does thermal expansion while hot accommodate seismic displacements? EWR submitted for MSA inspection/evaluation EWR 94-056. EWR determined that interaction was a problem. Calc N-94-168. MR 95-021 initiated to replace TE.	The temperature element is impinging on insulation. It must be determined if thermal expansion while hot accommodate seismic displacements.	An engineering evaluation showed that thermal expansion did not accommodate the expected seismic displacements. Modification request MR 95-021 is initiated to replace TE with a shorter one.	MR 95-021 initiated to replace TE with a bent unit. Scheduled for U2R23 (RE: PHB) Replacement TE installed U2R23	SQ-001570 Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
77	A,I,RG	19	RC	2TE-450D	RC LOOP A HOT LEG TEMPERATURE RTD	O - Impinging on insulation. Does thermal expansion while hot accommodate seismic displacements? EWR submitted for MSA inspection/evaluation. EWR 94-056 EWR determined that interaction was a problem, Calc N-94-168. MR 95-021 initiated to replace TE.	The temperature element is impinging on insulation. It must be determined if thermal expansion while hot accommodate seismic displacements.	An engineering evaluation showed that thermal expansion did not accommodate the expected seismic displacements. Modification request MR 95-021 is initiated to replace TE with a shorter one.	MR 95-021 initiated to replace TE with a bent unit. Scheduled for U2R23 (RE: PHB) Replacement TE installed U2R23	SQ-001571 Outlier is resolved.
78	I	19	RH	1TE-622	HX-11A RHR HX OUTLET TEMPERATURE RTD	O - Interaction. Pinned against pipe support. Support has a 2" gap so pipe could move and shear or bend element. Needs EWR.	The outlier concern is interaction. The TE is pinned against a pipe support. The support has a 2" gap so pipe could move and shear or bend element.	The piping analysis shows that the maximum expected pipe displacement at the TE is .13". Therefore only slight bending of the TE is expected and it is considered seismically operable. The temperature element will be related to removed the interaction concern. The item has been walked down for the IPEEE only. Subsequent to the walkdown, it has been screened out using the Seismic PSA screening criteria.	MR 96-036 assigned. MR 96-036 was cancelled. WO 9607885 repositioned the TE and conduit and secured w/ Loctite. (RE: Andy Hoy) Completed 7/21/97	SQ-001823 Outlier is resolved.
79	A,I,RG	20	MMS	C-01-1(2)C-04	MAIN CONTROL BOARDS	O - Interaction, adjacent supply cabinets not secured. EWR submitted. 7/25/94 - Supply cabinets secured. 1/18/95 - MR 94-021 installed 6/9/94 resolves interaction concern. Item identified during MCB walkdown 12/90 - Overhead lights and duct above control room restrained by chains or light metal straps that are sometimes hooked with open ended hooks. SRT not concerned that duct or lights pose a structural hazard, however, they may pose an operator (human injury) hazard.	An adjacent supply cabinet posed a spatial interaction hazard.	The supply cabinet was attached to the back of 2C-03 under modification MR 94-021.	Fixed, MR 94-021 bolted supply cabinets to the back of 1C-03 and 2C-03.	SQ-001824 Outlier is resolved.
80	A,I	20	IOPS	1C-75	TURBINE IOPS MAIN TRIP PANEL	O - Doors are not positively latched. T. Dykstra to submit MWR after inspection. 6/19/95 - Need to discuss with Steve Bowe to see if he would rather install different handles or have I&C start using the key lock to latch the door. 9/23/96 - WO 9607849	O - Doors are not positively latched.	The cabinet does not contain any essential relays, and the doors are fairly light weight therefore, significant damage is not expected to occur. I & C will be contacted to determine if the existing door latch can be used or whether a new handle would be preferred.	WO 9607849 installed new handle - completed 1/20/97	SQ-001825 Outlier is resolved.
81	A,I	20	IOPS	2C-75	TURBINE IOPS MAIN TRIP PANEL	O - Doors are not positively latched. T. Dykstra to submit MWR after inspection. 6/19/95 - Need to discuss with Steve Bowe to see if he would rather install different handles or have I&C start using the key lock to latch the door. 9/23/96 - WO 9607849	The doors are not positively latched.	The cabinet does not contain any essential relays, and the doors are fairly light weight therefore, significant damage is not expected to occur. I & C will be contacted to determine if the existing door latch can be used or whether a new handle would be preferred.	WO 9607850 installed new handle - completed 12/7/96	SQ-001826 Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
82	A,I	20	MMS	1C-105-114	PLANT PROCESS I&C CABINETS	O - 1C-105 door binding, not secured. Interaction - Supply cabinet interference EWR submitted. 1/18/95 - MR 94-021 installed 6/9/94 resolves interaction concern.	The door on 1C-105 was identified as binding and not being secured, allowing it to impact the cabinet.door binding, A adjacent supply cabinet poses and interaction concern.	The cabinet was bolted to the back of 1C-03 under MR 94-021. The door binding was checked by an I&C technician. The door does bind, but the binding does not prevent the door from closing. Technicians must use an extra effort to ensure the door is shut.	Fixed, MR 94-021 bolted supply cabinet to the back of 1C-03. Checked door binding with I&C technician. The door does bind, but the binding does not prevent the door from closing. Technicians must use an extra effort to ensure the door is shut.	SQ-001827 completed.
83	A,I	20	MMS	2C-105-114	PLANT PROCESS I&C CABINETS	O - Interaction - Supply cabinet interference EWR submitted. 1/18/95 - MR 94-021 installed 6/9/94 resolves interaction concern.	An adjacent supply cabinet posed a spatial interaction hazard.	The supply cabinet was attached to the back of 2C-03 under modification MR 94-021.	Fixed, MR 94-021 bolted supply cabinet to the back of 2C-03. Accepted 7/28/94	SQ-001830 completed.
84	A,I	20	RP	1C-115-133	PLANT PROCESS I&C CABINETS	O - Interaction - Table in SE corner should be secured or moved. EWR submitted. 1/18/95 - MR 94-021 installed 6/9/94 resolves interaction concern.	An adjacent supply cabinet posed a spatial interaction hazard.	The supply cabinet was attached to the back of 1C-03 under modification MR 94-021.	Fixed, MR 94-021 bolted supply cabinet to the back of 1C-03. Accepted 7/28/94	SQ-001831 completed.
85	A,I	20	RP	1C-151-155	RP TRAIN A RELAY CABINETS	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage. Needs EWR	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-007 will upgrade the anchorage.	MR 95-007 upgraded the anchorage - accepted 4/15/96	SQ-001832 Outlier is resolved.
86	A,I	20	RP	2C-151-155	RP TRAIN A RELAY CABINETS	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage. Needs EWR	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-008 will upgrade the anchorage.	MR 95-008 upgraded the anchorage. Outlier Resolved	SQ-001604 Outlier is resolved.
87	A,I	20	ESF	1C-156-157	SAFEGUARDS TRAIN A RELAY CABINETS	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage.	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-011 will upgrade the anchorage.	MR 95-011 cancelled, work combined with MR 95-007. MR 95-007 upgraded the anchorage - accepted 4/15/96	SQ-001524 completed.
88	A,I	20	ESF	2C-156-158	SAFEGUARDS TRAIN A RELAY CABINETS	O - Interaction; Mounted directly adjacent to inverter DY-OB. The cabinets are not fastened together. P-REPORT Provide Mod Package	The outlier is an Interaction. The cabinets are mounted directly adjacent to inverter DY-OB. The cabinets are not fastened together.	No "bad actor" relays are located in the cabinets. The relays in the cabinets have a seismic capacity of at least 4 g's. Therefore, they are considered seismically operable. The cabinet will be fastened to the adjacent inverter.	MR 96-037*A assigned to move inverter to create a gap between inverter and relay cabinet. WO 9805184. Installation complete.	SQ-001870 Outlier is resolved.
89	A,I	20	ESF	1C-158/166/167	SAFEGUARDS TRAIN B AND MISC RELAY CABINETS	O - Interaction; Mounted directly adjacent to inverter DY-OA. The cabinets are not fastened together. P-REPORT Provide Mod Package	The outlier is an Interaction. The cabinets are mounted directly adjacent to inverter DY-OA. The cabinets are not fastened together.	No "bad actor" relays are located in the cabinets. The relays in the cabinets have a seismic capacity of at least 4 g's. Therefore, they are considered seismically operable. The cabinet will be fastened to the adjacent inverter.	MR 96-037 assigned to move inverter to create a gap between inverter and relay cabinet. WO 9805185. Installation complete	SQ-001869 Outlier is resolved.
90	A,I	20	RP	1C-161-165	RP TRAIN B RELAY LOGIC CABINET (RED)	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage. Needs EWR	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-009 will upgrade the anchorage.	MR 95-009 cancelled, work combined with MR 95-007. MR 95-007 upgraded the anchorage - accepted 4/15/96	SQ-001843 Outlier is resolved.
91	A,I	20	RP	2C-161-165	RP TRAIN B RELAY CABINETS	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage. Needs EWR	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-010 will upgrade the anchorage.	MR 95-010 cancelled, work combined with MR 95-008. MR 95-008 upgraded the anchorage. Outlier Resolved.	SQ-001605 Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
92	A,I	20	ESF	2C-166-167	SAFEGUARDS TRAIN B AND MISC RELAY CABINETS	O - ANCHOR DETAIL Unknown. No specific information on the grout pad to concrete floor anchorage. Overhead light S-clamp needs to be clamped down. Needs EWR	The anchor detail for the grout pad and the perimeter channel is unknown.	Since the cabinet has anchorage as originally designed, it is considered seismically operable. Modification request MR 95-012 will upgrade the anchorage.	MR 95-012 cancelled - work transferred to MR 95-008. MR 95-008 upgrade the anchorage, accepted 10/25/95. WO 96-0001 (completed 5/3/96) inspected for open S-hooks on lighting in the CSR. 5 open S-hooks found and all were closed.	SC-001833 Outlier is resolved.
93	A,I	20	COMP	C-178-179	COMPUTER INPUT MUX	O - Line Printer adjacent to cabinet	Line Printer, LP-300, is kept on the floor adjacent to the cabinet.	C-178-179 are computer cabinets contain primarily solid state and circuit board components. There are no essential relays in the cabinets. The cabinets are considered seismically operable. 1&C will store the printer in a different location and have it adjacent to the cabinets only when being used.	12/30/98 - Have inspected the Computer Room on numerous occasions since the USI A-46 walkdown. The printer has been relocated. No interaction hazards were identified.	SC-001834 Outlier is resolved.
94	A,I,C	21	RH	2HX-11A	RESIDUAL HEAT REMOVAL HEAT EXCHANGER	O - Base bolt nuts not seated. 1/4" to 3/8" gaps. Not an operability concern since HX is top supported in both lateral directions.	The caste in place anchor bolt nuts are not fully seated. There are 1/4" to 3/8" gaps between the nut and the HX foot.	Not an operability concern since HX is top supported in both lateral directions.	EWR 96-053 assigned. WO 9815436 initiated to inspect / replace anchor bolt nuts. WO complete	SC-001835 Outlier is resolved.
95	A,I,C	21	CC	1T-12	COMPONENT COOLING SURGE TANK	O - Oversized anchor bolt holes (2.25" x 1.18") identified from WEST 685J114. Anchor bolts are 1" diameter. Too much clearance to say seismic load is transferred to enough anchor bolts.	The saddle anchorage on both ends of the tank has oversized anchor bolt holes (2.25" x 1.18") identified from WEST 685J114. The anchor bolts are 1" diameter. Therefore, there is too much clearance to say seismic load is transferred evenly to enough anchor bolts	There are large washers between the anchorage nut and the oval holes. Therefore, some load will be transferred to all of the anchor bolts. In addition, the attached piping will help in restraining the tank. Therefore, the tanks are considered seismically operable. The anchorage will be upgraded with a structural member between the tank base and the anchor bolt.	MR 94-091°C installed 1/2" steel plate under each of the nuts on the south side of the tank. The plate is welded to the saddle. The installation was checked 12/3/97	SC-001836 Outlier is resolved.
96	A,I,C	21	CC	2T-12	COMPONENT COOLING SURGE TANK	O - Oversized anchor bolt holes (2.25" x 1.18") identified from WEST 685J114. Anchor bolts are 1" diameter. Too much clearance to say seismic load is transferred to enough anchor bolts.	The saddle anchorage on both ends of the tank has oversized anchor bolt holes (2.25" x 1.18") identified from WEST 685J114. The anchor bolts are 1" diameter. Therefore, there is too much clearance to say seismic load is transferred evenly to enough anchor bolts	There are large washers between the anchorage nut and the oval holes. Therefore, some load will be transferred to all of the anchor bolts. In addition, the attached piping will help in restraining the tank. Therefore, the tanks are considered seismically operable. The anchorage will be upgraded with a structural member between the tank base and the anchor bolt.	MR 94-091°C installed 1/2" steel plate under each of the nuts on the south side of the tank. The plate is welded to the saddle. The installation was checked 12/3/97	SC-001837 Outlier is resolved.
97	A,I	21	SI	1T-13	REFUELING WATER STORAGE TANK W/6 IMMERSION HTRS	O - ANALYSIS/REINFORCEMENT 7/25/94 - Received DRAFT analysis from S&A showing RWST has sufficient capacity.	The tank does not pass the screening criteria of Section 7 of the GIP.	The tank has been analyzed using a finite element analysis [23].	In WE NRC RAI response NPL 97-0450, page 5 of 22, WE stated that the design margin from the A-46 analysis is not sufficient. EWR 97-169 assigned. MR 99-040 upgraded the RWST.	SC-001999 resolves this outlier

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
98	A,I	21	SI	2T-13	REFUELING WATER STORAGE TANK W/6 IMMERSION HTRS	O - ANALYSIS/REINFORCEMENT 7/25/94 - Received DRAFT analysis from S&A showing RWST has sufficient capacity.	The tank does not pass the screening criteria of Section 7 of the GIP.	The tank has been analyzed using a finite element analysis [23].	In WE NRC RAI response NPL 97-0450, page 5 of 22, WE stated that the design margin from the A-46 analysis is not sufficient. EWR 97-169 assigned. MR 99-041 upgraded RWST. MR 00-0052 replaced tank vent FME screen with a new screen.	SQ-001909 Outlier is resolved.
99	A,I	21	DA	T-61F	G-02 EDG STARTING AIR RECEIVER	O - Anchor - cracked grout	The grout under the foot of one of the air receiver tank legs is cracked.	An inspection subsequent to the seismic verification walkdown found a steel spacer plate under the leg of the tank. Therefore the grout is not structural and the tank is considered seismically operable. The leg will be re-grouted.	WO- 9501221 completed 5/23/97 - installed new grout	SQ-001838 resolves the outlier
100	A,I	22		AUX8FTAREA	PAB 8' Cable & Conduit Raceways		LAR 9 is an OUTLIER because it does not meet the requirements of Section 8.0 of the GIP. See S&A's LAR - Cable Tray and Conduit Supports Report, 91C2696-C-018.		Work completed under MR 96-022. Post installation walkdown complete. WO 9808941	SQ-001714 resolves the outlier
101	A,I	22		SPREADINGRM	CSR Cable & Conduit Raceways		LAR 3 & LAR 4 are OUTLIER(s) because it does not meet the requirements of Section 8.0 of the GIP. See S&A's LAR - Cable Tray and Conduit Supports Report, 91C2696-C-018.		MR 96-080 created to upgrade cable tray supports in the CSR (RE: DNC). Installation complete	SQ-001881 Outlier is resolved.
102	A,I	22		U1C21FTAREA	U1C 21' Cable & Conduit Raceways	O - Loose base clip angle	One outlier was noted on the floor-to-ceiling hanger east of the access hatch near location 8 (as marked on liner wall). The base clip angle on one side is loose and should be tightened.		DNC & TJD1 inspected & tightened the base clip angle 6/4/98. The CEA turned in < 1/4 turn and satisfied the requirements of a tightness check.	SQ-001388 resolves outlier
103	A,I	22		U1C46FTAREA	U1C 46' Cable & Conduit Raceways	O - Cables not tied to tray	(1) Vertical trays 1VR01 and 1VQ01 had large cable bundles (aka "pigtailed") from wall penetrations that were not tied to vertical tray and are free to swing, see figure 12.		Resolved during U1R24. Verified during walkdown. WO 9808624	SQ-001549 resolves outlier
104	A,I	22		U1C46FTAREA	U1C 46' Cable & Conduit Raceways	O - Cables not tied to tray	(2) Horizontal tray 1VA04 at penetration has cable pigtail hanging out of tray and not restrained to or within the tray. There appears to be other tray bundles with similar problems behind it, see figure 13.		Resolved during U1R24. Verified during walkdown. WO 9808624	SQ-001549 resolves outlier

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-48 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
105	A,I	22		U2C46FTAREA	U2C 46' Cable & Conduit Raceways	O - Cables not tied to tray	There is an isolated vertical cable tray which has no plastic ties and the cables appear to be hanging out of it, hence it is an outlier, see figure 18.		Resolved during U2R23. WO 9713098. Verified during walkdown.	SQ-001640 resolves outlier
106	A,I	1	480V	1B-32	480V MOTOR CONTROL CENTER PAB SAFEGUARDS	SAT - O- End cabinet on right hand side, base channel CEA fastening nuts are loose. Need to be tightened. T. Dykstra to develop CEA torque tightness procedure, Al Bayer to review. Then submit WO to do torque tightness check. WO 9411729. Maintenance			4/20/95 - Attempt to turn the nut during the bolt tightness test was unsuccessful. Application of torque > installation torque was not desirable due to possibility of breaking the bolt. Since the bolt is loaded in shear only, this is considered acceptable	NOT AN OUTLIER - Resolved in the anchorage analysis on the original SEWS
107	A,I,RG	3	4.16KV	1A-05	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	SAT - O-WELD QUALITY IN QUESTION, Recommend thorough weld inspection. T. Dykstra to check with QA about weld inspections			Weld inspection completed, used results to adjust anchorage capacity in the anchorage calculation.	NOT AN OUTLIER - resolved w/ weld inspection and anchorage calc.
108	A,I,RG	3	4.16KV	2A-05	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	SAT - O-WELD QUALITY IN QUESTION, Recommend thorough weld inspection. T. Dykstra to check with QA about weld inspections			Weld inspection completed, used results to adjust anchorage capacity in the anchorage calculation.	NOT AN OUTLIER - resolved w/ weld inspection and anchorage calc.
109	A,I,RG	3	4.16KV	1A-06 (old)	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	PO - Not fastened to adjacent D-08 battery charger. WELD QUALITY IN QUESTION, Recommend thorough weld inspection. T. Dykstra to check with QA about weld inspections. 11/7/94 - Renamed to 1A-06 (old). The old 1A-05 and old 1A-06 will be hard tied together			MR 94-048 connected cabinets together. WO 9904505.	SQ-001939 Outlier is resolved.
110	A,I,RG	3	4.16KV	2A-06 (old)	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	PO - Not fastened to adjacent D-07 battery charger. WELD QUALITY IN QUESTION, Recommend thorough weld inspection. T. Dykstra to check with QA about weld inspections. 11/7/94 - Renamed to 1A-06 (old). The old 1A-05 and old 1A-06 will be hard tied together			MR 94-048 connected cabinets together. WO 9904504.	SQ-001938 Outlier is resolved.

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
111	I,RG	7	SC	1SC-966A	PZR STEAM SAMPLE CONTAINMENT ISOLATION	PO - Valve on 3/8" tubing. Valve body clamped to support shelf by 2 U-bolts. May not be able to resist moment. Need material 11/11/94 Update - Material info provided to S&A. Valve status changed to Outlier based on walkdown 7/26/94. SRT recommends operator support	The AOV body is mounted to a support shelf by 2 U-bolts in friction. The valve is mounted on a 3/8" line. If the U-bolts slip, the potential exists for the line to be overstress.	This valve was not declared an outlier. This valve is normally closed and is required to stay closed in the event of an SSE. Rather than analyzing the U-bolt support's capacity, the SRT recommended installing an operator support as a prudent fix. The U	MR 96-035 installed operator supports.	SQ-001772 resolves this issue
112	I,RG	7	SC	1SC-966B	PZR LIQUID SAMPLE CONTAINMENT ISOLATION	PO - Valve on 3/8" tubing. Valve body clamped to support shelf by 2 U-bolts. May not be able to resist moment. Need material 11/11/94 Update - Material info provided to S&A. Valve status changed to Outlier based on walkdown 7/26/94. SRT recommends operator support	The AOV body is mounted to a support shelf by 2 U-bolts in friction. The valve is mounted on a 3/8" line. If the U-bolts slip, the potential exists for the line to be overstress.	This valve was not declared an outlier. This valve is normally closed and is required to stay closed in the event of an SSE. Rather than analyzing the U-bolt support's capacity, the SRT recommended installing an operator support as a prudent fix. The U	MR 96-035 installed operator supports.	SQ-001773 resolves this issue
113	A,I,RG	7	SC	1SC-966C	RC HOT LEG SAMPLE	PO - Valve on 3/8" tubing. Valve body clamped to support shelf by 2 U-bolts. May not be able to resist moment. Need material 11/11/94 Update - Material info provided to S&A. Valve status changed to Outlier based on walkdown 7/26/94. SRT recommends operator support	The AOV body is mounted to a support shelf by 2 U-bolts in friction. The valve is mounted on a 3/8" line. If the U-bolts slip, the potential exists for the line to be overstress.	This valve was not declared an outlier. This valve is normally open and is required to close in the event of an SSE. Rather than analyzing the U-bolt support's capacity, the SRT recommended installing an operator support as a prudent fix. The U1 configuration	MR 96-035 installed operator supports.	SQ-001774 resolves this issue
114	A,I,V	7	SI	2SI-897B	SI TEST LINE RETURN SECOND OFF ISOLATION	SAT - O - Attached copper lines too stiff. T. Dykstra to evaluate failure if copper line breaks. Valve currently gagged open during normal operation. P-MAT 11/11/94 Update - Valve walked down again 9/26/94. SRT confirmed that copper line was too st			Resolved	NOT AN OUTLIER - Resolved on original SEWS
115	A,I,C	8	CC	1CC-815	T-12 CC SURGE TANK EMERGENCY MAKEUP WATER INLET	PO - pipe has insufficient supports - 11/11/94 update - STATUS changed to outlier. Valves also identified as having insufficient pipe support adjacent to valve during the CCW Upgrade piping walkdowns. PO - 3g required to qualify valve yoke. Trapeze supports may allow valve yoke to swing resulting in possible pipe failure			NOT AN OUTLIER - CCW Upgrade identified these valves as having insufficient support. - MR 94-091 installed valve support. Verified installation 12/3/97	NOT AN OUTLIER - Resolved on original SEWS
116	A,I,C	8	CC	2CC-815	T-12 CC SURGE TANK EMERGENCY MAKEUP WATER INLET	PO - pipe has insufficient supports - 11/11/94 update - STATUS changed to outlier. Valves also identified as having insufficient pipe support adjacent to valve during the CCW Upgrade piping walkdowns. PO - 3g required to qualify valve yoke. Trapeze supports may allow valve yoke to swing resulting in possible pipe failure			NOT AN OUTLIER - CCW Upgrade identified these valves as having insufficient support. - MR 94-091 installed valve support. Verified installation 12/3/97	NOT AN OUTLIER - Resolved on original SEWS

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
117	A,I	8	SW	SW-2832A-S	K-3A SA COMPRESSOR INLET SOLENOID	SAT - O-Attached conduit is very flexible and should be restrained. Check with Frank Mueller about SW piping replacement. Rewalked 10/26/94 by SR St Amour and W Djordjevic. Determined flexibility was not a problem.			Resolved	NOT AN OUTLIER - Resolved on original SEWS
118	A,I	15	125V	D-05	125V DC STATION BATTERY	SAT - O-SPACER. Need battery cell type information. EWR submitted 2/4/94 for ESE to install styrofoam bead spacers. 7/25/94 - EWR cancelled. T. Dykstra to submit MWR to install spacers. 1/18/95 - Qual report shows batteries shake table tested in same			Resolved	NOT AN OUTLIER - Resolved on original SEWS
119	A,I	15	125V	D-06	125V DC STATION BATTERY	SAT - O-SPACER. EWR submitted 2/4/94 for ESE to install styrofoam bead spacers. 7/25/94 - EWR cancelled. T. Dykstra to submit MWR to install spacers. 1/18/95 - Qual report shows batteries shake table tested in same configuration at PBNP. No addition			Resolved	NOT AN OUTLIER - Resolved on original SEWS
120	A,I	15	125V	D-305	SWING STATION BATTERY	SAT - O-SPACER. EWR submitted 2/4/94 for ESE to install styrofoam bead spacers. 7/25/94 - EWR cancelled. T. Dykstra to submit MWR to install spacers. 1/18/95 - Qual report shows batteries shake table tested in same configuration at PBNP. No addition			Resolved	NOT AN OUTLIER - Resolved on original SEWS
121	A,I,C	18	CC	FI-643	K-1A WASTE GAS COMP CC RETURN FLOW INDICATOR	SAT - O-Anchor Bolted to Block Wall - no thru bolts T. Dykstra to check scope of block wall program. Tug tested by B.O. Sasman & W. Djordjevic 7/94 OK.			Resolved	NOT AN OUTLIER - Resolved on original SEWS
122	A,I,C	18	CC	FI-645	K-1B WASTE GAS COMP CC RETURN FLOW INDICATOR	SAT - O-Anchor Bolted to Block Wall - no thru bolts T. Dykstra to check scope of block wall program. Tug tested by B.O. Sasman & W. Djordjevic 7/94 OK.			Resolved	NOT AN OUTLIER - Resolved on original SEWS
123	I,RG	18	AF	LT-4039	T-24B CST LEVEL TRANSMITTER	O - Interaction, POTENTIAL FOR BLOCK WALL TO FALL ON COMPONENT. T. Dykstra to evaluate function of LT. 1/18/95 - LTs removed from A-46 list. Still IPEEE and RG 1.97.			Deleted from SSEL	Deleted from SSEL
124	I,RG	18	AF	LT-4040	T-24A CST LEVEL TRANSMITTER	O - Interaction, POTENTIAL FOR BLOCK WALL TO FALL ON COMPONENT. T. Dykstra to evaluate function of LT. 1/18/95 - LTs removed from A-46 list. Still IPEEE and RG 1.97.			Deleted from SSEL	Deleted from SSEL

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
125	I,RG	18	AF	LT-4041	T-24B CST LEVEL TRANSMITTER	O - Interaction, POTENTIAL FOR BLOCK WALL TO FALL ON COMPONENT. T. Dykstra to evaluate function of LT. 1/18/95 - LTs removed from A-46 list. Still IPEEE and RG 1.97.			Deleted from SSEL	Deleted from SSEL
126	I,RG	18	AF	LT-4038	T-24A CST LEVEL TRANSMITTER	O - Interaction, POTENTIAL FOR BLOCK WALL TO FALL ON COMPONENT. T. Dykstra to evaluate function of LT. 1/18/95 - LTs removed from A-46 list. Still IPEEE and RG 1.97.			Deleted from SSEL	Deleted from SSEL
127	A,I	18	RP	2PT-469	HX-1A SG PRESSURE TRANSMITTER	SAT - O-Interaction - Insufficient slack on inlet tube. T. Dykstra to submit MWR 11/11/94 Update - 926/94 walkdown by SRT did tug test on all 6 PTs in PAB 46' elevation east of SFP. Concluded that robust stanchions were rigid enough to prevent difference			Resolved	NOT AN OUTLIER - Resolved on original SEWS
128	A,I	18	RP	2PT-482	HX-1A SG STEAM PRESSURE TRANSMITTER	SAT - O-Interaction - Insufficient slack on inlet tube. T. Dykstra to submit MWR 11/11/94 Update - 926/94 walkdown by SRT did tug test on all 6 PTs in PAB 46' elevation east of SFP. Concluded that robust stanchions were rigid enough to prevent difference			Resolved	NOT AN OUTLIER - Resolved on original SEWS
129	I,RG	18	SI	1PT-936	T-34B SI ACCUMULATOR PRESSURE TRANSMITTER	SAT - resolved using Unistrut deflection calc. O - Cable tray support within 3/4" of PT			Resolved on SEWS using a Unistrut deflection calc.	NOT AN OUTLIER - Resolved on original SEWS
130	A,I,C	18	SC	1RK-20	PRIMARY PLANT SAMPLE ROOM RACK	SAT - O - Interim outlier until anchorage is checked. Interaction - adjacent sample sink has no visible anchorage			4/25/95 - phone conversation with Wally Djordjevic - determined that since the only function of the rack was to support flow indicator and that the sample tubing is isolated upstream of rack and there is no requirement to operate the valves on the rack.	NOT AN OUTLIER - Resolved on original SEWS
131	A,I,C	18	SC	2RK-20	PRIMARY PLANT SAMPLE ROOM RACK	SAT - O - Interim outlier until anchorage is checked. Interaction - adjacent sample sink has no visible anchorage			4/25/95 - phone conversation with Wally Djordjevic - determined that since the only function of the rack was to support flow indicator and that the sample tubing is isolated upstream of rack and there is no requirement to operate the valves on the rack.	NOT AN OUTLIER - Resolved on original SEWS

Outlier No.	Program	Equip Class	System	Equip ID	Noun Name	Status at Time of SRT Walkdown in 1993	Outlier Description	Interim Resolution Documented in the USI A-46 Seismic Evaluation Report to NRC	Status / Final Resolution	Required Close Out
132	A,I	20	RP	2C-115-133	PLANT PROCESS I&C CABINETS	PO - Interaction - Supply cabinet interference. EWR submitted. 1/18/95 - MR 94-021 installed 6/9/94 resolves interaction concern. 6/28/96 - WO 9503622 replaced missing CEA bolt in 2C-130.			Fixed, MR 94-021 bolted supply cabinet to the back of 2C-03.	SQ-001839 completed.

ATTACHMENT A Seismic Walkdown Equipment List Unit 2 (SWEL)

SWEL	RISK	N E W	UNIT	SYS CODE	EQUIP CLASS	WALK BY AREA	EQUIP #	EQUIP NAME	1	2	3	4	5	TRN	IPEEE Equip. Enhanced	LOCATION DESC
SWEL1-2	Y		2	AF	5	30	2P-029	AUX FEEDWATER TURBINE-DRIVEN PUMP	X	X		X		B		8/CB/AFP RM 2P-29 CUB
SWEL1-2			0	AF	5	30	P-038B	STANDBY STEAM GENERATOR PUMP	X	X		X		B		8/CB/AFP RM P-38B CUB
SWEL1-2	Y	Y	2	AF	7	30	2AF-04002	2P-29 AFP MINI RECIRC CONTROL	X	X		X		B		8/CB/AFP RM 2P-29 CUB
SWEL1-2		Y	0	AF	7	30	AF-04014	P-38B SSGP MINI RECIRC CONTROL	X	X		X		B		8/CB/AFP RM P-38B CUB
SWEL1-2			0	AF	7	30	AF-04019	P-38B SSGP DISCHARGE CONTROL	X	X		X		B		8/CB/AFP RM P-38B CUB
SWEL1-2		Y	0	125V	14	30	D-64	125V DC DISTRIBUTION PANEL	X	X	X	X	X	B		8/CB/AFP RM 2P-29 CUB
SWEL1-2			2	AF	18	30	2RK-35	2P-29 AUX FEEDWATER PUMP INSTRUMENTATION RACK	X	X		X		B		8/CB/AFP RM 2P-29 CUB
SWEL1-2			2	MS	20	30	2C-197	2P-29 AFP SUCTION PRESSURE CONTROL PANEL	X	X		X		B		8/CB/AFP RM 2P-29 CUB
SWEL1-2			2	AF	21a	30	2T-212	2P-29 AFP MINI RECIRC IA 2AF-4002 BACKUP ACCUMULATOR	X	X		X		B		8/CB/AFP RM
SWEL1-2			2	AF	8a	30	2AF-04000	2P-29 AFP DISCHARGE 2HX-1B SG INLET ISOLATION MOV	X	X		X		B		8/CB/AFP RM 2P-29 CUB
SWEL1-2			2	AF	8a	30	2AF-04001	2P-29 AFP DISCHARGE 2HX-1A SG INLET ISOLATION MOV	X	X		X		B		8/CB/AFP RM 2P-29 CUB
SWEL1-2			2	AF	8a	30	2AF-04006	2P-29 AFP SUCTION FROM SERVICE WATER	X	X		X		B		8/CB/AFP RM 2P-29 CUB
SWEL1-2			0	AF	8a	30	AF-04016	P-38B SSGP SUCTION FROM SERVICE WATER	X	X		X		B		8/CB/AFP RM P-38B CUB
SWEL1-2			0	AF	8a	30	AF-04020	P-38B SSGP DISCHARGE TO 2HX-1B STEAM GENERATOR	X	X		X		B		8/CB/AFP RM P-38B CUB
SWEL1-2			2	MS	8b	30	2MS-02090	2P-29 AFP BEARING COOLING INLET	X	X		X		B		8/CB/AFP RM
SWEL1-2	Y		2	480V	2	9	2B-03	480V SAFEGUARDS LOAD CENTER	X	X	X	X	X	A	X	26/CB/CSR
SWEL1-2	Y		2	480V	2	9	2B-04	480V SAFEGUARDS LOAD CENTER	X	X	X	X	X	B	X	26/CB/CSR
SWEL1-2	Y		2	480V	4	9	2X-13	2B-03 STATION SERVICE TRANSFORMER	X	X	X	X	X	A	X	26/CB/CSR
SWEL1-2	Y		2	480V	4	9	2X-14	2B-04 STATION SERVICE TRANSFORMER	X	X	X	X	X	B	X	26/CB/CSR
SWEL1-2		Y	0	125V	14	9	D-11	125V DC DISTRIBUTION PANEL	X	X	X	X	X	A		26/CB/CSR EAST
SWEL1-2	Y	Y	0	125V	14	9	D-13	125V DC DISTRIBUTION PANEL	X	X	X	X	X	B		26/CB/CSR EAST
SWEL1-2		Y	0	125V	14	9	D-26	125V DC DISTRIBUTION PANEL	X	X	X	X	X	A		26/CB/CSR
SWEL1-2		Y	0	125V	14	9	D-27	125V DC DISTRIBUTION PANEL	X	X	X	X	X	B		26/CB/CSR EAST
SWEL1-2			0	Y	14	9	Y-203	WHITE 120V INVERTER DISTRIBUTION PANEL	X	X	X	X	X	A		26/CB/CSR WEST WALL
SWEL1-2			2	Y	16	9	2DY-01	RED 125V DC/120V AC INVERTER	X	X	X	X	X	A		26/CB/CSR
SWEL1-2			2	Y	16	9	2DY-02	BLUE 125V DC/120V AC INVERTER	X	X	X	X	X	B		26/CB/CSR
SWEL1-2			0	Y	16	9	DY-0A	RED 125V DC/120V AC ALTERNATE INVERTER	X	X	X	X	X	A	X	26/CB/CSR
SWEL1-2	Y		0	SW	6	27	P-032B	SERVICE WATER PUMP	X			X		A	X	8/CWPH/SW BLDG
SWEL1-2	Y		0	SW	6	27	P-032C	SERVICE WATER PUMP	X			X		B	X	8/CWPH/SW BLDG
SWEL1-2	Y		0	SW	6	28	P-032D	SERVICE WATER PUMP	X			X		B	X	8/CWPH/SW BLDG
SWEL1-2	Y		0	SW	6	28	P-032E	SERVICE WATER PUMP	X			X		B	X	8/CWPH/SW BLDG
SWEL1-2	Y		0	SW	6	28	P-032F	SERVICE WATER PUMP	X			X		A	X	8/CWPH/SW BLDG
SWEL1-2			0	SW	8a	27	SW-02890	NORTH HEADER TO SOUTH SUPPLY HEADER CROSSCONNECT	X			X		B		8/CWPH/SW BLDG
SWEL1-2			0	SW	8a	28	SW-02891	SOUTH TO NORTH SUPPLY HEADER CROSSCONNECT	X			X		A		8/CWPH/SW BLDG
SWEL1-2		Y	2	480V	1	35	2B-40	480V MOTOR CONTROL CENTER DGB	X	X	X	X	X	B		28/DGB/G-04 SWGR RM
SWEL1-2		Y	0	DG	9	31	W-181B1	G-04 EDG HX-265B RADIATOR FAN	X	X	X	X	X	B		50/DGB/G-04 RADTR RM
SWEL1-2		Y	0	DG	9	31	W-181B2	G-04 EDG HX-265B RADIATOR FAN	X	X	X	X	X	B		50/DGB/G-04 RADTR RM
SWEL1-2		Y	0	DG	9	31	W-181B3	G-04 EDG HX-265B RADIATOR FAN	X	X	X	X	X	B		50/DGB/G-04 RADTR RM
SWEL1-2	Y	Y	0	VNDG	9	32	W-184B	G-04 EDG RM LARGE CAPACITY EXHAUST FAN	X	X	X	X	X	B		50/DGB/G-04 FAN RM
SWEL1-2	Y	Y	0	VNDG	9	32	W-184C	G-04 EDG RM SMALL CAPACITY EXHAUST FAN	X	X	X	X	X	B		50/DGB/G-04 FAN RM

SWEL	RISK	N E W	UNIT	SYS CODE	EQUIP CLASS	WALK BY AREA	EQUIP #	EQUIP NAME	1	2	3	4	5	TRN	IPEEE Equip. Enhanced	LOCATION DESC
SWEL1-2	Y		0	125V	14	35	D-40	G-04 EDG DC DISTRIBUTION PANEL	X	X	X	X	X	B		28/DGB/G-04 SWGR RM
SWEL1-2	Y	Y	0	DG	17	36	G-04	EMERGENCY DIESEL GENERATOR	X	X	X	X	X	B		28/DGB/G-04 RM
SWEL1-2		Y	0	DG	20	35	C-082	G-04 EDG CONTROL PANEL	X	X	X	X	X	B		28/DGB/G-04 SWGR RM
SWEL1-2		Y	0	DA	21a	36	T-171A	G-04 EDG STARTING AIR RECEIVER	X	X	X	X	X	B		28/DGB/G-04 RM
SWEL1-2		Y	0	DA	21a	36	T-171B	G-04 EDG STARTING AIR RECEIVER	X	X	X	X	X	B		28/DGB/G-04 RM
SWEL1-2		Y	1	480V	1	11	1B420C-B957D	P-32C SERVICE WATER PUMP NORMAL/ALT TRANSFER SW	X					B		8/CB/G-02 RM
SWEL1-2		Y	2	480V	1	11	2B427C-B957D	P-32E SERVICE WATER PUMP NORMAL/ALT TRANSFER SW	X					B		8/CB/G-02 RM
SWEL1-2	Y		0	DG	17	11	G-02	EMERGENCY DIESEL GENERATOR	X	X	X	X	X	A		8/CB/G-02 RM
SWEL1-2			0	DG	20	11	C-035	G-02 EDG ALARM AND ELECTRICAL PANEL	X	X	X	X	X	A		8/CB/G-02 RM W WALL
SWEL1-2			0	DG	20	11	C-035A	G-02 EDG LOCAL TRANSFER PANEL	X	X	X	X	X	A		8/CB/G-02 RM W WALL
SWEL1-2			0	DG	20	11	C-079	G-02 EDG DC POWER TRANSFER CONTROL PANEL	X	X	X	X	X	A		8/CB/G-02 RM
SWEL1-2			0	FO	21a	11	T-031B	G-02 DIESEL GENERATOR DAY TANK	X	X	X	X	X	A		8/CB/G-02 RM
SWEL1-2			0	DA	21a	11	T-061A	G-02 EDG STARTING AIR RECEIVER (RIGHT BANK)	X	X	X	X	X	A		8/CB/G-02 RM
SWEL1-2			0	DA	21a	11	T-061D	G-02 EDG STARTING AIR RECEIVER (LEFT BANK)	X	X	X	X	X	A		8/CB/G-02 RM
SWEL1-2			0	DA	21a	11	T-061F	G-02 EDG STARTING AIR RECEIVER (LEFT BANK)	X	X	X	X	X	A		8/CB/G-02 RM
SWEL1-2			0	FO	8a	11	FO-03931	T-31B G-02 EDG DAY TANK INLET SECOND OFF ISOLATION	X	X	X	X	X	A		8/CB/G-02 RM
SWEL1-2			0	SW	8b	29	SW-02820-S	K-2B IA COMPRESSOR INLET SOLENOID					X	B		G-02 ROOM
SWEL1-2			0	SW	8b	29	SW-02826-S	K-2A IA COMPRESSOR INLET SOLENOID				X		A		8/CB/AIR COMP RM
SWEL1-2			2	IA	7	23	2IA-03047	U2C IA HEADER INLET CONTROL					X	A		26/PAB/PIPEWAY #3
SWEL1-2			2	IA	7	23	2IA-03048	U2C IA HEADER INLET CONTROL					X	B		26/PAB/PIPEWAY #3
SWEL1-2	Y		0	SW	8a	22	SW-02869	NORTH HEADER TO WEST HEADER				X		A		26/PAB/CENTRAL
SWEL1-2	Y		0	SW	8a	46	SW-02870	SOUTH HEADER TO WEST HEADER CROSSCONNECT				X		B		26/PAB/CENTRAL
SWEL1-2	Y		2	CC	5	20	2P-011A	COMPONENT COOLING WATER PUMP	X	X		X		A	X	8/PAB/CC PUMP AREA
SWEL1-2	Y		2	CC	5	20	2P-011B	COMPONENT COOLING WATER PUMP	X	X		X		B	X	8/PAB/CC PUMP AREA
SWEL1-2			2	SI	5	19	2P-014A	CONTAINMENT SPRAY PUMP					X	A	X	8/PAB/SPRAY PUMP AREA
SWEL1-2			2	SI	5	19	2P-014B	CONTAINMENT SPRAY PUMP					X	B	X	8/PAB/SPRAY PUMP AREA
SWEL1-2	Y		2	SI	5	19	2P-015A	SAFETY INJECTION PUMP	X	X	X	X	X	A		8/PAB/SI PUMP AREA
SWEL1-2	Y		2	SI	5	19	2P-015B	SAFETY INJECTION PUMP	X	X	X	X	X	B		8/PAB/SI PUMP AREA
SWEL1-2			2	SI	8a	19	2SI-00825B	T-13 RWST OUTLET TO P-15A/B SI PUMP	X	X	X	X	X	B		8/PAB/SPRAY PUMP AREA
SWEL1-2	Y		2	SI	8a	19	2SI-00857B	HX-11B RHR HX OUTLET TO P-15B SI PUMP SUCTION	X	X	X	X	X	B		8/PAB/SI PUMP AREA
SWEL1-2	Y		2	SI	8a	19	2SI-00896B	P-15B SI PUMP SUCTION	X	X	X	X	X	B		8/PAB/SI PUMP AREA
SWEL1-2	Y		2	480V	1	16	2B-32	480V MOTOR CONTROL CENTER PAB SAFEGUARDS	X	X	X	X	X	A		8/PAB/U2 CHG PUMP AREA
SWEL1-2	Y		2	CV	5	40	2P-002C	CHARGING PUMP (Pump Only as Pressure Boundary)	X	X	X			B		8/PAB/U2 CHG PUMP RM
SWEL1-2			2	CV	7	12	2CV-00142	CHARGING LINE FLOW CONTROL	X	X		X		A		8/PAB/PIPEWAY #4
SWEL1-2	Y		2	SI	8a	12	2SI-00866A	COLD LEG INJECTION LINE ISOLATION	X	X	X	X	X	A		8/PAB/PIPEWAY #4
SWEL1-2	Y		2	CV	8a	16	2CV-00112B	2P-2A-C CHARGING PUMP REFUELING WATER SUCTION	X	X		X		A		8/PAB/U2 CHG PUMP AREA
SWEL1-2	Y		2	SI	8a	12	2SI-00866B	CORE DELUGE INJECTION LINE ISOLATION	X	X	X	X	X	B		8/PAB/PIPEWAY #4
SWEL1-2			2	SI	21a	49, 50	T-034A	SAFETY INJECTION ACCUMULATOR	X	X	X			A		21/U2C/NW QTR, 46/U2CNWQTR
SWEL1-2			2	SI	8a	49	SI-00841A	T-34A SI ACCUMULATOR OUTLET OPERATOR	X	X	X			A		21/U2C/NW QTR
SWEL1-2			2	SI	8a	51	SI-00878A	P-15B SI PUMP R-1 REACTOR VESSEL INJECTION	X	X	X		X	A		21/U2C/C-1 AIR LOCK AREA EAST
SWEL1-2	Y		2	RH	8a	52	RH-00720	RHR RETURN TO RCS		X				A		46/U2C/SE QTR

SWEL	RISK	N E W	UNIT	SYS CODE	EQUIP CLASS	WALK BY AREA	EQUIP #	EQUIP NAME	1	2	3	4	5	TRN	IPEEE Equip. Enhanced	LOCATION DESC
SWEL1-2			2	MS	7	25	2MS-02015	HX-1B SG HDR ATMOSPHERIC STEAM DUMP CONTROL	X	X		X		B		85/U2F
SWEL1-2			2	MS	7	25	2MS-02016	HX-1A SG HDR ATMOSPHERIC STEAM DUMP CONTROL	X	X		X		A		85/U2F
SWEL1-2			2	480V	1	21	2B-39	480V MOTOR CONTROL CENTER TRAIN A BATTERY CHARGER SUPPLY	X	X	X	X	X	A		8/CB/VSG RM
SWEL1-2			2	480V	1	21	2B-49	480V MOTOR CONTROL CENTER TRAIN B BATTERY CHARGER SUPPLY	X	X	X	X	X	B		8/CB/VSG RM
SWEL1-2	Y		2	4.16KV	3	21	2A-05	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	X	X	X	X	X	A		8/CB/VSG RM
SWEL1-2	Y		0	125V	14	21	D-02	125V DC DISTRIBUTION PANEL	X	X	X	X	X	B		8/CB/VSG RM
SWEL1-2	Y		0	125V	15	45	D-06	125V DC STATION BATTERY	X	X	X	X	X	B	X	8/CB/D-06 BATT RM
SWEL1-2	Y	Y	0	125V	16	21	D-07	D-05 DC STATION BATTERY CHARGER	X	X	X	X	X	A		8/CB/VSG RM
SWEL1-2	Y	Y	0	125V	16	21	D-08	D-06 DC STATION BATTERY CHARGER	X	X	X	X	X	B		8/CB/VSG RM
SWEL1-2			2	CC	19	8	TE-00621	HX-12C/D CC HX OUTLET HEADER TEMPERATURE RTD	X	X		X		0		46/PAB/CC HX AREA
SWEL1-2	Y	Y	0	CC	21b	8	HX-012C	COMPONENT COOLING WATER HEAT EXCHANGER	X	X		X		0		46/PAB/CC HX AREA
SWEL1-2	Y	Y	0	CC	21b	8	HX-012B	COMPONENT COOLING WATER HEAT EXCHANGER	X	X		X		0		46/PAB/CC HX AREA
SWEL1-2			0	VNBI	10	4	W-086	PAB BATTERY AND INVERTER ROOM VENT FAN	X	X	X	X	X	B		35/PAB/D-106 ROOF
SWEL1-2	Y		2	RH	5	44	2P-010B	RESIDUAL HEAT REMOVAL PUMP	X	X	X	X	X	A	X	-19/PAB

ATTACHMENT B Classes of Equipment Unit 2

Classes of Equipment		SWEL1 Unit 2
0	Other	0
1	MCCs and wall-mounted contactors	6
2	Low voltage switchgear and break panels	2
3	Medium voltage, metal-clad switchgear	1
4	Transformers	2
5	Horizontal pumps	10
6	Vertical pumps	5
7	Fluid-operated valves	8
8a	MOVs	19
8b	SOVs	3
9	Fans	5
10	Air handlers	1
11	Chiller	0
12	Air Compressors	0
13	Motor Generators	0
14	Distribution panels and Auto Transfer Switches	8
15	Batteries and Racks	1
16	Battery chargers and inverters	5
17	Engine Generators	2
18	Instrument Racks	1
19	Temperature sensors	1
20	Instrumentation and Control panels	5
21a	Tanks	8
21b	Heat exchangers	2
	TOTAL	95

Note: There are no Chillers, Air Compressors and Motor Generators at Point Beach Unit 1 which are Seismic Category I. Therefore, none of these classes of equipment were included in the SWEL.

C

Seismic Walkdown Checklists (SWCs)

Table C-1. Summary of Seismic Walkdown Checklists

Equipment ID	Equip Class	Equipment Description	Equipment Location	Area Walkby No.	Anchorage Check ¹
1B420C-B957D	1	P-32C SERVICE WATER PUMP NORMAL/ALT TRANSFER SW	8/CB/G-02 RM	11	N
2A-05	3	4.16 KV BUS SWITCHGEAR (SAFEGUARDS)	8/CB/VSG RM	21	Y
2AF-04000	8	2P-29 AFP DISCHARGE 2HX-1B SG INLET ISOLATION MOV	8/CB/AFP RM 2P-29 CUB	30	N/A
2AF-04001	8	2P-29 AFP DISCHARGE 2HX-1A SG INLET ISOLATION MOV	8/CB/AFP RM 2P-29 CUB	30	N/A
2AF-04002	7	2P-29 AFP MINI RECIRC CONTROL	8/CB/AFP RM 2P-29 CUB	30	N/A
2AF-04006	8	2P-29 AFP SUCTION FROM SERVICE WATER	8/CB/AFP RM 2P-29 CUB	30	N/A
2B-03	2	480V SAFEGUARDS LOAD CENTER	26/CB/CSR	9	N
2B-04	2	480V SAFEGUARDS LOAD CENTER	26/CB/CSR	9	N
2B-32	1	480V MOTOR CONTROL CENTER PAB SAFEGUARDS	8/PAB/U2 CHG PUMP AREA	16	N
2B-39	1	480V MOTOR CONTROL CENTER TRAIN A BATTERY CHARGER SUPPLY	8/CB/VSG RM	21	Y
2B-40	1	480V MOTOR CONTROL CENTER DGB	28/DGB/G-04 SWGR RM	35	N
2B427C-B957D	1	P-32E SERVICE WATER PUMP NORMAL/ALT TRANSFER SW	8/CB/G-02 RM	11	N
2B-49	1	480V MOTOR CONTROL CENTER TRAIN B BATTERY CHARGER SUPPLY	8/CB/VSG RM	21	Y
2C-197	20	2P-29 AFP SUCTION PRESSURE CONTROL PANEL	8/CB/AFP RM 2P-29 CUB	30	N
2CV-00112B	8	2P-2A-C CHARGING PUMP REFUELING WATER SUCTION	8/PAB/U2 CHG PUMP AREA	16	N/A
2CV-00142	7	CHARGING LINE FLOW CONTROL	8/PAB/PIPEWAY #4	12	N/A
2DY-01	16	RED 125V DC/120V AC INVERTER	26/CB/CSR	9	N
2DY-02	16	BLUE 125V DC/120V AC INVERTER	26/CB/CSR	9	Y
2IA-03047	7	U2C IA HEADER INLET CONTROL	26/PAB/PIPEWAY #3	23	N/A
2IA-03048	7	U2C IA HEADER INLET CONTROL	26/PAB/PIPEWAY #3	23	N/A
2MS-02015	7	HX-1B SG HDR ATMOSPHERIC STEAM DUMP CONTROL	85/U2F	39	N/A
2MS-02016	7	HX-1A SG HDR ATMOSPHERIC STEAM DUMP CONTROL	85/U2F	25	N/A
2MS-02090	8	2P-29 AFP BEARING COOLING INLET	8/CB/AFP RM	30	N/A
2P-002C	5	CHARGING PUMP (Pump Only as Pressure Boundary)	8/PAB/U2 CHG PUMP RM	40	Y
2P-010B	5	RESIDUAL HEAT REMOVAL PUMP	-19/PAB	44	Y
2P-011A	5	COMPONENT COOLING WATER PUMP	8/PAB/CC PUMP AREA	20	Y
2P-011B	5	COMPONENT COOLING WATER PUMP	8/PAB/CC PUMP AREA	20	Y

Equipment ID	Equip Class	Equipment Description	Equipment Location	Area Walkby No.	Anchorage Check ¹
2P-014A	5	CONTAINMENT SPRAY PUMP	8/PAB/SPRAY PUMP AREA	19	Y
2P-014B	5	CONTAINMENT SPRAY PUMP	8/PAB/SPRAY PUMP AREA	19	Y
2P-015A	5	SAFETY INJECTION PUMP	8/PAB/SI PUMP AREA	19	Y
2P-015B	5	SAFETY INJECTION PUMP	8/PAB/SI PUMP AREA	19	Y
2P-029	5	AUX FEEDWATER TURBINE-DRIVEN PUMP	8/CB/AFP RM 2P-29 CUB	30	Y
2RK-35	18	2P-29 AUX FEEDWATER PUMP INSTRUMENTATION RACK	8/CB/AFP RM 2P-29 CUB	30	Y
2SI-00825B	8	T-13 RWST OUTLET TO P-15A/B SI PUMP	8/PAB/SPRAY PUMP AREA	19	N/A
2SI-00857B	8	HX-11B RHR HX OUTLET TO P-15B SI PUMP SUCTION	8/PAB/SI PUMP AREA	19	N/A
2SI-00866A	8	COLD LEG INJECTION LINE ISOLATION	8/PAB/PIPEWAY #4	12	N/A
2SI-00866B	8	CORE DELUGE INJECTION LINE ISOLATION	8/PAB/PIPEWAY #4	12	N/A
2SI-00896B	8	P-15B SI PUMP SUCTION	8/PAB/SI PUMP AREA	19	N/A
2T-212	21	2P-29 AFP MINI RECIRC IA 2AF-4002 BACKUP ACCUMULATOR	8/CB/AFP RM	30	Y
2TE-00621	19	HX-12C/D CC HX OUTLET HEADER TEMPERATURE RTD	46/PAB/CC HX AREA	8	N/A
2X-13	4	2B-03 STATION SERVICE TRANSFORMER	26/CB/CSR	9	Y
2X-14	4	2B-04 STATION SERVICE TRANSFORMER	26/CB/CSR	9	Y
AF-04014	7	P-38B SSGP MINI RECIRC CONTROL	8/CB/AFP RM P-38B CUB	30	N/A
AF-04016	7	P-38B SSGP SUCTION FROM SERVICE WATER	8/CB/AFP RM P-38B CUB	30	N/A
AF-04019	7	P-38B SSGP DISCHARGE CONTROL	8/CB/AFP RM P-38B CUB	30	N/A
AF-04020	8	P-38B SSGP DISCHARGE TO 2HX-1B STEAM GENERATOR	8/CB/AFP RM P-38B CUB	30	N/A
C-035	20	G-02 EDG ALARM AND ELECTRICAL PANEL	8/CB/G-02 RM W WALL	11	Y
C-035A	20	G-02 EDG LOCAL TRANSFER PANEL	8/CB/G-02 RM W WALL	11	N
C-079	20	G-02 EDG DC POWER TRANSFER CONTROL PANEL	8/CB/G-02 RM	11	N
C-082	20	G-04 EDG CONTROL PANEL	28/DGB/G-04 SWGR RM	35	Y
D-02	14	125V DC DISTRIBUTION PANEL	8/CB/VSG RM	21	Y
D-06	15	125V DC STATION BATTERY	8/CB/D-06 BATT RM	45	Y
D-07	16	D-05 DC STATION BATTERY CHARGER	8/CB/VSG RM	21	N
D-08	16	D-06 DC STATION BATTERY CHARGER	8/CB/VSG RM	21	Y
D-11	14	125V DC DISTRIBUTION PANEL	26/CB/CSR EAST	9	Y
D-13	14	125V DC DISTRIBUTION PANEL	26/CB/CSR EAST	9	Y
D-26	14	125V DC DISTRIBUTION PANEL	26/CB/CSR	9	Y
D-27	14	125V DC DISTRIBUTION PANEL	26/CB/CSR EAST	9	Y
D-40	14	G-04 EDG DC DISTRIBUTION PANEL	28/DGB/G-04 SWGR RM	35	N
D-64	14	125V DC DISTRIBUTION PANEL	8/CB/AFP RM 2P-29 CUB	30	N/A
DY-0A	16	RED 125V DC/120V AC ALTERNATE INVERTER	26/CB/CSR	9	Y

Equipment ID	Equip Class	Equipment Description	Equipment Location	Area Walkby No.	Anchorage Check ¹
FO-03931	8	T-31B G-02 EDG DAY TANK INLET SECOND OFF ISOLATION	8/CB/G-02 RM	11	N/A
G-02	17	EMERGENCY DIESEL GENERATOR	8/CB/G-02 RM	11	Y
G-04	17	EMERGENCY DIESEL GENERATOR	28/DGB/G-04 RM	36	Y
HX-012B	21	COMPONENT COOLING WATER HEAT EXCHANGER	46/PAB/CC HX AREA	8	Y
HX-012C	21	COMPONENT COOLING WATER HEAT EXCHANGER	46/PAB/CC HX AREA	8	N
P-032B	6	SERVICE WATER PUMP	8/CWPH/SW BLDG	27	N
P-032C	6	SERVICE WATER PUMP	8/CWPH/SW BLDG	27	N
P-032D	6	SERVICE WATER PUMP	8/CWPH/SW BLDG	28	N
P-032E	6	SERVICE WATER PUMP	8/CWPH/SW BLDG	28	N
P-032F	6	SERVICE WATER PUMP	8/CWPH/SW BLDG	28	N
P-038B	5	STANDBY STEAM GENERATOR PUMP	8/CB/AFP RM P-38B CUB	30	Y
SW-02820-S	8	K-2B IA COMPRESSOR INLET SOLENOID	8/CB/AIR COMP RM	29	N/A
SW-02826-S	8	K-2A IA COMPRESSOR INLET SOLENOID	8/CB/AIR COMP RM	29	N/A
SW-02869	8	NORTH HEADER TO WEST HEADER	26/PAB/CENTRAL	22	N/A
SW-02870	8	SOUTH HEADER TO WEST HEADER CROSSCONNECT	26/PAB/CENTRAL	46	N/A
SW-02890	8	NORTH HEADER TO SOUTH SUPPLY HEADER CROSSCONNECT	8/CWPH/SW BLDG	28	N/A
SW-02891	8	SOUTH TO NORTH SUPPLY HEADER CROSSCONNECT	8/CWPH/SW BLDG	27	N/A
T-031B	21	G-02 DIESEL GENERATOR DAY TANK	8/CB/G-02 RM	11	Y
T-061A	21	G-02 EDG STARTING AIR RECEIVER (RIGHT BANK)	8/CB/G-02 RM	11	Y
T-061D	21	G-02 EDG STARTING AIR RECEIVER (LEFT BANK)	8/CB/G-02 RM	11	Y
T-061F	21	G-02 EDG STARTING AIR RECEIVER (LEFT BANK)	8/CB/G-02 RM	11	Y
T-171A	21	G-04 EDG STARTING AIR RECEIVER	28/DGB/G-04 RM	36	N
T-171B	21	G-04 EDG STARTING AIR RECEIVER	28/DGB/G-04 RM	36	Y
W-086	10	PAB BATTERY AND INVERTER ROOM VENT FAN	35/PAB/D-106 ROOF	4	N
W-181B1	9	G-04 EDG HX-265B RADIATOR FAN	50/DGB/G-04 RADTR RM	31	N
W-181B2	9	G-04 EDG HX-265B RADIATOR FAN	50/DGB/G-04 RADTR RM	31	N
W-181B3	9	G-04 EDG HX-265B RADIATOR FAN	50/DGB/G-04 RADTR RM	31	N
W-184B	9	G-04 EDG RM LARGE CAPACITY EXHAUST FAN	50/DGB/G-04 FAN RM	32	N
W-184C	9	G-04 EDG RM SMALL CAPACITY EXHAUST FAN	50/DGB/G-04 FAN RM	32	N
Y-203	14	WHITE 120V INVERTER DISTRIBUTION PANEL	26/CB/CSR WEST WALL	9	Y

¹ See report Section 5.2.1 for definitions.

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1B420C-B957D

Equipment Class: (1) Motor Control Centers

Equipment Description: P-32C SERVICE WATER PUMP NORMAL/ALT TRANSFER SW

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
4 – 3/8" CEA. 2 attaching 2 horizontal P1000 Unistruts to the wall. Panel attached to each Unistrut with 2 bolts to each Unistrut.

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1B420C-B957D

Equipment Class: (1) Motor Control Centers

Equipment Description: P-32C SERVICE WATER PUMP NORMAL/ALT TRANSFER SW

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits, exhaust pipe, light fixtures, and fire protection lines are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduits are not flexible. All items are attached to the same wall and are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Cabinet opened 10-3-12. Viewed by DNC and NJ. No internal mounting or interaction concerns.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2A-05

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4.16 KV BUS SWITCHGEAR (SAFEGUARDS)

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, VSG RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per SEWS SQ-000032. Anchorage verified by D. Carter & M. Nielsen on 9/20/12 in cubicles 2A52-67, 2A52-68, 2A52-73, 2A52-74, 2A52-75, 2A52-76. Anchorage in other cubicles verified by D. Carter & N. Juraydini on 9/21/12.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2A-05

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4.16 KV BUS SWITCHGEAR (SAFEGUARDS)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways well supported. Overhead light fixture S-hooks are closed.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
In panel 2A00-71 several of the wire restraints were loose. No immediate seismic concern.
In Panel 2A00-72 cables near lock out alarm relay 2-74/A05LO. Cables may interact with alarm relay. Relay does not have a seismic function. Therefore, the potential interaction is acceptable.

All cubicles were opened. No other mounting or seismic interaction concerns observed.

Comments

Seismic Walkdown Team: D. Carter & M. Nielsen on 9/20/12 and N. Juraydini & D. Carter - 9/21/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2AF-04000

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 2P-29 AFP DISCHARGE 2HX-1B SG INLET ISOLATION MOV

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 2P-29 CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2AF-04000

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 2P-29 AFP DISCHARGE 2HX-1B SG INLET ISOLATION MOV

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead AF pipes, conduit, cable trays, and other pipes are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2AF-04001

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 2P-29 AFP DISCHARGE 2HX-1A SG INLET ISOLATION MOV

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 2P-29 CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2AF-04001

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 2P-29 AFP DISCHARGE 2HX-1A SG INLET ISOLATION MOV

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead AF line, conduit, instrument airline, SW pipes, and other pipes are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2AF-04002

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: 2P-29 AFP MINI RECIRC CONTROL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 2P-29 CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2AF-04002

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: 2P-29 AFP MINI RECIRC CONTROL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead AF line, conduit, instrument airline, and light fixtures are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
*Attached hose and conduit are flexible.
Tubing has bends and is judged to be acceptable.*
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2AF-04006

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 2P-29 AFP SUCTION FROM SERVICE WATER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 2P-29 CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2AF-04006

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 2P-29 AFP SUCTION FROM SERVICE WATER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead AF line, conduit, cable trays, instrument airline, and SW line are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-03

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V SAFEGUARDS LOAD CENTER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
External anchorage judged to be acceptable.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-03

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V SAFEGUARDS LOAD CENTER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures falling onto equipment below judged not to be credible.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Overhead raceways are well-supported and judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
SW rear bottom panel is missing a mounting bolt. Bolt is possibly the same one found below the NE corner of 2DY-01. This issue has been entered into the station corrective action process.

Doors opened. No internal mounting or interaction issues observed.

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-04

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V SAFEGUARDS LOAD CENTER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-04

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V SAFEGUARDS LOAD CENTER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead raceways well supported. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
*Opened 2B00-25L, 2B00-25A, 2B52-DB50-56, 2B00-30A-2B04, 2B00-32A, 2B00-32B-2B04, 2B52-29B, B52-D850-008, 2B52-28B-2B04, 2B00-25C-2B04, 2B52-26C-2B04, 2B52-29C-2B04, 2B52-31C. Internal components well mounted.
Missing lower center mount bolt on lower back panel 25. Judged to be acceptable.
Rear panels not opened.*

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-32

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER PAB SAFEGUARDS

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, U2 CHG PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | | |
|----|---|----------------|
| 1. | Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware?

<i>Welds on back of panel to pad corner channel. 11 of 14 are visible and have minor surface corrosion. Otherwise OK. Observed 11 of 13 anchors identified on SWES. Other anchors not visible due to cables (anchors not observed are B7 and B8 - Reference SEWS SQ-000018).</i> | Yes |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-32

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER PAB SAFEGUARDS

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead HVAC, cable trays, conduit, piping, and light fixtures are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached cable trays and conduit are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
MCC cubicles opened 11-16-12 (see attached supplemental walkdown notes).

Comments

Seismic Walkdown Team: R. LaPlante & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-32

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER PAB SAFEGUARDS

Other Adverse Conditions

11. Attached Documentation

The following panels were opened and inspected by a Seismic Walkdown Team (J. Buboltz and R. LaPlante) on 11/15/2012. The cubicles were reviewed during Maintenance testing of 2B-32.

<u>Cubicle ID</u>	<u>Notes</u>
2B52-321B	No cubicle restraint screws as it was a small cubicle (12") – not required. No issues.
2B00-321C	Empty cubicle
2B52-321F	Two cubicle restraint screws installed. No issues.
2B52-321J	Two cubicle restraint screws installed. No issues.
2B52-321M	Two cubicle restraint screws installed. No issues.
2B52-322C	Two cubicle restraint screws installed. No issues.
2B52-322F	West restraint screw loose. Immediately corrected by Maintenance. East restraint screw was acceptable as found. Internal sticky tabs loose – judged to be acceptable.
2B52-322J	Two cubicle restraint screws installed. No issues.
2B52-322M	Two cubicle restraint screws installed. No issues.
2B52-323C	Two cubicle restraint screws installed. No issues.
2B52-323F	Two cubicle restraint screws installed. No issues.
2B52-323J	Two cubicle restraint screws installed. Internal sticky tab loose – judged to be acceptable.
2B52-323M	Two cubicle restraint screws installed. No issues.
2B52-324C	Two cubicle restraint screws installed. No issues.
2B52-324F	East restraint screw loose. Immediately corrected by Maintenance. West restraint screw was acceptable as found. No other issues.
2B52-324J	Two cubicle restraint screws installed. No issues.
2B52-324M	Two cubicle restraint screws installed. No issues.
2B52-325C	Spare/empty cubicle.
2B52-325F	Two cubicle restraint screws installed. No issues.
2B52-325J	Two cubicle restraint screws installed. No issues.
2B52-325M	Two cubicle restraint screws installed. No issues.
2B52-326C	Two cubicle restraint screws installed. No issues.
2B52-326F	Two cubicle restraint screws installed. No issues.
2B52-326J	Two cubicle restraint screws installed. No issues.
2B52-326M	Two cubicle restraint screws installed. No issues.
2B52-327C	Two cubicle restraint screws installed. Internal sticky tab loose – judged to be acceptable.
2B52-327F	Two cubicle restraint screws installed. No issues.
2B52-327J	Two cubicle restraint screws installed. No issues.
2B52-327M	Two cubicle restraint screws installed. No issues.
2B52-328C	Two cubicle restraint screws installed. No issues.
2B52-328F	Two cubicle restraint screws installed. No issues.
2B52-328H	No cubicle restraint screws as it was a small cubicle (12") – not required. No issues.
2B52-328K	No cubicle restraint screws as it was a small cubicle (12") – not required. No issues.

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-32

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER PAB SAFEGUARDS

Cubicle ID	Notes
2B52-328M	No cubicle restraint screws as it was a small cubicle (12") – not required. No issues.
2B00-329B	Spare/empty cubicle.
2B52-329D	No cubicle restraint screws as it was a small cubicle (12") – not required. No issues.
2B00-329F	Spare/empty cubicle.
2B52-329H	No cubicle restraint screws as it was a small cubicle (12") – not required. Internal sticky tab loose – judged to be acceptable.
2B52-329K	No cubicle restraint screws as it was a small cubicle (12") – not required. No issues.
2B00-329M	Spare/empty cubicle.
2B52-3210C	Two cubicle restraint screws installed. No issues.
2B52-3210F	Two cubicle restraint screws installed. No issues.
2B52-3210J	Two cubicle restraint screws installed. Internal sticky tab loose – judged to be acceptable.
2B52-3210M	Spare – terminal connection for testing present and connected. No issues.
2B52-3211C	Two cubicle restraint screws installed. No issues.
2B52-3211F	Two cubicle restraint screws installed. No issues.
2B00-3211G	Spare/empty cubicle.
2B52-3211M	Two cubicle restraint screws installed. No issues.
2B52-3212B	Spare - No cubicle restraint screws as it was a small cubicle (12") – not required. No issues.
2B52-3212D	No cubicle restraint screws as it was a small cubicle (12") – not required. No issues.
2B52-3212F	No cubicle restraint screws as it was a small cubicle (12") – not required. No issues.
2B00-3212H	Spare/empty cubicle.
2B52-3212M	Two cubicle restraint screws installed. No issues.
2B52-3213C	Two cubicle restraint screws installed. No issues.
2B00-3213D	Spare/empty cubicle.
2B52-3213G	Two cubicle restraint screws installed. No issues.
2B52-3213M	Two cubicle restraint screws installed. No issues.

In all applicable cubicles, fuses were removed for testing purposes. The plane of the cubicle was not broken, as a result of Maintenance testing. Some attachment fasteners for internal components could not be observed because of obstruction by pieces of equipment or wire bundles, otherwise internal components well mounted.

Cubicle Internals Only Seismic Walkdown Team: J. Buboltz & R. LaPlante – 11/15/12

Evaluated By: Detailed signed records of the checklists are available at the site.

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-39

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER TRAIN A BATTERY CHARGER SUPPLY

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, VSG RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per SEWS SQ-000631.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-39

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER TRAIN A BATTERY CHARGER SUPPLY

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways well supported. Overhead light fixture S-hooks are closed.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/21/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-40

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER DGB

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, G-04 SWGR RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Welded to embedded channel. Rear welds not accessible.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-40

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER DGB

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Nearby level indicator LI-3992B well supported.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead ductwork well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduits are flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Did not open panel.

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B427C-B957D

Equipment Class: (1) Motor Control Centers

Equipment Description: P-32E SERVICE WATER PUMP NORMAL/ALT TRANSFER SW

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | | |
|----|---|----------------|
| 1. | Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?
<i>4 – 3/8" CEA. 2 attaching 2 horizontal P1000 Unistruts to the wall. Panel attached to each Unistrut with 2 bolts to each Unistrut.</i> | No |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | | |
|----|--|-----|
| 7. | Are soft targets free from impact by nearby equipment or structures? | Yes |
|----|--|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B427C-B957D

Equipment Class: (1) Motor Control Centers

Equipment Description: P-32E SERVICE WATER PUMP NORMAL/ALT TRANSFER SW

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits, exhaust pipe, light fixtures, and fire protection lines are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduits are not flexible. All items are attached to the same wall and are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Cabinet opened 10-3-12. Viewed by DNC and NJ. No internal mounting or interaction concerns.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-49

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER TRAIN B BATTERY CHARGER SUPPLY

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, VSG RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per SEWS SQ-000633.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2B-49

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER TRAIN B BATTERY CHARGER SUPPLY

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduit, cable trays, HVAC, and light fixtures are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Conduits are rigid. Attached to supports on the same wall. therefore, judged that there will be no differential movement and thus acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2C-197

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: P-29 AFP SUCTION PRESSURE CONTROL PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 2P-29 CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2C-197

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: P-29 AFP SUCTION PRESSURE CONTROL PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead AF pipe, 2RK-38, conduit, SW pipe, and cable trays are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
All flexible except one EMT conduit. The overhead conduit is attached to the same wall resulting in no relative movement.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Cabinet opened. Witnessed by N. Juraydini and S. Kahl on 10/1/12. Internal components well mounted.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2CV-00112B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 2P-2A-C CHARGING PUMP REFUELING WATER SUCTION

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, U2 CHG PUMP AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2CV-00112B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 2P-2A-C CHARGING PUMP REFUELING WATER SUCTION

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead HVAC, pipes, and cable tray judged to be acceptable. Facade wall adjacent to valve is a masonry wall, Wall 6-1 (Reference Dwg. M-302) was walked down and reviewed under GL 80-1 1 (Appendix D of Masonry Walkdown Report) as being non-safety related.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: R. LaPlante & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2CV-00142

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CHARGING LINE FLOW CONTROL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, PIPEWAY #4

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2CV-00142

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CHARGING LINE FLOW CONTROL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Tubing, cable trays, conduit, piping, and overhead light fixtures all well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible. Flexible tube due to bends.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielson & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2DY-01

Equipment Class: (16) Inverters

Equipment Description: RED 125V DC/120V AC INVERTER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2DY-01

Equipment Class: (16) Inverters

Equipment Description: RED 125V DC/120V AC INVERTER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways are well-supported.
Overhead light fixtures are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Loose bolt below NE corner of 2DY-01. Possibly that of missing mounting bolt of SW rear bottom panel of 2B-03. This issue has been entered into the station corrective action process.

Cabinet doors were not opened.

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2DY-02

Equipment Class: (16) Inverters

Equipment Description: BLUE 125V DC/120V AC INVERTER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
*Anchorage verified per MR 84-228*B and SK-BLDG-0065/84-228 sheets 4 & 5.*

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2DY-02

Equipment Class: (16) Inverters

Equipment Description: BLUE 125V DC/120V AC INVERTER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways and ductwork well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Panel not opened.

Comments

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2IA-03047

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: U2C IA HEADER INLET CONTROL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 26.00 ft, PIPEWAY #3

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2IA-03047

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: U2C IA HEADER INLET CONTROL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Nearby piping is well supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead conduit and light fixtures are well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit is flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & C. McDonald - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2IA-03048

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: U2C IA HEADER INLET CONTROL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 26.00 ft, PIPEWAY #3

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2IA-03048

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: U2C IA HEADER INLET CONTROL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits, light fixtures, and junction boxes are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits judged to be acceptable.
Tubing is adequately flexible due to bends.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Conduit to limit switch in contact with handwheel on IA-1323. Judged not to be of seismic concern.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2MS-02015

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-1B SG HDR ATMOSPHERIC STEAM DUMP CONTROL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): U2F, 85.00 ft, ALL

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2MS-02015

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-1B SG HDR ATMOSPHERIC STEAM DUMP CONTROL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
IA lines and equipment well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
Attached tubing is very flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Instrument air tubing long spans judged to be acceptable.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2MS-02016

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-1A SG HDR ATMOSPHERIC STEAM DUMP CONTROL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): U2F, 85.00 ft, ALL

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2MS-02016

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HX-1A SG HDR ATMOSPHERIC STEAM DUMP CONTROL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Solenoid gage on valve. Flexible hose near solenoid. No concern. Tube by gage is stiff and will not impact causing damage.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead light fixtures and conduit are judged to be acceptable. Overhead lifting lug is connected to the bottom flange of beam. Connection is tight and judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit is flexible. Tubing has bend to make flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Insulation bonding below valve is very loose and needs to be fixed.

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2MS-02090

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-29 AFP BEARING COOLING INLET

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2MS-02090

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-29 AFP BEARING COOLING INLET

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Conduit and MS pipe are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
*Attached conduit is flexible.
Solenoid is attached to small tube which is attached to valve. Conduit Lb fitting also attached to same solenoid. Cannot determine if tubing connection would leak. Valve without air will fail open (safe) and therefore this is not an operability issue. This issue has been entered into the station corrective action process.*
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-002C

Equipment Class: (5) Horizontal Pumps

Equipment Description: CHARGING PUMP (Pump Only as Pressure Boundary)

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, U2 CHG PUMP AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Eight 1" CIP anchors. SEWS notes and drawing C-240 state that anchorage should be eight 1" Wej-lts. This issue has been entered into the station corrective action process. The capacity of the installed bolts exceeds the capacity of the bolts shown on the plant documentation. Therefore, no seismic concern.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-002C

Equipment Class: (5) Horizontal Pumps

Equipment Description: CHARGING PUMP (Pump Only as Pressure Boundary)

Interaction Effects

- 7. Are soft targets free from impact by nearby equipment or structures? Yes

- 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead copper piping, HVAC duct, conduits, and light fixtures judged to be acceptable.

- 9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits are judged to be acceptable.
Piping judged to be adequately flexible due to bends.

- 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

- 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-010B

Equipment Class: (5) Horizontal Pumps

Equipment Description: RESIDUAL HEAT REMOVAL PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, -19.00 ft, ALL

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Bend in SW anchor bolt above nut does not affect capacity of bolt. Judged not to be of concern.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Six 5/8" CIP anchors per SQ-000059 and drawing C-243, Rev. 5.
Anchors extend 4"-5" above pad.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-010B

Equipment Class: (5) Horizontal Pumps

Equipment Description: RESIDUAL HEAT REMOVAL PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Oiler judged to be acceptable.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead conduit and trolley beam judged to be acceptable.

Adjacent masonry wall judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached piping has bends and is adequately flexible.

Flexible conduits judged to be acceptable.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-011A

Equipment Class: (5) Horizontal Pumps

Equipment Description: COMPONENT COOLING WATER PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, CC PUMP AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per drawings C-250, Rev. 8, C-240, Rev. 6, C-242, Rev. 7.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-011A

Equipment Class: (5) Horizontal Pumps

Equipment Description: COMPONENT COOLING WATER PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Site glasses judged to be acceptable.
Oilers covered with screens and judged to be acceptable.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead cable trays, conduit, light fixtures, pipe, and HVAC are judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

*Attached conduit is flexible.
Tubing has bends and is judged to be acceptable.*

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-011B

Equipment Class: (5) Horizontal Pumps

Equipment Description: COMPONENT COOLING WATER PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, CC PUMP AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Six 3/4" anchors per SQ-000065 and drawings C-242, Rev. 7 and C-250, Rev. 8.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-011B

Equipment Class: (5) Horizontal Pumps

Equipment Description: COMPONENT COOLING WATER PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Oilers and site glasses are judged to be acceptable.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead CC piping, fire protection piping, and SI piping are judged to be acceptable.
Overhead cable trays and conduits are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attaching tubing is adequately flexible due to bends.
Flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-014A

Equipment Class: (5) Horizontal Pumps

Equipment Description: CONTAINMENT SPRAY PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SPRAY PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per drawings C-250, Rev. 8, C-242, Rev. 7, & C-240, Rev. 6.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-014A

Equipment Class: (5) Horizontal Pumps

Equipment Description: CONTAINMENT SPRAY PUMP

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead pipes, light fixtures, conduit, tubing, and duct are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
*Attached conduit is flexible.
Small pipes have several bends and are judged to be acceptable.*
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-014B

Equipment Class: (5) Horizontal Pumps

Equipment Description: CONTAINMENT SPRAY PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SPRAY PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Six 7/8" CIP anchors per SQ-000072 and drawings C-242, Rev. 7 and C-250, Rev. 8.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-014B

Equipment Class: (5) Horizontal Pumps

Equipment Description: CONTAINMENT SPRAY PUMP

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
CC line and SI line judged to be acceptable.
Overhead cable trays, conduits, and HVAC ducts judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits judged to be acceptable.
Piping and tubing adequately flexible due to bends.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Scaffold above pump is well-supported and adequately restrained.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-015A

Equipment Class: (5) Horizontal Pumps

Equipment Description: SAFETY INJECTION PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SI PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per SEWS SQ-000075.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-015A

Equipment Class: (5) Horizontal Pumps

Equipment Description: SAFETY INJECTION PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Oilers and site glasses are judged to be acceptable.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead fire protection line, pipes, light fixtures, cable trays, conduit, and HVAC are judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

*Attached conduit is flexible.
Small pipe has several bends and is judged to be acceptable.
Tubing is judged to be acceptable.*

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-015B

Equipment Class: (5) Horizontal Pumps

Equipment Description: SAFETY INJECTION PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SI PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Six 1-1/4" anchors per SQ-000077.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-015B

Equipment Class: (5) Horizontal Pumps

Equipment Description: SAFETY INJECTION PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Oilers and site glasses judged to be acceptable.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
FP line and SI line are judged to be acceptable.
Overhead light fixture, conduits, cable trays, and HVAC duct are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduit is short but judged to be acceptable.
Tubing and pipes are adequately flexible due to bends.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-029

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUX FEEDWATER TURBINE-DRIVEN PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 2P-29 CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per SEWS SQ-000079.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2P-029

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUX FEEDWATER TURBINE-DRIVEN PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

2 site glasses and 3 oilers are judged to be acceptable.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead light fixtures, conduits, SW lines, cable trays, and AF pipes are all well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Tubing to 2RK-35 is discussed in 2RK-35 SWC. All other lines are judged to be acceptable.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2RK-35

Equipment Class: (18) Instruments on Racks

Equipment Description: 2P-29 AUX FEEDWATER PUMP INSTRUMENTATION RACK

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 2P-29 CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per SEWS SQ-001000.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2RK-35

Equipment Class: (18) Instruments on Racks

Equipment Description: 2P-29 AUX FEEDWATER PUMP INSTRUMENTATION RACK

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead AF line, conduit, and SW line are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Tubes in track to 2P-29 skid. Tube track from 2RK-35 to 2P-29 skid therefore no relative movement for tubes.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2SI-00825B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: T-13 RWST OUTLET TO P-15A/B SI PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SPRAY PUMP AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2SI-00825B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: T-13 RWST OUTLET TO P-15A/B SI PUMP

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
FP lines and RMW lines judged to be acceptable.
Cable trays, conduits, and HVAC ducts judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2SI-00857B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-11B RHR HX OUTLET TO P-15B SI PUMP SUCTION

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SI PUMP AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | | |
|----|---|----------------|
| 1. | Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | | |
|----|--|-----|
| 7. | Are soft targets free from impact by nearby equipment or structures? | Yes |
|----|--|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2SI-00857B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HX-11B RHR HX OUTLET TO P-15B SI PUMP SUCTION

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead CC piping, and SI piping are judged to be acceptable.
Overhead cable trays, HVAC and conduits are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2SI-00866A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: COLD LEG INJECTION LINE ISOLATION

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, PIPEWAY #4

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2SI-00866A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: COLD LEG INJECTION LINE ISOLATION

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Nearby piping and cable trays judged to be acceptable. Conduit judged to be acceptable. No masonry walls.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: M. Nielson & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2SI-00866B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: CORE DELUGE INJECTION LINE ISOLATION

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, PIPEWAY #4

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2SI-00866B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: CORE DELUGE INJECTION LINE ISOLATION

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead SI piping, conduits, and cable trays judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2SI-00896B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-15B SI PUMP SUCTION

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 8.00 ft, SI PUMP AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2SI-00896B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-15B SI PUMP SUCTION

-
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead CC lines, SI lines, conduits, HVAC ducts, and cable trays judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2T-212

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: 2P-29 AFP MINI RECIRC IA 2AF-4002 BACKUP ACCUMULATOR

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per drawing SK-EC13507-S01, S02, & S03.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2T-212

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: 2P-29 AFP MINI RECIRC IA 2AF-4002 BACKUP ACCUMULATOR

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduit, cable trays, and SW pipes are well supported. C-207 is nearby with internal anchorage.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached lines have adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2TE-00621

Equipment Class: (19) Temperature Sensors

Equipment Description: HX-12C/D CC HX OUTLET HEADER TEMPERATURE RTD

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, CC HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2TE-00621

Equipment Class: (19) Temperature Sensors

Equipment Description: HX-12C/D CC HX OUTLET HEADER TEMPERATURE RTD

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
| 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
<i>Overhead piping and HVAC duct well supported.</i> | Yes |
| 9. Do attached lines have adequate flexibility to avoid damage? | Yes |
| 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? | Yes |

Other Adverse Conditions

- | | |
|--|-----|
| 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? | Yes |
|--|-----|

Comments

Seismic Walkdown Team: D. Brown & M. Nielsen - 11/16/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2X-13

Equipment Class: (4) Transformers

Equipment Description: 2B-03 STATION SERVICE TRANSFORMER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
NE plate has north-south bolt spacing of 12-3/8", which is less than the 13" minimum shown on SK-MR-94-012. All dimensions are enveloped by calculation 95-168, Rev. 1. Therefore, the as built condition matches the plant documentation.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2X-13

Equipment Class: (4) Transformers

Equipment Description: 2B-03 STATION SERVICE TRANSFORMER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways are well-supported and judged to be acceptable.

Overhead light fixtures are judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes
Lines are directly attached to 2B-03 and judged to be acceptable.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2X-14

Equipment Class: (4) Transformers

Equipment Description: 2B-04 STATION SERVICE TRANSFORMER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>As built dimensions within 1/4" of values in Calculation 95-0168 Rev. 1.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 2X-14

Equipment Class: (4) Transformers

Equipment Description: 2B-04 STATION SERVICE TRANSFORMER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead raceways and ductwork well supported. Yes
9. Do attached lines have adequate flexibility to avoid damage?
Lines directly through adjacent 2B-04. Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
Nearby fire extinguisher is well restrained. Yes

Comments

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04014

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: P-38B SSGP MINI RECIRC CONTROL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM P-38B CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04014

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: P-38B SSGP MINI RECIRC CONTROL

-
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead cable trays, conduit, pipes, and light fixtures are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
*Attached conduit is flexible.
Tubing has bends and is judged to be acceptable.
Flexible airline.*
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04016

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-38B SSGP SUCTION FROM SERVICE WATER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM P-38B CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04016

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-38B SSGP SUCTION FROM SERVICE WATER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures, conduits, SW lines, and AF pipe are all well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04019

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: P-38B SSGP DISCHARGE CONTROL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM P-38B CUB

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04019

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: P-38B SSGP DISCHARGE CONTROL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Chain is held in place with a seal lock and is judged to be acceptable.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead cable trays, conduit, and light fixtures are judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

*Attached hose is flexible.
Tubing has bends and is judged to be acceptable.
Attached conduit is flexible.*

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04020

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-38B SSGP DISCHARGE TO 2HX-1B STEAM GENERATOR

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM P-38B CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AF-04020

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: P-38B SSGP DISCHARGE TO 2HX-1B STEAM GENERATOR

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Chain has seal lock and is judged to be acceptable.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead cable trays, conduit, and AF pipes are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-035

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-02 EDG ALARM AND ELECTRICAL PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
Anchorage verified per SEWS SQ-001090. Yes

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-035

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-02 EDG ALARM AND ELECTRICAL PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Overhead fans W-12C & W-12D well supported.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways and pipes well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Unknown
Panel not opened. Completion of seismic walkdown deferred.

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-035A

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-02 EDG LOCAL TRANSFER PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-035A

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-02 EDG LOCAL TRANSFER PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

No soft targets.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead raceways well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached to same wall.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Unknown

Panel not opened. Completion of seismic walkdown deferred.

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: _____ Date: _____

Detailed signed records of the checklists are available at the site.

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-079

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-02 EDG DC POWER TRANSFER CONTROL PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-079

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-02 EDG DC POWER TRANSFER CONTROL PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

No soft targets.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead raceways and pipes well supported. Emergency light EL-16 well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached to same wall.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Unknown

Panel not opened. Completion of seismic walkdown deferred.

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-082

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-04 EDG CONTROL PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, G-04 SWGR RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Cracks at east end of cabinet judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per Calculation N-94-031, Rev. 0.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: C-082

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: G-04 EDG CONTROL PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead ductwork well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Lines through bottom of cabinets.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Unknown
Engine Control Cubicle, Metering Cubicle, and Voltage Regulator Exciter Cubicle opened on 10/3/2012. No internal mounting or interaction concerns. Viewed by DNC and NJ. Did not open transformer cubicles due to electrical hazard. Completion of seismic walkdown deferred.

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/2/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-02

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, VSG RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
Panel attached to 3/4 base plate which is attached to the floor with 8 - 7/8" HKB.

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Per SEWS SQ-000651, panel is anchored with 8 - 3/4" expansion anchors.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-02

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead emergency light, conduit, cable trays, and FP line are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Coiled cable tied off to lifting eye and is judged to be acceptable.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-06

Equipment Class: (15) Batteries on Racks

Equipment Description: 125V DC STATION BATTERY

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, D-06 BATT RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per SEWS SQ-000711.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-06

Equipment Class: (15) Batteries on Racks

Equipment Description: 125V DC STATION BATTERY

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Eyewash appears to be anchored to slab.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead cable trays, SW pipe sleeves, HVAC duct, light fixtures are judged to be acceptable.
Masonry walls are seismic as is evident by the reinforcing.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-07

Equipment Class: (16) Inverters

Equipment Description: D-05 DC STATION BATTERY CHARGER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, VSG RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-07

Equipment Class: (16) Inverters

Equipment Description: D-05 DC STATION BATTERY CHARGER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Block wall on North wall is seismically supported. Equipment connected to nearby equipment 2-74/A67FM.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead raceways well supported. Overhead light fixture S-hooks are closed.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit is flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/21/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-08

Equipment Class: (16) Inverters

Equipment Description: D-06 DC STATION BATTERY CHARGER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, VSG RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
3/4" HKB spaced at 19" in NS direction and 18 1/4" in EW direction.

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per ECN 15105 (261533)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-08

Equipment Class: (16) Inverters

Equipment Description: D-06 DC STATION BATTERY CHARGER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Tied off to switchgear.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead conduit, cable trays, and light fixtures are judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit is flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-11

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage per calculation 2001-0003, Rev. 1 and 99-0086, Rev. 0 which conservatively ignored the center anchors on the top and bottom Unistrut Channels. Verified by D. Carter and N. Juraydini on 10/4/12.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-11

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways and HVAC ductwork are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Lines are attached to the same wall and are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-13

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Panel mounted to 4 Unistrut P-1000 channels on wall. Each Unistrut is mounted with 2 – 3/8" expansion anchors. Calculation 2000-0024, Rev. 1 identifies mounting with additional center anchors in top and bottom Unistrut channels; these anchors are not accessible.
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Verified per Calculation 2000-oo24, Rev. 1, which conservatively ignored the center anchors in the top and bottom Unistrut channels.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-13

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways and ductwork well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
*Rigid conduits attached to same wall as panel.
Flexible conduits are also used.*
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Panel not opened.

Comments

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-26

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage is verified per calculation 2000-0024, Rev. 1 which conservatively ignored the center anchor in the top and bottom Unistrut angles channels.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-26

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Lines are attached to the same wall and are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
*Two crank handles in vicinity are loosely hung from bolts in the concrete wall.
This issue has been entered into the station corrective action process.*

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-27

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Panel mounted to 4 Unistrut P-1000 channels on wall. Each Unistrut is mounted with 2 – 3/8" expansion anchors. Calculation 99-0086, Rev. 0 identifies mounting with additional center anchors in top and bottom Unistrut channels; these anchors are not accessible.
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Verified per Calculation 99-0086, Rev. 0, which conservatively ignored the center anchors in the top and bottom Unistrut channels.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-27

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways and ductwork well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes
*Rigid conduits attached to same wall as panel.
Flexible conduits are also used.*

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Panel not opened.

Comments

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-40

Equipment Class: (14) Distribution Panels

Equipment Description: G-04 EDG DC DISTRIBUTION PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, G-04 SWGR RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Crack adjacent to embedded Unistrut on right side of panel. Judged to be a shrinkage crack, which is judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-40

Equipment Class: (14) Distribution Panels

Equipment Description: G-04 EDG DC DISTRIBUTION PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Emergency light EL-113 well supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

Lines enter panel from bottom through floor.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Did not open panel.

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-64

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM 2P-29 CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
Attached to Rack 2RK-89 with a minimum of 4 bolts.

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D-64

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC DISTRIBUTION PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits, ducts, SW pipe, cable trays, and AF pipes are all well supported.
Masonry wall behind is seismic.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Conduits are attached to same rack and judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: DY-0A

Equipment Class: (16) Inverters

Equipment Description: RED 125V DC/120V AC ALTERNATE INVERTER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
*Anchorage per MR 845-228*A, SK-BLDG-0065/84-228, sheets 4 & 5.
Verified by DNC and NJ on 10/3/12*

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: DY-0A

Equipment Class: (16) Inverters

Equipment Description: RED 125V DC/120V AC ALTERNATE INVERTER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Panel was not opened.

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/18/2012, D. Carter & N. Juraydini - 10/3/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: FO-03931

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: T-31B G-02 EDG DAY TANK INLET SECOND OFF ISOLATION

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: FO-03931

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: T-31B G-02 EDG DAY TANK INLET SECOND OFF ISOLATION

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Tank above valve. No issues.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: G-02

Equipment Class: (17) Engine-Generators

Equipment Description: EMERGENCY DIESEL GENERATOR

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Minor crack at SW corner. No seismic concern due to depth of anchors.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per SEWS SQ-000738.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: G-02

Equipment Class: (17) Engine-Generators

Equipment Description: EMERGENCY DIESEL GENERATOR

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead conduits and pipes well supported. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: G-04

Equipment Class: (17) Engine-Generators

Equipment Description: EMERGENCY DIESEL GENERATOR

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, G-04 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
Mild surface corrosion on a few washers and on some skid sole plate locations.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
*Minor cracks and chips in grout. Judged to be acceptable.
Minor cracks in concrete floor. Judged to be acceptable.*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per drawings E-121202 Rev. 8 and E-121212 Rev. 9.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: G-04

Equipment Class: (17) Engine-Generators

Equipment Description: EMERGENCY DIESEL GENERATOR

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Overhead crane well supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead piping and light fixtures well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached lines have bellows and flexible conduits and hoses.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HX-012B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING WATER HEAT EXCHANGER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, CC HX AREA

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Minor shrinkage cracking in grout judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage per SQ-001168.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HX-012B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING WATER HEAT EXCHANGER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Brown & N. Juraydini - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HX-012C

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING WATER HEAT EXCHANGER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 46.00 ft, CC HX AREA

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Minor cracking in grout judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HX-012C

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING WATER HEAT EXCHANGER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead cable trays and conduits are well-supported and judged to be acceptable.
Masonry wall at north wall of room seismically acceptable. See Drawing SK-C-206, Rev. 3.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-032B

Equipment Class: (6) Vertical Pumps

Equipment Description: SERVICE WATER PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CWPH, 8.00 ft, SW BLDG

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-032B

Equipment Class: (6) Vertical Pumps

Equipment Description: SERVICE WATER PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Junction box is 1/4" from fire protection pipe and is judged to be acceptable.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead raceways and piping are well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit is flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-032C

Equipment Class: (6) Vertical Pumps

Equipment Description: SERVICE WATER PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CWPH, 8.00 ft, SW BLDG

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
Some corrosion on baseplate judged to be acceptable.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-032D

Equipment Class: (6) Vertical Pumps

Equipment Description: SERVICE WATER PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CWPH, 8.00 ft, SW BLDG

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | | |
|----|---|----------------|
| 1. | Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation?
<i>Corrosion observed on baseplate. This issue has been entered into the station corrective action process.</i> | Yes |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-032D

Equipment Class: (6) Vertical Pumps

Equipment Description: SERVICE WATER PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Overhead crane well supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead piping well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit is flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-032E

Equipment Class: (6) Vertical Pumps

Equipment Description: SERVICE WATER PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CWPH, 8.00 ft, SW BLDG

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
Corrosion observed on baseplate. This issue has been entered into the station corrective action process.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-032E

Equipment Class: (6) Vertical Pumps

Equipment Description: SERVICE WATER PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Overhead crane well supported.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead piping and light fixtures well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-032F

Equipment Class: (6) Vertical Pumps

Equipment Description: SERVICE WATER PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CWPH, 8.00 ft, SW BLDG

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
*Some corrosion on SE corner baseplate anchor: washer and baseplate corner.
No immediate seismic concern.*

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Hairline crack at the NE corner baseplate is judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-032F

Equipment Class: (6) Vertical Pumps

Equipment Description: SERVICE WATER PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways and pipes are well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
FP-13 manual chain is restrained to nearby support and is judged to be acceptable.

Comments

The Seismic Walkdown Team: N. Juraydini and S. Kahl on 9/19/12.

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-038B

Equipment Class: (5) Horizontal Pumps

Equipment Description: STANDBY STEAM GENERATOR PUMP

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AFP RM P-38B CUB

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per SEWS SQ-000081.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-038B

Equipment Class: (5) Horizontal Pumps

Equipment Description: STANDBY STEAM GENERATOR PUMP

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Site glasses judged to be acceptable. No other sources.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead AF pipe, conduit, SW pipe, and light fixtures are judged to be acceptable.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit is flexible. Pipes have bends and are therefore flexible. Tubes to RK-25B are not very flexible. The tube track connects the pump skid and RK-25B. They move together and are judged to be acceptable.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02820-S

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: K-2B IA COMPRESSOR INLET SOLENOID

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02820-S

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: K-2B IA COMPRESSOR INLET SOLENOID

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead piping well supported. Yes
9. Do attached lines have adequate flexibility to avoid damage?
Attached conduit is flexible. Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02826-S

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: K-2A IA COMPRESSOR INLET SOLENOID

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, AIR COMP RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02869

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: NORTH HEADER TO WEST HEADER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 26.00 ft, CENTRAL

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02869

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: NORTH HEADER TO WEST HEADER

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduits and piping well supported. Overhead light fixtures not likely to swing into valve due to obstructions.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & J. Buboltz - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02870

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: SOUTH HEADER TO WEST HEADER CROSSCONNECT

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 26.00 ft, CENTRAL

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02870

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: SOUTH HEADER TO WEST HEADER CROSSCONNECT

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures, conduits, HVAC ducts, and piping judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Flexible conduits judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02890

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: NORTH HEADER TO SOUTH SUPPLY HEADER CROSSCONNECT

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CWPH, 8.00 ft, SW BLDG

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02890

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: NORTH HEADER TO SOUTH SUPPLY HEADER CROSSCONNECT

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
*Overhead jib crane well supported. Jib crane could come in contact with pipe rod hanger. See Area Walk-by 28 for discussion.
Overhead area heater well supported.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead piping and conduit well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02891

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: SOUTH TO NORTH SUPPLY HEADER CROSSCONNECT

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CWPH, 8.00 ft, SW BLDG

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SW-02891

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: SOUTH TO NORTH SUPPLY HEADER CROSSCONNECT

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Overhead fan well supported.
Overhead jib crane capacity is 1150 lbs. There is no seismic concern.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead raceways and piping are well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached conduit is flexible.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-031B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-02 DIESEL GENERATOR DAY TANK

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

Crack located above east top bolt, approximately 6" away. Cracks acceptable since anchors are through bolts.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes

Tank is mounted to steel frame with 5/8" diameter bolts and the frame is mounted with 1" thru bolts and one anchor welded to tan embed plate. Calculation N-90-043, Rev. 1, Attachment 2 shows analysis for 5/8" mounting bolts for tank and 1" thru bolts for the attachment of the frame to the wall. Therefore, the plant documentation is confirmed.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-031B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-02 DIESEL GENERATOR DAY TANK

Interaction Effects

- 7. Are soft targets free from impact by nearby equipment or structures? Yes

- 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduit and piping well supported.

- 9. Do attached lines have adequate flexibility to avoid damage? Yes

- 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

- 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-061A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-02 EDG STARTING AIR RECEIVER (RIGHT BANK)

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage verified per SEWS SQ-001199.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-061A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-02 EDG STARTING AIR RECEIVER (RIGHT BANK)

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
Overhead conduits well supported. Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-061D

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-02 EDG STARTING AIR RECEIVER (LEFT BANK)

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per SEWS SQ-001202. Southwest bolt does not have full thread engagement. Judged to be acceptable.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-061D

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-02 EDG STARTING AIR RECEIVER (LEFT BANK)

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduit and piping well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-061F

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-02 EDG STARTING AIR RECEIVER (LEFT BANK)

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 8.00 ft, G-02 RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | |
|---|-----|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | Yes |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per SEWS SQ-001204.</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures? | Yes |
|---|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-061F

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-02 EDG STARTING AIR RECEIVER (LEFT BANK)

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways and piping well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-171A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-04 EDG STARTING AIR RECEIVER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, G-04 RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Secured with U-bolt around tank to I-beams which are welded to embedded plate. Top west U-bolt nuts not accessible.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-171A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-04 EDG STARTING AIR RECEIVER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Nearby unit heater HX-272C well supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

Overhead light fixtures well supported.

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached lines mounted to same wall as tank.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-171B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-04 EDG STARTING AIR RECEIVER

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, G-04 RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | | |
|----|--|-----|
| 1. | Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Yes |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware?
<i>Anchored to floor with 4 posts, 2 – 5/8" bolts each.
Attached to wall at midheight to two base angles with 2 – 3/4" bolts each.</i> | Yes |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors?
<i>Minor cracks in grout are judged to be acceptable.</i> | Yes |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
<i>Anchorage verified per drawing E-121202, Rev. 7. For floor anchor bolts and drawing E-221501, Rev. 2, for wall anchor bolts.</i> | Yes |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T-171B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: G-04 EDG STARTING AIR RECEIVER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Nearby panel TB-170 well supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

Attached lines mounted to same wall to which tank is attached.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-086

Equipment Class: (10) Air Handlers

Equipment Description: PAB BATTERY AND INVERTER ROOM VENT FAN

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): PAB, 35.00 ft, D-106 ROOF

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
Some surface rust. Judged acceptable.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-086

Equipment Class: (10) Air Handlers

Equipment Description: PAB BATTERY AND INVERTER ROOM VENT FAN

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures are judged to be acceptable.
Overhead piping and ducts are judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Did not open access door to check mounting to skid.

Comments

Seismic Walkdown Team: D. Carter & M. Nielsen – 10/3/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-181B1

Equipment Class: (9) Fans

Equipment Description: G-04 EDG HX-265B RADIATOR FAN

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 50.00 ft, G-04 RADTR RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Mounted with 4 bolts to steel frame which is anchored to floor.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
*Front anchorage accessible only.
Minor corrosion in steel frame judged to be acceptable.*

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Minor cracks in grout judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-181B1

Equipment Class: (9) Fans

Equipment Description: G-04 EDG HX-265B RADIATOR FAN

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-181B2

Equipment Class: (9) Fans

Equipment Description: G-04 EDG HX-265B RADIATOR FAN

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 50.00 ft, G-04 RADTR RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
Mounted with 4 bolts to steel frame which is anchored to floor.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
*Front anchorage accessible only.
Minor corrosion in steel frame judged to be acceptable.*

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Minor cracks in grout judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-181B2

Equipment Class: (9) Fans

Equipment Description: G-04 EDG HX-265B RADIATOR FAN

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-181B3

Equipment Class: (9) Fans

Equipment Description: G-04 EDG HX-265B RADIATOR FAN

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 50.00 ft, G-04 RADTR RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

- | | | |
|----|---|----------------|
| 1. | Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | No |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware?
<i>Mounted with 4 bolts to steel frame which is anchored to floor.</i> | Yes |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation?
<i>Front anchorage accessible only.
Minor corrosion in steel frame judged to be acceptable.</i> | Yes |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors?
<i>Minor cracks in grout judged to be acceptable.</i> | Yes |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

- | | | |
|----|--|-----|
| 7. | Are soft targets free from impact by nearby equipment or structures? | Yes |
|----|--|-----|

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-181B3

Equipment Class: (9) Fans

Equipment Description: G-04 EDG HX-265B RADIATOR FAN

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead light fixtures well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-184B

Equipment Class: (9) Fans

Equipment Description: G-04 EDG RM LARGE CAPACITY EXHAUST FAN

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 50.00 ft, G-04 FAN RM

Manufacturer/Model: _____

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
Anchorage embedded in concrete per drawing 6704-E-222403, Rev. 5, Detail 3.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-184B

Equipment Class: (9) Fans

Equipment Description: G-04 EDG RM LARGE CAPACITY EXHAUST FAN

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduit and light fixtures well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-184C

Equipment Class: (9) Fans

Equipment Description: G-04 EDG RM SMALL CAPACITY EXHAUST FAN

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): DGB, 50.00 ft, G-04 FAN RM

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
Anchorage embedded in concrete per Drawing 6704-E-222403, Rev. 5, Detail 3.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
Crack in floor judged to be acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) No

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: W-184C

Equipment Class: (9) Fans

Equipment Description: G-04 EDG RM SMALL CAPACITY EXHAUST FAN

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
Nearby emergency light EL-144 well mounted.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead conduit and light fixtures well supported.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Attached conduit is flexible.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: Y-203

Equipment Class: (14) Distribution Panels

Equipment Description: WHITE 120V INVERTER DISTRIBUTION PANEL

Project: Point Beach 2 SWEL 1

Location (Bldg, Elev, Room/Area): CB, 26.00 ft, CSR

Manufacturer/Model:

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Yes
Anchorage per SQ-000700.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: Y-203

Equipment Class: (14) Distribution Panels

Equipment Description: WHITE 120V INVERTER DISTRIBUTION PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Overhead raceways are well-supported and judged to be acceptable.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Lines are mounted to the same structure/wall and are judged to be acceptable.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
Panel was not opened. Panels FACP-6 and D-400 in vicinity are well-supported and judged to be acceptable.

Comments

Seismic Walkdown Team: J. Buboltz & N. Juraydini - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

D

Area Walk-By Checklists (AWCs)

Table D-1. Summary of Area Walk-By Checklists

Area Walk-by#	Description	Equipment
AWB 4	PAB El. 26' North End Outside of Inverter Room Roof	W-086
AWB 8	PAB El. 46' CCW Heat Exchanger Room	2TE-00621
		HX-012B
		HX-012C
AWB 9	Control Building El. 26' Cable Spreading Room	2B-03
		2B-04
		2DY-01
		2DY-02
		2X-13
		2X-14
		D-11
		D-13
		D-26
		D-27
		DY-0A
		Y-203
AWB 11	Control Building El 8' G-02 RM	1B420C-B957D
		2B427C-B957D
		C-035
		C-035A
		C-079
		FO-03931
		G-02
		T-031B
		T-061A
		T-061D
T-061F		
AWB 12	PAB El. 8' Pipeway #4	2CV-00142
		2SI-00866A
		2SI-00866B
AWB 16	PAB EL 8' 2B-32 Area	2B-32
		2CV-00112B

Area Walk-by#	Description	Equipment
AWB 19	PAB EL 8' BY SI & CS Pumps	2P-014A
		2P-014B
		2P-015A
		2P-015B
		2SI-00825B
		2SI-00857B
		2SI-00896B
AWB 20	PAB EL 8' By CC Pumps	2P-011A
		2P-011B
AWB 21	CB EL 8' Vital Switchgear Room	2A-05
		2B-39
		2B-49
		D-02
		D-07
		D-08
AWB 22	PAB EL 26' Central area	SW-02869
AWB 23	PAB EL 26' Pipeway #3	2IA-03047
		2IA-03048
AWB 25	U2 Facade EL 85'	2MS-02016
AWB 27	Pump House El. 8'. South Room.	P-032B
		P-032C
		SW-02891
AWB 28	Pump House El. 8'. North Room.	P-032D
		P-032E
		P-032F
		SW-02890
		SW-02820-S
AWB 29	Control Building EL 8' AIR COMP. ROOM	SW-02826-S
		2AF-04000
AWB 30	Control Building EL 8' AF Pump Room North of Fire Door	2AF-04001
		2AF-04002
		2AF-04006
		2C-197
		2MS-02090
		2P-029
		2RK-35
		2T-212
		AF-04014
		AF-04016
		AF-04019
		AF-04020
		D-64
		P-038B
		AWB 31
W-181B2		
W-181B3		

Area Walk-by#	Description	Equipment
AWB 32	DGB EI 50' G-04 Fan Room	W-184B
		W-184C
AWB 35	DGB EI 28' G-04 Switchgear Room	2B-40
		C-082
		D-40
AWB 36	DGB EI 28' G-04 Room	G-04
		T-171A
		T-171B
AWB 39	U2 Facade B-Train Safety Valve Area	2MS-02015
AWB 40	PAB EL. 8 Near 2P002C Cubicle	2P-002C
AWB 44	PAB EI. -19 2P-10B Cubicle	2P-010B
AWB 45	Control Building EL 8' D-06 Battery Room	D-06
AWB 46	PAB EI. 26' Near SW-2870	SW-02870

Status: Y N U

Area Walk-By Checklist (AWC)

Area Walk-by 04: PAB El. 26' North End East Inverter Room Roof D-
Location (Bldg, Elev, Room/Area): 106 Roof

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
West anchorage of W-085 not accessible.
East anchorage of W-086 not accessible.
Anchorage north of W-085 and W-086 not accessible.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead systems are well-supported and judged to be acceptable.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Service-water pipes are well-supported and judged to be acceptable.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Area Walk-by 04: PAB El. 26' North End East Inverter Room Roof D-

Location (Bldg, Elev, Room/Area): 106 Roof

Temporary conduit mounted on floor judged to be acceptable.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & C. McDonald - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 08: PAB El. 46' CCW Heat Exchanger Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Nuts for south post support for 1T-6A not fully tightened. This issue has been entered into the station corrective action process.

Lack of thread engagement for nuts at supports below RS-SH-10. Judged acceptable.

Lack of thread engagement for nuts at support near valve 1MS-2020. Judged acceptable.

Lack of thread engagement for nuts at support at M-3-5-17-F94. Judged acceptable.
 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 08: PAB El. 46' CCW Heat Exchanger Room

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes
Masonry wall at north wall of room seismically acceptable. See Drawing SK-C-206, Rev. 3, SKC-170, rev. 2 and SKC-171, rev. 2.

Comments

Seismic Walkdown Team: D. Brown & N. Juraydini - 9/17/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 09: Control Building El. 26' Cable Spreading Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Gaps between clamps and baseplates for conduits 1S071, 1S216, and 1S218 above Panel 2Y203. Judged to be of no seismic concern.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead raceways and HVAC ducts are well-supported and judged to be acceptable.

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
S-hook on light near 1X-13 is open. Not an interaction concern. This issue has been entered into the station corrective action process.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Service-water pipes are well-supported and judged to be acceptable.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Ladders placed on building bracing below 1Y-204 and Y-204 could come into contact with conduits 1S079 and 2S080. Judged to be of no seismic concern.

Scaffolds near 1X-13 and east of 1B03 are judged to be of no seismic concern.

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 09: Control Building El. 26' Cable Spreading Room

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini - 9/21/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 11: Control Building EI 8' G-02 RM

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead raceways and piping well supported.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Fire protection piping is rod hung. Only lateral support is at G-01 wall. Sprinkler head is 2" from W-12D. Four rod hangers above G-02 are short and may absorb a higher portion of the lateral load. Two rod hangers attached to chamfer on concrete beams with insufficient edge distance. It is uncertain if the fire protection piping would leak during a seismic event. This issue has been entered into the station corrective action process.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 11: Control Building EI 8' G-02 RM

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes
FP Piping in G-02 room is supplied by valve FP-3741 located in G-01 room.

Comments

Seismic Walkdown Team: D. Carter & N. Juraydini on 9/21/12

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 12: PAB El. 8' Pipeway #4

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Scaffold walk plate attached to trays KB06 and KC06 with tie wraps. No seismic concern. Pipeway temperature indicator suspended with tiewraps - OK.

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Threaded pipe to room heater judged to be acceptable. No fire protection lines.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
No sources.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 12: PAB El. 8' Pipeway #4

-
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: M. Nielson & D. Carter - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 16: PAB EL 8' 2B-32 Area

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
A masonry wall (west wall) is located adjacent to the door to the facade. Wall 6-1 (Reference Dwg. M-302) was walked down and reviewed under GL 80-11 (Appendix D of Masonry Walkdown Report) as being non-safety related. Due to configuration of the wall (short span and relatively large thickness) it is judged not to be a concern for interaction.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
Overhead lights and other items are all acceptable.

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
All piping is welded and judged to be acceptable.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
No sources.

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 16: PAB EL 8' 2B-32 Area
temporary installations (e.g., scaffolding, lead shielding)

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Review Team: D. Carter & R. LaPlante on 9/18/12

Seismic Walkdown Team: R. LaPlante & D. Carter - 9/18/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 19 PAB EL 8' BY SI & CS PUMPS

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Some minor lack of thread engagement judged to be acceptable.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
1/4" tube for 1SI881A has long span between supports of about 10', resulting in very flexible tubing. Suggest added support. This issue has been entered into the station corrective action process.

At the west end, flexible pipe from SI-917A appears to be bearing on some Unistrut clamps at about 10' from the floor. One end is free and not secure behind 1FE-661. Could dislodge from clamps and interact with item below. No soft targets directly below. 1FIT-661 off to the side. This issue has been entered into the station corrective action process.

Conduit for valve 2SI-825C is attached to flange of structural steel pipe hanger with clamp oriented incorrectly. Attached adequately to cable tray JG08 and will not fall. This issue has been entered into the station corrective action process.

Copper IA pipe attached to structural steel hanger with clamp oriented incorrectly. At bottom of hanger support for copper pipe spans 2' horizontally to adequate support. There is sufficient vertical support. Clamps provide lateral support. Judged to be acceptable. This issue has been entered into the station corrective action process.
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 19 PAB EL 8' BY SI & CS PUMPS

-
- | | | |
|----|---|-----|
| 5. | Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?
<i>Fire protection lines in area are threaded and well supported. Judged to be acceptable.</i> | Yes |
| 6. | Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?
<i>No sources.</i> | Yes |
| 7. | Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?
<i>Scaffold above 2P-14B looks to be well built and tied off.</i> | Yes |
| 8. | Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?
<i>Two lights in corridor area are attached to steel with magnets. Appear to be strongly attached.</i> | Yes |

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/20/2012

Evaluated by:	Detailed signed records of the checklists are available at the site.	Date:	

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 20 PAB EL 8' By CC Pumps

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Overhead pipe support attached to ceiling on NW corner of room has several questions. Support is structural member (W shape) with weak axis resisting DL welded to a four bolt anchor plate at each end. One anchor is absent on South plate. The west flange and about 1/2 of the web are notched in three places. Shackle attached to SW anchor on North plate. Can not tell how it is secured. No seismic concern. This issue has been entered into the station corrective action process.
All other anchorage is OK.
 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Fire protection piping is well supported.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 20 PAB EL 8' By CC Pumps

-
- | | | |
|----|--|-----|
| 6. | Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?
<i>No sources.</i> | Yes |
| | | |
| 7. | Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? | Yes |
| | | |
| 8. | Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? | Yes |

Comments

Seismic Walkdown Team: M. Nielsen & D. Carter - 9/20/2012

Evaluated by:	Detailed signed records of the checklists are available at the site.	Date:	_____
	_____		_____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 21: CB EL 8' Vital Switchgear Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
*No anchorage issues identified for accessible equipment.
Gaps between conduit clamps and baseplate at T4041, 2S227, S011, D07-7, S291, S292, and D09SW3. No immediate seismic concerns.*

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead raceways well supported. Conduit G-02-2 resting on conduit above rear of 2A52-69. No immediate seismic concern.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
S hook for light fixture above 1B-49 slightly open. No concerns observed.

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
SW line in south end of room is well incased in full length sleeve.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 21: CB EL 8' Vital Switchgear Room

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & D. Carter - 9/21/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 22: PAB EL 26' Central area

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead raceways, piping, and HVAC are well supported.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Piping well supported.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
No combustibles.

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Free standing ladder on opposite side of pipe from SW-734. No seismic concern.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 22: PAB EL 26' Central area

-
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & J. Buboltz - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 23: PAB EL 26' Pipeway #3

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead conduits well supported.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Overhead piping well supported.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
No combustibles.

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Tool box on floor on east side of pipeway #3. No seismic concerns.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 23: PAB EL 26' Pipeway #3

-
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & C. McDonald - 9/20/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 25: U2 Facade EL 85'

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
A small steel angle frame is stored next to the enclosure for 2RK-33. The potential is with the enclosure no the rack. Therefore, there is no seismic concern.

There is a trolley beam laying on the platform. It is not secured. There are no

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 25: U2 Facade EL 85'

items in the immediate vicinity that the trolley beam would interact with.

There is a hose along the platform that is not well secured at each end. There are on items in the vicinity that the hose could interact with.

There is a section of removable handrail that is tied off to the permanent handrail with a piece of rope. The removable section of handrail is adequately secured.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & C. McDonald - 9/19/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 27: Pump House El. 8'. South Room.

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Missing NW anchor bolt on pipe support plate west of P-31A. This issue has been entered into the station corrective action process.

Missing anchor bolt on base plate NW of P-31A for chlorination line. This issue has been entered into the station corrective action process.
 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
Corrosion on P-31A base plate and pipe support base plate west of P-31A. This issue has been entered into the station corrective action process.
 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead raceways are well supported.
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Overhead piping is well supported.
 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Overhead hoist control pendant noted on P-32A SWC.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 27: Pump House El. 8'. South Room.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: N. Juraydini & S. Kahl - 9/20/2012

Pump House El. 8'. South Room.

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 28: Pump House El. 8'. North Room.

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
*Bottom anchor bolt for W-28 not fully engaged.
Missing anchor bolt on baseplate NW of P-35A.
Loose grout at NE corner anchor bolt below SW-13.
These issues have been entered into the station corrective action process.*
 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
*Corrosion at P-32D, P-32E baseplates noted in SWC.
Corrosion on P-31B baseplate. This issue has been entered into the station corrective action process.
Corrosion at P-32F baseplate noted on SWC.*
 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead raceways and piping well supported.
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
Overhead piping well supported.
 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Overhead piping well supported.
 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 28: Pump House El. 8'. North Room.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Crane above SW-2391 not restrained from swinging to the west. Could come in contact with rod hanger but rod hanger supports abandoned line and has flexibility. No immediate seismic concern.

Light fixture support rod above SW-32F in contact with pipe rod hanger. No immediate seismic concern.

Comments

Pump House El. 8'. North Room.

Seismic Walkdown Team: N. Juraydini & S. Kahl - 9/20/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 29: CB EL 8' AIR COMP. ROOM

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Conduit support at SW corner of K-3B has one missing nut and one loose nut. This issue has been entered into the station corrective action process.

West anchor for T-33A has a nut that does not have full thread engagement. This issue has been entered into the station corrective action process.

SW of T-33A there is a 1" gap in the grout pad. Same on the north side. This issue has been entered into the station corrective action process.

Cracks in grout pads of T-33A/B/C/D. Judged to be acceptable.

Cracks in pedestal at NW corner of K-2A. Judged to be acceptable.

Cracks in pedestal at NW corner, west side, SW corner, SE corner, and NE corner of K-2B. Judged to be acceptable.

Crack in pedestal at NE corner of K-3B. Judged to be acceptable.
 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead conduit, cable trays, and HVAC system are well supported.
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 30: CB EL 8' AF Pump Room North of Fire Door

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
C-207 panel anchorage not accessible. Pipe support in North cubicle on west wall missing two bolts. Plate is welded to embedment and judged to be acceptable.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Long section of tubing in 2P-29 cubicle is very flexible and judged to be acceptable.

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Safety shower piping in P-38B cubicle is judged to be acceptable.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
No sources.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 30: CB EL 8' AF Pump Room North of Fire Door

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 31: DGB EI 50' G-04 RADTR RM

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 31: DGB EI 50' G-04 RADTR RM

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

DGB EI 50' G-04 RADTR RM

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 32: DGB EI 50' G-04 FAN RM

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 32: DGB EI 50' G-04 FAN RM

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

DGB EI 50' G-04 FAN RM

Seismic Walkdown Team: N. Juraydini & S. Kahl - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 35: DGB EI 28' G-04 SWGR ROOM

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Overhead fan W-185B well supported. Emergency lights well mounted.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Overhead ductwork well supported.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
No water sources.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 35: DGB EI 28' G-04 SWGR ROOM

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

DGB EI 28' G-04 SWGR ROOM

Seismic Walkdown Team: N. Juraydini & M. Nielsen - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 36: DGB EI 28' G-04 Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Emergency light and unit heaters are well mounted. Overhead items well supported.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Conduits well supported.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
Light fixture may come in contact with tubing track. Judged to be acceptable.

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
Fire protection line well supported.

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Crane control pendant well secured.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 36: DGB EI 28' G-04 Room

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

DGB EI 28' G-04 Room

Seismic Walkdown Team: N. Juraydini & R. LaPlante - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 39: U2 Facade B-Train Safety Valve Area

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
See #8 below.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Light above letdown gas stripper vent stack sample tubes. Mounted with magnets to round pipe. Uncertain of seismic restraint. Only items below are items identified above end platform.

A subsequent walkdowns found two components adjacent to the light: VNRAD-00001, Bldg Vent Stack Gas Sample Inlet, and RE-00224, Gas Stripper Building Exhaust Monitor. Both of these components are non-seismic. Therefore, if the magnet were to fail to hold the light in place during a seismic event, there are no seismically qualified components that the light could impact upon.
 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes
No sources.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 39: U2 Facade B-Train Safety Valve Area

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Hose of platform. Not a seismic concern.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes
Platform in front of safety valves is not anchored to the floor. Interaction potential with MS line below valves and Façade freeze heat tracing. Permanent platform by elevator prevents overturning in EW direction.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 40: PAB EL. 8 Near 2P002C Cubicle

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
One of trolley beam anchor bolts on wall has a minor lack of thread engagement. Judged to be acceptable.

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Pipe support clamp on pipe 2T-58C and 2CV-399 is skewed but judged to be acceptable.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 40: PAB EL. 8 Near 2P002C Cubicle

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 44: PAB El. -19 2P-10B Cubicle

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Missing anchor on valve extender support. Load on anchor is small. Support is near floor. Judged to be of no seismic concern. This issue has been entered into the station corrective action process.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
Conduits and pipes judged to be acceptable.

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 44: PAB El. -19 2P-10B Cubicle

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/1/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 45: CB EL 8' D-06 Battery Room

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?
No sources. Yes

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?
No sources. Yes

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 45: CB EL 8' D-06 Battery Room

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: Detailed signed records of the checklists are available at the site. Date: _____

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 46: PAB El. 26' Near SW-2870

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
Cannot view anchors on C-60A.

 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes

 3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes

 4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
HVAC duct could interact with hanger may damage duct but would not cause duct to collapse. Judged to be acceptable.

 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes

 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
Handrail stored near masonry wall judged to not be of concern.
-

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area Walk-by 46: PAB El. 26' Near SW-2870

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

Masonry wall below valve SW-2870. Interaction with BS valves on west side judged to not be credible.

Masonry wall near DOOR-149 appears to be reinforced for seismic considerations.

Masonry wall near T-108A/T-108B area appears to be adequate. Walls are approximately 6' tall. Judged to be acceptable.

Comments

Seismic Walkdown Team: D. Carter & D. Nuttall - 10/2/2012

Evaluated by: _____ Detailed signed records of the checklists are available at the site. _____ Date: _____

E

Plan for Future Seismic Walkdown of Inaccessible Equipment

Completion of the walkdowns for four items must be deferred due to accessibility. One item requires a bus outage and five items require a refueling outage. Table E-1 summarizes the reasons each item is inaccessible during normal plant operation. PBNP CRs have been written to identify these deferred components and to provide a schedule the future Seismic Walkdowns for these items.

Table E-1. Summary of Inaccessible Equipment

Component ID	Location	Description	Reason for Inaccessibility	Scheduled Completion
T-034A	21/U2C/NW QTR	Safety Injection Accumulator	Access to containment is restricted during plant operation	Fall, 2012
SI-00841A	21/U2C/T-34A Accum. East	T-34A SI Accumulator Outlet Operator	Access to containment is restricted during plant operation	Fall, 2012
SI-00878A	21/U2C/C-1 Air Lock Area East	P-15B SI Pump R-1 Reactor Vessel Injection	Access to containment is restricted during plant operation	Fall, 2012
RH-00720	46/U2C/SE QTR	RHR Return to RCS	Access to containment is restricted during plant operation	Fall, 2012
C-035	8/CB/G-02 RM West Wall	G-02 EDG Alarm and Electrical Panel	Equipment energized	1 st Qtr, 2014
C-035A	8/CB/G-02 RM West Wall	G-02 EDG Local Transfer Panel	Equipment energized	1 st Qtr, 2014
C-079	8/CB/G-02 Rm	G-02 EDG DC Power Transfer Control Panel	Equipment energized	1 st Qtr, 2014
C-082	28/DGB/G-04 SWGR Rm	G-04 EDG Control Panel	Equipment energized	2 nd Qtr, 2013

F

Peer Review Report

**Peer Review Report for the Seismic
Walkdown Inspection of Point Beach
Nuclear Plant (NRC Near Term Task Force
(NTTF) Recommendation 2.3)**

Point Beach Nuclear Plant

November 2012

Prepared by *Douglas P. Brown* 11/23/12
Douglas P. Brown (PR Team Lead) Date

Reviewed by S.E. Guokas by telecon 11/23/12
S. E. Guokas (PRA Group) *Douglas P. Brown* Date
11/23/12

1. INTRODUCTION

This report documents the peer review of the seismic walkdowns performed for Point Beach Nuclear Plant in September and October 2012, in support of the NRC Near Term Task Force (NTTF) Recommendation 2.3. This document describes the peer review team and process (Section 3), the peer review of the SWEL selection (Section 4), and the peer review of the seismic walkdown (Section 5).

The peer review was performed consistent with Section 6 of the EPRI-TR-1025286 ^(REF 1) guidance document and addresses the following specific activities:

- Review of the selection of components for the Seismic Walkdown Equipment List (Section 4)
- Review of a sample of the checklists prepared for the Seismic Walkdowns & Area Walk-Bys (Section 5.1)
- Review of any licensing basis evaluations (Section 5.2)
- Review of the decisions for entering the potentially adverse conditions in to the plant's Corrective Action Program (Section 5.2)
- Review of the final submittal report (Section 6).

2. BACKGROUND

This peer review covers three portions of the seismic walkdown: (a) the preparation of the SWEL, (b) the actual walkdown, and (c) the final submittal report.

The Seismic Walkdown Equipment List (SWEL) was prepared in the summer of 2012 and finalized in November, 2012, based on revisions that occurred during the walkdowns. Section 4 describes the process of peer reviewing the SWEL.

The vast majority of the seismic walkdowns occurred September 17 through September 21 and October 1 through October 5. The peer review is described and documented in Section 5 of this report.

Two entire areas – the containments – were deferred for each unit for completion during each following respective outage - see Appendix E for a *Plan for Future Seismic Walkdown of Inaccessible Equipment*. This allowed the walkdown to occur with less radiation exposure to the walkdown team. Inspection deferrals for Unit 1 and Unit 2 Containments are being tracked in NAMS Action Tracking system.

There are also nine (9) other components that are being deferred. They have partially complete Seismic Walkdown Checklists. The SWCs could not be completed since they are electrical panels and are required to be opened in order to inspect the panel internals for 'Other Adverse Conditions'. These items are also being tracked in Appendix E as well as the NAMS Action Tracking System.

3. PEER REVIEW TEAM & PROCESS

The Point Beach (PBN) Peer Review Team consisted of individuals from PBN operations, civil engineering, licensing, and PRA as well as structural/seismic engineers from Stevenson & Associates. These individuals participated in phases of preparation, performance, and peer review of the seismic walkdowns. This section documents the peer review process and how the Peer Review Team interacted with the Seismic Walkdown Engineering Teams.

3.1 Peer Review Team

The affiliation, role, and qualifications for each Peer Review Team member are summarized in the following table.

Name	Group	Role *	Qualifications **
Rick Merkes	PBN Operations	SWEL co-preparer	(e)(f)
Douglas P. Brown	PBN Civil Engineering	Peer Review Team Leader SWE SWEL co-preparer	(b) (c) (g)
David N. Carter	Stevenson & Assoc. (consultant eng.)	SWE Team #1 Leader SWE PR	(b) (c) (g)
Nabil Juraydini	Stevenson & Assoc. (consultant eng.)	SWE Team #2 Leader SWE PR	(b) (c) (g)
Stanley E. Guokas	PBN PRA Group	PR Team PBN – SWEL Preparer	(d)
Russ Severson	DAEC PRA Group	SWEL PR	(d)
T. K. Ram	Stevenson & Assoc. (consultant eng.)	SWEL PR	(b) (c) (g)
Jeffery Buboltz	PBN Civil Engineering	SWE Team Member SWE PR	(b) (c) (g)
Scott Kahl		SWE Team Member SWE PR	(b) (c) (g)
Richard L. LaPlante		SWE Team Member SWE PR	(b) (c) (g)
Coreen A. McDonald		SWE Team Member SWE PR	(b) (c) (g)
Mark C. Nielsen		SWE Team Member SWE PR License Basis PR	(b) (c) (g)
Dave J. Nuttall		SWE Team Member SWE PR License Basis PR	(b) (c) (g)

Notes:

* Role: PR (peer review), SWEL (seismic walkdown equipment list), SWE (seismic walkdown engineer)

** Qualifications:

- (a) Completed EPRI NTF 2.3 Seismic Walkdown Training
- (b) Seismic engineering experience
- (c) Degree in mechanical engineering or civil/structural engineering
- (d) Seismic PRA / IPEEE experience

- (e) Knowledge of plant operations, documentation
- (f) Plant Operations member
- (g) Completed *SQUG Walkdown Screening and Seismic Evaluation Training Course*

3.2 Peer Review Process

PR Team Lead

Doug Brown served as the Peer Review Team Lead. In that role, he was responsible for coordinating the peer review and assembling this report. As described below, he also performed some additional roles as part of the walkdown team and checklist PR. He also participated in the SWEL preparation, so he was not part of that PR process. That is, even though he was a SWEL co-preparer, the SWEL was independently reviewed and he did not partake in any of the SWEL PR. Therefore, performing as the lead peer review is considered acceptable.

SWEL Preparation

The SWEL was prepared by S. Guokas, who is a PBN PRA engineer, with familiarity with the PBN IPEEE Report and the PBN PRA model. Additional input into the SWEL was provided by a plant staff structural/seismic engineer (D. P. Brown), and a Plant Operations representative (R. Merkes).

The SWEL was Peer Reviewed by a team that included a PRA engineer (R. Severson), and a seismic engineer (T. K. Ram).

Seismic Walkdown

The primary seismic walkdown was conducted with two teams, each with two qualified structural/seismic engineers. A contractor engineer served as Team Leader of each team. The second team member was an available PBN SWE or the two contract engineers worked together as one team.

The Peer Review of the walkdowns consisted of a Peer Review Team Lead with Operations and PRA knowledge, and structural/seismic engineers. The structural/seismic engineers made up the SWE teams, but also served to peer review each other's work. The Peer Review Team Lead also participated in a few of the walkdowns for logistical support. The ultimate judgments regarding licensing basis were made by qualified Point Beach structural engineers.

- Seismic Walkdown Engineers (SWE):
 - SWE Team #1 – D. N. Carter (team lead),
 - SWE Team #2 – N. Juraydini (team lead),
 - SWE Team member – D. P. Brown
 - SWE Team member - J. Buboltz

- SWE Team member – S. Kahl
- SWE Team member – R. L. LaPlante
- SWE Team member – C. A. McDonald
- SWE Team member – M. C. Nielsen
- SWE Team member – D. J. Nuttall
-
- PR Team – Doug Brown (PR Team Leader), Stan Guokas
- Licensing Basis Reviewers – M. C. Nielsen, Dave J. Nuttall
- IPEEE Reviewers – S. Guokas

Final Report

The final seismic walkdown report was prepared by the Stevenson & Assoc. consultants, with review by Point Beach representatives from Operations, design structural engineering, and PRA.

- Preparers– D. N. Carter, N. Juraydini
- Reviewers – D. P. Brown, S. E. Guokas

4. PEER REVIEW – SELECTION OF COMPONENTS FOR SWEL

The purpose of this section is to describe the process to perform the peer review of the selected components that were included in the Seismic Walkdown Equipment List (SWEL). This peer review was based on review of the SWEL Selection Report ^(REF 2 & 3).

The guidance in Section 3: *Selection of SSCs* of the EPRI Technical Report ^(REF 1) was used as the basis for this review. Specifically, this peer review utilized the checklist in Appendix F: *Checklist for Peer Review of SSC Selection of the EPRI Technical Report* in Reference 1. Attachment 1 of this peer review report documents the completed checklist.

This peer review determined that the SSCs selected for the SWEL 1 seismic walkdowns represent a diverse sample of equipment required to perform the five safety functions and to meet the sample selection attributes, including:

- Various types of systems
- Major new and replacement equipment
- Various types of equipment
- Various environments
- Equipment enhanced based on the findings of the IPEEE
- Risk insight consideration

For SWEL 2 development, the peer review determined that spent fuel related items were adequately considered and were appropriately included or excluded.

This peer review resulted in no additional findings. All peer review comments requiring resolution were incorporated prior to completion of the SWEL Selection Report.

This peer review concludes that the process for selecting SSCs to be included on the Seismic Walkdown Equipment List appropriately followed the process outlined in Reference 1. It is further concluded that the SWEL sufficiently represents a broad population of plant Seismic Category 1 equipment and systems to meet the objectives of the NRC 50.54(f) Letter.

5. PEER REVIEW – SEISMIC WALKDOWN

The peer review of the seismic walkdown was performed by the Walkdown Team members on November 20. The Peer Review was performed as a group discussion, with all members participating.

5.1 Review of Sample Checklists & Area Walk-bys

The peer review meeting consisted of a review of thirty (30) randomly selected Seismic Walkdown Checklist (SWCs) representing thirty (30) pieces of equipment. Also, nine (9) Area Walk-by Checklists (AWCs) were randomly selected.

Table 5-1 lists the sample of 30 components from the Seismic Walkdown Checklist (SWC) that were discussed in the peer review meeting. These samples represent about 15% of the total SWEL population of 190 components that were completed. The sample includes a variety of types of components (heat exchanger, fluid-operated valve, motor operated valve, horizontal pump, vertical pump, tank, instrument rack, fan, low voltage switchgear, medium voltage switchgear, battery and rack, distribution panel, diesel generator, and control panel)

Table 5-1 also lists the sample of 9 areas from the Area Walk-by Checklist (AWC) that were discussed in the peer review. These samples represent about 18% of the total AWC population of 48 areas.

During the Peer Review discussion of components and areas during the following topics were addressed:

- Adequate license basis evaluation of adjacent components that are not tied together, but are touching. The evaluation should have addressed sensitive components inside both of the components, not just local deformation affects.
- There were a few checklists that it was noted the answer to the checklist question was incorrect, such as being answered as 'Not Applicable', when the answer should have been 'Yes'.
- Discussion about why an inverter panel was not opened for internal inspection. It was determined that there were more than just a few fasteners holding the front panel on and therefore the panel was not easily accessible.
- Seismic scaffolding – On the first day of the walkdowns, the entire Walkdown Team went as a group. It was noted that there was a scaffold nearby the component being walked down. The documentation package for the scaffold was checked to ensure the scaffold had been evaluated for potential interaction with the nearby component.
- Discussion about overhead support that the WD team had evaluated as being acceptable as-is. Therefore further evaluation is not required, and an AR did was not required for the condition.

- Discussion about pump oiler and potential interaction from overhead support. That support and overhead support are separated by several feet horizontally and therefore interaction is not a concern.
- There were several discussions about adjacent masonry walls.
- There was discussion about a spray interaction and why it was not noted on the SWC. The SWCs do not address spray interactions. Spray interactions are addressed on AWCs.
- Some valves located on Primary Auxiliary Building (PAB) 8 foot elevation are partially concealed by checkered floor plate. When needed, the SWEs had the floor plates lifted so that inspection of the valve could be completed.
- Discussion about why the SWEs are not required to evaluate pipe supports. Pipe supports were addressed in response to NRC Bulletin BL 79-14, *Seismic Analyses for As-Built Safety Related Piping Systems*.
- Discussion about less than full thread engagement. AR not required as thread engagement was short by only one thread and the SWEs determined the existing thread engagement is adequate.
- Discussion about a wall that is made of sheet rock and steel studs. It has been determined that the wall was designed considering seismic forces.
- Victaulic fittings were discussed. Follow-up evaluation of Victaulic fittings found that pipes with these fittings are well supported and that the fittings are acceptable.
- Discussion about thread engagement on existing Wej-it anchor bolts. Anchor bolts are for a trolley beam. Since trolley beam would not be evaluated with the trolley fully loaded, concurrent with a seismic event. Trolley beam need only be evaluated for dead weight concurrent with a seismic event.

5.2 Review of Licensing Basis Evaluations & Corrective Action Process

The final report includes tables of anomalies that were identified during the PBNP seismic walkdown inspection and how they were addressed. The list was reviewed by the peer review team, and it was found that a thorough and reasonable process was used to address each item on the list. There were no added comments offered by the review team, except that a typographical error was found in one Condition Report (CR). The CR indicated that the tube in question was 1/4" OD, but the tube that was analyzed by the seismic review team 3/8" OD. The peer review team walked down the tube in question and verified that the tube was 3/8" OD as was analyzed. The peer review team updated the CR to show the correct tube diameter.

6. REVIEW FINAL SUBMITTAL REPORT & SIGN-OFF

The final submittal report has been reviewed by Point Beach representatives from structural engineering, and the PRA Group, and found to meet the requirements of the EPRI 1025286 – Seismic Walkdown Guidance ^(REF. 1).

7. REFERENCES

1. EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, June 2012.
2. Point Beach Report, *Selection of the Seismic Walkdown Equipment List (SWEL) for the Requirement 2.3 Walkdown, Unit 1*, November 2012.
3. Point Beach Report, *Selection of the Seismic Walkdown Equipment List (SWEL) for the Requirement 2.3 Walkdown, Unit 2*, November 2012.

Table 5-1: Table of Sample Components from Seismic Walkdown Checklist (SWC) and Area Walk-by (AWB)

Walkdown Team		Equipment Identification	Walkby Area Identification
NJ	JJB	1-83/DY-03	
DNC	NJ	1A-05	
DNC	JJB	1AF-04002	
DNC	NJ	1B-03	
DNC	NJ	1C-105	
NJ	JJB	1DY-03	
DNC	MCN	1P-010A	
DNC	DJN	1P-014B	
DNC	DJN	1RH-00625	
SDK	JJB	AF-04023	
DNC	NJ	C-078	
DNC	DJN	D-16	
DNC	DN	G-01	
DNC	CAM	RK-25A	
NJ	MCN	SW-00012C	
DNC	NJ	T-060E	
NJ	SDK	W-181A1	
DNC	NJ	2B-39	
DNC	DJN	D-06	
NJ	RLL	2DY-02	
DNC	DJN	2IA-03048	
DNC	DJN	2SI-00825B	
DPB	MCN	2TE-00621	
DNC	DJN	D-02	
DNC	NJ	FO-03931	
NJ	SDK	P-032D	
NJ	JJB	SW-02869	

NJ	RLL	T-171A	
DNC	DJN	HX-013B	
NJ	CAM		AWB 5
DNC	NJ		AWB 11
DNC	RLL		AWB 16
DNC	RLL		AWB 18
DNC	MCN		AWB 20
NJ	CAM		AWB 23
NJ	SDK		AWB 28
NJ	SDK		AWB 34
DNC	DJN		AWB 40

Peer Review Checklist for SWEL Point Beach Unit 1

Instructions for Completing Checklist

This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (SWEL) in accordance with Section 6: Peer Review. The space below each question in this checklist should be used to describe any findings identified during the peer review process and how the SWEL may have changed to address those findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Were the five safety functions adequately represented in the SWEL 1 selection? Y N
Appropriate equipment has been included to maintain the five safety functions.
-

2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:

- a. Various types of systems? Y N
Various system types have been included (e.g., Aux Feed, Charging, RHR, CCW, Containment Spray, SI, and support systems such as DG, Load Centers, Distribution Panels, and HVAC).

- b. Major new and replacement equipment? Y N
New or Replace" equipment are included in the list.

- c. Various types of equipment? Y N
Second peer reviewer comments satisfactorily resolved as follows: 1. SWEL 1 revised to add equipment classes 3 and 6; 2. Note added to Attachment B of the SWEL selection report providing justification for the absence of equipment classes 11, 12, and 13.

- d. Various environments? Y N
Appropriate environments have been included (e.g., Containment, DG, and Control buildings)

- e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program? Y N
Included as indicated in the column, "IPEEE Enhancement."

Peer Review Checklist for SWEL Point Beach Unit 1

f. Were risk insights considered in the development of SWEL 1? Y N
A checkmark in the risk column indicates the equipment being risk significant.

3. For SWEL 2:

a. Were spent fuel pool related items considered, and if applicable included in SWEL 2? Y N

Second peer reviewer comments satisfactorily resolved as follows: Justification for not including manual and check valves that are unrelated to rapid draindown scenario is provided in the SWEL selection report, section 4.2, "Screening for SWEL 2," (Screen #3 Sample Considerations (Equipment Type)).

b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2? Y N

Yes, it has been in section 4.2 of the SWEL selection report.

4. Provide any other comments related to the peer review of the SWELs.

5. Have all peer review comments been adequately addressed in the final SWEL? Y N

Peer Reviewer #1:  Russ Severson Date: 11/16/12

Peer Reviewer #2:  T. K. Ram Date: 11/16/12

Peer Review Checklist for SWEL Point Beach Unit 2

Instructions for Completing Checklist

This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (SWEL) in accordance with Section 6: Peer Review. The space below each question in this checklist should be used to describe any findings identified during the peer review process and how the SWEL may have changed to address those findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Were the five safety functions adequately represented in the SWEL 1 selection? Y N
Appropriate equipment has been included to maintain the five safety functions.
-
2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:
- a. Various types of systems? Y N
Various system types have been included (e.g., Aux Feed, Charging, RHR, CCW, SW, SI, and support systems such as DG, Load Centers, Distribution Panels, and HVAC).

 - b. Major new and replacement equipment? Y N
New or Replace" equipment are included in the list.

 - c. Various types of equipment? Y N
Second peer reviewer comments satisfactorily resolved as follows: 1. SWEL 1 revised to add equipment classes 10, 19, and 21b; 2. Note added to Attachment B of the SWEL selection report providing justification for the absence of equipment classes 11, 12, and 13.

 - d. Various environments? Y N
Appropriate environments have been included (e.g., DG, SWGR, and SW buildings)

 - e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program? Y N
Included as indicated in the column, "IPEEE Enhancement."

Peer Review Checklist for SWEL Point Beach Unit 2

f. Were risk insights considered in the development of SWEL 1? Y N
A checkmark in the risk column indicates the equipment being risk significant.

3. For SWEL 2:

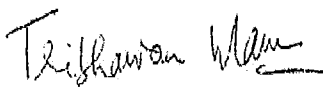
a. Were spent fuel pool related items considered, and if applicable included in SWEL 2? Y N
N/A (SWEL 2 has been included in Unit 1 selection and not included here)

b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2? Y N
N/A (See Item 3 a above)

4. Provide any other comments related to the peer review of the SWELs.

5. Have all peer review comments been adequately addressed in the final SWEL? Y N

Peer Reviewer #1:  Russ Severson Date: 11/16/12

Peer Reviewer #2:  T. K. Ram Date: 11/16/12