

SEISMIC WALKDOWN REPORT

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

for the

**ST. LUCIE PLANT UNIT 1
NRC Docket No. 50-335**

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Executive Summary

The purpose of this report is to provide information as requested by the Nuclear Regulatory Commission (NRC) in its March 12, 2012 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 March 12, 2012 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 St. Lucie Plant 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) St. Lucie 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
- IPEEE Vulnerabilities Resolution Report
- Peer Review

Seismic Licensing Basis

The design basis earthquake (DBE) for the St. Lucie Plant site is 0.10g horizontal ground acceleration. The vertical earthquake is defined as 2/3 of the horizontal earthquake acceleration. (Ref. 2 section 3.7)

Personnel Qualifications

The walkdown team consisted of experienced site personnel with Civil, Operations and PRA backgrounds. The site personnel were supplemented by two vendors with significant experience in the areas of seismic design and the performance of seismic walkdowns. 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). Personnel qualifications are discussed in Section 3 of this report.

Selection of SSCs

One hundred (100) components were selected for the walkdown effort, including spent fuel pool items. These components were selected as 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 St. Lucie Plant Unit 1 were performed October 1-5, 2012. The walkdown team consisted of two 2-person Seismic Walkdown Engineer (SWE) teams.

The seismic walkdown team inspected 88 of the 100 components on the SWEL (comprised of SWEL 1 and SWEL 2). Walkdowns for 11 components were deferred due to accessibility issues relating to energized equipment or equipment being located within containment. These 11 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 39 components. (Ref. 1) A total of 42 anchorage configurations were confirmed to be installed in accordance with the station documentation.

During the seismic walkdowns at St. Lucie Unit 1, several Action Requests (ARs) were issued for a variety of conditions, which are detailed in Tables 5-2 and 5-3. After evaluation through the Corrective Action Program (CAP), it was determined that none of the conditions identified in the ARs were adverse seismic conditions that challenged the plant licensing basis.

Seismic Licensing Basis Evaluations

Conditions identified during the walkdowns were documented on the SWCs, AWCs, and entered into the CAP. Conditions that required seismic licensing basis evaluations were completed and documented within Section 6: Licensing Basis Evaluations of this report. Tables 5-2 and 5-3 in the report provide a summary of the conditions and the action completion status.

IPEEE Vulnerabilities

No vulnerabilities were identified as a result of the effort that addressed the Individual Plant Examination of External Events (IPEEE).

Peer Reviews

The Peer Review of the walkdowns consisted of one team made up of two representatives and two structural/seismic engineers. The structural/seismic engineers made up the SWE team, but also served to peer review each other's work. Section 8 and 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. Further, 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

In summary, seismic walkdowns have been completed at the St. Lucie Plant 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 corrective action program.

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 that challenged the plant licensing basis. 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 predominantly pertaining to maintenance and housekeeping. 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 11 items that could not be inspected at the time of the walkdown. Of the 11 items, 6 were electrical cabinets that could not be opened due to potential electrical hazard from energized buswork and 5 were items that are located within containment. These 11 items will be inspected during a future outage.

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Introduction

1.1 Background

In response to Near-Term Task Force (NTTF) Recommendation 2.3, the Nuclear Regulatory Commission (NRC) issued a 10CFR50.54(f) letter on March 12, 2012 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 (Reference 1), was endorsed by the NRC on May 31, 2012. St. Lucie has committed to using this NRC-endorsed guidance as the basis completing the walkdown effort.

1.2 Plant Overview

Florida Power & Light Company's (FPL) St. Lucie site consists of two pressurized water reactor (PWR) generating units located on Hutchinson Island in St. Lucie County, Florida approximately 7 miles to the south of the city of Ft. Pierce. The eastern boundary of the site is the Atlantic Ocean and the western boundary is the Indian River, a tidal lagoon. Other prominent natural features within 50 miles of the site include Lake Okeechobee, 30 miles to the west-southwest of the site and a portion of the Everglades approximately 24 miles to the south of the site. The plant's nuclear steam supply system (NSSS) is a pressurized water reactor designed by Combustion Engineering Incorporated. The net electrical output is approximately 890 Mwe per unit. The containment structure and balance of plant are designed by Ebasco Services Incorporated.

1.3 Approach

The EPRI Seismic Walkdown Guidance (Reference 1) was used for the St. Lucie 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 SSCs
- Seismic Walkdowns and Area Walk-Bys
- Seismic Licensing Basis Evaluations
- IPEEE Vulnerabilities Resolution Report
- Peer Review

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Seismic Licensing Basis

The licensing basis for Seismic Class I (SC-1) equipment at St. Lucie Plant is defined in the UFSAR (Ref. 2) Section 3.7. Site design ground motion response spectra for the Operating Basis Earthquake (OBE) and Design Basis Earthquake (DBE) are based on the Housner spectral shape provided in UFSAR Figures 3.7-1 and 3.7-2. The DBE is that which could produce the maximum vibratory acceleration at the site as determined from evaluation of seismic and geologic information. The OBE and DBE damping values for buildings, piping and SC-1 equipment are listed in UFSAR Section 3.7.1.3.

The entire state of Florida is by all accounts a low seismicity region of the United States having been a Zone 0 area by the Uniform Building Code [Ref. 2.3] which means no seismic design loads for "conventional" buildings. The original design operating basis earthquake was conservatively set to a horizontal 0.05g peak ground acceleration (PGA) and the design basis earthquake (DBE) was set to 0.10g by requirement of 10CFR100, Appendix S. The vertical earthquake is 2/3 of the horizontal component and applied simultaneously with one horizontal component. The term "Seismic Class I" as used herein corresponds to the term "Category I" as used in the "Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants", February 1972. No seismic classifications are made on the basis of plant operability, hence no additional seismic classes or categories have been established.

Seismic Class I structures, systems and components have been designed to withstand loadings due to the design basis earthquake (DBE):

- without loss of function or fluid boundary integrity if they are needed for safe plant shutdown or to mitigate the effects of a LOCA
- without failure of fluid boundary integrity if such failure could result in significant uncontrolled release of radioactivity to the environment
- without loss of function if such function is needed to detect or prevent potential significant uncontrolled release of radioactivity to the environment or if such function is needed to detect conditions requiring plant shutdown.

Per UFSAR Section 3.9 Mechanical equipment was qualified by testing and analysis. Manufacturers were required to test equipment to floor response spectra provided for the location where the equipment was located or by analysis where stresses were limited to 90% of material yield stress for the DBE loading cases or by experience demonstrating the sufficient margin. Seismic static factors for various equipment are given in Table 3.9-1. For active Code Class 1, 2 and 3 mechanical components St. Lucie followed Regulatory Guide 1.48 for testing pumps and valves to demonstrate operability for loadings which included seismic. St. Lucie followed the requirements of the draft ASME Code for Pumps and Valves (Ref. 3). Valve motor operators supplied on St. Lucie 1 were manufactured by Limitorque. These operators are representative of the prototype units that were successfully seismically tested in accordance with Ogden Technology Laboratories Report No. 7192-9 dated 9/26/72 and Lockheed Electronics Company Test Report No. 2120-4594 dated July 31, 1968, and No. 2539A-4723 dated

September 23, 1973. These reports show that the operators comply with the intent of IEEE Standard 344-1971 requirements.

For Code Class 1, 2 and 3 piping St. Lucie 1 performed dynamic analysis and followed the requirements and stress limits of ANSI B31.7.

For electrical equipment purchase specifications for seismic Class I instrumentation and electrical equipment contain horizontal and vertical seismic acceleration values based on the DBE spectra for the equipment location. Where there is a possibility of amplification or the floor response acceleration due to equipment supports, the specified acceleration values are increased to account for such amplification. Manufacturers were also supplied the floor response spectra for the equipment location. It was required to ensure that the natural period of vibration of the component did not fall within the critical frequency range of the floor response spectra. Qualification documentation was required to demonstrate that the component was capable of functioning under the specified seismic loadings. The qualification data could consist of prototype test results, mathematical analysis or operational experience. Per UFSAR Section 3.10, SC-1 electrical equipment was qualified per follow the guidelines recommended in IEEE Standard 344-1971, "IEEE Guide for Seismic Qualification of Class 1E Electric Equipment for Nuclear Power Generating Stations" even though it was not in existence at the time the construction permit was granted.

For concrete structures and components, the basic code for determining the section strengths is ACI 318-63, Part IVB for Ultimate Strength Design (USD). Steel design and construction followed AISC, "Specification for the Design, Fabrication and Erection of Structural Steel for Buildings," 1969.

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Personnel Qualifications

3.1 Overview

This section of the report identifies the personnel who participated in the NTTF 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 (Reference 1). Resumes contained in Appendix A provide detailed personnel qualification information.

3.2 Project Personnel

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

Table 3-1: Personnel Roles

Name	Equipment Selection Engineer	Plant Operations	Seismic Walkdown Engineer (SWE)	Licensing Basis Reviewer	IPEEE Reviewer	Peer Reviewer
St. Lucie (NextEra Energy)						
G. Tullidge	X					
A. Restrepo	X					
M. Bladek		X				X
A. Terezakis		X				
D. West				X	X	X
E. Hollowell				X	X	X
S. Ramani				X	X	
Stevenson & Associates						
S. W. Baker			X	X		
H. A. Young			X	X		

3.3 Equipment Selection Personnel

The SWEL development was performed by G. Tullidge, from the St. Lucie PRA Group. The SWEL was reviewed by A. Restrepo from the PRA Group, A. Terezakis from Operations, and S. Ramani from Engineering. Résumés are provided in Appendix A.

3.4 Seismic Walkdown Engineers

The seismic walkdown team consisted of two seismic walkdown engineers (SWEs) from Stevenson and Associates (S&A). The SWEs were Seth W. Baker and Hunter A. Young of S&A. Other St. Lucie professional staff participating in some of the walkdowns included D. West, E. Hollowell and M. Bladek. Resumes are included in Appendix A.

The SWEs (S. Baker and H. Young) are engineers from Stevenson and Associates (S&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 Probabilistic Risk Assessment (PRA) or Seismic Margin Assessment, to address US Nuclear Regulatory Commission (NRC) Individual Plant Evaluation for External Events (IPEEE) for over 35 US and European plants.

3.5 Licensing Basis Reviewers

The S&A Licensing Basis Reviewers for St. Lucie consisted of Seth Baker and Hunter Young. The St. Lucie engineers E. Hollowell, S. Ramani, and D. West had the lead in licensing basis determinations, with support from the S&A engineers.

3.6 IPEEE Reviewers

The IPEEE Reviewers for St. Lucie consisted of the PRA engineers, G. Tullidge, who participated in the SWEL preparation as well as E. Hollowell, S. Ramani and D. West, from Engineering who participated in the seismic walkdowns.

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 other Operations personnel also provided support to the walkdown by reviewing the list of components for accessibility and accompanying the SWEs to open cabinet doors for accessibility to anchorage.

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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 EPRI Seismic Walkdown Guidance (Reference 1). The final SWEL (both SWEL 01 & SWEL 02) is included in the SWEL Selection Report in Appendix B.

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Seismic Walkdowns and Area Walk-by's

5.1 Overview

The St. Lucie Seismic Walkdowns and Area Walk-Bys were conducted by two trained Seismic Walkdown Engineers in accordance with the EPRI Seismic Walkdown Guidance (Reference 1). The walkdowns occurred October 1-5, 2012. Selected electrical equipment cabinets that were not completely inspected or were not opened at all during the inspections due to unavailability were deferred to a future unit outage or another time when the equipment is accessible, as appropriate. The Seismic Walkdowns and Area Walk-Bys are discussed in more detail in the following sections.

5.2 Seismic Walkdowns

The Seismic Walkdowns focused on the seismic adequacy of the items on the SWEL as provided 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 88 of the 100 items identified on the St. Lucie Plant Unit 1 SWEL. The completed SWCs along with any comments are provided in Appendix C of this report. 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.

Seismic Walkdowns are deferred for the remaining 11 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 they were energized and required for safe plant operation. 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.

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 Corrective Action Program 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.

5.2.2 Anchorage Configuration Confirmation

As required by the EPRI Seismic Walkdown Guidance (Reference 1, page 4-3), at least 50% of the items were confirmed to be anchored consistent with design drawings. 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:

- Design drawings
- Seismic qualification reports of analyses or shake table tests

The table of contents for Appendix C 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 drawings 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	$(A - B) / 2$	
100	23	39	42

5.2.3 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 Seismic Walkdown Engineers exercised their judgment to identify seismic interaction hazards. Section 5.2.5 provides a summary of issues identified during the Seismic Walkdowns.

5.2.4 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 were evaluated. 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.

5.2.5 Issues Identification during Seismic Walkdowns

Table 5-2 provides a summary of issues identified during the equipment Seismic Walkdowns. The equipment Seismic Walkdowns resulted in several conditions requiring action and each of these was

entered into the station's CAP by St. Lucie Plant site personnel (PSL). All of the identified concerns were assessed and concluded to have no current operability issues.

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

No.	Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP (Y/N)	Current Status
Anchorage issues					
1	MV-14-3	W-flange section where operator is mounted has a hole indicative of past corrosion that was painted over.	Per PSL, AR generated for condition. Operator has sufficient remaining welds so as to preclude failure during a seismic event. AR action generated to evaluate and correct as required.	Y	Action being tracked in CAP
2	DOST 1B	Noted 2 nuts painted over w/ apparent loss of nut area (all threads are engaged). Verify whether condition has been analyzed.	Per PSL, AR generated AR for condition. Circumference of nut intact. No loss of anchor cross section. No current operability issue. AR action to replace degraded nut.	Y	Action being tracked in CAP
3	1A MFIV ACCUM	Hold down bolt on east end of tank has evidence of area loss due to corrosion.	Per PSL, AR generated for condition. Corrosion on head of bolt did not significantly affect anchor cross section or capacity. No current operability issue. AR action to clean and coat, replace if required.	Y	Action being tracked in CAP
4	FT-14-1A	Steel mounting bracket has lost area rendering bottom bolt structurally ineffective.	Per PSL, AR generated for condition. Three other bolts remain effective and given low mass of FT, there is no loss of functionality for a design basis seismic event. No current operability issue. AR action to replace bracket.	Y	Action being tracked in CAP

No.	Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP (Y/N)	Current Status
Seismic interaction issues					
5	QSPDS CHAN A CAB	Unanchored storage cabinet is approx. 1' east of QSPDS and could overturn and impact cabinet.	Per PSL, storage cabinet removed. PSL generated AR for condition. No current operability issue.	Y	Action being tracked in CAP
Other conditions					
6	QSPDS CHAN A CAB	Verify whether QSPDS A and B cabinets are bolted together or unbolted condition is analyzed.	Per PSL, existing modification package validates that as-installed condition as conforming with its seismic qualification.	N	Closed
7	ESC SA	Noted missing latch on bottom of N door.	Per PSL, AR generated for condition. Remaining latches secured and sufficient to maintain the door in a closed position. No current operability issue. AR action to repair latch.	Y	Action being tracked in CAP
8	RTGB-106	Noted open interior cabinet door (unsecured), which could move but not damage equipment during a seismic event.	Corrected by PSL during walkdown. No adverse seismic condition.	N	Closed
9	RTGB-106	Various panel bolts and possibly interior panels missing. Also noted relay covers on the interior floor.	Per PSL, AR generated for condition. All panels had sufficient bolts such that condition was not an adverse seismic. AR action issued to address seismic housekeeping issues. No current operability concern.	Y	Action being tracked in CAP

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 vicinity is described on the Area Walk-By Checklist (AWC), shown in Appendix D of this report. A total of 35 AWCs were completed for St. Lucie 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 meet the station administrative procedure for the control of scaffolding. Seismic housekeeping was examined to meet the station procedure for the control of temporary equipment, temporary power, job setup, and plant storage.

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. Those prior evaluations were considered, as applicable, as information for the Area Walk-Bys.

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 Class I tanks

The SWEs exercised their judgment to identify only those seismically-induced interactions that could lead to flooding or spray. No concerns associated with fire protection piping or spray of equipment were identified at St. Lucie 1.

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 Seismic Walkdown Engineers exercised their judgment to identify only those seismically-induced interactions that could lead to fires. No such interactions were found at St. Lucie 1.

5.3.1 Issues Identification during Area Walk-bys

Table 5-3 provides a summary of issues identified during the Area Walk-bys. The Area Walk-bys resulted in several conditions requiring action and each of these was entered into the station's CAP by St. Lucie Plant site personnel (PSL). All of the identified concerns were assessed and concluded to have no current operability issues.

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

No.	Area	Potentially Adverse Seismic Condition	Resolution	Entered into CAP (Y/N)	Current Status
Seismic housekeeping issues					
1	AW22 – RAB 62' CTRL Rm	Permanent file cabinet south of PAP "A" and "B" cabinets may pose overturning hazard if unanchored. Verify whether cabinets are anchored.	Per PSL existing modification package validates file cabinet as adequately anchored to preclude overturning hazard.	N	Closed
2	AW20 – RAB 19.5' CEA MG ST Rm	Vertical man lift resting against box B197B for PT-07-8B. Impact from man lift during SSE could damage transmitter.	Per PSL, man lift relocated to safe position. Box is not seismically sensitive. No current operability issue.	N	Closed
3	AW20 – RAB 19.5' CEA MG ST Rm	Protected equipment signs stored against 4.16 kV SWGR 1AB. Sign impact could cause equipment malfunction during SSE.	Per PSL, signs relocated to safe position. Sufficient gap remained to protect equipment. Signs relatively light weight compared to cabinet. PSL generated AR action to updated Operations procedures for storage/location of signs. No current operability issues.	Y	Action being tracked in CAP
Other seismic interaction issues					
4	AW17 – FHB 48' HVAC Rm	MCC 1B - 8 has approx. 1/8" gap in front - to - back direction w/ concrete wall to the east. Verify whether condition is analyzed, gap is adequate, or systems analysis determines chatter acceptable for safety - related functionality.	MCC 1B - 8 confirmed to be Quality Related, Seismic Category 2:1. Therefore potential contact with the wall poses no adverse concern since equipment functionality is not required.	N	Closed

No.	Area	Potentially Adverse Seismic Condition	Resolution	Entered into CAP (Y/N)	Current Status
5	AW22 – RAB 62' CTRL Rm	Approx. 3/16" gap between Aux Relay Cabinet and PAP "A" Cabinet. Determine whether gap is adequate.	Licensing Basis Evaluation concluded that gap is adequate. See Section 6.	N	Closed
Other conditions					
6	AW17 – FHB 48' HVAC Rm	Plenum for HVE - 16A and - 16B has significant corrosion indicative of strength loss at NE corner of unit. 2 out of approx. 60 stitch welds may be affected.	Per PSL, AR generated for condition. Remaining length of weld acceptable for equipment to perform function. AR action issued to clean, inspect and repair as required to restore design margin. No current operability issue.	Y	Action being tracked in CAP
7	AW22 – RAB 62' CTRL Rm	Aux Relay Cabinet door damaged so that top latch does not properly engage.	Per PSL, AR generated for condition. Aux Relay cabinet is not Quality Related, Seismic Cat 2:1. Latch adjusted to close properly. No current operability issue.	Y	Action being tracked in CAP
8	AW22 – RAB 62' CTRL Rm	Due to raised floor, unable to view anchorages of all equipment. Verify equipment anchorages from drawings.	Per PSL, anchorage of equipment confirmed by plant drawings.	N	Closed
9	AW01 – CCW N Area A Train	Approx. 1" pipe north of strainer has 2 unanchored supports ineffective at resisting lateral load.	Per PSL, AR generated for condition. Piping is still functional due to low mass and inherent ductility with no impact hazards to other equipment due to decreased stiffness. AR action to provide anchors for lateral restraint. No current operability issue.	Y	Action being tracked in CAP

No.	Area	Potentially Adverse Seismic Condition	Resolution	Entered into CAP (Y/N)	Current Status
10	AW05 – YARD 19' Inside CST Concrete Enclosure	Base plate anchor bolts and nuts for support of LT - 12 - 12 are heavily corroded and indicated loss of strength.	PSL generated AR for condition. Given LT low mass and ability of attached tubing and conduit to provide positive structural support, loss of strength judged to be acceptable for function of equipment during seismic event. AR action to clean, repair and coat the degraded support. No current operability issue.	Y	Action being tracked in CAP
11	AW05 – YARD 19' Inside CST Concrete Enclosure	On N side of tank on what appears to be CST fill line, vertical support base plate has heavy corrosion on bolts and nuts indicative of strength loss.	Per PSL, AR generated for condition. Support provides only bearing support so degraded bolts and nuts do not negatively affect the seismic function of support. AR action to clean, repair and coat the degraded support. No current operability issue.	Y	Action being tracked in CAP
12	AW28 – RAB 43' Remote Shutdown Rm	Door latch to HSCP 1B is broken. Door cannot close and could cause equipment malfunction during SSE.	Per PSL, AR generated for condition. Door latch still in tact, but handle broken. Door latch secured by maintenance. No current operability concern. AR action to replace broken handle.	Y	Action being tracked in CAP

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 corrective action process. One seismic licensing basis evaluation was required for Unit 1 of St. Lucie and is shown in Table 6-1.

Table 6-1: Licensing Basis Evaluations

Equipment/Area ID	Potentially Adverse Seismic Condition	Licensing Basis Evaluation	Status
AW22 – RAB 62' CTRL Rm	Approx. 3/16" gap between Aux Relay Cabinet and PAP "A" Cabinet. Determine whether gap is adequate.	Per EPRI NP7146s-SL R1, tested relay cabinets with similar properties of the Aux Relay Cabinet and PAP "A" Cabinet had fundamental frequencies ranging from 9.5 Hz to 11 Hz. The SSE horizontal spectral acceleration at 9 Hz (lower-bound estimate) at the 61 ft elevation of the RAB for 2% damping (in accordance with the U1 UFSAR) is approximately 0.45g. Using a 1.6 modal shape factor for cantilever action and conservatively summing relative displacements, the maximum combined cabinet displacement is 0.17 in ($=2 \cdot 1.6 \cdot 0.45g \cdot 386.4 \text{ in/s}^2/g / (2 \cdot \pi \cdot 9 \text{ Hz})^2$). Therefore, the 3/16" gap is adequate.	Closed

7

IPEEE Vulnerabilities Resolution Report

The seismic assessment performed for the St. Lucie IPEEE Report (Ref. 4) was reviewed and no seismic vulnerabilities were identified. No plant improvements were required as a result of the seismic portion of the IPEEE. (See page 2 of the NRC SER on IPEEE (Ref. 10)). There were no vulnerabilities identified during the IPEEE report, and no scenario or event sequence has been identified which is considered to be a severe accident vulnerability

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 final 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. St. Lucie Plant 1 Updated Final Safety Analysis Report (UFSAR), Amendment 22, May, 2007.
3. Draft ASME Code for Pumps and Valves for Nuclear Power, November, 1968, Class II.
4. Seismic Individual Plant Examination for External Events (IPEEE) for St. Lucie 1.
5. IEEE 344-1971
6. ACI 318-63
7. AISC, 1969
8. EPRI NP-7146s-SL R1, "Guidelines for Development of In-Cabinet Demand for Devices Mounted in Electrical Cabinets."

A

Project Personnel Resumes and SWE Certificates

A.1 Introduction

Resumes for the following personnel that contributed to the seismic walkdown and/or peer review are included in this Appendix:

FPL, St. Lucie Plant: M. Bladek, E. Hollowell, S. Ramani, A. Restrepo, A. Terezakis, G. Tullidge, D. West

Stevenson & Associates: S. W. Baker, H. A. Young

EPRI Walkdown Training Course certificates are included for each of the designated SWEs.

A.2 Resumes & Certifications

Seth Baker

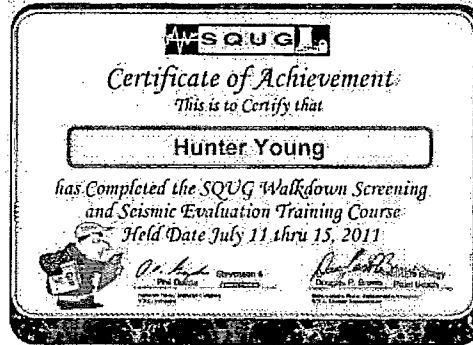
Mr. Baker is a Senior Engineer I in the S&A Boston office, where he joined in 2008. He has performed seismic and other dynamic evaluations on a variety of nuclear structures including steel frame buildings, equipment frames, and electrical cabinets, as well as having designed several structural modifications. He has completed the NTTF Recommendation 2.3 Training Course and has subsequently performed seismic walkdowns on seven US nuclear units. Mr. Baker holds an MS in Civil Engineering from Stanford University, a BS in Civil Engineering from the Worcester Polytechnic Institute, and is a registered E.I.T in Massachusetts.



Hunter A. Young, P.E.

Mr. Young is a Senior Engineer in the S&A Phoenix office with specialization in the dynamic analysis and design of structures and equipment for seismic, blast, fluid, and wind loads. He has managed and led seismic walkdowns and fragility analyses of structures and components for use in probabilistic risk assessments. Mr. Young has performed the seismic analyses of braced steel frames, concrete foundations, masonry walls, large storage tanks, and electrical and mechanical equipment anchorages. In addition, Mr. Young has executed the walkdown and analysis of tank structures and their associated leakpath piping to assess loss of inventory in the event of beyond

design basis seismic events using manual and finite element methods. Mr. Young has a Master of Engineering in Structural Engineering from the Massachusetts Institute of Technology and BSCE from the University of Notre Dame. He is a licensed P.E. (civil) in California and has completed the SQUG Walkdown training course.



Sharam Ramani

Mr. Ramani is a Civil/Mechanical Design Engineering Supervisor at Saint Lucie Nuclear Station (PSL). He has more than 30 years of nuclear experience, with most of that at PSL Nuclear Design Engineering group. He directs and coordinates major and minor civil/mechanical engineering activities to support safe and reliable nuclear plant operation. Has ability to extrapolate and communicate to management on complex problems /resolutions to justify continued operation. He evaluates regulatory guidance to determine applicability to components and evaluates design basis to ensure compliance. Mr. Ramani has a Civil Engineering degree from University of Massachusetts.

Dan West

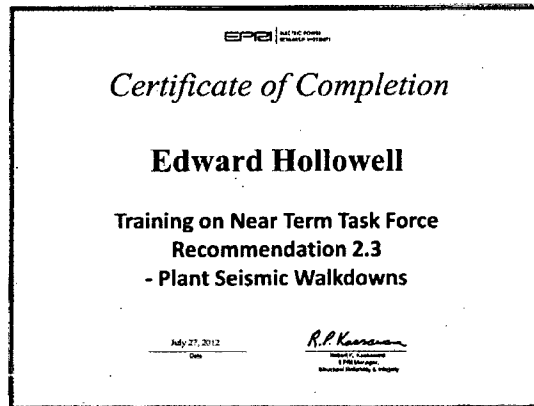
Mr. West is a Staff Engineer in the St. Lucie Plant Engineering department. He has over 32 years of varied nuclear engineering experience at St. Lucie and is currently the site lead for the Fukushima response. He previously worked for General Electric at the Knolls Atomic Power Laboratory in the US Navy nuclear propulsion program. Mr. West has a B.S. in Marine Engineering from the US Merchant Marine Academy and an MBA from the Florida Institute of Technology. He held an SRO license on the St. Lucie Units from 1982 to 1988.

Michael Bladdek

Mr. Bladdek is Assistant Operations Manager in the St. Lucie Plant Operations Department with the responsibility for the PSL Operations Department support organization including the corrective action program, NRC inspection support, performance indicators, industry benchmarking and evaluation support. He has 27 year career in operations he has held various positions in St. Lucie and Turkey Point Plant Operation departments from Shift Manager to Field Operator. He has a Bachelor of Science Degree from the University of Maryland in Nuclear Science. Mr. Bladdek holds a current Senior Reactor Operators license at St. Lucie Plant.

Edward Hollowell

Mr. Hollowell is currently a Principal Engineer at St Lucie Nuclear Station (PSL). He has more than 30 years of Civil Engineering experience in the Nuclear Industry. He has been part of FPL Civil design engineering group for 22 years, with 18 years of experience in seismic related structural design at PSL. Mr. Hollowell has a Bachelor of Science Degree in Structural Engineering and Construction Technology from Penn State University. He recently completed the EPRI Seismic Walkdown Engineer (SWE) training (see certificate below).



Andy Terezakis

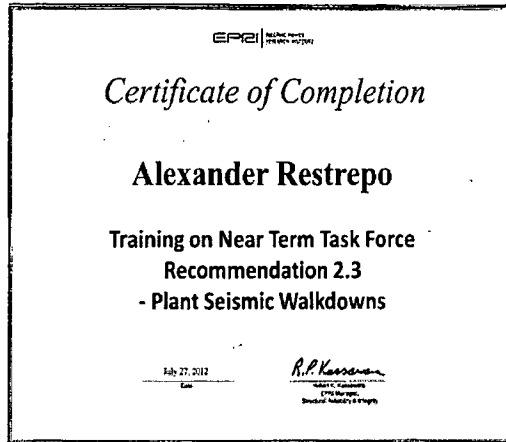
Mr. Terezakis is currently a Senior Licensed Reactor Control Operator in the Operations Support Group at St. Lucie and is a member of the St. Lucie Fukushima Response Team. He has 31 years of nuclear plant experience at St. Lucie that includes over 29 years in Operations. Mr. Terezakis has maintained an SRO license at St. Lucie for over 20 years and has a BS in Nuclear Science and Engineering from the University of Maryland.

George Tullidge

Mr. Tullidge is a Staff Engineer in the PRA Group at NextEra Energy Juno Beach office. He has over 30 years of commercial nuclear power experience. Mr. Tullidge has a degree in Physics from Pennsylvania State University. His years of experience include Operations, Maintenance, and Engineering. He also held an active Senior Reactor Operator license at St. Lucie and was a qualified Operations Shift Manager.

Alexander Restrepo

Mr. Restrepo is an Engineer I in the PRA Group at NextEra Energy, working primarily on Turkey Point Nuclear Station. He has three years of Operations experience at Turkey Point and two years of PRA experience. He has completed the necessary requirements and qualifications for a PRA engineer. Recently he completed Training on the Near Term task Force Recommendation 2.3 – Plant Seismic Walkdowns. He holds a BS and MS in Nuclear Engineering, both from the University of Florida.



B

SWEL Selection Report

Florida Power & Light

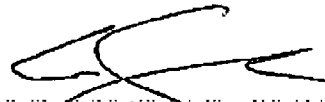
**Selection of the St. Lucie Plant Unit 1
Seismic Walkdown Equipment List (SWEL)
for the Requirement 2.3 Walkdown**

St. Lucie Nuclear Station

Revision 0

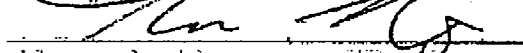
November 2012

Prepared by


George Tullidge (PRA Group)

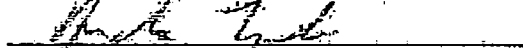
11/12/12
Date

Reviewed by


Alexander Restrepo (PRA Group)


11/12/12
Date

Reviewed by


Andy Terezakis (Operations)

11/12/12
Date

Reviewed by


Sharam Ramani (Engineering)

11/13/12
Date

1 Introduction

This document contains the information used to develop the Seismic Walkdown Equipment List (SWEL) at St. Lucie (PSL) in accordance with EPRI Report 1025286, "Seismic Walkdown Guidance," dated June 2012 [1].

The selection process was completed by applying separate screening criteria to develop SWELs 1 and 2. The documentation is sequenced by first providing the screening criteria requirements, and then applying the screening criteria to the development and implementation of the seismic walkdown equipment list (SWEL).

2 Process

The general process focused first on building a Master Component List, with attributes to support the sample selection process (Sections 3 and 4). This list was obtained by generating a NAMS query of the entire PSL Equipment Database for all components along with data such as system code, component type, location, etc. Then the screening criteria below were applied to arrive at a final SWEL 1 and SWEL 2 comprised of approximately 100 items for each Unit.

The process also included identifying a set of plant locations around which the walkdown was organized (Section 5). The plant locations were also used to support the "walk-by" process to assess cable trays and ventilation ducts and the potential for seismic spatial interactions (Section 6).

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

Because the SWEL needs to address a number of attributes, the selection was performed and reviewed by a team that included representatives from PRA, Operations, and Engineering.

3 SWEL 1 Screening Criteria

The final SWEL 1 is listed in Attachment 1.

3.1 Screening Criteria 1 – Seismic Category 1

Requirement

The scope of SSCs (Systems, Structures, and Components) in the plant are limited to those that are designed to Seismic Category (SC) I requirements. This is done because only such items have a defined seismic licensing basis against which to evaluate the as-installed configuration. Selecting these items is intended to comply with the request in the NRC 50.54(f) Letter, under the "Requested Actions" section, to "verify current plant configuration with the current license basis."

Application

An equipment list from the PSL equipment database was obtained via a Nuclear Asset Management System (NAMS) query. The Seismic Class 1 SSCs were queried from the report by choosing only those SSCs designated as Seismic Class I.

3.2 Screening Criteria 2 – Equipment or Systems

Requirement

The scope of SSCs included selecting only those that do not regularly undergo inspections to confirm that their configuration continues to be consistent with the plant licensing basis. Cable/conduit raceways and HVAC ductwork were not included as "equipment" in the SWEL 1, and were instead left to be reviewed during area walk-bys of the spaces containing items on the SWEL 1. Also omitted were SC 1 structures, containment penetrations, and SC1 piping systems.

3.3 Screening Criteria 3 – Supports 5 Safety Functions**Requirement**

The scope of SSCs to be included in SWEL 1, are those SSCs associated with maintaining the five safety functions. These five safety functions include the four safe shutdown functions (reactor reactivity control, reactor coolant pressure control, reactor coolant inventory control, and decay heat removal, which includes the Ultimate Heat Sink), plus the containment functions.

Application

Since the PRA risk model represents the five safety functions listed above, a list of all PRA component tags was compared to the remaining SSCs. Items not included in the PRA model were removed.

3.4 Screening Criteria 4 – Sample Considerations**Requirement**

It was expected that SWEL 1, taken as a whole, would include representative items from some of the variations within each of the following five attributes:

- A variety of types of systems
- Major new and replacement equipment
- A variety of types of equipment
- A variety of environments
- Equipment enhanced due to vulnerabilities identified during the IPEEE program

Application

The equipment analyzed in this program was used as a base and compared to the screening criteria above. The remaining components in the Master Component List were reordered according to system code, component type, and then location in order to obtain a broad sample. Operations personnel were consulted with to identify new or replaced equipment that were on the truncated Master Component List.

4 SWEL 2 Screening Criteria

SWEL 2 began with the same Master Component List as SWEL 1. An initial screening was done retaining only SSCs related to the Spent Fuel Pool system. Screening criteria 1, 2, and 3 for SWEL 2 were performed identical to that of screening criteria 1,2, and 4 for SWEL 1, respectively. The final SWEL 2 is incorporated into the PSL1 & PSL 2 SWEL.

4.1 Screening Criteria 4 – Cause Rapid Drain-Down

Requirement

The EPRI guidance requires assessment of the potential for Spent Fuel Pool (SFP) rapid drain down, specifically the identification of SFP penetrations below approximately 10 feet above the top of the fuel assemblies.

Application

Components were included in this screening based on their importance in maintaining spent fuel pool inventory and cooling.

5 Walk-By Table

Each location was also subjected to a walk-by, an examination (in less detail) of the other SSCs, 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), natural gas lines, and hazardous/flammable material stored in the location.
- Seismic-induced flood. This includes all flood/spray sources (tanks, piping) originating in each location, based on the Internal Flood PRA. Note, the flood sources of interest are only those originating in the location, not those coming from another location. The potential for flood propagation will be addressed in the seismic/flood analysis.
- 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.

6 Evaluations

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

6.1 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.

6.2 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)". Based on discussion with Operations and Engineering, major new or replacement equipment was identified and noted as such in the SWEL spreadsheet.

6.3 Modifications

The walkdown team allowed for changes to be made to the SWEL mid-walkdown. Many components were changed from 'B' train to 'A' train as the former was the protected train, precluding the thorough inspection of some components.

7 References

7.1 IPEEE Report for St. Lucie, L-94-318, Dec. 1994

7.2 EPRI TR-1025286, "Seismic Walkdown Guidance," June 2012

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
1	MV-14-3	MOTOR OPERATED VALVE FOR CCW RETURN HDR B TO CCW PUMP 1C SUCTION	VL	14	Component Cooling Water	8	CCW/15/N-952/E-1683	Y	3	
2	MV-14-1	MOTOR OPERATED VALVE FOR CCW PP 1C DISCH TO CCW HX 1B CROSSOVER	VL	14	Component Cooling Water	8	CCW/15/N-964/E-1708	Y	3	
3	HCV-14-9	HAND CONTROL VALVE FOR CCW RTN HDR N CROSSOVER TO CCW RTN HDR A	VL	14	Component Cooling Water	8	CCW/15/N-980/E-1670	Y	3	
4	TCV-14-4A	TEMPERATURE CONTROL VALVE FOR ICW FLOW TO CCW HX 1A OUTLET	VL	14	Component Cooling Water	7	CCW/15/N-995/E-1726	Y	3	
5	FT-14-1A	FLOW TRANSMITTER FOR COMPONENT COOLING WATER HX 1A OUTLET	VL	14	Component Cooling Water	18	CCW/17/N-947/E-1678	N	3	
6	HCV-14-8A	HAND CNTL VLV FOR CCW HX 1B OUTLET A LOOP CROSSOVER TO SPLY HDR N	VL	14	Component Cooling Water	8	CCW/17/N-999/E-1670	Y	3	

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
7	SS-21-1A CNTL PNL	SS-21-1A CONTROL PANEL	FI/IN	21	Circ Wtr- Intake Cooling Wtr	20	CCW/24/S-A/E-3	N	3	
8	SS-21-1A	STRAINER FOR CCW HX 1A ICW INLET	FI	21	Circ Wtr- Intake Cooling Wtr	0	CCW/26/S-AW-4	Y	3	
9	CCW PP 1A	COMPONENT COOLING WATER PUMP 1A	PU	14	Component Cooling Water	5	CCW/27/N-992/E- 1697	Y	3	
10	CCW HX 1A	COMPONENT COOLING WATER HEAT EXCHANGER 1A	HT	14	Component Cooling Water	21b	CCW/28/N-1007/E- 1704	Y	3	Item 29
11	COND STOR TK	CONDENSATE STORAGE TANK	AC	12	Condensate	21a	CST/19/N-1013/E- 1167	Y	4	Item 9
12	480V MCC 1A7	480V MOTOR CONTROL CENTER 1A7	EK	47	480V Electrical	1	DG/23/N-803/E-1690	Y	1,2,3,4,5	
13	DG 1A CNTL PNL	DIESEL GENERATOR 1A CONTROL PANEL	IN	59	Diesel Generator	20	DGB/24	Y	1,2,3,4,5	Item 16 Sim (1A)
14	DG 1A S/U AIR TK 1A1	DIESEL GENERATOR 1A START-UP AIR TANK 1A1	AC	59	Diesel Generator	21a	DGB/24	Y	1,2,3,4,5	Item 14 Sim (1A)

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
15	DG ENG 1A2 LUBO CLR	LUBE OIL COOLER FOR DIESEL GENERATOR ENGINE 1A2	EN/HT	59	Diesel Generator	21b	DGB/24	Y	1,2,3,4,5	
16	DSL GEN 1A	DIESEL GENERATOR 1A	GE	59	Diesel Generator	17	DGB/26	Y	1,2,3,4,5	Item 13 Sim (1A)
17	DG DO DAY TK 1A2	DIESEL GENERATOR DIESEL OIL DAY TANK 1A2	AC	59	Diesel Generator	21a	DGB/27/DG ENG 1B1	Y	1,2,3,4,5	
18	DG ENG 1A2 RDTR	RADIATOR FOR 16 CYLINDER DIESEL GENERATOR ENGINE 1A2	EN/HT	59	Diesel Generator	21b	DGB/28	Y	1,2,3,4,5	
19	SKBK LUBO AC PP 1A2	SOAKBACK LUBE OIL AC PUMP FOR DIESEL GENERATOR ENGINE 1A2	PU	59	Diesel Generator	5	DGB/28	Y	1,2,3,4,5	
20	SKBK LUBO DC PP 1A2	SOAKBACK LUBE OIL DC PUMP FOR DIESEL GENERATOR ENGINE 1A2	PU	59	Diesel Generator	5	DGB/28	Y	1,2,3,4,5	
21	DOST 1B	DIESEL OIL STORAGE TANK 1B	AC	17	Turbine Lube Oil/DSL Fuel Oil	21a	DOST/22/N879/E1780	Y	1,2,3,4,5	

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
22	DOST 1A	DIESEL OIL STORAGE TANK 1A	AC	17	Turbine Lube Oil/DSL Fuel Oil	21a	DOST/22/N914/E1780	Y	1,2,3,4,5	Item 6 PCM 90-152
23	DG FO XFR PP 1B	DIESEL GENERATOR FUEL OIL TRANSFER PUMP 1B	PU	17	Turbine Lube Oil/DSL Fuel Oil	5	DOST/23/N863/E1773	Y	1,2,3,4,5	
24	DG FO XFR PP 1A	DIESEL GENERATOR FUEL OIL TRANSFER PUMP 1A	PU	17	Turbine Lube Oil/DSL Fuel Oil	5	DOST/23/N931/E1773	Y	1,2,3,4,5	Item 1
25	MV-21-2	MOTOR OPERATED VLV FOR ICW TRAIN B SUPPLY TO TCW HX'S	VL	21	Circ Wtr-Intake Cooling Wtr	8	INTK/11/N-4/W-C	Y	4	
26	MV-21-3	MOTOR OPERATED VLV FOR ICW TRAIN A SUPPLY TO TCW HX's	VL	21	Circ Wtr-Intake Cooling Wtr	8	INTK/11/N-4/W-C	Y	4	
27	ICW PP 1C	INTAKE COOLING WATER PUMP 1C	PU	21	Circ Wtr-Intake Cooling Wtr	6	INTK/21/N-3/W-C	Y	3	
28	ICW PP 1A	INTAKE COOLING WATER PUMP 1A	PU	21	Circ Wtr-Intake Cooling Wtr	6	INTK/21/S-4/W-C	Y	3	Item 4

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
29	CHG PP 1A	CHARGING PUMP 1A	PU	2	Chem & Vol Ctrl Sys	5	RAB/0/N-RA2/E-RAE	Y	1,2,3	Item 2
30	BAM PP 1A	BORIC ACID MAKE-UP PUMP 1A	PU	2	Chem & Vol Ctrl Sys	5	RAB/0/N-RA4/E-RAE	Y	1	Item 5
31	BAMT 1A	BORIC ACID MAKE-UP TANK 1A	AC	2	Chem & Vol Ctrl Sys	21a	RAB/0/N-RA4/E-RAE	Y	1	Item 7
32	SE-07-2A	PRI SOLENOID ISOL VLV FOR SODIUM HYDROXIDE TO FD TO CNTMT SPRY PP'S	VL	7	Containment Spray	8	RAB/0/S-RA3/E-RAH	Y	5	
33	NAOH STG TK 1A	SODIUM HYDROXIDE STORAGE TANK 1A	AC	7	Containment Spray	21a	RAB/00/S-RA3/E-RAL	Y	5	
34	CNTMT SPR PP 1A	CONTAINMENT SPRAY PUMP 1A	PU	7	Containment Spray	4	RAB/-10/N-RA3/W-RAG	Y	5	
35	PT-07-4B	PRESSURE TRANSMITTER FOR CONTAINMENT PRESSURE	IX	7	Containment Spray	18	RAB/19/N-RA2/RAF	Y	5	
36	480V SWGR 1AB	480V SWITCHGEAR 1AB	EL	47	480V Electrical	1	RAB/19/N-RA2/W-RAG	Y	1,2,3,4,5	
37	4KV SWGR 1AB	4.16 KV SWITCHGEAR 1AB	CK	52	4.16 KV Electrical	1	RAB/19/S-RA2/W-RAG	Y	1,3,4	
38	SDC HX 1A	SHUTDOWN COOLING HEAT EXCHANGER 1A	HT	3	Safety Injection	21b	RAB/3/N-RA3/E-RAJ	Y	4	

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
39	V2514	MOTOR OPER VLV FOR EMERG BORATION FROM BORIC ACID MU PUMPS DISCH	VL	2	Chem & Vol Ctrl Sys	8	RAB/3/N-RA3Z/W-RAE	Y	1	
40	FT-3311	FLOW TRANSMITTER FOR HPSI HEADER FEED TO LOOP 1A2	IX	3	Safety Injection	18	RAB/4/N-RA3/W-RAK	N	3	
41	PT-3305	PRESSURE TRANSMITTER FOR HPSI PUMP 1A DISCHARGE HEADER	IX	3	Safety Injection	18	RAB/4/S-RA3/E-RAF	N	3	
42	HVS-4A	CENTRIFUGAL FAN FOR RAB MAIN SUPPLY SYSTEM	BL	25	HVAC-Plumb & Drain/Leak	9	RAB/43/N-RA1/W-RAD	Y	5	
43	125V BATT 1A	125V DC BATTERY 1A	BA	50	125V DC	15	RAB/43/N-RA1/W-RAH	Y	1,2,3,4,5	
44	125V BATT 1B	125V DC BATTERY 1B	BA	50	125V DC	15	RAB/43/N-RA1/W-RAI	Y	1,2,3,4,5	
45	HVE-6A	CENTRIFUGAL FAN FOR SHIELD BUILDING VENTILATION SYSTEM	BL	25	HVAC-Plumb & Drain/Leak	9	RAB/43/N-RA2/W-RAE	N	5	
46	HVE-6A PLENUM	FILTER PLENUM	BL	25	HVAC-Plumb & Drain/Leak	10	RAB/43/N-RA2/W-RAE	N	5	

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
47	RX TRIP SWGR	REACTOR TRIP SWITCHGEAR	RL	63	Reactor Protection	2	RAB/43/N-RA2/W-RAJ	Y	1,2,3	
48	ISOLATION PL 1A	ISOLATION PANEL 1A - Control Room Inaccessibility Transfer Panel	IN	69	Safeguards Panels	14	RAB/43/N-RA3/E-RA1	Y	1,2,3,4	
49	HVE-9A	CENTRIFUGAL FAN FOR ECCS VENTILATION SYSTEM	BL	25	HVAC-Plumb & Drain/Leak	9	RAB/43/N-RA3/E-RAF	Y	5	
50	STC INVTR 1A	STATIC INVERTER 1A (10 KVA)	GE	49	120V Vital AC	16	RAB/43/N-RA3/E-RAK	Y	1,2,3,5	
51	HSCP 1A (IN/PANEL)	HOT SHUTDOWN CONTROL PANEL 1A	IN	69	Safeguards Panels	20	RAB/43/N-RA4/E-RAL	N	1,2,3,4	
52	120V INSTR BUS 1MC	120V AC INSTRUMENT BUS 1MC DISTRIBUTION PANEL	EL	49	120V Vital AC	14	RAB/43/RA1/RAK	N	1,2,3,4	
53	125V DC BUS 1A	125V DC BUS POWER DISTRIBUTION PANEL ESS-SA	EL	50	125V DC	14	RAB/43/RA3/RAK	Y	1,2,3,4,5	Item 25 Sim (1A - PCM 90-152)
54	4KV SWGR 1A3	4.16 KV SWGR 1A3-1	EL	52	4.16 KV Electrical	2	RAB/43/RA3/W-RAH	Y	1,2,4	Item 20

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
55	BATT CHGR 1A	BATTERY CHARGER 1A	BA	50	125V DC	16	RAB/43/RA3/W-RAK	Y	1,2,3,4,5	Item 23 SIM (1A - PCM 90-152)
56	480V SWGR 1B2	480V SWGR 1B2	EL	47	480V Electrical	1	RAB/43/RA4/E-RAJ	Y	1,2,3,4,5	
57	STA SVC XFMR 1B-2 (SVC XFMR 1B-2)	STATION SERVICE TRANSFORMER 1B-2	TR	47	480V Electrical	4	RAB/43/RA4/E-RAJ	Y	1,2,3,4,5	
58	480MCC 1A6	480V MCC 1A6	EL	47	480V Electrical	1	RAB/43/S-RA1/E-RAI	Y	1,2,3,4,5	Item 19 PCM 90-152
59	480PZ BUS1A3	480V PRZR BUS 1A3	EL	47	480V Electrical	2	RAB/43/S-RA1/E-RAJ	Y	1,2	Item 22
60	480PZR XFMR 1A3	480V PRESSURIZER TRANSFORMER 1A3	TR	47	480V Electrical	4	RAB/43/S-RA1/E-RAJ	N	1,2	

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
61	STA SVC XFMR 1A-2 (SVC XFMR 1A-2)	STATION SERVICE TRANSFORMER 1A-2	TR	47	480V Electrical	4	RAB/43/S-RA1/W- RAH	Y	1,2,3,4,5	
62	480MCC 1AB	480V MOTOR CONTROL CENTER 1AB	EL	47	480V Electrical	1	RAB/43/S-RA1/W- RAK	Y	1,2,3,4,5	
63	PDT-25- 16A	Pressure Differential Transmitter for ECCS Equipment Room	IX	25	HVAC- Plumb & Drain/Leak	18	RAB/5/S-RA3/E-RAH	N	3	
64	LPSI 1A	LOW PRESSURE SAFETY INJECTION PUMP 1A	PU	3	Safety Injection	4	RAB/-6/S-RA2/W- RAH	Y	4	
65	HVA-3A	AIR HANDLING UNIT FOR CNTL RM, TSC & COMPUTER ROOM	BL	25	HVAC- Plumb & Drain/Leak	11	RAB/62/N-RA2/E-RAJ	Y	1,4	
66	RTGB-106	REACTOR TURBINE GENERATOR CONTROL BOARD 106	IN	69	Safeguards Panels	20	RAB/62/N-RA2/E-RAL	Y	4	
67	HVE-13A	CENTRIFUGAL FAN FOR CONTROL ROOM RETURN SYSTEM	BL	25	HVAC- Plumb & Drain/Leak	11	RAB/62/N-RA2/W-RAI	Y	1,4	

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
68	QSPDS CHAN A CAB	QUALIFIED SAFETY PARMETER DISPLAY SYSTEM CHANNEL A CABINET	IN	70	Data Acquisit Remote Term Unit	20	RAB/62/N-RA2/W- RAJ	N	2,3	
69	ESC SA	ENGINEERED SAFEGUARD LOGIC CABINET SA	IN	69	Safeguards Panels	20	RAB/62/N-RA2/W- RAK	Y	1,3,4,5	
70	HPSI PP 1A	HIGH PRESSURE SAFETY INJECTION PUMP 1A	PU	3	Safety Injection	5	RAB/-7/S-RA2/E-RAF	Y	4	
71	CCW SRG TK	COMPONENT COOLING WATER SURGE TANK	AC	14	Component Cooling Water	21a	RAB/75/S-RA1/E-RAJ	Y	3	
72	HVS-1D	CONTAINMENT FAN COOLER FOR RCB A/C SYSTEM DURING NORMAL OPERATION	BL	25	HVAC- Plumb & Drain/Leak	11	RCB/45/N-26/W-50	Y	5	
73	HVS-1A	CONTAINMENT FAN COOLER FOR RCB A/C SYSTEM DURING NORMAL OPERATION	BL	25	HVAC- Plumb & Drain/Leak	11	RCB/45/N-38/E-46	Y	5	
74	HVS-1B	CONTAINMENT FAN COOLER FOR RCB A/C SYSTEM DURING NORMAL OPERATION	BL	25	HVAC- Plumb & Drain/Leak	11	RCB/45/S-44/E-44	Y	5	

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
75	SIT 1A1	SAFETY INJECTION TANK 1A1	AC	3	Safety Injection	21a	RCB/62/N-61/W-8	Y	4	
76	SIT 1B1	SAFETY INJECTION TANK 1B1	AC	3	Safety Injection	21a	RCB/62/S-57/E-17	Y	4	
77	AFW PP 1C	AUXILIARY FEEDWATER PUMP 1C (STEAM DRIVEN)	PU	9	Feedwater	5	TRSL/20/N-T3/W-TA	Y	4	
78	AFW PP1A	AUXILIARY FEEDWATER PUMP 1A	PU	9	Feedwater	5	TRSL/20/N-T5/W-TA	Y	4	
79	AFW PP1B	AUXILIARY FEEDWATER PUMP 1B	PU	9	Feedwater	5	TRSL/20/N-T6/W-TA	Y	4	
80	MFIV AIR ACCUM 1A	MFIV N2 ACCUM 1A	AC	9	Feedwater	21a	TRSL/20/N-T6/W-TA	Y	5	
81	MV-09-13	MOTOR OPERATED VALVE FOR CROSSTIE BETWEEN AFW PP 1A & 1B DISCH	VL	9	Feedwater	8	TRSL/21/N-T5/W-TA	Y	4	
82	MV-09-14	MOTOR OPERATED VALVE FOR CROSSTIE BETWEEN AFW PP 1A & 1B DISCH	VL	9	Feedwater	8	TRSL/21/S-T5/W-TA	Y	4	
83	MV-08-3	THROTTLE/TRIP VALVE FOR AUXILIARY	VL	8	Main Steam	8	TRSL/22/N-T3/W-TA	Y	4	

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
		FEEDWATER PUMP 1C								
84	PT-09-9B	PRESSURE TRANSMITTER FOR FEEDWATER HDR STEAM GENERATOR 1A INLET	IX	9	Feedwater	18	TRSL/24/S-T1/W-TA	N	4	
85	MV-08-13	MOTOR OPERATED ISOLATION VALVE FOR SG 1A MAIN STEAM TO AFW PP 1C	VL	8	Main Steam	8	TRSL/28/N-T3/W-TA	Y	4	
86	HCV-09-7	MAIN FEEDWATER ISOLATION VALVE FOR SG 1A UPSTREAM OF PENETR P-3	VL	9	Feedwater	7	TRSL/36/N-T2/W-TA	Y	5	
87	HCV-08-1A	MAIN STEAM ISOLATION VALVE (MSIV) FOR STEAM GENERATOR 1A	VL	8	Main Steam	7	TRSL/36/N-T3/E-TB	Y	5	
88	HCV-09-8	MAIN FEEDWATER ISOLATION VALVE FOR SG 1B UPSTREAM OF PENETR P-4	VL	9	Feedwater	7	TRSL/36/N-T6/W-TA	Y	5	

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
89	HCV-08-1B	MAIN STEAM ISOLATION VALVE (MSIV) FOR STEAM GENERATOR 1B	VL	8	Main Steam	7	TRSL/36/S-T4/E-TB	Y	5	
90	MV-09-11	MOTOR OPERATED VALVE FROM AUX FW PP 1C DISCHARGE TO STEAM GEN 1A	VL	9	Feedwater	8	TRSL/43/N-T2/E-TB	Y	4	
91	MV-09-9	MOTOR OPERATED VALVE FROM AUX FW PP 1A DISCHARGE TO STEAM GEN 1A	VL	9	Feedwater	8	TRSL/43/N-T2/E-TB	Y	4	
92	MV-09-10	MOTOR OPERATED VALVE FROM AUX FW PP 1B DISCHARGE TO STEAM GEN 1B	VL	9	Feedwater	8	TRSL/43/N-T6/E-TB	Y	4	
93	MV-09-12	MOTOR OPERATED VALVE FROM AUX FW PP 1B DISCHARGE TO STEAM GEN 1B	VL	9	Feedwater	8	TRSL/43/N-T6/E-TB	Y	5	
94	MSIV ACCUM 1B	MAIN STEAM ISOLATION VALVE (HCV-08-1B) CNTL AIR ACCUMULATOR 1B1	AC	18	Service Air/ Instrumetrn Air	21a	TRSL/45/N-T5/E-TB	Y	5	

St. Lucie Unit 1 Seismic Walkdown Equipment List (SWEL)

Item #	Tag	Equipment Name	EQUIP. TYP	SYS#	Sys Descrip.	Equip. Class	Loc. Descrip.	Risk Sig.	Safety Function	USI A-46 Item No.
95	RWT	REFUELING WATER TANK	AC	7	Containment Spray	21a	YD/19/N-897/E-1704	Y	3	Item 10
96	480V MCC 1A8	480V MCC FOR FUEL HANDLING BUILDING MISC POWER SUPPLIES	MS	47	480V Electrical	5	FHB/48/N-FH6/E-RAC	N	4	
97	FUEL POOL HX	FUEL POOL HEAT EXCHANGER	HT	4	Fuel Pool Cooling & Purification	21b	FHB/22/S-FH5/W-RAA	N	4	
98	FUEL POOL PP 1A	FUEL POOL PUMP 1A	PU	4	Fuel Pool Cooling & Purification	5	FHB/19/S-FH5/E-RAC	N	4	
99	FUEL POOL PP 1B	FUEL POOL PUMP 1B	PU	4	Fuel Pool Cooling & Purification	5	FHB/19/S-FH5/E-RAC	N	4	
100	HVE-16A	CENTRIFUGAL FAN FOR FUEL POOL EXHAUST SYSTEM	BL	25	HVAC-Plumb & Drain/Leak	9	FHB/48/S-FH5/W-RAA	N	4	

C

Seismic Walkdown Checklists (SWCs)

Table C-1: Summary of Seismic Walkdown Checklists

- Anchorage Configuration Confirmation Performed

Tag ID	Component Description	Building Name	Room ID's	Equipment Class	Page #
CCW-HX-1A	COMPONENT COOLING WATER HEAT EXCHANGER 1A	Component Cooling Water	AW01 - CCW N Area A Train	(05) Horizontal Pumps	C-6
## CCW-PP-1A	COMPONENT COOLING WATER PUMP 1A	Component Cooling Water	AW01 - CCW N Area A Train	(21) Tanks and Heat Exchangers	C-8
FT-14-1A	FLOW TRANSMITTER FOR COMPONENT COOLING WATER HX 1A OUTLET	Component Cooling Water	AW01 - CCW N Area A Train	(00) Other	C-10
HCV-14-8A	HAND CNTL VLV FOR CCW HX 1B OUTLET A LOOP CROSSOVER TO SPLY HDR N	Component Cooling Water	AW01 - CCW N Area A Train	(08) Motor-Operated and Solenoid-Operated Valves	C-13
HCV-14-9	HAND CONTROL VALVE FOR CCW RTN HDR N CROSSOVER TO CCW RTN HDR A	Component Cooling Water	AW01 - CCW N Area A Train	(08) Motor-Operated and Solenoid-Operated Valves	C-16
MV-14-1	MOTOR OPERATED VALVE FOR CCW PP 1C DISCH TO CCW HX 1B CROSSOVER	Component Cooling Water	AW01 - CCW N Area A Train	(08) Motor-Operated and Solenoid-Operated Valves	C-19
MV-14-3	MOTOR OPERATED VALVE FOR CCW RETURN HDR B TO CCW PUMP 1C SUCTION	Component Cooling Water	AW01 - CCW N Area A Train	(08) Motor-Operated and Solenoid-Operated Valves	C-22
## SS-21-1A	STRAINER FOR CCW HX 1A ICW INLET	Component Cooling Water	AW01 - CCW N Area A Train	(00) Other	C-25
## SS-21-1A CNTL PNL	SS-21-1A CONTROL PANEL	Component Cooling Water	AW01 - CCW N Area A Train	(20) Instrumentation and Control Panels and Cabinets	C-27
TCV-14-4A	TEMPERATURE CONTROL VALVE FOR ICW FLOW TO CCW HX 1A OUTLET	Component Cooling Water	AW01 - CCW N Area A Train	(07) Fluid-Operated Valves	C-29
## CST	CONDENSATE STORAGE TANK	Condensate Storage Tank	AW05 - YARD 19' Inside CST Concrete Enclosure	(21) Tanks and Heat Exchangers	C-32
480V MCC 1A7	480V MOTOR CONTROL CENTER 1A7	Diesel Generator Building	AW21 - DGB 22' 1A Rm	(01) Motor Control Centers	Deferred
DG 1A CNTL PNL	DIESEL GENERATOR 1A CONTROL PANEL	Diesel Generator Building	AW21 - DGB 22' 1A Rm	(20) Instrumentation and Control Panels and Cabinets	C-34
## DG 1A S/U AIR TK 1A1	DIESEL GENERATOR 1A START-UP AIR TANK 1A1	Diesel Generator Building	AW21 - DGB 22' 1A Rm	(21) Tanks and Heat Exchangers	C-36
DG DO DAY TK 1A2	DIESEL GENERATOR DIESEL OIL DAY TANK 1A2	Diesel Generator Building	AW21 - DGB 22' 1A Rm	(21) Tanks and Heat Exchangers	C-38
DG ENG 1A2 LUBO CLR	LUBE OIL COOLER FOR DIESEL GENERATOR ENGINE 1A2	Diesel Generator Building	AW21 - DGB 22' 1A Rm	(21) Tanks and Heat Exchangers	C-40

Tag ID	Component Description	Building Name	Room ID's	Equipment Class	Page #
DG ENG 1A2 RDTR	RADIATOR FOR 16 CYLINDER DIESEL GENERATOR ENGINE 1A2	Diesel Generator Building	AW21 - DGB 22' 1A Rm	(21) Tanks and Heat Exchangers	C-41
DSL GEN 1A	DIESEL GENERATOR 1A	Diesel Generator Building	AW21 - DGB 22' 1A Rm	(17) Engine-Generators	C-43
## SKBK LUBO AC PP 1A2	SOAKBACK LUBE OIL AC PUMP FOR DIESEL GENERATOR ENGINE 1A2	Diesel Generator Building	AW21 - DGB 22' 1A Rm	(05) Horizontal Pumps	C-45
## SKBK LUBO DC PP 1A2	SOAKBACK LUBE OIL DC PUMP FOR DIESEL GENERATOR ENGINE 1A2	Diesel Generator Building	AW21 - DGB 22' 1A Rm	(05) Horizontal Pumps	C-47
## DOST 1A	DIESEL OIL STORAGE TANK 1A	Diesel Oil Storage Tank	AW31 - DOST Area	(21) Tanks and Heat Exchangers	C-49
## DOST 1B	DIESEL OIL STORAGE TANK 1B	Diesel Oil Storage Tank	AW31 - DOST Area	(21) Tanks and Heat Exchangers	C-51
## DG FO XFR PP 1A	DIESEL GENERATOR FUEL OIL TRANSFER PUMP 1A	Diesel Oil Storage Tank	AW32 - 1A Diesel Xfer Pumphouse	(05) Horizontal Pumps	C-54
## DG FO XFR PP 1B	DIESEL GENERATOR FUEL OIL TRANSFER PUMP 1B	Diesel Oil Storage Tank	AW33 - 1B Diesel Xfer Pumphouse	(05) Horizontal Pumps	C-56
## FUEL POOL PP 1A	FUEL POOL PUMP 1A	Fuel Handling Building	AW16 - FHB 19.5' FP Pump Rm	(05) Horizontal Pumps	C-58
## FUEL POOL PP 1B	FUEL POOL PUMP 1B	Fuel Handling Building	AW16 - FHB 19.5' FP Pump Rm	(05) Horizontal Pumps	C-60
## FUEL POOL HX	FUEL POOL HEAT EXCHANGER	Fuel Handling Building	AW15 - FHB 20' FPHX Rm	(21) Tanks and Heat Exchangers	C-62
480V MCC 1A8	480V MCC FOR FUEL HANDLING BUILDING MISC POWER SUPPLIES	Fuel Handling Building	AW17 - FHB 48' HVAC Rm	(05) Horizontal Pumps	C-64
HVE-16A	CENTRIFUGAL FAN FOR FUEL POOL EXHAUST SYSTEM	Fuel Handling Building	AW17 - FHB 48' HVAC Rm	(09) Fans	C-67
MV-21-2	MOTOR OPERATED VLV FOR ICW TRAIN B SUPPLY TO TCW HX'S	Intake	AW04 - INTK 11' ICW Header Pit	(08) Motor-Operated and Solenoid-Operated Valves	C-69
MV-21-3	MOTOR OPERATED VLV FOR ICW TRAIN A SUPPLY TO TCW HX's	Intake	AW04 - INTK 11' ICW Header Pit	(08) Motor-Operated and Solenoid-Operated Valves	C-71
## ICW-PP-1A	INTAKE COOLING WATER PUMP 1A	Intake	AW03 - INTK 20' Inside ICW Pump Missile Enclosure	(06) Vertical Pumps	C-73
## ICW-PP-1C	INTAKE COOLING WATER PUMP 1C	Intake	AW03 - INTK 20' Inside ICW Pump Missile Enclosure	(06) Vertical Pumps	C-75
## LPSI 1A	LOW PRESSURE SAFETY INJECTION PUMP 1A	Reactor Auxiliary Building	AW09 - RAB -10 EI, LPSI 1A Rm	(04) Transformers	C-77
## CTMT SPR PP 1A	CONTAINMENT SPRAY PUMP 1A	Reactor Auxiliary Building	AW10 - RAB -10 EI, CS/HPSI "A" Pump Room	(04) Transformers	C-79
## HPSI PP 1A	HIGH PRESSURE SAFETY INJECTION PUMP 1A	Reactor Auxiliary Building	AW10 - RAB -10 EI, CS/HPSI "A" Pump Room	(05) Horizontal Pumps	C-81
## FT-3311	FLOW TRANSMITTER FOR HPSI HEADER FEED TO LOOP 1A2	Reactor Auxiliary Building	AW06 - RAB -0.5' EI, W Corridor near NaOH "A" Tank	(00) Other	C-84
## NAOH STG TK 1A	SODIUM HYDROXIDE STORAGE TANK 1A	Reactor Auxiliary Building	AW06 - RAB -0.5' EI, W Corridor near NaOH "A" Tank	(21) Tanks and Heat Exchangers	C-86
## SDC HX 1A	SHUTDOWN COOLING HEAT EXCHANGER 1A	Reactor Auxiliary Building	AW07 - RAB -0.5' EI, SDHX 1A Rm	(21) Tanks and Heat Exchangers	C-88
## PDT-25-16A	ECCS Equip RM D/P	Reactor Auxiliary	AW08 - RAB -0.5' EI, Central Corridor	(00) Other	C-90

Tag ID	Component Description	Building Name	Room ID's	Equipment Class	Page #
		Building			
## PT-3305	PRESSURE TRANSMITTER FOR HPSI PUMP 1A DISCHARGE HEADER	Reactor Auxiliary Building	AW08 - RAB -0.5' EI, Central Corridor	(00) Other	C-92
SE-07-2A	PRI SOLENOID ISOL VLV FOR SODIUM HYDROXIDE TO FD TO CNTMT SPRY PP'S	Reactor Auxiliary Building	AW08 - RAB -0.5' EI, Central Corridor	(08) Motor-Operated and Solenoid-Operated Valves	C-94
V2514	MOTOR OPER VLV FOR EMERG BORATION FROM BORIC ACID MU PUMPS DISCH	Reactor Auxiliary Building	AW08 - RAB -0.5' EI, Central Corridor	(08) Motor-Operated and Solenoid-Operated Valves	C-96
## CHG PP 1A	CHARGING PUMP 1A	Reactor Auxiliary Building	AW11 - RAB -0.5' EI, Chg Pump 1A Cubicle	(05) Horizontal Pumps	C-98
## BAM PP 1A	BORIC ACID MAKE-UP PUMP 1A	Reactor Auxiliary Building	AW12 - RAB -0.5' EI, BAMS 1A Rm	(05) Horizontal Pumps	C-100
## BAMS 1A	BORIC ACID MAKE-UP TANK 1A	Reactor Auxiliary Building	AW12 - RAB -0.5' EI, BAMS 1A Rm	(21) Tanks and Heat Exchangers	C-102
480V SWGR 1AB	480V SWITCHGEAR 1AB	Reactor Auxiliary Building	AW20 - RAB 19.5' CEA MG ST Rm	(01) Motor Control Centers	Deferred
4KV SWGR 1AB	4.16 KV SWITCHGEAR 1AB	Reactor Auxiliary Building	AW20 - RAB 19.5' CEA MG ST Rm	(01) Motor Control Centers	Deferred
## PT-07-4B	PRESSURE TRANSMITTER FOR CONTAINMENT PRESSURE	Reactor Auxiliary Building	AW20 - RAB 19.5' CEA MG ST Rm	(00) Other	C-104
## 125V BATT 1B	125V DC BATTERY 1B	Reactor Auxiliary Building	AW25 - RAB 43' "B" Battery Rm	(15) Batteries on Racks	C-106
120V INSTR BUS 1MC	120V AC INSTRUMENT BUS 1MC DISTRIBUTION PANEL	Reactor Auxiliary Building	AW26 - RAB 43' Cable Spreading Rm	(14) Distribution Panels	C-108
125V DC BUS 1A	125V DC BUS POWER DISTRIBUTION PANEL ESS-SA	Reactor Auxiliary Building	AW26 - RAB 43' Cable Spreading Rm	(14) Distribution Panels	C-110
480 PZ BUS1A3	480V PRZR BUS 1A3	Reactor Auxiliary Building	AW26 - RAB 43' Cable Spreading Rm	(02) Low Voltage Switchgear	Deferred
## 480V MCC 1AB	480V MOTOR CONTROL CENTER 1AB	Reactor Auxiliary Building	AW26 - RAB 43' Cable Spreading Rm	(01) Motor Control Centers	C-112
480V PZR XFMR 1A3	480V PRESSURIZER TRANSFORMER 1A3	Reactor Auxiliary Building	AW26 - RAB 43' Cable Spreading Rm	(04) Transformers	C-114
## BATT CHGR 1A	BATTERY CHARGER 1A	Reactor Auxiliary Building	AW26 - RAB 43' Cable Spreading Rm	(16) Inverters	C-116
## RX TRIP SWGR	REACTOR TRIP SWITCHGEAR	Reactor Auxiliary Building	AW26 - RAB 43' Cable Spreading Rm	(02) Low Voltage Switchgear	C-118
## STC INVTR 1A	STATIC INVERTER 1A (10 KVA)	Reactor Auxiliary Building	AW26 - RAB 43' Cable Spreading Rm	(16) Inverters	C-120
## 125V BATT 1A	125V DC BATTERY 1A	Reactor Auxiliary Building	AW27 - RAB 43' "A" Batt Rm	(15) Batteries on Racks	C-122
## HSCP 1A	HOT SHUTDOWN CONTROL PANEL 1A	Reactor Auxiliary Building	AW28 - RAB 43' Remote Shutdown Rm	(20) Instrumentation and Control Panels and Cabinets	C-124
480V SWGR 1B-2	480V SWGR 1B2	Reactor Auxiliary	AW29 - RAB 43' S SWGR Rm	(01) Motor Control Centers	Deferred

Tag ID	Component Description	Building Name	Room ID's	Equipment Class	Page #
		Building			
STA SVC XFMR 1B-2	STATION SERVICE TRANSFORMER 1B-2	Reactor Auxiliary Building	AW29 - RAB 43' S SWGR Rm	(04) Transformers	C-126
480V MCC 1A6	480V MCC 1A6	Reactor Auxiliary Building	AW30 - RAB 43' N SWGR Rm	(01) Motor Control Centers	C-128
4KV SWGR 1A3	4.16 KV SWGR 1A3-1	Reactor Auxiliary Building	AW30 - RAB 43' N SWGR Rm	(02) Low Voltage Switchgear	Deferred
ISOL PNL 1A	ISOLATION PANEL 1A - Control Room Inaccessibility Transfer Panel	Reactor Auxiliary Building	AW30 - RAB 43' N SWGR Rm	(14) Distribution Panels	C-130
STA SVC XFMR 1A-2	STATION SERVICE TRANSFORMER 1A-2	Reactor Auxiliary Building	AW30 - RAB 43' N SWGR Rm	(04) Transformers	C-132
HVS-4A	CENTRIFUGAL FAN FOR RAB MAIN SUPPLY SYSTEM	Reactor Auxiliary Building	AW18 - RAB 48' Inside Plenum	(09) Fans	C-134
HVE-6A	CENTRIFUGAL FAN FOR SHIELD BUILDING VENTILATION SYSTEM	Reactor Auxiliary Building	AW19 - RAB 48' HVAC Area	(09) Fans	C-136
HVE-6A PLENUM	FILTER PLENUM	Reactor Auxiliary Building	AW19 - RAB 48' HVAC Area	(10) Air Handlers	C-138
HVE-9A	CENTRIFUGAL FAN FOR ECCS VENTILATION SYSTEM	Reactor Auxiliary Building	AW19 - RAB 48' HVAC Area	(09) Fans	C-140
ESC SA	ENGINEERED SAFEGUARD LOGIC CABINET SA	Reactor Auxiliary Building	AW22 - RAB 62' CTRL Rm	(20) Instrumentation and Control Panels and Cabinets	C-142
QSPDS CHAN A CAB	QUALIFIED SAFETY PARAMETER DISPLAY SYSTEM CHANNEL A CABINET	Reactor Auxiliary Building	AW22 - RAB 62' CTRL Rm	(20) Instrumentation and Control Panels and Cabinets	C-144
RTGB-106	REACTOR TURBINE GENERATOR CONTROL BOARD 106	Reactor Auxiliary Building	AW22 - RAB 62' CTRL Rm	(20) Instrumentation and Control Panels and Cabinets	C-146
HVA-3A	AIR HANDLING UNIT FOR CNTL RM, TSC & COMPUTER ROOM	Reactor Auxiliary Building	AW23 - RAB 62' HVAC Rm N Area	(11) Chillers	C-148
HVE-13A	CENTRIFUGAL FAN FOR CONTROL ROOM RETURN SYSTEM	Reactor Auxiliary Building	AW23 - RAB 62' HVAC Rm N Area	(09) Fans	C-150
## CCW SRG TK	COMPONENT COOLING WATER SURGE TANK	Reactor Auxiliary Building	AW24 - RAB 62' CCW Surge Tank Rm	(21) Tanks and Heat Exchangers	C-152
## AFW PP 1A	AUXILIARY FEEDWATER PUMP 1A	TRSL	AW34 - TRSL 19.5' El., S Rm	(05) Horizontal Pumps	C-154
## AFW PP 1B	AUXILIARY FEEDWATER PUMP 1B	TRSL	AW34 - TRSL 19.5' El., S Rm	(05) Horizontal Pumps	C-156
MFIV AIR ACCUM 1A	MFIV N2 ACCUM 1A	TRSL	AW34 - TRSL 19.5' El., S Rm	(21) Tanks and Heat Exchangers	C-158
MV-09-13	MOTOR OPERATED VALVE FOR CROSSTIE BETWEEN AFW PP 1A & 1B DISCH	TRSL	AW34 - TRSL 19.5' El., S Rm	(08) Motor-Operated and Solenoid-Operated Valves	C-160
MV-09-14	MOTOR OPERATED VALVE FOR CROSSTIE BETWEEN AFW PP 1A & 1B DISCH	TRSL	AW34 - TRSL 19.5' El., S Rm	(08) Motor-Operated and Solenoid-Operated Valves	C-162
## AFW PP 1C	AUXILIARY FEEDWATER PUMP 1C (STEAM DRIVEN)	TRSL	AW35 - TRSL 19.5' El., N Rm	(05) Horizontal Pumps	C-164

Tag ID	Component Description	Building Name	Room ID's	Equipment Class	Page #
MV-08-03	THROTTLE/TRIP VALVE FOR AUXILIARY FEEDWATER PUMP 1C	TRSL	AW35 - TRSL 19.5' EI, N Rm	(08) Motor-Operated and Solenoid-Operated Valves	C-166
MV-08-13	MOTOR OPERATED ISOLATION VALVE FOR SG 1A MAIN STEAM TO AFW PP 1C	TRSL	AW35 - TRSL 19.5' EI, N Rm	(08) Motor-Operated and Solenoid-Operated Valves	C-168
PT-09-9B	PRESSURE TRANSMITTER FOR FEEDWATER HDR STEAM GENERATOR 1A INLET	TRSL	AW35 - TRSL 19.5' EI, N Rm	(00) Other	C-170
HCV-08-1B	MAIN STEAM ISOLATION VALVE (MSIV) FOR STEAM GENERATOR 1B	TRSL	AW13 - TRSL 43' S Area	(07) Fluid-Operated Valves	C-172
HCV-09-08	MAIN FEEDWATER ISOLATION VALVE FOR SG 1B UPSTREAM OF PENETR P-4	TRSL	AW13 - TRSL 43' S Area	(07) Fluid-Operated Valves	C-174
MSIV ACCUM 1B1	MAIN STEAM ISOLATION VALVE (HCV-08-1B) CNTL AIR ACCUMULATOR 1B1	TRSL	AW13 - TRSL 43' S Area	(21) Tanks and Heat Exchangers	C-176
MV-09-10	MOTOR OPERATED VALVE FROM AUX FW PP 1B DISCHARGE TO STEAM GEN 1B	TRSL	AW13 - TRSL 43' S Area	(08) Motor-Operated and Solenoid-Operated Valves	C-178
MV-09-12	MOTOR OPERATED VALVE FROM AUX FW PP 1B DISCHARGE TO STEAM GEN 1B	TRSL	AW13 - TRSL 43' S Area	(08) Motor-Operated and Solenoid-Operated Valves	C-180
HCV-08-1A	MAIN STEAM ISOLATION VALVE (MSIV) FOR STEAM GENERATOR 1A	TRSL	AW14 - TRSL 43' N Area	(07) Fluid-Operated Valves	C-182
HCV-09-07	MAIN FEEDWATER ISOLATION VALVE FOR SG 1A UPSTREAM OF PENETR P-3	TRSL	AW14 - TRSL 43' N Area	(07) Fluid-Operated Valves	C-184
MV-09-09	MOTOR OPERATED VALVE FROM AUX FW PP 1A DISCHARGE TO STEAM GEN 1A	TRSL	AW14 - TRSL 43' N Area	(08) Motor-Operated and Solenoid-Operated Valves	C-186
MV-09-11	MOTOR OPERATED VALVE FROM AUX FW PP 1C DISCHARGE TO STEAM GEN 1A	TRSL	AW14 - TRSL 43' N Area	(08) Motor-Operated and Solenoid-Operated Valves	C-188
RWT	REFUELING WATER TANK	Yard	AW02 - RWT Pit	(21) Tanks and Heat Exchangers	C-190

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: CCW-HX-1AEquipment Class: (5) Horizontal PumpsEquipment Description: COMPONENT COOLING WATER HEAT EXCHANGER 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): CCW, 28.00 ft, AW01

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>Anchor Bolts are covered by foam or steel plates so view is obscured. DWGs 8770-G-671, 716 & 717 confirm presence of anchorage.</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.: CCW-HX-1A

Equipment Class: (5) Horizontal Pumps

Equipment Description: COMPONENT COOLING WATER HEAT EXCHANGER 1A

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?
Exposed Not Applicable

- 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)Equipment ID No.: CCW-PP-1AEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: COMPONENT COOLING WATER PUMP 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): CCW, 27.00 ft, AW01

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>Per 8770-G-671</i> | Yes |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: CCW-PP-1A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING WATER PUMP 1A

- | | | |
|-----|--|-----|
| 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 |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: FT-14-1A

Equipment Class: (0) Other

FLOW TRANSMITTER FOR COMPONENT COOLING WATER HX 1A

Equipment Description: OUTLET

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): CCW, 17.00 ft, AW01

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>Moderate surface corrosion on nuts & bolts w/ no indication of strength loss. At bottom, however, steel mounting bracket has lost area so bottom bolt is ineffective. Three other bolts remain effective and given low mass of FT, no loss of functionality for seismic event. kicker brace is degraded at connection to structure steel. Given fixed connection of FT vertical members & low mass, kicker brace judged to be acceptable for functionality of FT during seismic event. PSL generated AR and WR to address issue.</i> | No |
| 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.: FT-14-1A

Equipment Class: (0) Other

FLOW TRANSMITTER FOR COMPONENT COOLING WATER HX 1A

Equipment Description: 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?
Exposed area. Not Applicable
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
missing block valve screw lever. No seismic concern, notified PSL

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: FT-14-1A

Equipment Class: (0) Other

FLOW TRANSMITTER FOR COMPONENT COOLING WATER HX 1A

Equipment Description: OUTLET

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HCV-14-8A

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

HAND CNTL VLV FOR CCW HX 1B OUTLET A LOOP CROSSOVER TO

Equipment Description: SPLY HDR N

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): CCW, 17.00 ft, AW01

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>Steel mounted</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.: HCV-14-8A

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

Equipment Description: HAND CNTL VLV FOR CCW HX 1B OUTLET A LOOP CROSSOVER TO
SPLY HDR N**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?
Exposed Not Applicable
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
Operator is steel mounted at upper elevation whereas valve is in-line supported below. No concern for diff. disp since piping is well supported nearby and floor diff displacement between elevations for heavy concrete, half embedded ccw structure is negligible. OK.

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HCV-14-8A

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

Equipment Description: HAND CNTL VLV FOR CCW HX 1B OUTLET A LOOP CROSSOVER TO
SPLY HDR N

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HCV-14-9

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

HAND CONTROL VALVE FOR CCW RTN HDR N CROSSOVER TO CCW

Equipment Description: RTN HDR A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): CCW, 15.00 ft, AW01

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>Steel mounted</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.: HCV-14-9

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

HAND CONTROL VALVE FOR CCW RTN HDR N CROSSOVER TO CCW

Equipment Description: RTN HDR A

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?
Exposed 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
See #11 HCV-14-8A for similar comments. No issue.

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HCV-14-9

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

HAND CONTROL VALVE FOR CCW RTN HDR N CROSSOVER TO CCW

Equipment Description: RTN HDR A

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: MV-14-1Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesMOTOR OPERATED VALVE FOR CCW PP 1C DISCH TO CCW HX 1BEquipment Description: CROSSOVERProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): CCW, 15.00 ft, AW01

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>Steel Mounted</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.: MV-14-1Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesMOTOR OPERATED VALVE FOR CCW PP 1C DISCH TO CCW HX 1BEquipment Description: CROSSOVER**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
unanchored security shack ~ 3' S of mov. shack is about 9' wide in n-s dir. 4' in e-w dir. given orientation, shack judged not to be overturning hazard to MOV. no issue.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Not Applicable
Exposed
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
See #11 for MV-14-8A for similar comments

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MV-14-1

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

MOTOR OPERATED VALVE FOR CCW PP 1C DISCH TO CCW HX 1B

Equipment Description: CROSSOVER

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MV-14-3

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

MOTOR OPERATED VALVE FOR CCW RETURN HDR B TO CCW PUMP

Equipment Description: 1C SUCTION

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): CCW, 15.00 ft, AW01

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? No
W-flange section is mounted has a hole indicative of past corrosion & painted over. operator has rugged welded connections in remaining places so as to preclude failure. PSL has issued AR and WR to address the issue. Per PSL, operator has sufficient remaining welds so as to preclude failure during a seismic event. See table 5-3.

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
Steel mounted

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.: MV-14-3Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesMOTOR OPERATED VALVE FOR CCW RETURN HDR B TO CCW PUMPEquipment Description: 1C 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?
Exposed Not Applicable
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
See #11 for HCV-14-8A for similar comments. no issue.

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MV-14-3

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

MOTOR OPERATED VALVE FOR CCW RETURN HDR B TO CCW PUMP

Equipment Description: 1C SUCTION

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: SS-21-1A

Equipment Class: (0) Other

Equipment Description: STRAINER FOR CCW HX 1A ICW INLET

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): CCW, 26.00 ft, AW01

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>Conf. per 0770-G-814 sht 113</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.: SS-21-1A

Equipment Class: (0) Other

Equipment Description: STRAINER FOR CCW HX 1A ICW INLET

Interaction Effects

- 7. Are soft targets free from impact by nearby equipment or structures? Yes
Large mast lighting to the N within Z.O.I lighting mast is robust and adequate bolting therefore judged no hazard.

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

- 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)Equipment ID No.: SS-21-1A CNTL PNLEquipment Class: (20) Instrumentation and Control Panels and CabinetsEquipment Description: SS-21-1A CONTROL PANELProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): CCW, 24.00 ft, AW01

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 consistent with PCM 02025, DWG ENG-02025-118, -119, -100</i> | Yes |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SS-21-1A CNTL PNL

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

Equipment Description: SS-21-1A CONTROL PANEL

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

<i>shelf for binder & flashlight over panel; not possible for equip to fall out and hit panel; no issue</i> | Yes |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by:	Seth W. Baker	Date:	11/16/12
	Hunter A. Young		11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TCV-14-4A

Equipment Class: (7) Fluid-Operated Valves

TEMPERATURE CONTROL VALVE FOR ICW FLOW TO CCW HX 1A

Equipment Description: OUTLET

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): CCW, 15.00 ft, AW01

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>Steel Mounted</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.: TCV-14-4A

Equipment Class: (7) Fluid-Operated Valves

TEMPERATURE CONTROL VALVE FOR ICW FLOW TO CCW HX 1A

Equipment Description: 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?
Exposed Not Applicable
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
See #11 for HCV-14-8-A. Same comments about mounting

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CST

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: CONDENSATE STORAGE TANK

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): CST, 19.00 ft, AW05

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>Surface corrosion on backs of bolts. No loss of diameter noted.</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.)
<i>conf. per 8770-G-682</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.: CST

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: CONDENSATE STORAGE 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 |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG 1A CNTL PNL

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

Equipment Description: DIESEL GENERATOR 1A CONTROL PANEL

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): DGB, 24.00 ft, AW21

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>Per PSL, anchorage consistent with EDSFI against items 139 and 140</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.: DG 1A CNTL PNL

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

Equipment Description: DIESEL GENERATOR 1A CONTROL PANEL

Interaction Effects

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG 1A S/U AIR TK 1A1

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: DIESEL GENERATOR 1A START-UP AIR TANK 1A1

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): DGB, 24.00 ft, AW21

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>Conf. per 8770-G-668.</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.: DG 1A S/U AIR TK 1A1

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: DIESEL GENERATOR 1A START-UP AIR TANK 1A1

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 |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG DO DAY TK 1A2

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: DIESEL GENERATOR DIESEL OIL DAY TANK 1A2

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): DGB, 27.00 ft, AW21

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>Mounted to DG Skid</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.: DG DO DAY TK 1A2Equipment Class: (21) Tanks and Heat ExchangersEquipment Description: DIESEL GENERATOR DIESEL OIL DAY TANK 1A2**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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG ENG 1A2 LUBO CLR

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: LUBE OIL COOLER FOR DIESEL GENERATOR ENGINE 1A2

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): DGB, 24.00 ft, AW21

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>Mounted to diesel skid.</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.: DG ENG 1A2 LUBO CLR

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: LUBE OIL COOLER FOR DIESEL GENERATOR ENGINE 1A2

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

- 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG ENG 1A2 RDTR

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: RADIATOR FOR 16 CYLINDER DIESEL GENERATOR ENGINE 1A2

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, AW21

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>Mounted to EDG Skid</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.: DG ENG 1A2 RDTR

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: RADIATOR FOR 16 CYLINDER DIESEL GENERATOR ENGINE 1A2

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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DSL GEN 1A

Equipment Class: (17) Engine-Generators

Equipment Description: DIESEL GENERATOR 1A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): DGB, 26.00 ft, AW21

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.: DSL GEN 1A

Equipment Class: (17) Engine-Generators

Equipment Description: DIESEL GENERATOR 1A

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 hoists & fire piping well supported. No overhead concerns.
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: SKBK LUBO AC PP 1A2

Equipment Class: (5) Horizontal Pumps

Equipment Description: SOAKBACK LUBE OIL AC PUMP FOR DIESEL GENERATOR ENGINE 1A2

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, AW21

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>Mounted to EDG Skid</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.: SKBK LUBO AC PP 1A2

Equipment Class: (5) Horizontal Pumps

Equipment Description: SOAKBACK LUBE OIL AC PUMP FOR DIESEL GENERATOR ENGINE 1A2

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 |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SKBK LUBO DC PP 1A2

Equipment Class: (5) Horizontal Pumps

Equipment Description: SOAKBACK LUBE OIL DC PUMP FOR DIESEL GENERATOR ENGINE 1A2

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): DGB, 28.00 ft, AW21

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>Mounted to EDG Skid</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.: SKBK LUBO DC PP 1A2

Equipment Class: (5) Horizontal Pumps

Equipment Description: SOAKBACK LUBE OIL DC PUMP FOR DIESEL GENERATOR ENGINE 1A2

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 |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: DOST 1AEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: DIESEL OIL STORAGE TANK 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): DOST, 22.00 ft, AW31

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 consistent with drawing 8770-G-683 Sh. 1</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.: DOST 1AEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: DIESEL OIL STORAGE TANK 1A**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?
Exposed area. Not Applicable
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: DOST 1BEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: DIESEL OIL STORAGE TANK 1BProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): DOST, 22.00 ft, AW31

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? No
Two nuts are painted over, but appear to have partial loss of nut area. PSL generated AR and WR to track and investigate of nut area loss. PSL to provide results of investigation. Further investigation by PSL found circumference of nut to be intact. No loss of anchor cross section. No current operability issue. AR action to replace degraded nut.
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

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: DOST 1BEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: DIESEL OIL STORAGE TANK 1B

- | | | |
|----|--|-----|
| 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 |
| 8. | Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
<i>Exposed area.</i> | Not Applicable |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
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	<u>Hunter A. Young</u>		<u>11/16/12</u>
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Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: DOST 1B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: DIESEL OIL STORAGE TANK 1B

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG FO XFR PP 1A

Equipment Class: (5) Horizontal Pumps

Equipment Description: DIESEL GENERATOR FUEL OIL TRANSFER PUMP 1A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): DOST, 23.00 ft, AW32

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 consistent with drawing 8770-G-683 Sh. 1</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.: DG FO XFR PP 1A

Equipment Class: (5) Horizontal Pumps

Equipment Description: DIESEL GENERATOR FUEL OIL TRANSFER PUMP 1A

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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG FO XFR PP 1B

Equipment Class: (5) Horizontal Pumps

Equipment Description: DIESEL GENERATOR FUEL OIL TRANSFER PUMP 1B

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): DOST, 23.00 ft, AW33

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 consistent with drawing 8770-G-683 Sh. 1</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.: DG FO XFR PP 1B

Equipment Class: (5) Horizontal Pumps

Equipment Description: DIESEL GENERATOR FUEL OIL TRANSFER PUMP 1B

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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FUEL POOL PP 1A

Equipment Class: (5) Horizontal Pumps

Equipment Description: FUEL POOL PUMP 1A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): FHB, 19.00 ft, AW16

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>Conf. per 8770-G-605</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.: FUEL POOL PP 1A

Equipment Class: (5) Horizontal Pumps

Equipment Description: FUEL POOL PUMP 1A

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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FUEL POOL PP 1B

Equipment Class: (5) Horizontal Pumps

Equipment Description: FUEL POOL PUMP 1B

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): FHB, 19.00 ft, AW16

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>Conf. per 8770-G-605</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.: FUEL POOL PP 1B

Equipment Class: (5) Horizontal Pumps

Equipment Description: FUEL POOL PUMP 1B

Interaction Effects

- 7. Are soft targets free from impact by nearby equipment or structures? Yes
Hoist chain is supported over oil site glass but zip-tied off so as to preclude impact. No Hazard
- 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FUEL POOL HX

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: FUEL POOL HEAT EXCHANGER

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): FHB, 22.00 ft, AW15

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>Conf. per 8770-G-605</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.: FUEL POOL HX

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: 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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 480V MCC 1A8

Equipment Class: (5) Horizontal Pumps

Equipment Description: 480V MCC FOR FUEL HANDLING BUILDING MISC POWER SUPPLIES

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): FHB, 48.00 ft, AW17

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.) | 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.: 480V MCC 1A8

Equipment Class: (5) Horizontal Pumps

Equipment Description: 480V MCC FOR FUEL HANDLING BUILDING MISC POWER SUPPLIES

Interaction Effects

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

Approximately 1/2" clearance noted in front-to-back direction of top of 90" tall MCC to concrete wall. Also, approximately 1/8" clearance approx. 36" above ground to a steel angle mounted to the wall. Verify whether gap is adequate or chatter does not affect safety-related functionality of equipment.

Response:

Per PSL, cabinet is Seismic Category 2:1 (Quality Related); therefore potential contact with the wall poses no adverse concern since equipment functionality is not required.

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

Detailed signed records of the checklists are available at the site.

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 480V MCC 1A8

Equipment Class: (5) Horizontal Pumps

Equipment Description: 480V MCC FOR FUEL HANDLING BUILDING MISC POWER SUPPLIES

Evaluated by:	Seth W. Baker	Date:	11/16/12
	Hunter A. Young		11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HVE-16A

Equipment Class: (9) Fans

Equipment Description: CENTRIFUGAL FAN FOR FUEL POOL EXHAUST SYSTEM

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): FHB, 48.00 ft, AW17

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.: HVE-16AEquipment Class: (9) FansEquipment Description: CENTRIFUGAL FAN FOR FUEL POOL EXHAUST SYSTEM**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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: MV-21-2Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesEquipment Description: MOTOR OPERATED VLV FOR ICW TRAIN B SUPPLY TO TCW HX'SProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): INTK, 11.00 ft, AW04

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.: MV-21-2Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesEquipment Description: MOTOR OPERATED VLV FOR ICW TRAIN B SUPPLY TO TCW HX'S**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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MV-21-3

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

Equipment Description: MOTOR OPERATED VLV FOR ICW TRAIN A SUPPLY TO TCW HX's

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): INTK, 11.00 ft, AW04

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.: MV-21-3Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesEquipment Description: MOTOR OPERATED VLV FOR ICW TRAIN A SUPPLY TO TCW HX's**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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: ICW-PP-1A

Equipment Class: (6) Vertical Pumps

Equipment Description: INTAKE COOLING WATER PUMP 1A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): INTK, 21.00 ft, AW03

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>Surface oxidation on all bolts. No concern.</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.)
<i>Conf. per 8770-G-643</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.: ICW-PP-1A

Equipment Class: (6) Vertical Pumps

Equipment Description: INTAKE COOLING WATER PUMP 1A

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
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
E screen is completely off and resting against pump. Notified PSL.; no seismic concern as screen has no seismic importance and is not a threat to soft targets.

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: ICW-PP-1C

Equipment Class: (6) Vertical Pumps

Equipment Description: INTAKE COOLING WATER PUMP 1C

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): INTK, 21.00 ft, AW03

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>Surface oxidation on all bolts. No concern.</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.)
<i>Conf. per 8770-G-643</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.: ICW-PP-1C

Equipment Class: (6) Vertical Pumps

Equipment Description: INTAKE COOLING WATER PUMP 1C

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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: LPSI 1AEquipment Class: (5) Horizontal PumpsEquipment Description: LOW PRESSURE SAFETY INJECTION PUMP 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): RAB, -6.00 ft, AW09

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>Conf. per 8770-G-589</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.: LPSI 1AEquipment Class: (5) Horizontal PumpsEquipment Description: LOW PRESSURE SAFETY INJECTION PUMP 1A**Interaction Effects**

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CTMT SPR PP 1A

Equipment Class: (6) Vertical Pumps

Equipment Description: CONTAINMENT SPRAY PUMP 1A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, -10.00 ft, AW10

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>Conf. per 8770-G-589</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.: CTMT SPR PP 1A

Equipment Class: (6) Vertical Pumps

Equipment Description: CONTAINMENT SPRAY PUMP 1A

Interaction Effects

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: HPSI PP 1AEquipment Class: (5) Horizontal PumpsEquipment Description: HIGH PRESSURE SAFETY INJECTION PUMP 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): RAB, -7.00 ft, AW10

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 |
| 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.: HPSI PP 1A

Equipment Class: (5) Horizontal Pumps

Equipment Description: HIGH PRESSURE SAFETY INJECTION PUMP 1A

Conf. per 8770-G-589

Interaction Effects

- 7. Are soft targets free from impact by nearby equipment or structures? Yes
Noted ladder tied off at btm but unsecured at top. During SSE event, ladder could lose stability but btm tie off and angle supports halfway up ladder preclude impact of soft targets. Against housekeeping procedures. PSL generated AR to address issue.
- 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Hoist overhead 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

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FT-3311

Equipment Class: (0) Other

Equipment Description: FLOW TRANSMITTER FOR HPSI HEADER FEED TO LOOP 1A2

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 4.00 ft, AW06

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>Conf. per 8770-B-231</i> | Yes |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FT-3311

Equipment Class: (0) Other

Equipment Description: FLOW TRANSMITTER FOR HPSI HEADER FEED TO LOOP 1A2

- | | | |
|-----|---|-----|
| 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>Heavy cable tray overhead; ruggedly 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12Status: Y N U

Seismic Walkdown Checklist (SWC)Equipment ID No.: NAOH STG TK 1AEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: SODIUM HYDROXIDE STORAGE TANK 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): RAB, 0.00 ft, AW06

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>Conf. per 8770-G-591 Sht. 7</i> | Yes |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: NAOH STG TK 1AEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: SODIUM HYDROXIDE STORAGE TANK 1A

- | | | |
|-----|--|-----|
| 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>Rod-hung piping but well supported vertically so as to preclude collapse.</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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
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	<u>Hunter A. Young</u>		<u>11/16/12</u>
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Status: Y N U

Seismic Walkdown Checklist (SWC)Equipment ID No.: SDC HX 1AEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: SHUTDOWN COOLING HEAT EXCHANGER 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): RAB, 3.00 ft, AW07

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>Conf. per 8770-G-589 & 590.</i> | Yes |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: SDC HX 1AEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: SHUTDOWN COOLING HEAT EXCHANGER 1A

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

Noted bent (apparently intentional) lighting shaft. No soft targets in Z.O.I. should it fail. No hazard.

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: PDT-25-16A

Equipment Class: (0) Other

Equipment Description: ECCS Equip RM D/P

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, -0.50 ft, AW08

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>Conf. per 8770-B-231</i> | Yes |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: PDT-25-16A

Equipment Class: (0) Other

Equipment Description: ECCS Equip RM D/P

-
- 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
Same overhead as PT-3305 (See SWC comment #8)

 - 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: PT-3305

Equipment Class: (0) Other

Equipment Description: PRESSURE TRANSMITTER FOR HPSI PUMP 1A DISCHARGE HEADER

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 4.00 ft, AW08

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>Conf. per. 8770-B-231</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: PT-3305Equipment Class: (0) OtherEquipment Description: PRESSURE TRANSMITTER FOR HPSI PUMP 1A DISCHARGE HEADER

- | | | |
|-----|---|-----|
| 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>Heavy cable and rod-hung pipe overhead w/ adequate vertical support.</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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
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	<u>Hunter A. Young</u>		<u>11/16/12</u>
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Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: SE-07-2A

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

PRI SOLENOID ISOL VLV FOR SODIUM HYDROXIDE TO FD TO CNTMT

Equipment Description: SPRY PP'S

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 0.00 ft, AW08

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.: SE-07-2A

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

PRI SOLENOID ISOL VLV FOR SODIUM HYDROXIDE TO FD TO CNTMT

Equipment Description: SPRY PP'S

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Same overhead comment as PT-3305 (See #8 for that SWC) OK.
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: V2514

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

MOTOR OPER VLV FOR EMERG BORATION FROM BORIC ACID MU

Equipment Description: PUMPS DISCH

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 3.00 ft, AW08

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.: V2514

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

MOTOR OPER VLV FOR EMERG BORATION FROM BORIC ACID MU

Equipment Description: PUMPS DISCH

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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker

Date: 11/16/12

Hunter A. Young

11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: CHG PP 1AEquipment Class: (5) Horizontal PumpsEquipment Description: CHARGING PUMP 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): RAB, 0.00 ft, AW11

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
Conf. per 8770-G-590

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

Interaction Effects

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: CHG PP 1A

Equipment Class: (5) Horizontal Pumps

Equipment Description: CHARGING PUMP 1A

- | | | |
|-----|--|-----|
| 7. | Are soft targets free from impact by nearby equipment or structures?
<i>Hoist beam overhead well supported.</i> | Yes |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: BAM PP 1AEquipment Class: (5) Horizontal PumpsEquipment Description: BORIC ACID MAKE-UP PUMP 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): RAB, 0.00 ft, AW12

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>Conf. per 8770-G-589,590</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.: BAM PP 1AEquipment Class: (5) Horizontal PumpsEquipment Description: BORIC ACID MAKE-UP PUMP 1A

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: BAMT 1AEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: BORIC ACID MAKE-UP TANK 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): RAB, 0.00 ft, AW12

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>Conf. per 8770-G-589 & 590</i> | Yes |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | Yes |

Interaction Effects

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: BAMT 1AEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: BORIC ACID MAKE-UP TANK 1A

- | | | |
|-----|--|-----|
| 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 |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: PT-07-4B

Equipment Class: (0) Other

Equipment Description: PRESSURE TRANSMITTER FOR CONTAINMENT PRESSURE

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 19.00 ft, AW20

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 consistent with drawing 8770-B-231</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.: PT-07-4B

Equipment Class: (0) Other

Equipment Description: PRESSURE TRANSMITTER FOR CONTAINMENT PRESSURE

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 125V BATT 1B

Equipment Class: (15) Batteries on Racks

Equipment Description: 125V DC BATTERY 1B

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW25

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 consistent with drawing 8770-G-814 Sh. 82

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.: 125V BATT 1B

Equipment Class: (15) Batteries on Racks

Equipment Description: 125V DC BATTERY 1B

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
NO foam spacers provided, but condition analyzed as acceptable per PCM-034-995

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 120V INSTR BUS 1MC

Equipment Class: (14) Distribution Panels

Equipment Description: 120V AC INSTRUMENT BUS 1MC DISTRIBUTION PANEL

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW26

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.: 120V INSTR BUS 1MC

Equipment Class: (14) Distribution Panels

Equipment Description: 120V AC INSTRUMENT BUS 1MC DISTRIBUTION PANEL

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
See AWC regarding overhead. No hazard.
9. Do attached lines have adequate flexibility to avoid damage? Yes
Conduit into 1A MAINT BYPASS BUS & 1A-DC-SWGR are rigid, straight runs. However, all cabinets are rigidly mounted to same wall; therefore, diff. displacement expected to be negligible. No hazard.
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

Detailed signed records of the checkiists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 125V DC BUS 1A

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC BUS POWER DISTRIBUTION PANEL ESS-SA

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW26

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.: 125V DC BUS 1A

Equipment Class: (14) Distribution Panels

Equipment Description: 125V DC BUS POWER DISTRIBUTION PANEL ESS-SA

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

- 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 480V MCC 1AB

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER 1AB

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 47.00 ft, AW26

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 consistent with drawing 8770-G-833 Sh. 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.: 480V MCC 1AB

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MOTOR CONTROL CENTER 1AB

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 480V PZR XFMR 1A3

Equipment Class: (4) Transformers

Equipment Description: 480V PRESSURIZER TRANSFORMER 1A3

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW26

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.: 480V PZR XFMR 1A3

Equipment Class: (4) Transformers

Equipment Description: 480V PRESSURIZER TRANSFORMER 1A3

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BATT CHGR 1A

Equipment Class: (16) Inverters

Equipment Description: BATTERY CHARGER 1A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW26

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>Conf. Per 8770-C-837 Sh. 1&2.</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.: BATT CHGR 1A

Equipment Class: (16) Inverters

Equipment Description: BATTERY CHARGER 1A

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: RX TRIP SWGR

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: REACTOR TRIP SWITCHGEAR

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW26

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>Conf. per 8770-G-837 sh. 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.: RX TRIP SWGREquipment Class: (2) Low Voltage SwitchgearEquipment Description: REACTOR TRIP SWITCHGEAR

HVAC duct w/ ~12" clearance to S is hung by sheet metal straps & is very flexible. Straps are relatively short (<3') so frequency is expected >1Hz; therefore, relatively low SSE peak accelerations in RAB leads to SWT conclusion that gap is acceptable.

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. BakerDate: 11/16/12Hunter A. Young11/16/12Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: STC INVTR 1A

Equipment Class: (16) Inverters

Equipment Description: STATIC INVERTER 1A (10 KVA)

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW26

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 consistent with drawing 8770-G-591 Sh. 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.: STC INVTR 1AEquipment Class: (16) InvertersEquipment Description: STATIC INVERTER 1A (10 KVA)

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 125V BATT 1A

Equipment Class: (15) Batteries on Racks

Equipment Description: 125V DC BATTERY 1A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW27

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 consistent with drawing 8770-G-814 Sh. 82

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

Interaction Effects

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 125V BATT 1A

Equipment Class: (15) Batteries on Racks

Equipment Description: 125V DC BATTERY 1A

- 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

- 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
*See 125V Batt 1B SWC #11 for discussion of no foam spacers between cells.
 No Hazard.*

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HSCP 1A

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

Equipment Description: HOT SHUTDOWN CONTROL PANEL 1A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW28

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 consistent with drawing 8770-G-837 Sh. 1

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.: HSCP 1AEquipment Class: (20) Instrumentation and Control Panels and CabinetsEquipment Description: HOT SHUTDOWN CONTROL PANEL 1A

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: STA SVC XFMR 1B-2

Equipment Class: (4) Transformers

Equipment Description: STATION SERVICE TRANSFORMER 1B-2

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW29

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.: STA SVC XFMR 1B-2

Equipment Class: (4) Transformers

Equipment Description: STATION SERVICE TRANSFORMER 1B-2

Adjacent scaffolding to the south is well anchored. No hazard.

- 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 480V MCC 1A6

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MCC 1A6

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW30

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.: 480V MCC 1A6

Equipment Class: (1) Motor Control Centers

Equipment Description: 480V MCC 1A6

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: ISOL PNL 1A

Equipment Class: (14) Distribution Panels

Equipment Description: ISOLATION PANEL 1A - Control Room Inaccessibility Transfer Panel

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW30

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.: ISOL PNL 1A

Equipment Class: (14) Distribution Panels

Equipment Description: ISOLATION PANEL 1A - Control Room Inaccessibility Transfer Panel

- 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: STA SVC XFMR 1A-2

Equipment Class: (4) Transformers

Equipment Description: STATION SERVICE TRANSFORMER 1A-2

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW30

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.: STA SVC XFMR 1A-2

Equipment Class: (4) Transformers

Equipment Description: STATION SERVICE TRANSFORMER 1A-2

- 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HVS-4A

Equipment Class: (9) Fans

Equipment Description: CENTRIFUGAL FAN FOR RAB MAIN SUPPLY SYSTEM

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW18

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.: HVS-4AEquipment Class: (9) FansEquipment Description: CENTRIFUGAL FAN FOR RAB MAIN SUPPLY SYSTEM

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HVE-6A

Equipment Class: (9) Fans

Equipment Description: CENTRIFUGAL FAN FOR SHIELD BUILDING VENTILATION SYSTEM

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW19

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.: HVE-6A

Equipment Class: (9) Fans

Equipment Description: CENTRIFUGAL FAN FOR SHIELD BUILDING VENTILATION SYSTEM

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

Suction side of the fan is differentially supported at the fan on the ground & from a rigid support from the ceiling above. Given ~15' run of duct, SWT judged duct run as adequately flexible so as to preclude failure.

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HVE-6A PLENUM

Equipment Class: (10) Air Handlers

Equipment Description: FILTER PLENUM

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW19

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.: HVE-6A PLENUMEquipment Class: (10) Air HandlersEquipment Description: FILTER PLENUM

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HVE-9A

Equipment Class: (9) Fans

Equipment Description: CENTRIFUGAL FAN FOR ECCS VENTILATION SYSTEM

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 43.00 ft, AW19

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 obscured by epoxy coating, but drawing 8770-G-875 states that fan bases are welded to embedded plates. Therefore ok.

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, superficial crack noted in slab. No seis. 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.: HVE-9A

Equipment Class: (9) Fans

Equipment Description: CENTRIFUGAL FAN FOR ECCS VENTILATION SYSTEM

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: ESC SA

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

Equipment Description: ENGINEERED SAFEGUARD LOGIC CABINET SA

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 62.00 ft, AW22

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>View obscured by raised flooring. Received 8770-G-837 sh1 to confirm anchorage.</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.: ESC SA

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

Equipment Description: ENGINEERED SAFEGUARD LOGIC CABINET SA

- 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
See Awc regarding 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? No
Missing latch on bottom of N door. PSL generated AR and WR to address issue.

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: QSPDS CHAN A CAB

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

Equipment Description: QUALIFIED SAFETY PARAMETER DISPLAY SYSTEM CHANNEL A CABINET

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 62.00 ft, AW22

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>Anchorage obscured by raised floor. Review of drawing 8770-15417 confirmed that anchors are present.</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? | No |
|----|--|----|

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: QSPDS CHAN A CAB

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

Equipment Description: QUALIFIED SAFETY PARAMETER DISPLAY SYSTEM CHANNEL A CABINET

- i. *Unanchored storage cabinet ~1' E of QSPDS could overturn and impact DSPQDS. PSL generated AR and WR to address issue. PSL has removed storage cabinet. Per PSL, no current operability issue.*
- ii. *Verify whether QSPDS A and B cabinets are bolted together or unbolted condition is analyzed. PSL CRN No. 18959 validates that as-installed condition as conforming with its seismic qualification.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
See AWC regarding overhead drop ceiling.
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? No

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: RTGB-106

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

Equipment Description: REACTOR TURBINE GENERATOR CONTROL BOARD 106

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 62.00 ft, AW22

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>View obscured by carpeting & raised flooring that would require excessive dismounting. Reviews dwg 8770-G-837 sht1 to confirm anchorage of cabinet</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

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: RTGB-106Equipment Class: (20) Instrumentation and Control Panels and CabinetsEquipment Description: REACTOR TURBINE GENERATOR CONTROL BOARD 106

- | | | |
|-----|---|-----|
| 7. | Are soft targets free from impact by nearby equipment or structures? | Yes |
| | <i>Overhead ceiling qualified as acceptable per A-46 SQUG program. Noted one tile out of position & resting on top of box conduit per RTGB-106. Low mass and of no hazard to soft targets but notified PSL to resecure.</i> | |
| 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 |
| | <i>Noted open interior cabinet door (unsecured) which could move in seismic event. PSL fixed on spot. Various panel bolts & possibly panels missing. Also, relay covers on floor inside. All non-adverse seismic conditions. PSL generated AR and WR to address issue.</i> | |

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HVA-3A

Equipment Class: (11) Chillers

Equipment Description: AIR HANDLING UNIT FOR CNTL RM, TSC & COMPUTER ROOM

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 62.00 ft, AW23

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.: HVA-3A

Equipment Class: (11) Chillers

Equipment Description: AIR HANDLING UNIT FOR CNTL RM, TSC & COMPUTER ROOM

- 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HVE-13A

Equipment Class: (9) Fans

Equipment Description: CENTRIFUGAL FAN FOR CONTROL ROOM RETURN SYSTEM

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): RAB, 62.00 ft, AW23

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.: HVE-13AEquipment Class: (9) FansEquipment Description: CENTRIFUGAL FAN FOR CONTROL ROOM RETURN SYSTEM

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. BakerDate: 11/16/12Hunter A. Young11/16/12Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CCW SRG TKEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: COMPONENT COOLING WATER SURGE TANKProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): RAB, 75.00 ft, AW24

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? Not Applicable
Mounted to bldg steel

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 consistent with drawing 8770-G-821, Sh. 11

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.: CCW SRG TKEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: COMPONENT COOLING WATER SURGE TANK

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: AFW PP 1AEquipment Class: (5) Horizontal PumpsEquipment Description: AUXILIARY FEEDWATER PUMP 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): TRSL, 20.00 ft, AW34

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
Noted pad notch-out for conduit. Verified that no rebar was cut for notch and that anchors extend deep into pump pedestal. 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.) Yes
Anchorage consistent with drawing 8770-G-489

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.: AFW PP 1AEquipment Class: (5) Horizontal PumpsEquipment Description: AUXILIARY FEEDWATER PUMP 1A

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: AFW PP 1BEquipment Class: (5) Horizontal PumpsEquipment Description: AUXILIARY FEEDWATER PUMP 1BProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): TRSL, 20.00 ft, AW34

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
North-east and south-east nuts have evident surface corrosion. No indication of loss of strength. No hazard.

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 consistent with drawing 8770-G-489

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

Interaction Effects

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: AFW PP 1B

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUXILIARY FEEDWATER PUMP 1B

- 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

- 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MFIV AIR ACCUM 1A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: MFIV N2 ACCUM 1A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): TRSL, 19.50 ft, AW34

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? No
Hold down bolt on east end of tank has evidence of corrosion, potentially indicative of strength loss. PSL generated AR and WR to address issue.

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 consistent with drawing 8770-G-814 Sh. 137

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.: MFIV AIR ACCUM 1A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: MFIV N2 ACCUM 1A

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MV-09-13

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

MOTOR OPERATED VALVE FOR CROSSTIE BETWEEN AFW PP 1A & 1B

Equipment Description: DISCH

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): TRSL, 21.00 ft, AW34

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.: MV-09-13Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesMOTOR OPERATED VALVE FOR CROSSTIE BETWEEN AFW PP 1A & 1BEquipment Description: DISCH

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: MV-09-14Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesEquipment Description: MOTOR OPERATED VALVE FOR CROSSTIE BETWEEN AFW PP 1A & 1BEquipment Description: DISCHProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): TRSL, 21.00 ft, AW34

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.: MV-09-14Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesMOTOR OPERATED VALVE FOR CROSSTIE BETWEEN AFW PP 1A & 1BEquipment Description: DISCH**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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: AFW PP 1CEquipment Class: (5) Horizontal PumpsEquipment Description: AUXILIARY FEEDWATER PUMP 1C (STEAM DRIVEN)Project: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): TRSL, 20.00 ft, AW35

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 consistent with drawing 8770-G-489</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.: AFW PP 1C

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUXILIARY FEEDWATER PUMP 1C (STEAM DRIVEN)

Interaction Effects

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

Noted steel platform built overhead. Ruggedly supported with steel plates on wide-flange sections bolted to building steel. No hazard.

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MV-08-03Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesEquipment Description: THROTTLE/TRIP VALVE FOR AUXILIARY FEEDWATER PUMP 1CProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): TRSL, 22.00 ft, AW35

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.: MV-08-03Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesEquipment Description: THROTTLE/TRIP VALVE FOR AUXILIARY FEEDWATER PUMP 1C

Bank of operator has approx 1/16" to conduit box that is supported from elevation above. Items will likely contact during SSE. Conduit box is low mass and differential displacement will not transfer significant kinetic energy; therefore contact is not an adverse seismic condition.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Noted steel platform built overhead. Ruggedly supported with steel plates on wide-flange sections bolted to building steel. No hazard.
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MV-08-13

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

Equipment Description: PP 1C

MOTOR OPERATED ISOLATION VALVE FOR SG 1A MAIN STEAM TO AFW

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): TRSL, 28.00 ft, AW35

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.: MV-08-13Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesMOTOR OPERATED ISOLATION VALVE FOR SG 1A MAIN STEAM TO AFWEquipment Description: PP 1C**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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: PT-09-9B

Equipment Class: (0) Other

PRESSURE TRANSMITTER FOR FEEDWATER HDR STEAM GENERATOR

Equipment Description: 1B INLET

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): TRSL, 24.00 ft, AW35

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? Not Applicable
Mounted to building steel.

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 consistent with drawing 8770-B-231 Sh. 30-01A

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.: PT-09-9B

Equipment Class: (0) Other

PRESSURE TRANSMITTER FOR FEEDWATER HDR STEAM GENERATOR

Equipment Description: 1B 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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: HCV-08-1BEquipment Class: (7) Fluid-Operated ValvesEquipment Description: MAIN STEAM ISOLATION VALVE (MSIV) FOR STEAM GENERATOR 1BProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): TRSL, 36.00 ft, AW13

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

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: HCV-08-1BEquipment Class: (7) Fluid-Operated ValvesEquipment Description: MAIN STEAM ISOLATION VALVE (MSIV) FOR STEAM GENERATOR 1B

- | | |
|---|-----|
| 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 |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HCV-09-08

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MAIN FEEDWATER ISOLATION VALVE FOR SG 1B UPSTREAM OF
PENETR P-4

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): TRSL, 36.00 ft, AW13

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.: HCV-09-08

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MAIN FEEDWATER ISOLATION VALVE FOR SG 1B UPSTREAM OF
PENETR P-4

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MSIV ACCUM 1B1

Equipment Class: (21) Tanks and Heat Exchangers

MAIN STEAM ISOLATION VALVE (HCV-08-1B) CNTL AIR ACCUMULATOR

Equipment Description: 1B1

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): TRSL, 45.00 ft, AW13

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>Anchored to steel structure</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.: MSIV ACCUM 1B1Equipment Class: (21) Tanks and Heat ExchangersMAIN STEAM ISOLATION VALVE (HCV-08-1B) CNTL AIR ACCUMULATOREquipment Description: 1B1**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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: MV-09-10Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesEquipment Description: MOTOR OPERATED VALVE FROM AUX FW PP 1B DISCHARGE TO
STEAM GEN 1BProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): TRSL, 43.00 ft, AW13

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.: MV-09-10

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

MOTOR OPERATED VALVE FROM AUX FW PP 1B DISCHARGE TO
Equipment Description: STEAM GEN 1B**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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: MV-09-12Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesEquipment Description: MOTOR OPERATED VALVE FROM AUX FW PP 1B DISCHARGE TO
STEAM GEN 1BProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): TRSL, 43.00 ft, AW13

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.: MV-09-12

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

MOTOR OPERATED VALVE FROM AUX FW PP 1B DISCHARGE TO
Equipment Description: STEAM GEN 1B**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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HCV-08-1A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MAIN STEAM ISOLATION VALVE (MSIV) FOR STEAM GENERATOR 1A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): TRSL, 36.00 ft, AW14

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

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HCV-08-1A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MAIN STEAM ISOLATION VALVE (MSIV) FOR STEAM GENERATOR 1A

- | | | |
|-----|---|-----|
| 7. | Are soft targets free from impact by nearby equipment or structures? | Yes |
| | <i>Handrail to the W is missing bolts fastening handrail stanchions to sleeves. Sleeves are deep enough to preclude falling out and impacting valves soft target during SSE. No issue</i> | |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by:	Seth W. Baker	Date:	11/16/12
	Hunter A. Young		11/16/12

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: HCV-09-07

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MAIN FEEDWATER ISOLATION VALVE FOR SG 1A UPSTREAM OF
PENETR P-3

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): TRSL, 36.00 ft, AW14

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.: HCV-09-07

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MAIN FEEDWATER ISOLATION VALVE FOR SG 1A UPSTREAM OF
PENETR P-3

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: MV-09-09Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesEquipment Description: MOTOR OPERATED VALVE FROM AUX FW PP 1A DISCHARGE TO
STEAM GEN 1AProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): TRSL, 43.00 ft, AW14

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.: MV-09-09Equipment Class: (8) Motor-Operated and Solenoid-Operated ValvesEquipment Description: MOTOR OPERATED VALVE FROM AUX FW PP 1A DISCHARGE TO
STEAM GEN 1A**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
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MV-09-11

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

Equipment Description: MOTOR OPERATED VALVE FROM AUX FW PP 1C DISCHARGE TO
STEAM GEN 1A

Project: St Lucie 1 SWEL

Location (Bldg, Elev, Room/Area): TRSL, 43.00 ft, AW14

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.: MV-09-11

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

Equipment Description: MOTOR OPERATED VALVE FROM AUX FW PP 1C DISCHARGE TO
STEAM GEN 1A**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
Scaff. plank is ~3/4" from conduit supplying mov. plank & supporting scaffolding adequately anchored. No interaction concern.
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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12Hunter A. Young 11/16/12

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: RWTEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: REFUELING WATER TANKProject: St Lucie 1 SWELLocation (Bldg, Elev, Room/Area): YD, 19.00 ft, AW02

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>Anchorage chairs covered in protective insulation</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

Status: Y N U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: RWTEquipment Class: (21) Tanks and Heat ExchangersEquipment Description: REFUELING WATER TANK

-
- | | | |
|-----|---|----------------|
| 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>Exposed area</i> | Not Applicable |
| 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. BakerDate: 11/16/12Hunter A. Young11/16/12

D

Area Walk-by Checklists (AWCs)

Table D-1: Summary of Area Walk-by Checklists

Area Walk-by	Description	ID	Page
AW01	CCW N Area A Train	CCW-HX-1A CCW-PP-1A FT-14-1A HCV-14-8A HCV-14-9 MV-14-1 MV-14-3 SS-21-1A SS-21-1A CNTL PNL TCV-14-4A	D-4
AW02	RWT Pit	RWT	D-6
AW03	INTK 20' Inside ICW Pump Missile Enclosure	ICW-PP-1A ICW-PP-1C	D-8
AW04	INTK 11' ICW Header Pit	MV-21-2 MV-21-3	D-10
AW05	YARD 19' Inside CST Concrete Enclosure	CST	D-12
AW06	RAB -0.5' EI, W Corridor near NaOH "A" Tank	FT-3311 NAOH STG TK 1A	D-14
AW07	RAB -0.5' EI, SDHX 1A Rm	SDC HX 1A	D-16
AW08	RAB -0.5' EI, Central Corridor	PDT-25-16A PT-3305 SE-07-2A V2514	D-18
AW09	RAB -10 EI, LPSI 1A Rm	LPSI 1A	D-20
AW10	RAB -10 EI, CS/HPSI "A" Pump Room	CTMT SPR PP 1A HPSI PP 1A	D-22
AW11	RAB -0.5' EI, Chg Pump 1A Cubicle	CHG PP 1A	D-24
AW12	RAB -0.5' EI, BAMT 1A Rm	BAM PP 1A BAMT 1A	D-26
AW13	TRSL 43' S Area	HCV-08-1B	D-28

Area Walk-by	Description	ID	Page
		HCV-09-08 MSIV ACCUM 1B1 MV-09-10 MV-09-12	
AW14	TRSL 43' N Area	HCV-08-1A HCV-09-07 MV-09-09 MV-09-11	D-30
AW15	FHB 20' FPHX Rm	FUEL POOL HX	D-32
AW16	FHB 19.5' FP Pump Rm	FUEL POOL PP 1A FUEL POOL PP 1B	D-34
AW17	FHB 48' HVAC Rm	480V MCC 1A8 HVE-16A	D-36
AW18	RAB 48' Inside Plenum	HVS-4A	D-38
AW19	RAB 48' HVAC Area	HVE-6A HVE-6A PLENUM HVE-9A	D-40
AW20	RAB 19.5' CEA MG ST Rm	480V SWGR 1AB* 4KV SWGR 1AB* CEA DR MG ST 1A CEA DR MG ST 1A (IN CNTL PNL)* PT-07-4B	D-42
AW21	DGB 22' 1A Rm	480V MCC 1A2 480V MCC 1A7* DG 1A CNTL PNL DG 1A S/U AIR TK 1A1 DG DO DAY TK 1A2 DG ENG 1A2 LUBO CLR DG ENG 1A2 RDTR DSL GEN 1A SKBK LUBO AC PP 1A2 SKBK LUBO DC PP 1A2	D-44
AW22	RAB 62' CTRL Rm	ESC SA QSPDS CHAN A CAB RTGB-106	D-46
AW23	RAB 62' HVAC Rm N Area	HVA-3A HVE-13A	D-48
AW24	RAB 62' CCW Surge Tank Rm	CCW SRG TK	D-50
AW25	RAB 43' 'B' Battery Rm	125V BATT 1B	D-52

Area Walk-by	Description	ID	Page
AW26	RAB 43' Cable Spreading Rm	120V INSTR BUS 1MC 125V DC BUS 1A 480 PZ BUS1A3* 480V MCC 1AB 480V PZR XFMR 1A3 BATT CHGR 1A RX TRIP SWGR STC INVTR 1A	D-54
AW27	RAB 43' "A" Batt Rm	125V BATT 1A	D-56
AW28	RAB 43' Remote Shutdown Rm	HSCP 1A	D-58
AW29	RAB 43' S SWGR Rm	480V SWGR 1B-2* STA SVC XFMR 1B-2	D-60
AW30	RAB 43' N SWGR Rm	480V MCC 1A6 4KV SWGR 1A3* ISOL PNL 1A STA SVC XFMR 1A-2	D-62
AW31	DOST Area	DOST 1A DOST 1B	D-64
AW32	1A Diesel Xfer Pumphouse	DG FO XFR PP 1A	D-66
AW33	1B Diesel Xfer Pumphouse	DG FO XFR PP 1B	D-68
AW34	TRSL 19.5' El., S Rm	AFW PP 1A AFW PP 1B MFIV AIR ACCUM 1A MV-09-13 MV-09-14	D-70
AW35	TRSL 19.5' El, N Rm	AFW PP 1C MV-08-03 MV-08-13 PT-09-9B	D-72

* Item deferred

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW01 - CCW N Area A Train

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)?
<i>#2 see below</i> | Yes |
| 2. | Does anchorage of equipment in the area appear to be free of significant degraded conditions?
<i>~1" pipe N of strainer has 2 unanchored supports ineffective at resisting lateral load. piping is still functional due to low mass & inherent ductility. No impact hazards. PSL generated AR and WR to address issue.</i>

<i>Significant surface corrosion throughout area. no other strength loss of than those identified in SWCs.</i> | No |
| 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)?
<i>Exposed area</i> | 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): AW01 - CCW N Area A Train

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
Various grating clips missing

Heavily corroded grating N of HX A. No fall hazard. PSL generated AR and WR to address issue.

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW02 - RWT Pit

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?
<i>Surface corrosion throughout; no structural strength loss indicated</i> | 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)?
<i>Exposed Area</i> | Not Applicable |
| 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): AW02 - RWT Pit

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
- On SE side of tank. conduit w/ missing cover and general poor condition of conduit that runs to B101. No seismic concern but notified PSL.*

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW03 - INTK 20' Inside ICW Pump Missile Enclosure

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?
<i>Surface corrosion throughout due to harsh environment. No indication of strength loss. No concern.</i> | 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): AW03 - INTK 20' Inside ICW Pump Missile Enclosure

Scaff. has good clearance & support. No issue

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
- Conc. block protecting conduit to ICW-PP-B is completely cracked through. slab below provides support; therefore, non-seismic concern. PSL generated WR to address issue.*

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW04 - INTK 11' ICW Header Pit

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?
<i>Normal surface corrosion noted due to harsh environment. No seismic concerns.</i> | 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): AW04 - INTK 11' ICW Header Pit

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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): AW05 - YARD 19' Inside CST Concrete Enclosure

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?
<i>base plate anchor bolts and nuts for support of LT-12-12 are heavily corroded and indicate loss of strength. Given LT low mass, loss of strength judged to be acceptable for function of equip. during seismic event w/ tubing and conduit able to provide additional support. PSL generated AR and WR.</i>

<i>On N side of tank on what appears to be CST fill line, vertical support base plate has heavy corrosion on bolts and nuts which indicates loss of strength. Support provides only bearing support so bolts and nuts do not negatively affect seismic function of support. PSL generated AR and WR to address the issue.</i> | No |
| 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): AW05 - YARD 19' Inside CST Concrete Enclosure

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

Detailed signed records of the checklists are available at the site.

Evaluated by:	Seth W. Baker	Date:	11/16/12
	Hunter A. Young		11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW06 - RAB -0.5' EI, W Corridor near NaOH "A" Tank

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)?
<i>Heavy cable tray ruggedly supported w/ welded channels and angle supports at frequent intervals. No hazard.</i> | Yes |
| 4. | <i>Rod hung piping throughout w/ potential to come in contact with other rugged pipe. No concern for objects to fall due to good vertical support & flexibility.</i>
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)?
<i>See #3 above.</i> | Yes |
| 5. | Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?
<i>rod hung fire piping is welded and very ductile. No spray hard adhesive, supported vertically.</i> | 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): AW06 - RAB -0.5' EI, W Corridor near NaOH "A" Tank

Rolling RP cabinet not chocked off at wheels. Judged not to be overturning hazard due to ability to roll & apparent low c.g., but notified PSL of possible procedure violation. Noted scaffolding w/ no load w/in 2" of cable tray. No seismic concern but alerted PSL of possible procedure violation.

- 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

Detailed signed records of the checklists are available at the site.

Evaluated by:	Seth W. Baker		Date: 11/16/12
	Hunter A. Young		11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW07 - RAB -0.5' EI, SDHX 1A 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)?
<i>See #7 for SD HX 1A. No hazard</i> | 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): AW07 - RAB -0.5' EI, SDHX 1A 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW08 - RAB -0.5' EI, Central Corridor

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)?
<i>Heavy cable tray w/ rugged supports</i> | 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)?
<i>MCCs 1B-2 & 1A-2 have small gaps to conc. walls but appear NNS & therefore would have no SC-1 basis. Confirmed by PSL.</i> | Yes |
| 5. | Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?
<i>Rod hung overhead piping carrying the service water lines w/ long runs w/o designed lateral support. Actual stiffness comes from branch lines going to supports at walls. Enough pipe lines and contact points (in addition to 90 deg. turn of pipe runs) to preclude excessive to one pipe line so as to preclude failure. 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? | 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): AW08 - RAB -0.5' EI, Central Corridor

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW09 - RAB -10 EI, LPSI 1A 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)?
<i>Hoist overhead well supported. OK</i> | 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): AW09 - RAB -10 EI, LPSI 1A Rm

Ladder adequately anchored overhead.

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

Detailed signed records of the checklists are available at the site.

Evaluated by:

Seth W. Baker

Date: 11/16/12

Hunter A. Young

11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW10 - RAB -10 EI, CS/HPSI "A" 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 |
| 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)?
<i>Overhead hoist well supported.</i> | 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): AW10 - RAB -10 EI, CS/HPSI "A" Pump Room

See #7 for HPSI 1A SWC regarding unsecured ladder. No adverse seismic condition per SWE judgment.

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW11 - RAB -0.5' El, Chg Pump 1A 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)?
<i>Discharge line of charge pump 1A is missing a U-bolt on a branch line support of a welded tab for vertical support. Adequate support provided adjacently for small flexible pipe w/ good clearance so as to preclude seismic failure. PSL noted condition.</i> | 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)?
<i>Overhead hoist well supported</i> | 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): AW11 - RAB -0.5' EI, Chg Pump 1A 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW12 - RAB -0.5' EI, BAMT 1A 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)?
<i>Duct run cuts into BAMT 1A insulation. Judged as no hazard to duct due to tank stiffness & duct flexibility.</i> | 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): AW12 - RAB -0.5' EI, BAMT 1A 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW13 - TRSL 43' S 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 |
| 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): AW13 - TRSL 43' S Area

Scaff in area is well supported w/ good clearance to equipment in area. No concerns.

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW14 - TRSL 43' N 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 |
| 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)?
<i>Visual pressure indicator in close proximity to building steel E of MSIV HCV-08-1A and instr. air pipe to MSIV accum 1A is flexible and may come into contact with different steel support (although already noted). Both instances have inherently rugged items that are not soft targets; Contact chatters will not damage equipment. No seismic concern.</i> | 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): AW14 - TRSL 43' N Area

All scaff is well anchored & supported w/ adequate clearance. No issue

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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW15 - FHB 20' FPHX 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): AW15 - FHB 20' FPHX 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW16 - FHB 19.5' FP Pump 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)?
<i>Hoist chains zip-tied off so no interaction hazard with soft targets. No issue.</i> | 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): AW16 - FHB 19.5' FP Pump 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW17 - FHB 48' HVAC 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)?
<i>Lighting transformer appears unanchored to elevated wall platforms. Ops Confirmed as NNS. No fall hazard to safety equipment.</i> | Yes |
| 2. | Does anchorage of equipment in the area appear to be free of significant degraded conditions?
<i>Plenum for HVE-16A&16B has significant corrosion indicative of strength loss at NE corner. 2 out of approx. 60 stitch welds may be affected. PSL generated AR and WR to address issue. Per PSL, Remaining length of weld acceptable for equipment to perform function. AR action issued to clean, inspect and repair as required to restore design margin. No current operability issue.</i> | No |
| 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)?
<i>MCC-1B-8 has 1/8" gap in front-to-back direction w/ concrete wall to the E. MCC 1B-8 confirmed to be QR, Seismic Category 2:1. Therefore potential contact with the wall poses no adverse concern since equipment functionality is not required.</i> | 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)

Location (Bldg, Elev, Room/Area): AW17 - FHB 48' HVAC Rm
temporary installations (e.g., scaffolding, lead shielding)?

Ladder stored by HVE-16 plenum and HVS-7. No interaction concern since no soft targets but notified PSL of procedure violation.

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW18 - RAB 48' Inside Plenum

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): AW18 - RAB 48' Inside Plenum

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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW19 - RAB 48' HVAC 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)?
<i>Heavy HVAC well supported w/ angle sections at frequent intervals. OK.</i> | 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)?
<i>Piping is flexible across containment/ RAB building gap. No Issue.</i> | 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): AW19 - RAB 48' HVAC 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW20 - RAB 19.5' CEA MG ST 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)?
<i>Heavy hoist beam w/ large rig appears seismically rugged & parked in safe position.</i> | 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)? | No |

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): AW20 - RAB 19.5' CEA MG ST Rm

Vert. Man-lift chocked off but resting against box B197B for PT-07-8B. Mount of Man-lift during SSE could damage transmitter. PSL generated AR to address issue.

Protected equip signs stored against 4.16 KV SWGR 1AB. Could cause equip malfunction from impact. PSL generated AR to address issue.

RAD waste bin on wheels adjacent to CTMT rad monitoring equipment. Low mass and low C.G. Bin; therefore, SWT judged bin to be no hazard to equip. Recommend moving to proper storage.

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

Detailed signed records of the checklists are available at the site.

Evaluated by:	Seth W. Baker	Date:	11/16/12
	Hunter A. Young		11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW21 - DGB 22' 1A 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)?
<i>Hoists, fire piping, exhaust silencers all rigidly supported w/ no fall concerns. Hoist chains are tied off in safe positions.</i> | 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 |

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): AW22 - RAB 62' CTRL 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
Due to raised floor, unable to view anchorages of all equipment. Anchorage of equipment confirmed by 8770-G-837 Sht. 1 & 2.

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
(a) Suspended ceiling w/ eggcrates acoustic tiles. Cannot access above panels to visually assess, but A-46 program reviewed and determined no seismic hazard.

(b) Permanent file cabinet S of PAP-A&B may pose overturn is unanchored. Per PSL Document ENG-04115-213 Sht 1, ENG-04115-226 Sht 1, and ENG-04115-230 Sht 2, file cabinet is adequately anchored to preclude overturning hazard.

*(c) Approx. 3/16" gap between AUX relay cabinet and PAP-A. Determine if gap is adequate. Per EPRI NP7146s-SL R1, tested relay cabinets with similar properties of the Aux Relay Cabinet and PAP "A" Cabinet had fundamental frequencies ranging from 9.5 Hz to 11 Hz. The SSE horizontal spectral acceleration at 9 Hz (lower-bound estimate) at the 61 ft elevation of the RAB for 2% damping (in accordance with the U1 UFSAR) is approximately 0.45g. Using a 1.6 modal shape factor for cantilever action and conservatively summing relative displacements, the maximum combined cabinet displacement is 0.17 in ($=2*1.6*0.45g*386.4 \text{ in/s}^2/g / (2*\pi*9 \text{ Hz})^2$). Therefore, the 3/16" gap is adequate.*

Status: Y N U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): AW22 - RAB 62' CTRL Rm

(d) Noted conduit clamps not properly attached to support. No fall hazard but notified PSL.

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

See QSPDS Chan A Cab SWC regarding unanchored storage cabinet in zone of influence

Air Maint. Carts ~2' E of SOER cabs. Per PSL, Cabs are NNS. No 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? No

AUX Relay cabinet door unanchored on top. PSL generated AR to address issue.

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW23 - RAB 62' HVAC Rm N 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?
<i>Surface corrosion noted but no struct. concerns.</i> | 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)?
<i>Rugged overhead supports of duct work noted.</i> | 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): AW23 - RAB 62' HVAC Rm N 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW24 - RAB 62' CCW Surge Tank 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)?
<i>Steel platform plates appear unanchored but cannot fall due to overlap on angles. No issue.</i> | 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): AW24 - RAB 62' CCW Surge Tank 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW25 - RAB 43' "B' Battery 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?
<i>Service water pipe is well-supported & eyewash shower is bolted well. No spray flood hazard.</i> | 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): AW25 - RAB 43' "B' Battery 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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW26 - RAB 43' Cable Spreading 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)?
<i>Very heavy cable tray is ruggedly supported w/ combo of trapeze and wall braced supports (all welded steel sections). No fall hazard.</i>

<i>Noted flexible HVAC duct supported by sheet metal straps. HVAC may impact CEDM cabinets but NNS per ops.</i> | 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)?
<i>1/4" gap btwn batt chgr 1AB & 1AB DC swgr. 1AB DC SWGR is anchored to wall & floor & is rigid. 1AB batt. charger is supported by weak axis of base channels and may be flexible. Per the U1 UFSAR, Appendix 3B.F, the side-to-side natural frequency of the battery charger is 27 Hz. Given the large frequency and low seismic demand, a 1/4" gap is acceptable to preclude contact.</i> | 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): AW26 - RAB 43' Cable Spreading Rm

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW27 - RAB 43' "A" Batt 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?
<i>Service water piping is well supported. No hazard.</i> | 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): AW27 - RAB 43' "A" Batt 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW28 - RAB 43' Remote Shutdown 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): AW28 - RAB 43' Remote Shutdown Rm

Unanchored cabinet south of HSCP 1A is located far enough away as to preclude potential impact. No hazard.

- 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? No
Door latch to HSCP 1B is broken. Door cannot close and could cause potential malfunction during SSE. PSL generated AR and WR to address issue.

Comments

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW29 - RAB 43' S 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 |
| 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)?
<i>Heavy overhead well supported rigidly except for rod-hung piping w/ adequate vertical support. Noted drain W end w/ possible corrosion of structural concern. However, failure at point would not induce collapse and equipment NNS. Notified PSL.</i> | 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)?
<i>Heavy hoisting stopped in safe position and well supported.</i> | Yes |
| 5. | Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?
<i>Noted rod hung fire piping but welded and adequately vertically supported.</i> | 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): AW29 - RAB 43' S SWGR Rm

Noted well anchored scaffolding. No hazard.

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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW30 - RAB 43' N 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 |
| 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)?
<i>Heavy cable tray ruggedly supported with steel angle and channel to ceiling. Ductile connections and no vertical fall hazard.</i> | 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?
<i>Eyewash shower is located behind block walls. No hazard.</i> | 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): AW30 - RAB 43' N 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW31 - DOST 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)?
<i>Exposed area.</i> | Not Applicable |
| 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): AW31 - DOST Area

Noted temporary air compressor rig located to the west of diesel piping. An overturning calculation was performed in the field and the minimum horizontal acceleration to start uplift was determined to be 0.33g. Since the SSE is 0.10g, no overturning of the air compressor rig is possible. Therefore, no hazard exists.

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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW32 - 1A Diesel Xfer Pumphouse

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): AW32 - 1A Diesel Xfer Pumphouse

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW33 - 1B Diesel Xfer Pumphouse

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): AW33 - 1B Diesel Xfer Pumphouse

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

Detailed signed records of the checklists are available at the site.

Evaluated by:	<u>Seth W. Baker</u>	Date:	<u>11/16/12</u>
	<u>Hunter A. Young</u>		<u>11/16/12</u>

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW34 - TRSL 19.5' El., S 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?
<i>Noted missile shield plates with evidence of surface corrosion. No seismic hazard to equipment.</i> | 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)?
<i>Noted large lighting suspended from horizontal 1" diameter rigid conduit. Given stiffness and strength of conduit, SWT judged the lighting support as adequate.</i> | 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): AW34 - TRSL 19.5' El., S 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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12
Hunter A. Young 11/16/12

Status: Y N U**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): AW35 - TRSL 19.5' El, N 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): AW35 - TRSL 19.5' EI, N Rm

Ladder adjacent to conduit, but well tied off. No hazard.

Scaffolding well anchored with adequate clearance. No hazard.

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

Detailed signed records of the checklists are available at the site.

Evaluated by: Seth W. Baker Date: 11/16/12

Hunter A. Young 11/16/12

E

Plan for Future Seismic Walkdowns of Inaccessible Equipment

This appendix identifies equipment that was inaccessible for inspection during the walkdown. Table E-1 identifies equipment that is located within containment and could not be accessed because the unit was at power during the time of the walkdown. Table E-2 identifies electrical cabinets that could not be opened due to electrical safety and plant operation hazard. The plans for inspection of inaccessible equipment are to inspect the items during the first available equipment outage or refueling outage, when they can be safely accessed. The next scheduled refueling outage is Fall 2013. A plant Corrective Action has been issued to plan for and implement additional cabinet internal inspections.

Table E-1: Completely Inaccessible Equipment

Component ID	Description	Reason for Inaccessibility
HVS-1D	CONTAINMENT FAN COOLER FOR RCB A/C SYSTEM DURING NORMAL OPERATION	Equipment located in containment. Unit 1 was at power during time of walkdown. Defer to outage.
HVS-1A	CONTAINMENT FAN COOLER FOR RCB A/C SYSTEM DURING NORMAL OPERATION	Equipment located in containment. Unit 1 was at power during time of walkdown. Defer to outage.
HVS-1B	CONTAINMENT FAN COOLER FOR RCB A/C SYSTEM DURING NORMAL OPERATION	Equipment located in containment. Unit 1 was at power during time of walkdown. Defer to outage.
SIT 1A1	SAFETY INJECTION TANK 1A1	Equipment located in containment. Unit 1 was at power during time of walkdown. Defer to outage.
SIT 1B1	SAFETY INJECTION TANK 1B1	Equipment located in containment. Unit 1 was at power during time of walkdown. Defer to outage.

Table E-2: Cabinets with Inaccessible Internals

Component ID	Description	Reason for Inaccessibility
480V SWGR 1AB	480V SWITCHGEAR 1AB	Cabinet was energized during inspection and posed electrical safety and plant operation hazard. Operations requested deferral to next equipment outage.
480V MCC 1A7	480V MOTOR CONTROL CENTER 1A7	Cabinet was energized during inspection and posed electrical safety and plant operation hazard. Operations requested deferral to next equipment outage.
4KV SWGR 1AB	4.16 KV SWITCHGEAR 1AB	Cabinet was energized during inspection and posed electrical safety and plant operation hazard. Operations requested deferral to next equipment outage.

Component ID	Description	Reason for Inaccessibility
4KV SWGR 1A3	4.16 KV SWITCHGEAR 1A3-1	Cabinet was energized during inspection and posed electrical safety and plant operation hazard. Operations requested deferral to next equipment outage.
480V SWGR 1B2	480V SWITCHGEAR 1B2	Cabinet was energized during inspection and posed electrical safety and plant operation hazard. Operations requested deferral to next equipment outage.
480 PZ BUS 1A3	480V PRZR BUS 1A3	Cabinet was energized during inspection and posed electrical safety and plant operation hazard. Operations requested deferral to next equipment outage.

F

Peer Review Report

**Peer Review Report for the
Seismic Walkdown Inspection of St. Lucie Plant Unit 1
(NRC Near Term Task Force Recommendation 2.3)**

St. Lucie Plant (PSL)

Revision 0

November 2002

1. Introduction

This report documents the peer review of the seismic walkdowns performed for St. Lucie Plant, Unit 1, 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 & 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 August and finalized in October, based on revisions that occurred during the walkdowns. Section 3 describes the process of peer reviewing the SWEL.

The vast majority of the seismic walkdowns occurred on October 1-5, 2012. One member of the peer review team was present for all of the seismic walkdowns. This portion of the peer review is documented in Section 4.

Six components could not be examined entirely with the bus powered:

1. 4.16KV Switchgear 1A3-1
2. 480V Pressurizer Bus 1A3
3. 480V Motor Control Center 1A7
4. 480V Switchgear 1B2
5. 480V Switchgear 1AB
6. 4.16KV Switchgear 1AB

Five components were located inside Unit 1 containment, which is currently in operation.

1. HVS-1A Containment Fan Cooler
2. HVS-1B Containment Fan Cooler
3. HVS-1D Containment Fan Cooler
4. SIT 1A1 Safety Injection Tank
5. SIT 1B1 Safety Injection Tank

Consequently, the walkdown for these components was postponed to the next scheduled outage of sufficient duration or when the electrical equipment is scheduled to be removed from service for maintenance. These inspection deferrals are being tracked with an AR.

3. Peer Review Team & Process

The PSL Peer Review Team consisted of individuals from PSL Operations, Engineering, and Reliability Risk Assessment (PRA). 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 Walkdown/Peer Review Team

The affiliation, role, and qualifications for each Team member are summarized in the following table.

Name	Group	Role *	Qualifications **
Mike Bladek	PSL Operations	PR – Team Lead PR – SWEL PR – SWE	(e), (f)
Dan West	PSL System Engineering	PR - SWEL PR – SWE	(c), (e)
Andy Terezakis	PSL Operations	PR - SWEL	(e), (f)
Ed Hollowell	PSL Structural Engineering	PR - SWEL PR – SWE	(a), (b), (c)
George Tullidge	PSL PRA Group	SWEL	(d)
Alexander Restrepo	PSL PRA Group	PR- SWEL	(a)(d)
Hunter Young	Stevenson & Assoc. (consultant eng.)	SWE	(a) (b)
Seth Baker	Stevenson & Assoc. (consultant eng.)	SWE	(a) (b)
Sharam Ramani	PSL Structural Engineering	PR-SWEL PR- SWE	(b), (c)

Notes:

* Role: PR (peer review), SWEL (seismic walkdown equipment list), SWE (seismic walkdown engineer)

** Qualifications:

- (a) Completed EPRI NTTF 2.3 Seismic Walkdown Training
- (b) Seismic engineering experience
- (c) Degree in mechanical engineering or civil/structural engineering
- (d) Seismic Reliability Risk Assessment (PRA) / IPEEE experience
- (e) Knowledge of plant operations, documentation
- (f) Plant Operations member

3.2 Peer Review Process

PR Team Lead

Mike Bladek 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 peer review of the SWEL and seismic walkdown team.

SWEL Preparation

The SWEL was prepared by George Tullidge, who is the St. Lucie Reliability Risk Assessment (PRA) engineer, with experience and familiarity with the St. Lucie IPEEE Report and St. Lucie Seismic PRA.

A technical peer review of the SWEL was performed by a team that included a PRA engineer (PRA-2), design structural engineer (Sharam Ramani), and Operations representative (Andy Terezakis). All of these individuals are familiar with the design and layout of the plant and plant documentation.

- SWEL Prepared By – G. Tullidge
- SWEL Reviewed By– A. Restrepo, S. Ramani, A. Terezakis

A Peer review of the process used to prepare the SWEL was performed by M. Bladek, D. West and E. Hollowell.

Seismic Walkdown

The primary seismic walkdown was conducted with one team, with two qualified structural/seismic engineers (SWE's) from Stevenson and Associates. The peer review of the walkdowns consisted of representatives from St. Lucie Plant Operations (M. Bladek), and Engineering (E. Hollowell, D. West, S. Ramani). Operations and Engineering representatives also participated on the walkdowns for logistical support as well as peer review. The ultimate judgments regarding licensing basis were made by qualified St. Lucie Plant structural engineers (E. Hollowell, S. Ramani).

- Seismic Walkdown Engineers (SWE):
 - Hunter Young (team lead)
 - Seth Baker
- Peer Review of SWE – M. Bladek, E. Hollowell, D. West, S. Ramani
- Licensing Basis Reviewers – E. Hollowell, S. Ramani,
- IPEEE Reviewers – E. Hollowell, D. West, G. Tullidge

Final Report

The final seismic walkdown report was prepared by the Stevenson & Assoc. consultants, with review by St. Lucie Plant representatives from Operations, Engineering, and PRA.

- Preparers –Seth Baker, Hunter Young
- Reviewers – M. Bladek, D. West, E. Hollowell

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).

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 individual PR Team members on each day of the walkdowns. The Seismic Walkdown Engineers (SWE) were accompanied by at least one member of either the Operations or Engineering Peer Review team during the walkdown. Additional peer review occurred following the walkdowns as documented in this report.

5.1 Review of Sample Checklists & Area Walk-bys

The peer review meetings were performed on the following morning for the walkdowns that were performed the previous day. The SWE presented samples from their Seismic Walkdown Checklist (SWC) and Area Walk-by Checklist (AWC) that they had completed that morning. This peer review meeting following the previous day's walkdown activities allowed for immediate feedback between each walkdown team as well as common agreement on how issues would be addressed.

Table 5-1 lists the sample of 25 components from the Seismic Walkdown Checklist (SWC) that were discussed in the peer review meetings. These samples represent about 25% of the total SWEL population of 100 components. The sample includes a variety of types of components (heat exchanger, valve, pump, tank, instrument rack, transformer, fan, MCC, compressor, power panel, and control panel) and component locations (Reactor Aux Bldg, Steam Trestle, Refueling Water Tank, DG Bldg, and Essential Switchgear room).

Table 5-2 lists the sample of 10 areas from the Area Walk-by Checklist (AWC) that were discussed in the peer review. These samples represent about 25% of the total AWC population. These areas included Reactor Aux Bldg, Steam Trestle, Refueling Water Tank, DG Bldg, and Essential Switchgear room.

These tables document observations from the walkdown teams that formed the basis for the peer review. The following topics were addressed:

- **Seismic Housekeeping** - Seismic housekeeping was assessed in each area and found to be acceptable. In areas where equipment was in-service, work carts were tied off or separated from equipment in designated areas.

The presence of stanchions and signs to identify protected train equipment was also noted. In most cases it was agreed that these do not represent significant seismic risk due to the weight distribution (heavy base) and the light-weight nature of these stanchions. At one location the sign was identified as being significant enough to be seismically adverse and was removed immediately by the Operations team member.

A number of panels were identified with missing and or loose bolting or latches. In most cases these were not considered to be seismically adverse.

- **Concrete cracks** – Minor concrete cracks were observed in the concrete floors or grout pads where components were anchored. The location, cause of the cracking, and potential impact on the seismic capacity was reviewed. No conditions were identified that adversely impacted the seismic capacity. Corrosion of anchors or welds was identified on a couple of items. Due to the available design margin the identified corrosion was not considered to adversely impact the design basis of the component. These issues were entered into the corrective action program to remove the existing corrosion, perform detailed inspection and repair to restore design margin as required.
- **Physical interaction** – Several of the samples were examples of close spacing between the SWEL component and a hard object (such as a concrete/block walls), with the potential for interaction. In each case, the spacing was judged adequate, but this did reinforce the importance of careful field examination of each component.
- **Seismic scaffolding** – A number of areas had scaffolding. In each case, the scaffolding was noted to be carefully braced to provide seismic strength and documented on the scaffolding. This was observed by both walkdown teams.
- **Non-safety piping in SR buildings** – NS piping in all walk-by areas was observed to be well supported.

No significant issues were identified from the peer review team discussions.

5.2 Review of Licensing Basis Evaluations & Corrective Action Process

The final report provides a list of the anomalies encountered during the St. Lucie seismic walkdown inspections and how they were addressed. The review of those anomalies demonstrates a thorough and reasonable process for the review of open issues. There were no comments offered by the peer review team.

6. Review Final Submittal Report & Sign-off

The final submittal report has been reviewed by St. Lucie representatives from Engineering, Operations, 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. St. Lucie Plant Report, *Selection of the St. Lucie Plant Unit 1 Seismic Walkdown Equipment List (SWEL) for the Requirement 2.3 Walkdown, Rev 0*, November 2012.

Table 5-1: Table of Sample Components from Seismic Walkdown Checklist (SWC)

Walkdown Team (PR Team)	Equipment Identification	Walkdown Team Observations
Hollowell	MV-14-3	A hole in the wide flange supporting the valve operator was identified. The hole was due to corrosion but was cleaned and coated with no evidence of active corrosion. The actuator support had sufficient remaining section and capacity that the support would not fail in a seismic event. AR was written to document evaluation or repair.
Bladek/Hollowell	DOST 1B	2 cast in place anchors for the DOST had degraded nuts. The nuts showed signs of previous loss of section that had been cleaned and coated, with no signs of active corrosion. The condition was not considered seismically adverse. An AR was written to replace the degraded nuts.
Hollowell	STC INVTR 1A	Drawing was not provided for field inspection. The field condition was sketched (3/16" fillet welds to embed plates) Documentation provided later for verification.
Hollowell	CCW Surge Tank	The tank was bolted to the building steel with 8 – 1" dia. bolts. No seismically adverse conditions.
Bladek/Hollowell	1A MFIV Accum.	The tank was bolted to the floor with 4 -3/4" anchors. One of the bolts that fastened the tank to the base plate on the east side of the tank was corroded that indicated some loss of section of the head of the bolt. Not
Bladek/Hollowell	HPSI PP 1A	A ladder was installed adjacent to the pump that was not properly secured. A review by the SWE concluded that during a SSE event the ladder could lose stability but bottom was tied off and existing angle supports half way up the ladder would prevent impact on soft targets. AR issued and ladder properly secured.
Bladek/Hollowell	HCV-08-1A	A set screw for a socket support for an adjacent removable handrail was missing. The sockets are deep enough to prevent the handrail from falling out. No adverse seismic conditions identified.
Bladek/Hollowell	RTGB-106	An interior cabinet door was open and was closed by Operations personnel. Miscellaneous screws and panel bolts missing on interior closure panels. A few light weight plastic relay covers were lying on the interior floor. All conditions were considered not seismically adverse.
Bladek/Hollowell	ICW PP 1A	A screen covering the pump packing area was removed for maintenance and leaning against the side of the pump. Not seismically adverse. Subsequent walkdown (10/17/12) identified the door as being installed.
Hollowell	SKBK LUBO AC PP 1A2	No seismically adverse conditions identified.
Hollowell	LPSI PP 1A	The skid is on an elevated concrete/grout pad, secured with cast in place anchors. No significant cracking or corrosion identified. No seismically adverse conditions identified.
Bladek/Hollowell	BATT CHGR 1A	No seismically adverse conditions identified

Walkdown Team (PR Team)	Equipment Identification	Walkdown Team Observations
Bladek/Hollowell	MV-09-12	No seismically adverse conditions identified
Bladek/Hollowell	FT-3111	The pressure transmitter is bracket mounted and attached to an instrument rack in accordance with plant standard details. The rack is bolted and welded to a concrete wall. No adverse seismic conditions identified.
Bladek/Hollowell	PT-07-4B	The pressure transmitter is bracket mounted and attached to an instrument rack in accordance with plant standard details. The rack is bolted and welded to a concrete wall. No adverse seismic conditions identified.
Bladek/Hollowell	125V DC Bus 1A	No seismically adverse condition identified
Bladek/Hollowell	SE-07-2A	Valve and actuator are mounting in-line, with no additional support. No adverse seismic conditions identified.
Bladek/Hollowell	125V Batt 1A	Base angles are welded to floor with 3/16" fillet welds to floor embeds. No adverse seismic conditions identified.
Hollowell	TCV-14-4A	Actuator support is bolted to platform support steel. Support appeared to be recently coated with no visible corrosion. No adverse seismic conditions identified.
Bladek/Hollowell	Fuel Pool PP 1A	Pump is supported on an elevated pedestal and anchored with cast in place anchors. No significant concrete cracks or corrosion identified. No adverse seismic conditions identified.
Bladek/Hollowell	Fuel Pool HX	HX is supported on an elevated pedestal and anchored with cast in place anchors. No significant concrete cracks or anchor corrosion identified. No adverse seismic conditions identified.
Bladek/Hollowell	CHG PP 1A	The pump is adequately support with no adverse seismic concerns. The discharge line is missing a U-bolt on a branch line. Adequate supports are provided adjacent that this is not an adverse seismic concern. This part of ongoing work associated with valve replacement.
Hollowell	RWT	The anchors were encased in a protective coating that prevented the anchor degradations identified on Unit 2. No adverse seismic concerns associated with tank. A couple housekeeping items associated with conduits routed in area captured as part of Area Walk by.
Bladek/Hollowell	HVS-4A	Some minor surface corrosion. No adverse seismic concerns identified.
Bladek/Hollowell	PT-3305	Pressure transmitter is mounted on a bracket per standard details and bolted to instrument rack. No adverse seismic concerns identified.

Table 5-2: Table of Sample Areas from Area Walk-by Checklist (AWC)

Walkdown Team (PR Team)	Area Walkdown Room (SWEL #)	Walkdown Team Observations
Hollowell	AW1	A run of construction air piping that runs along the north wall of the CCW area was supported vertically but no lateral restraint was provided. The condition was not considered to be seismically adverse because the low mass, no impact hazard. There was also a section of degraded grating that was not an adverse seismic condition or falling hazard. An AR was issued to address both conditions.
Hollowell	AW3	A grout block adjacent to the concrete ICW pump pedestal is cracked and loose. The grout block provides protection for the conduit penetrating the slab. There is no adverse seismic concern. A Work Request was issued to repair the grout block.
Bladek/Hollowell	AW6	Scaffolding was identified to be within 2" of an overhead cable tray. Not an adverse seismic condition. Scaffolding to be removed at completion of outage. Procedures for system start-up walkdowns to address issue.
Bladek/Hollowell	AW17	Stitch welds at the base of the plenum for HVE-16A/B are corroded with some loss of cross section. Due to the size and amount of weld the loss of strength does not create an adverse seismic condition. An AR was issued to correct the condition. Ladder was stored adjacent to the plenum. This was not a seismic concern. Operations rep on walkdown notified personnel to correct housekeeping issue. MCC 1B-8 had a small approx. 1/8" gap between wall and equipment. Equipment was identified as a seismic III/I mounting issue and interaction with the wall is not considered a seismic adverse condition.
Bladek/Hollowell	AW19	Overhead HVAC adequately supported. Expansion/flexible joint across building gap between RCB and RAB. No adverse seismic conditions identified.
Hollowell	AW21	Scaffolding is adjacent to the EDG is attached to the EDG skid. Equipment is currently out of service during the refueling outage. Scaffolding needs to be removed prior to returning equipment to service. Procedures for system start-up walkdowns to address issue.
Bladek/Hollowell	AW26	Identified a 1/4" gap between battery charger 1AB and 1AB DC switchgear. Based on SWE evaluation the 1/4" gap is acceptable. No other adverse seismic conditions identified.
Bladek/Hollowell	AW27	Overhead service piping is well supported. No adverse seismic concerns identified.
Bladek/Hollowell	AW30	Overhead cable trays well supported. Portable eyewash station separated from equipment by block wall. No adverse seismic concerns identified.
Bladek/Hollowell	AW31	A large flatbed mounted air compressor located west of

		tank area. An evaluation of the condition by SWE, no potential overturning concern. No adverse seismic issues identified.
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Attachment 1: Peer Review Checklist

Peer Review Checklist for SWEL

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

Requirement met.

Remarks: The equipment on the SWEL was well distributed over 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

Requirement met.

Remarks: Over 20 different systems are represented on the list.

- b. Major new and replacement equipment? Y N

Requirement met.

Remarks: Various transmitters, tanks, transformers, and valves that have been replaced within the last 15 years are part of the Equipment List.

- c. Various types of equipment? Y N

Requirement met.

Remarks: Approximately 20 different classes of equipment are represented on the list.

- d. Various environments? Y N

Requirement met.

Remarks: Equipment from all the major safety related buildings, and environments. Equipment from outside areas such as steam trestle area, and refueling water tank, dry areas such as RAB switchgear rooms, hot and harsh areas such as RAB basement, ECCS Rooms and Containment were part of the survey.

Peer Review Checklist for SWEL

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- e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program? Y N

Requirement met.

Remarks: Based on discussion with Operations and Engineering, major new or replacement equipment was identified and noted as such in the SWEL spreadsheet.

- f. Were risk insights considered in the development of SWEL 1? Y N

Requirement met.

Remarks:

3. For SWEL 2:

- a. Were spent fuel pool related items considered, and if applicable included in SWEL 2? Y N

Requirement met.

Remarks: Fuel pool cooling and purification items are included on the list.

- b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2? Y N

Requirement met.

Remarks: Components were included in this screening based on their importance in maintaining spent fuel pool inventory and cooling.

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4. Provide any other comments related to the peer review of the SWELs.

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5. Have all peer review comments been adequately addressed in the final SWEL? Y N
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