ATTACHMENT (1)

SUPPLEMENTAL SEISMIC WALKDOWN REPORT

Constellation Energy Nuclear Group, LLC
December 21, 2012

ATTACHMENT 1
SEISMIC WALKDOWN REPORT

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Executive Summary

This Supplemental Seismic Walkdown Report documents walkdowns performed at R.E. Ginna Nuclear Power Plant for components that were not accessible during the initial walkdowns and were not included in the Response to 10 CFR 50.54(f) Request for Information, Recommendation 2.3, Seismic [Ref. 3]. These seismic walkdowns did not identify any adverse seismic conditions that required licensing basis evaluations. Identified issues such as internal cabinet cleanliness and missing internal fasteners were entered into the station's corrective action program.

Four (4) Seismic Walk Down Equipment List (SWEL) 1 electrical components remain deferred as they require specific maintenance configurations for the walkdowns. Table E-1 lists these components and provides the two dates we plan to provide the walkdown results.

Fourteen SWEL 2 spent fuel pool rapid drain-down components will not be inspected because they are in locked high radiation areas. Appendix E of this report provides operational considerations that would mitigate the consequences from a failure of one of these components and Table E-2 lists the components.

EPRI Technical Report 1025286 was used to perform the engineering walkdowns and evaluations described in this report. In accordance with EPRI Technical Report 1025286, the following topics are addressed in the subsequent sections of this report.

- Personnel Qualifications
- Selection of Systems, Structures , and Components (SSCs)
- Seismic Walkdowns and Area Walk-Bys
- Seismic Licensing Basis Evaluations
- Peer Review

Personnel Qualifications

Personnel qualifications are discussed in Section 2 of this report. The personnel who performed the key activities required to fulfill the objectives and requirements of the 50.54(f) letter are qualified and trained as required in EPRI Technical Report 1025286 [Ref. 1]. These personnel are responsible for:

- Performing the Seismic Walkdowns and Area Walk-Bys,
- Performing the seismic licensing basis evaluations, as applicable,
- Performing the peer reviews

Selection of SSCs

The selection of SSCs was completed and documented within Reference 3. This supplemental report documents the substitution of alternate components that were selected by the SWE's when the original component was unavailable or inaccessible due to changing plant conditions.

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Seismic Walkdowns and Area Walk-Bys

Section 4 of this report documents the equipment Seismic Walkdowns, Area Walk-Bys and Internal Inspections. The supplemental seismic walkdowns for Ginna were performed during the Fall of 2012 during power operation and during the plant's 37th refueling outage. The walkdown team consisted of two Seismic Walkdown Engineers (SWE) from the station's Design Engineering group. Operations/Maintenance personnel were also available and called upon as needed.

The seismic walkdowns focused primarily on the seismic adequacy of the SWEL items and on identifying:

- Adverse anchorage conditions
- Adverse seismic spatial interactions
- Other adverse seismic conditions (e.g., degradation)

Area Walk-Bys were conducted in each area of the plant that contained an item on the SWEL. The purpose of an Area Walk-by is to identify potentially adverse seismic conditions associated with other SSCs located within the vicinity of a SWEL item. There were 8 Area Walk-bys completed for Ginna with no areas remaining. The key examination factors considered in the Area Walk-Bys included:

- Anchorage conditions (if visible without opening equipment)
- Significantly degraded equipment in the area
- Potential seismic interactions
- 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 interactions that could cause flooding/spray and fire in the area
- Miscellaneous other conditions including conformance of temporary installations to general seismic housekeep procedures

The seismic walkdown team inspected the remaining 18 of the 111 components on the SWEL 1 and 5 of the 104 components on the SWEL 2. All components in Containment have been inspected. Anchorage verification was completed for all components as specified in Reference 3. A supplemental inspection of the A Spent Fuel Pool Heat Exchanger (Component ID EAC14) anchorage was also completed to verify the anchorage configuration. The Refueling Water Storage Tank (Component ID: TSI01) anchorage was inspected, closing the open item noted in Reference 3.

Ginna was required to complete a supplemental internal inspection of 19 cabinets. The walkdown team completed supplemental internal inspections on 15 of those electrical components. Four more components will be inspected on an as-scheduled basis in conjunction with maintenance.

During the Ginna walkdown, there were no adverse seismic conditions discovered that challenged the licensing basis for the plant. No formal Licensing Basis Evaluations were performed.

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Under this supplemental inspection an additional Seven (7) Condition Reports (CRs) were issued to address conditions such as internal cabinet cleanliness and missing internal fasteneners. These issues were identified in the Seismic Walkdown Checklists (SWCs), and Area Walk-by Checklists (AWCs) of this report. Disposition of the identified issues was completed within the station's corrective action process.

SWCs and AWCs were completed for all components and areas that were walked down. SWCs for deferred items will be completed at the time of the follow up walkdowns Any SWCs or AWCs that need to be revised as a result of the deferred inspections will be updated in a follow-up report.

Seismic Licensing Basis Evaluations

EPRI Technical Report 1025286, Section 5: Seismic Licensing Basis Evaluation provides a detailed process to perform and document seismic licensing basis evaluations of SSCs when potentially adverse seismic conditions are identified during the equipment Seismic Walkdowns or Area Walk-Bys. The process provides a means to identify, evaluate and document how the identified potentially adverse seismic condition meets a station's seismic licensing basis without entering the condition into a station's Corrective Action Program (CAP). Further, the process directs that if a condition cannot be readily shown to meet the seismic licensing basis, then the identified condition should be entered into the station's CAP where it will be determined that the condition does or does not meet the seismic licensing basis.

Constellation Energy Group/Ginna staff did not utilize the process provided in EPRI Technical Report 1025286 to perform and document seismic licensing bases evaluations of SSCs with potentially adverse seismic condition. Instead, all questionable conditions identified by the SWEs during the equipment Seismic Walkdowns or Area Walk-Bys were entered into the station CAP to be further evaluated and addressed as required. Therefore, no seismic licensing basis evaluations were completed in accordance with the process documented in EPRI Technical Report 1025286, Section 5 [Ref. 1]: Seismic Licensing Basis Evaluation. Tables 4-2, 4-3, and 4-4 of Section 4 of this report provide a summary of the conditions identified during the Seismic Walkdowns and Area Walk-Bys.

Peer Reviews

A peer review team consisting of two qualified individuals, one of whom has seismic engineering experience as it applies to nuclear power plants was assembled and peer reviews were performed in accordance with EPRI Technical Report 1025286, Section 6: Peer Reviews [Ref. 1]. The Peer Review process included the following activities:

- Review of the Seismic Walkdown Checklists (SWCs) and Area Walk-Bys (AWCs)
- Review of Licensing basis evaluations, as applicable
- Review of the decisions for entering the potentially adverse conditions into the CAP process
- Review of the submittal report
- Provide a summary report of the peer review process in the submittal report

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Section 6 of this report contains the Peer Review summary report. The Peer Review determined that the objectives and requirements of the 50.54(f) letter [Ref. 2] are met. Further, the efforts completed and documented within this report are in accordance with EPRI Technical Report 1025286.

Summary

In summary, the supplemental seismic walkdowns have been completed at R.E. Ginna Nuclear Power Plant 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 to be addressed. Remaining deferred walkdown items and expected completion dates are outlined in Appendix E.

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1
Introduction

1.1 BACKGROUND

In response to the Near-Term Task Force (NTTF) Recommendation 2.3 and 10CFR50.54(f) letter, Ginna performed seismic walkdowns in accordance with EPRI Technical Report 1025286. Results of the walkdowns are documented within Reference 3. The walkdown team was unable to inspect some equipment due to plant configuration and personnel qualifications. This supplemental report documents completion of most of the required seismic walkdowns for inaccessible equipment and equipment required to be opened for inspection.

1.2 APPROACH

In accordance with the EPRI Seismic Walkdown Guidance [Ref. 1] the following topics are addressed in this supplemental report:

- Personnel Qualifications
- Selection of SSC's
- Seismic Walkdowns, Area Walk-Bys, and Supplemental Internal Inspections
- Licensing Basis Evaluations
- Peer Review

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Personnel Qualifications

2.1 OVERVIEW

This section of the report identifies the personnel that participated in the supplemental inspections for the NTTF 2.3 Seismic Walkdown effort. A description of the responsibilities of each Seismic Walkdown participant's role(s) is provided in Section 2 of the EPRI Seismic Walkdown Guidance [Ref. 1]. Note that for this report, the only roles required were for the walkdown team, licensing basis reviewer, and peer reviewer. Personnel responsible for equipment selection and IPEEE review are noted within Section 3 of Reference 3.

2.2 WALKDOWN PERSONNEL

Table 2-1 below summarizes the names and corresponding roles of personnel who participated in the NTTF 2.3 Seismic Walkdown effort.

Table 2-1 Personnel Included in NTTF 2.3 Supplemental Walkdown

Personnel / Role	Seismic Walkdown Engineer	Licensing Basis Reviewer	Peer Reviewer
Mr. Jeffrey Gardiner	X	X	
Mr. Francis Peterson	X	X	
Mr. Mark Fitzsimmons			X[1]
Mr. John Traynor			X

Notes:
1. Peer Review Team Leader.

The following includes a short synopsis of each individual's qualifications.

Jeffrey Gardiner: Mr. Gardiner is an engineer in the Nuclear Engineering Services group at the R.E. Ginna Nuclear Power Plant. Mr. Gardiner is a fully qualified Civil/Seismic engineer and has worked in the Mechanical Design Group at Ginna for over 3 years. During this time Mr. Gardiner has been involved in the seismic analysis of new and replacement components (mechanical and electrical), the design and implementation of safety-related modifications and the evaluation of "as-found" degraded conditions at the site. Mr. Gardiner is knowledgeable in the site seismic licensing basis, and is a qualified to perform and review 50.59 Screens and Applicability Determinations. For the last 6 months Mr. Gardiner has

served as the seismic engineer for the site's Fukushima Response Team. Mr. Gardiner has a BSCE in Civil Engineering and an MSCE in Civil Engineering with concentrations in Structural and Seismic Engineering from the University at Buffalo. He has passed the E.I.T. in New York and has completed the 5-day SQUG Walkdown Screening and Seismic Evaluation Training Course.

Francis Peterson: Mr. Peterson is an engineer in the Nuclear Engineering Services group at the R.E. Ginna Nuclear Power Plant. Mr. Peterson is a fully qualified Mechanical/Seismic engineer and has worked in the Mechanical Design Group at Ginna for over 5 years. During this time Mr. Peterson has been involved in the design and analysis of piping systems including piping and component supports. Mr. Peterson is an owner of the site Snubber Inspection and Testing Program and since 2008 has lead the preparation and implementation of all snubber testing, replacement and failure analysis. Mr. Peterson familiar with the site seismic licensing basis and is qualified to perform and review 50.59 Screens and Applicability Determinations. Mr. Peterson has a BSME in Mechanical Engineering from the University at Buffalo and has completed the 5-day SQUG Walkdown Screening and Seismic Evaluation Training Course. Mr. Peterson is a member on the ASME subcommittee for the Qualification of Active Mechanical Equipment Used in Nuclear Power Plants (QME) Section QDR, Qualification of Dynamic Restraints.

Mark B. Fitzsimmons: Mr. Fitzsimmons is a Principal Engineer in the Nuclear Engineering Services (NES) group at the R.E. Ginna Nuclear Power Plant. Having graduated with a Bachelor of Science degree in Civil and Environmental Engineering from Clarkson University he has been a member of the technical staff for over 32 years. SQUG walk down training was completed in the late 90s and Mr. Fitzsimmons completed the SQUG and IPEEE outlier modification designs at Ginna in addition to being a SQUG Seismic Capability Engineer (SCE). Mr. Fitzsimmons was structural lead on a number of major modification projects including I&E 80-11 Block Walls, NUREG 0612 Heavy Loads, USI A46, SEP Topic for Wind and Tornado, S/G Replacement, Reactor Vessel Closure Head Replacement and Independent Spent Fuel Storage Installation. As part of the NES Civil and Mechanical design group he provides structural and seismic review support for multidiscipline engineering modifications, is experienced in large construction efforts, has performed field walk downs, industry INPO assist visits on rigging and handling, and is a member of ASME "Cranes for Nuclear Facilities" committee. Mr. Fitzsimmons is a licensed Professional Engineer in the state of New York.

John Traynor: Mr. Traynor is a Sr. Project Manager – Assessments/Licensing Support with 35 years of experience in commercial nuclear power. He is a former licensed Senior Reactor Operator (SRO) at San Onofre Unit 1 and was a Senior Licensed Instructor at Seabrook and Ginna, where he also successfully completed the Senior Reactor Operator (SRO) Certification course. Subsequently he was a Lead Auditor with an Engineering focus, becoming the initial Director of Quality and Performance Improvement for UniStar Nuclear Energy. He provided and directed oversight of the Combined License Applications (COLA) for four potential US EPR sites and developed the first Quality Assurance Program Description approved by the NRC for a COLA. In 2010 Mr. Traynor worked at Ginna as Sr. Project Manager (Assessments), performing numerous assessment activities to assist with Ginna Site preparations for a NRC 95002 Inspection. Since March 2012 Mr. Traynor has been locating and evaluating Ginna's licensing basis documents in preparation for the development of the station's responses to the post Fukushima NRC Orders and Requests for Information.

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Selection of SSCs

3.1 OVERVIEW

Section 4.0 of reference 3 details the selection methodology utilized for this report and SWEL development. Selection of SSC's is outside the scope of work performed within this report.

3.2 SELECTION OF ALTERNATE COMPONENTS

Many of the components inspected under the supplemental walkdown are located in containment. The walkdown of components in containment was performed during the 37th refueling outage. This walkdown required coordination between maintenance in progress, required operating equipment, ALARA dose concerns, and availability of the walkdown team. In a few cases the selected component could not be inspected due to plant conditions. In these cases, the walkdown team inspected an alternate train component (same equipment class) credited with performing the same function. The potential substitution of components due to changing plant conditions was discussed with the peer review team during the preparation of section 4.0 of reference 3. Table 3-1 provides an evaluation of the original SWEL 1 component against the alternate components.

Table 3-1 Selection of Alternate Components Based on Plant Conditions				
Equipment Class	**Original SWEL1 Component**	**Alternate Component**	**Basis For Change**	**Evaluation**
7	270A, REACTOR COOLANT PUMP A SEAL AIR OPERATED OUTLET VALVE	270B, REACTOR COOLANT PUMP B SEAL AIR OPERATED OUTLET VALVE	Scaffold construction in "A" RCP cubicle during walkdown	Acceptable, 270B is the alternate train AOV for the B RCP. Walk-by area 26b relocated to B RCP cubicle
7	430, PRESSURIZER POWER OPERATED RELIEF VALVE	431C, PRESSURIZER POWER OPERATED RELIEF VALVE	ALARA concerns, accessibility of 431C vs. 430, minimized stay time in area.	Acceptable, 431C is the alternate train PORV. Both are same model and located in the pressurizer cubicle (Walk by area 26a)
7	434, PRESSURIZER RELIEF VALVE TO PRESSURIZER RELIEF TANK	435, PRESSURIZER RELIEF VALVE TO PRESSURIZER RELIEF TANK	ALARA concerns, accessibility of 434 vs. 435, minimized stay time in area.	Acceptable, 435 is the alternate train pressurizer safety valve. Both are same model and located in the pressurizer cubicle (Walk by area 26a)
10	ACP02, CONTAINMENT RECIRCULATING FILTER AND COOLING UNIT A	ACP04, CONTAINMENT RECIRCULATING FILTER AND COOLING UNIT C	Fan and motor anchorage are within unit's surrounding ductwork. ACP02 inaccessible during walkdown	Acceptable, ACP02 and ACP04 are two of four containment recirculating fan cooler units. Both anchorages were enhanced under IPEEE program.
19	TT-2145, CRFC 1D AIR INLET TEMPERATURE TRANSMITTER	TT-2139, CRFC 1A AIR INLET TEMPERATURE TRANSMITTER	Easier access to inlet transmitter of A CRFC (ACP02). Supplemental ladder not required	Acceptable, TT-2139 and TT-2145 are two of four inlet temperature transmitters for containment recirculating fan cooler units.
19	TT-2146 CRFC 1D AIR OUTLET TEMP	TT-2140 CRFC 1A AIR OUTLET TEMP	Easier access to outlet transmitter of A CRFC, Rigging activities in progress over D CRFC during walkdown	Acceptable, TT-2140 and TT-2146 are two of four outlet temperature transmitters for containment recirculating fan cooler units.

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Seismic Walkdowns, Area Walk-By's and Internal Inspections

4.1 OVERVIEW

Seismic Walkdowns and Area Walk-Bys were conducted by a two-person team of trained Seismic Walkdown Engineers, in accordance with the EPRI Seismic Walkdown Guidance, [Ref. 1]. Each engineer has completed the 5-day SQUG Walkdown Training course, a recognized equivalent to the NTTF 2.3 Seismic Walkdown Training Course per section 2 of Reference 1.

4.2 SEISMIC WALKDOWNS

The components included in the Seismic Walkdowns are shown on the Ginna SWEL 1 in Attachment 3 of reference 3. A Seismic Walkdown Checklist (SWC) from Appendix C of [Ref. 1] was completed for each item on the SWEL, or an alternate component as previously described. Completed SWCs for the remaining deferred items will be added at a later date. Additionally, photos are included with most SWCs to provide a visual record of the walkdowns. Seismic Walkdowns were completed for the remaining 18 SWEL 1 items noted in table E-1 of Reference 3. Walkdowns were completed for 5 of the items on the SWEL 2 list (Table E-2 of Reference 3). Supplemental internal inspections were completed for 15 electrical components listed in Table E-3 of reference 3. A supplemental inspection of the A Spent Fuel Pool Heat Exchanger (Component ID EAC14) anchorage was also completed to verify the anchorage configuration. The Refueling Water Storage Tank (Component ID: TSI01) anchorage was inspected, closing the open item noted in Reference 3.

4.2.1 Anchorage Configuration Confirmation

As required by the EPRI Seismic Walkdown Guidance [Ref. 1] (pg. 4-3), 50% of the items (excluding line mounted equipment) were confirmed to have anchorage configurations consistent with plant documentation. The table of contents for Appendix B 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. It is noted that EPRI guidance document, Technical Report 1025286 [Ref. 1] includes Question 6 on the SWC's which asks, "Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?" and only provides for a Yes, No or Unknown answer choice. The answer for question 6 is therefore given a "Yes" when the answers to questions 1 to 5 on the check list are "N/A".

Y: components anchored to the civil structure which were selected for configuration verification to ensure the anchorage is consistent with plant configuration documentation. A minimum of 50% of anchored components are required to be verified in accordance with Technical Report 1025286

N: components anchored to the civil structure which were not selected for configuration verification.

4.2.2 *Issues Identification during Seismic Walkdowns*

There were no issues identified by the SWEs during the equipment walkdowns that were ultimately judged to be a "Potentially Adverse Seismic Condition." Table 4-2 provides a summary of the issues identified during the Seismic Walkdowns.

4.3 AREA WALK-BYS

In accordance with Reference 1, Area Walk-by Checklists (AWC) were performed for each room or area within a large room (35 foot radius) which included one or more items on the SWEL. Table 4-1 provides a description of the area walk-bys performed for this report. Completed AWCs are included in Appendix C with attached photos. These include overhead areas and other equipment items not on the SWELs in the area. A total of 8 supplemental AWCs were completed to encompass the Auxiliary Building Sub-Basement, CVCS Waste Holdup Tank Room, Boric Acid Evaporator Room and Containment.

Table 4-1: Ginna Supplemental Area Walk-By Designation

Area Number	Location	Elevation
17	Auxiliary Building CVCS Waste Holdup Tank Room	235'
25	Auxiliary Building, Sub-Basement, RHR Pit	219'
26a	Containment, Pressurizer Cubicle	274'-6"
26b	Containment, B RCP/SG Cubicle	252'
26c	Containment, Basement Level, North	235'-8"
26d	Containment, Intermediate Level North-East	253'-3"
26e	Containment, Post Accident Charcoal Filter Plenum	300'-4"
27	Auxiliary Building, Former Boric Acid Evaporator Room	235'

4.3.1 *Issue Identification during Area Walk-bys*

None of the issues identified by the SWEs during the area walk-bys were ultimately judged to be a "Potentially Adverse Seismic Condition" because in all cases it was concluded that the issue would not prevent the equipment from performing its safety-related function during or after a seismic event. Table 4-3 provides a summary of the issues identified in the Area Walk-bys.

4.4 ELECTRICAL CABINET INTERNAL INSPECTIONS

The initial walkdowns at Ginna were completed prior to NRC direction to perform internal inspections of electrical cabinets. During this supplemental inspection, Ginna personnel opened and inspected cabinets to the extent practical. Nearly all of the cabinets were inspected while energized. Per plant management direction, the team did not break the plane of the energized cabinets and was unable to move or relocate wires to enhance the inspection. As discussed in Appendix E of this report, some cabinet inspections will be deferred to a later date. Supplemental SWCs for internal inspections of the cabinets are located within Appendix D of this report.

4.4.1 Supplemental Internal Inspection Checklists

Supplemental internal inspections of electrical cabinets are documented with Appendix D of this report. This internal inspection concentrated on adverse internal mounting and missing fasteners. Table 4-4 provides a summary of the issues identified during the supplemental internal inspections of electrical cabinets.

These checklists are denoted to identify that anchorage inspection and interaction effects were documented under previous seismic walkdowns. To avoid conflict, the checklists are left blank for criteria that have already been evaluated under the previous walkdown submitted within Reference 3.

Several of the supplemental internal inspections were performed during maintenance with the cabinets energized. Given the station personal protective equipment (PPE) requirements, the SWE's were limited from breaking the plane of the cabinet. Digital photography was utilized to maximize viewing angles, and minimize exposure to potential hazards. All photographs taken were reviewed by the SWE's to ensure the intent of the guidance was met. This criteria included identifying:

- Degraded Internal Anchorage: The internal anchors of cabinets are not credited in the anchorage analysis of these components. Internal anchors were not verified nor inspected.

- Loose or missing fasteners, to the extent possible. Wiring and internal components were not moved or relocated to verify underlying fastener condition in accordance with PPE and qualification requirements. Missing hardware was noted on modules typically removed from racks for servicing or replacement. An extent of condition walkdown was completed for similar racks.

- Large, heavy components mounted to a cabinet not typically included by the original equipment manufacturer. With the exception of the Main Control Board, internally mounted cantilevered equipment was minimal and of small mass. This equipment appeared to be installed by the original equipment manufacturer and was judged acceptable by the team. The cantilevered equipment of the Main Control Board was previously documented and evaluated as acceptable under the USI A-46 SQUG effort.

- Cabinet doors or panels not latched or fastened: All of the access doors are secured with a latching mechanism or lock. Cabinet doors do not contain large relays or other chatter sensitive equipment. Cabinet doors are lightly loaded.

- Adverse Conditions: With the exception of one cabinet (ABCHP1B/1CRC), electrical cabinets were free of foreign material.

AC and DC distribution panels, Class 14 components, are engineered to limit personnel access to live electrical components when the panel door is opened. To gain access to the remainder of the component would require disassembly of the panel cover and potential exposure of the team to critical safety-related loads. Given the external anchorage available on these components at Ginna, and the relative ruggedness of these components, the inspection at Ginna was limited to opening the installed panel doors. No further disassembly was performed.

Table 4-2: Table of Potentially Degraded, Nonconforming or Unanalyzed Conditions for Equipment Items at Ginna Identified During Supplemental Walkdowns.			
Component ID	Potentially Adverse Seismic Condition	Action Taken to Address the Condition	Current Status
SWEL 1 Items			
PCH01A	Three ladders leaning against wall adjoining pump. No ladder station provided. Potential for ladders to fall and impact pumps. Inspection team laid ladders on ground to remove interaction concern	CR-2012-006918 was issued. Team laid ladders down on ground to remove interaction concern.	Confirmed on 11/12/2012 that the ladders were properly staged against floor. Ginna has initiated work order C91044795 to install ladder racks to prevent recurrence
SWEL 2 Items			
EAC14	Circumferential crack-like indication was identified on the East pedestal of the A SFP HX (EAC14). This crack is barely evident over applied paint.	CR-2012-008931 was initiated. Completed supplemental inspection of pedestal with senior civil engineer (Lead Peer Reviewer)	CR-2012-008931 documents evaluation of as-found condition considering crack is through entire pedestal. Based on anchor embedment depth the impact to the heat exchanger anchorage was determined to be negligible.

Table 4-3: Table of Potentially Degraded, Nonconforming or Unanalyzed Conditions for Area Walk-bys at Ginna Identified During Supplemental Walkdowns.

Area #	Component ID or Area Description	Potentially Adverse Seismic Condition	Action Taken to Address the Condition	Current Status
4	AB, RHR Sub-basement	Three ladders leaning against wall adjoining pump. No ladder station provided. Potential for ladders to fall and impact pumps. Inspection team laid ladders on ground to remove interaction concern	CR-2012-006918 was issued. Team laid ladders down on ground to remove interaction concern.	See table 4-2 for current status
4	AB, RHR Sub-basement	Corrosion on conduit supports for conduit routed along Sub-basement floor	CR-2012-008409 was issued. Team judged that conduit supports were still capable of performing their function	CR written, discussion with System Engineer indicated this condition was previously identified under CR-2011-001811. WO C91239307 was initiated to track replacement of conduit supports.

Table 4-4: Table of Potentially Degraded, Nonconforming or Unanalyzed Conditions for Supplemental Internal Inspection of Electrical Equipment

Component ID	Potentially Adverse Seismic Condition	Action Taken to Address the Condition	Current Status
SWEL 1 Items			
ABCHP1B/1CRC	Internal inspection of recently installed cabinet ABCHP1B/1CRC located several, spare, loose terminal deck labeling strips at the bottom of the cabinet. This condition is not consistent with electrical cabinet cleanliness and is considered foreign material.	CR-2012-008138 was issued. Electrical maintenance removed foreign material prior to closing cabinet	Current configuration acceptable.
Y1	Terminal deck Y1-M is missing the support screw that fastens the terminal deck to the support framing.	CR-2012-008137 was issued, inspection during mode 6, refueling.	Discussion with I&C technician and supplemental walkdown indicated that this screw was mounting only for a terminal labeling strip. The terminal deck is still fastened to the frame by four additional screws. Deemed acceptable as-is.
R1	Three controllers were missing one of the two module restraint screws in the rack. This impacts components LQ-426 (top screw), TT-405A-1, TM-405-0 (top screws missing).	CR-2012-008208 was issued, inspection during mode 6, refueling.	Mode restraint concern. Screws replaced, reference CR-2012-008557
SA	Screw was found missing for module TM-630 in the SA rack	CR-2012-008208 was issued, inspection during mode 6, refueling.	Mode restraint concern. Screws replaced, reference CR-2012-008557

Table 4-4: Table of Potentially Degraded, Nonconforming or Unanalyzed Conditions for Supplemental Internal Inspection of Electrical Equipment

Component ID	Potentially Adverse Seismic Condition	Action Taken to Address the Condition	Current Status
N/A	Peer review team requested extent of condition be conducted given issues noted in CR-2012-008208. Ginna performed review of 34 cabinets of similar configuration in the relay room and control room. The following conditions were noted: The following modules were noted to have 1 mounting screw Transmitter directly below TC-182 IN CVCS1 Front PQ-128 in CVCS1 Front PQ-135, FQ-111, and YC-110A in CVCS2 Front PM-950 in Y2 Front RM-405X in RIL Front (Control Room) TM-405I in RIL Front (Control Room) LC-2022A-1,FC-2001, LY-942A, LY-942C, LY-942E, and TC-409A-1 in FOX1 LC-2022B-1, FC-2002, LY-943A and LY-943C in FOX2	I&C installed missing screws in missing mounting brackets as noted in CR-2012-008557. Modules FQ-111, YC-110A, located in CVCS2 rack and PQ-128 located in CVCS1 rack did not have a corresponding second mounting hole in the rack. Configuration was deemed acceptable-as-is. This was determined based on the following conditions: • Modules are Non-Safety Related • Modules are restrained by the adjoining modules which are also Non-Safety Related • Cabinets CVCS1 and CVCS2 do not contain any equipment required for the Seismic Safe Shutdown Equipment List	Acceptable, issues identified and resolved.

Table 4-4: Table of Potentially Degraded, Nonconforming or Unanalyzed Conditions for Supplemental Internal Inspection of Electrical Equipment			
Component ID	Potentially Adverse Seismic Condition	Action Taken to Address the Condition	Current Status
SWEL 2 Items			
There are no electrical cabinets on SWEL 2			

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Licensing Basis Evaluations

There were no issues identified during the supplemental Seismic Walkdowns, Area Walk-Bys and Internal Inspections determined to be a "Potentially Adverse Seismic Condition" that could have potentially challenged the site's licensing basis.

6

Peer Review

6.1 PEER REVIEW INTRODUCTION

6.1.1 *Overview*

The peer review was performed in accordance with the walkdown guidance document [Ref. 1]. The scope of the Peer Review was limited to the following activities, as the SWEL development process has already been peer reviewed by the original peer review team:

- Observation of seismic walkdown team during the containment portion of the walkdown on October 26, 2012 by Peer Reviewer, Mr. Mark Fitzsimmons.
- Review of all the checklists completed for the Seismic Walkdowns & Area Walk-Bys & Internal Inspections
- Review of any licensing basis evaluations
- Review of the decisions for entering the potentially adverse conditions in to the plant's Corrective Action Plan (CAP)
- Review of the final submittal report
- The inclusion of a summary of the peer review process in the submittal report

6.1.2 *Seismic Walkdown Inspection Overview*

The peer review of the seismic walkdown inspection started on October 26, 2012 with a peer check of the actual walkdowns at Ginna. Mr. Fitzsimmons joined the walkdown team for a portion of the day's planned walkdowns to observe the conduct of walkdowns and adherence to the Seismic Walkdown Guidance (SWG) [Ref.1].

In addition, an interview was conducted by Mr. Fitzsimmons with the SWE inspection team after review of the Seismic Walkdown Checklists (SWC) and Area Walk-By Checklists (AWC) to ascertain the quality and procedural compliance with the SWG.

6.2 REVIEW OF SAMPLE CHECKLIST & AREA WALK-BYS

6.2.1 *Overview of Walkdowns*

Mr. Fitzsimmons accompanied the team for the walkdown of components located in containment to perform peer review of the seismic walkdown inspection for the Ginna walkdowns. The SWE trained walkdown engineers were Mr. Jeffrey Gardiner and Mr. Francis Peterson. The peer review at the plant included the walkdowns inside the Containment Building (Basement, RCP cubicle and Pressurizer Cubicle). After review of the SWCs and AWCs an interview was conducted by Mr. Fitzsimmons with the SWE inspection team in accordance with the SWG requirements on December 7, 2012.

6.2.2 *Walkdown Review and Review of Checklists*

Mr. Fitzsimmons and Mr. Traynor completed a peer review of all SWC's and AWC's completed by the team. The peer review comments shown are those provided to the SWE walkdown team at the time of the review. All comments have been addressed in the final SWCs.

Table 6-1: Table of Peer Review Comments for SWC's

Item Tag No.	Equipment (GIP) Class	Walkdown Item	Location	Observations
435	7	PRESSURIZER RELIEF VALVE TO PRESSURIZER RELIEF TANK	RB-274	Note that the mass of the light is not sufficient to cause damage
951	7	PRESSURIZER STEAM SPACE SAMPLE ISOL AOV	RB-274	Grating is at 274'-6"
8635D	0	SPENT FUEL POOL HEAT EXCHANGER B INLET DRAIN VLV	AB-235	Add note that cap is in place
8635G	0	SPENT FUEL POOL HEAT EXCHANGER B OUTLET DRAIN VLV	AB-235	Add note that cap is in place
EAC13	21	SPENT FUEL POOL HEAT EXCHANGER B	AB-271	Reference engineering change package on SWC
EAC14	21	SPENT FUEL POOL HEAT EXCHANGER A	AB-253	Agree with identification of crack on pedestal. Completed supplemental walkdown with SWE.CR written, agree with disposition.

Table 6-2: Table of Peer Review Comments for AWC's			
Area	**Area Walkdown Description**	**Location**	**Peer Review Comments**
17	Auxiliary Building CVCS Waste Holdup Tank Room	AB-235	Questioned seismic category of CVCS waste holdup tanks in room. SWE's provided design documentation of seismic design basis (Completed A-46 SQUG evaluation)
25	Auxiliary Building, Sub-Basement, RHR Pit	AB-219'	Agree that CR for conduit was appropriate
26a	Containment, Pressurizer Cubicle	RB-274'-6"	Cubicle is evaluated for single missile shield block removed at power Correct elevation of grating in cubicle is 274'-6" Correct where appropriate
26b	Containment, B RCP/SG Cubicle	RB-252'	Duct and louvers are not supported below penetration, but still acceptable based on walkdown team's assessment
26e	Containment, Post Accident Charcoal Filter Plenum	RB-300'-4"	Lights are a potential interaction source, but won't cause damage due to lack of mass
27	Auxiliary Building, Former Boric Acid Evaporator Room	AB-235'	No comments

6.2.3 *Evaluation of Findings*

In all cases, the issues identified would not prevent the equipment from performing its safety-related function. The peer review team has reviewed the identified issues and associated disposition and agree with the conclusions of Section 4.

6.3 REVIEW OF LICENSING BASIS EVALUATIONS

6.3.1 *Overview of Licensing Basis Evaluations*

None of the issues identified during the Seismic Walkdowns and Area Walk-Bys as shown in Tables 4-2, 4-3, and 4-4 were determined to be "Potentially Adverse Seismic Conditions" in that the issues that were identified would not prevent the equipment from performing its safety-related function or the plant from achieving safe shutdown. Therefore, no additional formal Licensing Basis Evaluations were required.

6.4 PEER REVIEW TEAM PROCESS SUMMARY

- Discussed Seismic Walkdown approach with assigned personnel, including components, buildings, access, inspections, division of responsibility, recordings, and review.
- Questioned the personnel responsible for the selection and development of SWEL SSCs list (on components and systems selected).
- Monitored walkdown work efforts and schedule.
- Coordinated Containment walkdowns performed during 2012 RFO for License Renewal Structural Assessment and Monitoring Program inspection with Seismic Walkdowns
- Discussed identified structural concerns, reporting and corrective action plans throughout walkdown effort.
- Provided general structural engineering guidance, located SQUG Screening Evaluation Worksheets for components, explained SQUG and IPEEE outlier resolutions, and directed team members to past seismic upgrade programs and modifications.
- Accompanied team members on portions of the Seismic Walkdowns, provided oversight, reviewed and commented on all completed component checklists.
- Accompanied team members in Area Walk-bys for oversight, discussed engineering assessments for spatial interaction, and reviewed checklists.
- No Licensing Basis Evaluations were performed so peer review was not applicable.
- Provided review and comments to final report submittal.
- General review indicated that the SWEL component list was properly populated. The qualification of team personnel reflected experience and great familiarity with the Ginna nuclear power block, walkdown data sheets were thoroughly filled out and completed. Questioning attitudes regarding anchorages and particularly spatial interactions were discussed at length. Corrective actions were employed using the Corrective Action Program and in some cases immediate timely actions were taken (ladders and tools close to safety related components were removed). Documentation was developed and compiled such that it is recorded and retrievable.

6.5 REVIEW OF FINAL SUBMITTAL REPORT & SIGN-OFF

The supplemental inspection report has been reviewed by Mark Fitzsimmons and John Traynor and is found to meet the requirements of the EPRI 1025286 – Seismic Walkdown Guidance [Ref. 1] and the objectives and requirements of the 50.54(f) letter [Ref. 22].

7

References

Reference drawings related to SWEL items are cited 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. NRC (E Leeds and M Johnson) Letter to All Power Reactor Licensees et al., "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendation 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," Enclosure 2.3, "Recommendation 2.3: Seismic."

3. Letter from M. G. Korsnick to Document Control Desk (NRC) dated November 27, 2012, Response to 10 CFR 50.54(f) Request for Information, Recommendation, Seismic, Page 7-1

4. Updated Final Safety Analysis Report (UFSAR) Rev. 23, R. E. Ginna Nuclear Power Plant, December 6, 2011

ATTACHMENT (1)

SUPPLEMENTAL SEISMIC WALKDOWN REPORT

A

Project Personnel Certificates

SQUG

Certificate of Achievement

This is to Certify that

Francis Peterson

has Completed the SQUG Walkdown Screening and Seismic Evaluation Training Course

June 11-15, 2012

Glen Allen, Virginia

Paul D. Baughman, ARES Corporation
SQUG Instructor

Divakar Bhargava, Dominion Generation
SQUG Chairman

SQUG

Certificate of Achievement

This is to Certify that

Jeff Gardiner

has Completed the SQUG Walkdown Screening and Seismic Evaluation Training Course
June 11-15, 2012
Glen Allen, Virginia

Paul D. Baughman, ARES Corporation
SQUG Instructor

Divakar Bhargava, Dominion Generation
SQUG Chairman

SQUG

Certificate of Achievement

This is to Certify that

Mark B. Fitzsimmons

has Completed the SQUG Walkdown Screening and Seismic Evaluation Training Course

April 20-24, 1998
Date of Course

SQUG Representative

Training Course Administrator

SQUG

Certificate of Achievement

This is to Certify that

Mark B. Fitzsimmons

has Completed the SQUG Training Course for
Demonstrating Seismic Adequacy of New and Replacement Equipment and
Subcomponents Using GIP and STERI Methods
Held November 19-21, 1997

Neil P. Smith, ComEd
SQUG Chairman

David A. Freed, MPR Associates
SQUG Training Coordinator

Robert P. Kassawara, EPRI
SQUG Program Manager

SQUG

Certificate of Achievement

This is to Certify that

Mark B. Fitzsimmons

has Completed the

SQUG Equipment Selection and Relay Evaluation Training Course

Held March 9–10, 1998

Jess Bettick, MPR Associates

Richard G. Starck, MPR Associates

ATTACHMENT (1)
SUPPLEMENTAL SEISMIC WALKDOWN REPORT

B

Seismic Walkdown Checklists (SWCs)

Table B-1. Summary of Seismic Walkdown Checklists Completed by Ginna Personnel (SWEL 1)		
Component ID	**Description**	**Anchorage Verification Required**
VFD/CHP1B	CHARGING PUMP 1B MOTOR VFD	YES
ABCHP1B/1CRC	CHARGING PUMP 1B / 1C MOTOR VFD RELAY CABINET	YES
PAC01B	RESIDUAL HEAT REMOVAL PUMP B	YES
431C	PRESSURIZER POWER OPERATED RELIEF VALVE	N/A
435	PRESSURIZER RELIEF VALVE TO PRESSURIZER RELIEF TANK	N/A
951	PRESSURIZER STEAM SPACE SAMPLE ISOL AOV	N/A
270B	RCP B SEAL OUTLET VLV AOV-270B	N/A
830A	LOOP B ACCUMULATOR A RELIEF VALVE	N/A
8608A	NITROGEN ACCUMULATOR A RELIEF VLV	N/A
515	MOTOR OPERATED INLET BLOCK VLV TO PORV 431C	N/A
ACP04	CONTAINMENT RECIRCULATING FILTER AND COOLING UNIT C	YES
ACP06	POST ACCIDENT CHARCOAL FILTER UNIT A	YES
LT-504	STEAM GENERATOR EMS01A WIDE RANGE LEVEL TRANSMITTER	N/A
TSI03A	SAFETY INJECTION ACCUMULATOR A	YES
TT-2139	CRFC 1A AIR INLET TEMP	N/A
TT-2140	CRFC 1A AIR OUTLET TEMP	N/A

ATTACHMENT (1)

SUPPLEMENTAL SEISMIC WALKDOWN REPORT

Table B-1. Summary of Seismic Walkdown Checklists Completed by Ginna Personnel (SWEL 1)		
Component ID	**Description**	**Anchorage Verification Required**
TSI01	REFUELING WATER STORAGE TANK	NO
5871	A POST ACCIDENT CHAR FILTER DAMPER INLET ISOL VLV	N/A

Table B-2 Summary of Seismic Walkdown Checklists Completed by Ginna Personnel (SWEL 2)		
Component ID	**Description**	**Anchorage Verification Required**
8635B	GATE VALVE	N/A
8635D	SFP HX B INLT DRN VLV	N/A
8635G	SFP HX B OUTLET DRN VLV	N/A
8663	SFP HX B OUTLET BLK VLV	N/A
EAC13	SPENT FUEL POOL HEAT EXCHANGER B	YES
EAC14	SPENT FUEL POOL HEAT EXCHANGER A	YES

C

Area Walk-By Checklists (AWCs)

Table C-1: Summary of Area Walk-By Check Lists Completed by Ginna Personnel		
Area Number	**Location**	**Elevation**
17	Auxiliary Building CVCS Waste Holdup Tank Room	235
25	Auxiliary Building, Sub-Basement, RHR Pit	219'
26a	Containment, Pressurizer Cubicle	274'-6"
26b	Containment, B RCP/SG Cubicle	252'
26c	Containment, Basement Level, North	235'-8"
26d	Containment, Intermediate Level North-East	253'-3"
26e	Containment, Post Accident Charcoal Filter Plenum	300'-4"
27	Auxiliary Building, Former Boric Acid Evaporator Room	235

ATTACHMENT (1)
SUPPLEMENTAL SEISMIC WALKDOWN REPORT

D

SWC's for Supplemental Internal Inspections of Electrical Cabinets

Table D-1: Summary of Supplemental Internal Inspections Completed by Ginna		
Equipment Class	**Component ID**	**Description**
1	MS@V3505A (42/3505A)	MOTOR STARTER FOR MOV-3505A
14	ACPDPAB10	PRESSURIZER HEATERS AC POWER DISTRIBUTION PANEL 1A1 (480 VAC)
14	DCPDPCB01A	DC DISTRIBUTION PANEL (BATTERY A MAIN DISCONNECT PANEL)
14	DCPDPCB02A	DC POWER DISTRIBUTION PANEL CB 02 A (MAIN FUSE CAB A)
14	DCPDPCB03A	DC POWER DISTRIBUTION PANEL CB 03 A (MAIN DC PNL 1A)
16	BYCA	BATTERY CHARGER A
16	BYCA1	BATTERY CHARGER A1
16	INVTCVTA	INVERTER INVTA / CONSTANT VOLTAGE TRANSFORMER CVTA CABINET
20	MCB	MAIN CONTROL BOARD
20	R1	REACTOR PROTECTION INSTRUMENT RACK CHANNEL 1 RED 1
20	RA2	AUXILIARY RELAY RACK 2
20	SA	SAFETY INJECTION/AUX COOLANT RACK
20	SAFWPCIP	STANDBY AUXILIARY FEEDWATER PUMP C INSTRUMENT PANEL
20	SIA1	SAFEGUARDS INITIATION RACK A1
20	Y1	REACTOR PROTECTION INSTRUMENT RACK CHANNEL 4 YELLOW 1

ATTACHMENT (1)
SUPPLEMENTAL SEISMIC WALKDOWN REPORT

E

Plan for Future Seismic Walkdown of Inaccessible Equipment

Ginna has completed walkdowns for all SWEL 1 items except for four components which require specific maintenance configurations to complete the internal inspection. All of the required anchorage verifications and Area Walk-bys are complete. Table E-1 summarizes the remaining electrical equipment subject to supplemental internal inspections.

Table E-1. Summary of Electrical Equipment Subject to Supplemental Internal Inspections

Equipment Class	Component ID	Description	Building	ELEV.	Planned Walkdown/ Walk-By Date	Planned Updated Submittal Report Date
1	MCCC	480 VAC MOTOR CONTROL CENTER C	AB	271	12/2015	1/2016
2	BUS14	BUS 14 480 VOLT POWER	AB	271	12/2015	1/2016
20	DGAEC	DIESEL GENERATOR A EXCITER CABINET	DG	253	06/2013	07/2013
20	FOXDGA1	FOXBORO INSTRUMENT RACK DIESEL GENERATOR KDG01A DAY TANK LEVEL	DG	253	06/2013	07/2013

SWEL 2 components that have not been inspected are summarized in Table E-2. These components are on the SWEL 2 due to their ability to induce a rapid drain down as described in Reference 1. The rapid drain down criteria does not credit manual operator actions over the course of 72 hours. The SFP demineralizer, SFP filter, and associated valves are normally aligned to the SFP cooling system. The SFP purification components noted in table E-2 are located in Locked High Radiation Areas typically accessed annually. The SFP demineralizer is located in the demineralizer room which is typically inspected using remote technology. Inspecting these "rugged" components represents a high radiological risk. The remaining manual valves, demineralizer and filter are passive components. Manual valves were considered rugged under the SQUG program. Ginna considered the following items in its decision to not inspect these components:

1. Alternative Flow Paths: Ginna has three pumps and two heat exchangers providing six different spent fuel cooling paths available to plant operators to maintain SFP cooling and inventory. Four of these loops are seismically qualified.

2. Direct Level Indication: Ginna utilizes low level alarm, LAL-634, to notify operators of decreasing pool level. This alarm actuates when level in the pool has decreased a maximum of 10.5" from normal spent fuel pool level..

3. Indirect Level Indication: Should the SFP system rupture, the lost inventory would drain to the Auxiliary Building sump. Annunciators L-9 and L-10 inform the control room operators of high sump level and pump actuation. The alarm response procedure directs an Auxiliary Operator to check for leakage to the sump.

4. Bypass Ability: Should a rupture of the SFP demineralizer, filter or associated piping occur, each of the cooling loops can be aligned to bypass the affected sections of piping and prevent drain down while ensuring SFP cooling is maintained.

5. Spent Fuel Pool Isolation: The SFP Pump suction lines are seismically qualified with isolation valves located as close to the penetration as possible. In addition, each pump has an individual suction isolation valve that, in the worst case drain down, operators can secure to stop the pool drain down.

6. Maximum Drain Down: Should a rupture of the SFP demineralizer, filter or associated piping occur, the SFP cannot drain down to less than the lower suction line, which is approximately 5 ft-4 in. above the top of the fuel racks, and ensures a minimum level of 5 ft-4 in. above the top of the fuel. Normally the lower suction line is isolated and the upper suction line is in service, which penetrates the SFP near the top of the pool. [UFSAR Section 9.1.3.2.2, Ref. 4]. The upper suction line penetrates the pool 23 ft above the lower suction. When the upper suction is aligned and the lower suction is isolated, the intent of Screen 4 of Ref. 1 is met and there is no rapid-drain down mechanism for the Spent Fuel Pool.

7. Procedures: Attachment 1, "Post Earthquake Plant Checks," of operations procedure ER-SC.4 "Earthquake Emergency Plan" directs operators to monitor SFP level and monitor for leakage after a seismic event.

8. Ginna Station has diesel driven portable pumps which can be aligned to water sources, including Lake Ontario, to keep the SFP water level above the top of active fuel.

Table E-2. Summary of Inaccessible Equipment – SWEL 2					
Component ID	**Description**	**Building**	**Planned Walkdown/ Walk-By Date**	**Planned Updated Submittal Report Date**	**Reason for Inaccessibility**
791	SFP DI BACKWASH ISOL VLV	AB	None	None	Locked High radiation area.
792	RMW INLT ISOL VLV	AB	None	None	Locked High radiation area.
793	DIAPHRAGM VALVE	AB	None	None	Locked High radiation area.
794	SFP DI OUTLET ISOL VLV	AB	None	None	Locked High radiation area.
797	SFP FILTER BYP VLV	AB	None	None	Locked High radiation area.
798A	INLT BLK VLV	AB	None	None	Locked High radiation area.
798B	RCDT PMP S DISCH ISOL VLV	AB	None	None	Locked High radiation area.
799A	SFP FILTER DRN VLV	AB	None	None	Locked High radiation area.
799D	SFP FILTER VENT VLV	AB	None	None	Locked High radiation area.
800	INSTR ROOT VLV	AB	None	None	Locked High radiation area.
801	INSTR ROOT VLV	AB	None	None	Locked High radiation area.
802	SFP FILTER OUTLET BLK VLV	AB	None	None	Locked High radiation area.
FAC02	SFP FILTER	AB	None	None	Locked High radiation area..
TAC04	SFP DI	AB	None	None	Locked High radiation area.

ATTACHMENT (2)

SEISMIC WALKDOWN CHECKLISTS

Constellation Energy Nuclear Group, LLC
December 21, 2012

B

Seismic Walkdown Checklists

Table B-1. Summary of Seismic Walkdown Checklists Completed by Ginna Personnel (SWEL 1)			
Component ID	**Description**	**Anchorage Verification Required**	**Page**
VFD/CHP1B	CHARGING PUMP 1B MOTOR VFD	YES	B-86
ABCHP1B/1CRC	CHARGING PUMP 1B / 1C MOTOR VFD RELAY CABINET	YES	B-42
PAC01B	RESIDUAL HEAT REMOVAL PUMP B	YES	B-66
431C	PRESSURIZER POWER OPERATED RELIEF VALVE	N/A	B-6
435	PRESSURIZER RELIEF VALVE TO PRESSURIZER RELIEF TANK	N/A	B-9
951	PRESSURIZER STEAM SPACE SAMPLE ISOL AOV	N/A	B-20
270B	RCP B SEAL OUTLET VLV AOV-270B	N/A	B-3
830A	LOOP B ACCUMULATOR A RELIEF VALVE	N/A	B-16
8608A	NITROGEN ACCUMULATOR A RELIEF VLV	N/A	B-26
515	MOTOR OPERATED INLET BLOCK VLV TO PORV 431C	N/A	B-13
ACP04	CONTAINMENT RECIRCULATING FILTER AND COOLING UNIT C	YES	B-45
ACP06	POST ACCIDENT CHARCOAL FILTER UNIT A	YES	B-49
LT-504	STEAM GENERATOR EMS01A WIDE RANGE LEVEL TRANSMITTER	N/A	B-62
TSI03A	SAFETY INJECTION ACCUMULATOR A	YES	B-77
TT-2139	CRFC 1A AIR INLET TEMP	N/A	B-80
TT-2140	CRFC 1A AIR OUTLET TEMP	N/A	B-83
TSI01	REFUELING WATER STORAGE TANK	NO	B-70
5871	A POST ACCIDENT CHAR FILTER DAMPER INLET ISOL VLV	N/A	B-23

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Table B-2 Summary of Seismic Walkdown Checklists Completed by Ginna Personnel (SWEL 2)			
Component ID	**Description**	**Anchorage Verification Required**	
8635B	GATE VALVE	N/A	B-30
8635D	SFP HX B INLT DRN VLV	N/A	B-33
8635G	SFP HX B OUTLET DRN VLV	N/A	B-36
8663	SFP HX B OUTLET BLK VLV	N/A	B-39
EAC13	SPENT FUEL POOL HEAT EXCHANGER B	YES	B-53
EAC14	SPENT FUEL POOL HEAT EXCHANGER A	YES	B-57

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 270B (Alternate train for valve 270A)

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: REACTOR COOLANT PUMP B SEAL AIR OPERATED OUTLET VALVE

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, "B" RCP/SG Cubicle, 253'-0", Area 26b

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☐ N ☐ U ☐ N/A ☒

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? Y ☐ N ☐ U ☐ N/A ☒
   (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 270B (Alternate train for valve 270A)

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: REACTOR COOLANT PUMP B SEAL AIR OPERATED OUTLET VALVE

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2

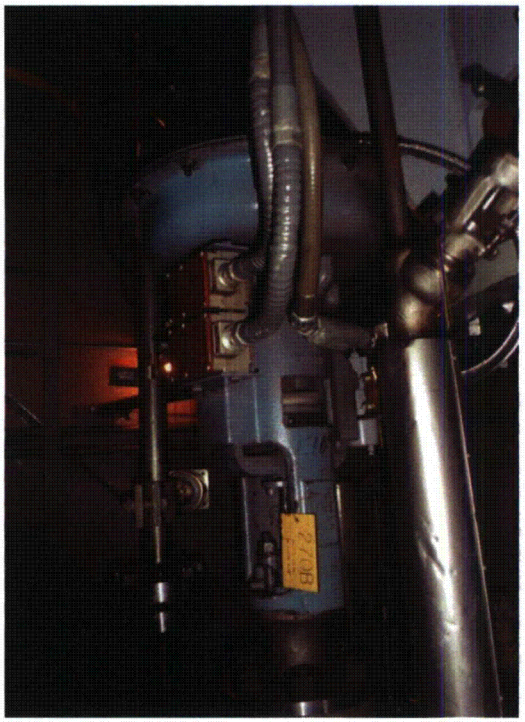
SEISMIC WALKDOWN CHECKLISTS

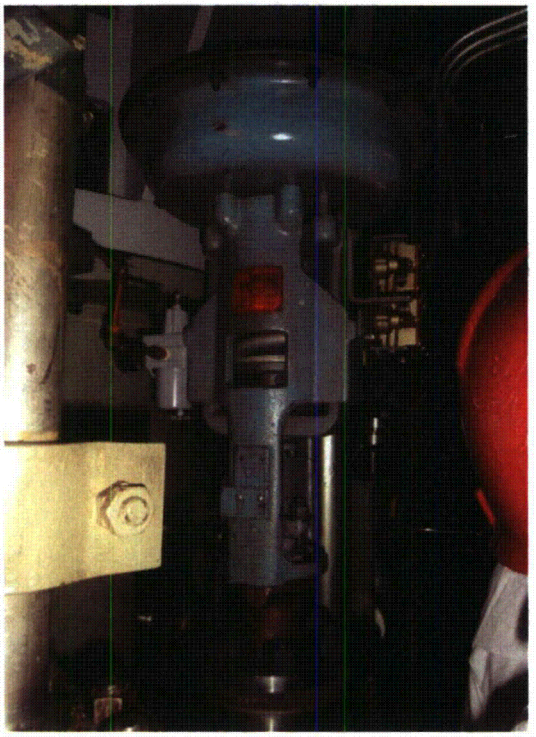
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.:	270B (Alternate train for valve 270A)
Equipment Class:	(7) Fluid-Operated Valves
Equipment Description:	REACTOR COOLANT PUMP B SEAL AIR OPERATED OUTLET VALVE

Photos





ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 431C (Alternate Train for valve 430)

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: PRESSURIZER POWER OPERATED RELIEF VALVE TO PZR RELIEF TANK TRC02

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Pressurizer Cubicle, 274'-6", Area 26a

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☐ N ☐ U ☐ N/A ☒

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 431C (Alternate Train for valve 430)

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: PRESSURIZER POWER OPERATED RELIEF VALVE TO PZR RELIEF TANK TRC02

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
Light overhead, no soft targets on valve. Light appears sufficiently anchored to preclude collapse. Judged acceptable by team

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.:	431C (Alternate Train for valve 430)
Equipment Class:	(7) Fluid-Operated Valves
Equipment Description:	PRESSURIZER POWER OPERATED RELIEF VALVE TO PZR RELIEF TANK TRC02

Photos

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 435 (Alternate Train for valve 434)

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: PRESSURIZER RELIEF VALVE TO PRESSURIZER RELIEF TANK

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Pressurizer Cubicle, 274'-6", Area 26a

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☐ N ☐ U ☐ N/A ☒

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 435 (Alternate Train for valve 434)

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: PRESSURIZER RELIEF VALVE TO PRESSURIZER RELIEF TANK

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
   Light overhead, no soft targets on relief valve, limited mass of light. Judged acceptable by team

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

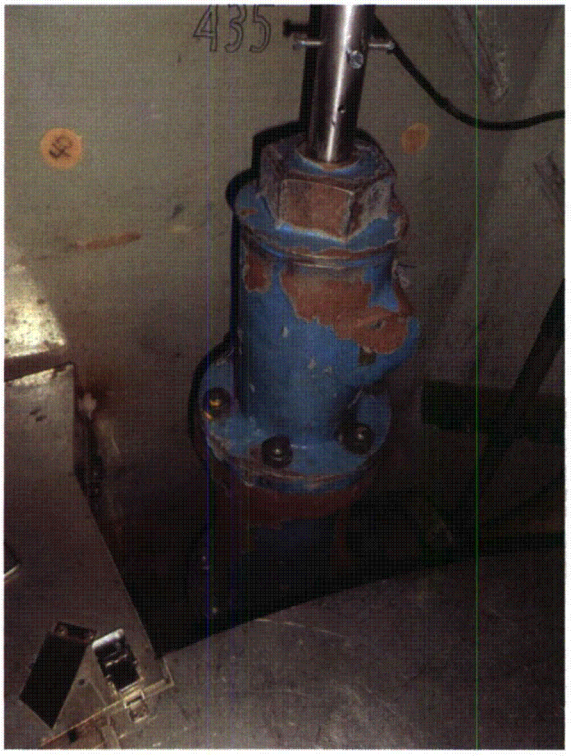
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 435 (Alternate Train for valve 434)

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: PRESSURIZER RELIEF VALVE TO PRESSURIZER RELIEF TANK

Photos



ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

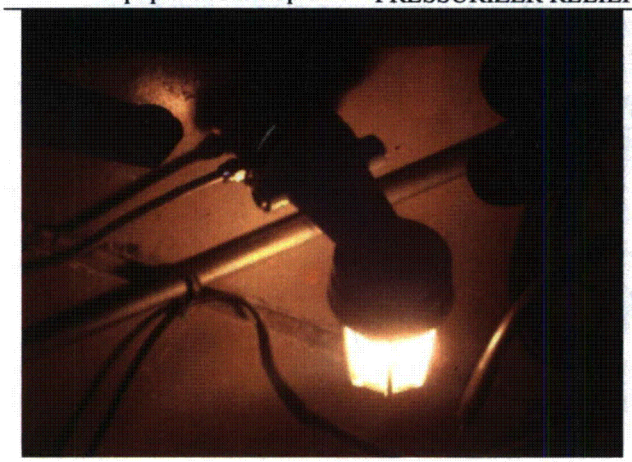
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 435 (Alternate Train for valve 434)

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: PRESSURIZER RELIEF VALVE TO PRESSURIZER RELIEF TANK



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 515

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

Equipment Description: MOTOR OPERATED INLET BLOCK VLV TO PORV 431C

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Pressurizer Cubicle, 274'-6", Area 26a

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☐ N ☐ U ☐ N/A ☒

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 515

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

Equipment Description: MOTOR OPERATED INLET BLOCK VLV TO PORV 431C

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
Light overhead, no soft targets on valve. Light appears sufficiently anchored to preclude collapse. Judged acceptable by team

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

Date: 12/10/2012

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

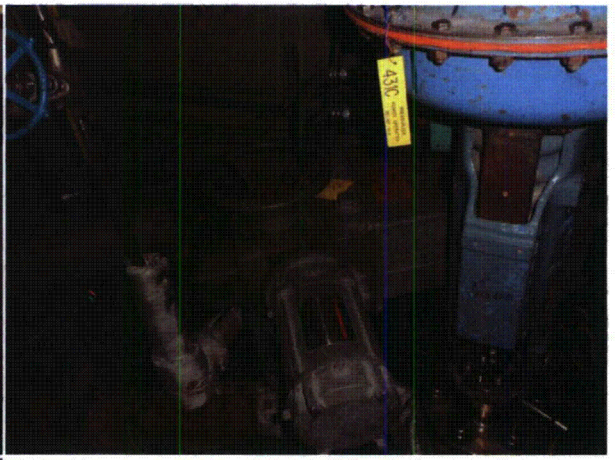
Seismic Walkdown Checklist (SWC)

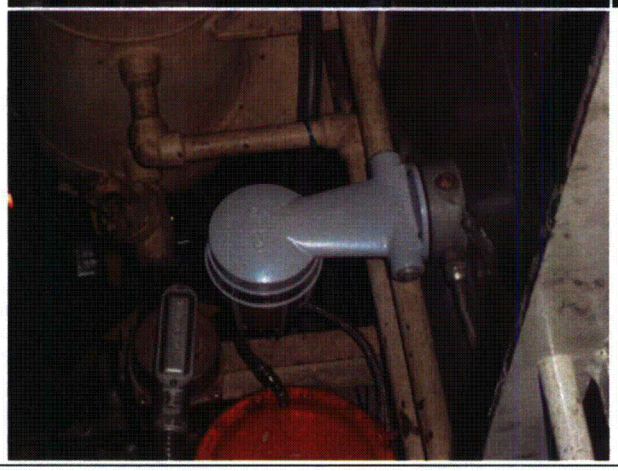
Equipment ID No.: 515

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

Equipment Description: MOTOR OPERATED INLET BLOCK VLV TO PORV 431C

Photos





ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 830A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: LOOP B ACCUMULATOR A RELIEF VLV

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Intermediate Level, North Side, 253'-0", Area 26d

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☐ N ☐ U ☐ N/A ☒

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 830A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: LOOP B ACCUMULATOR A RELIEF VLV

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

Jim Pollock 12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

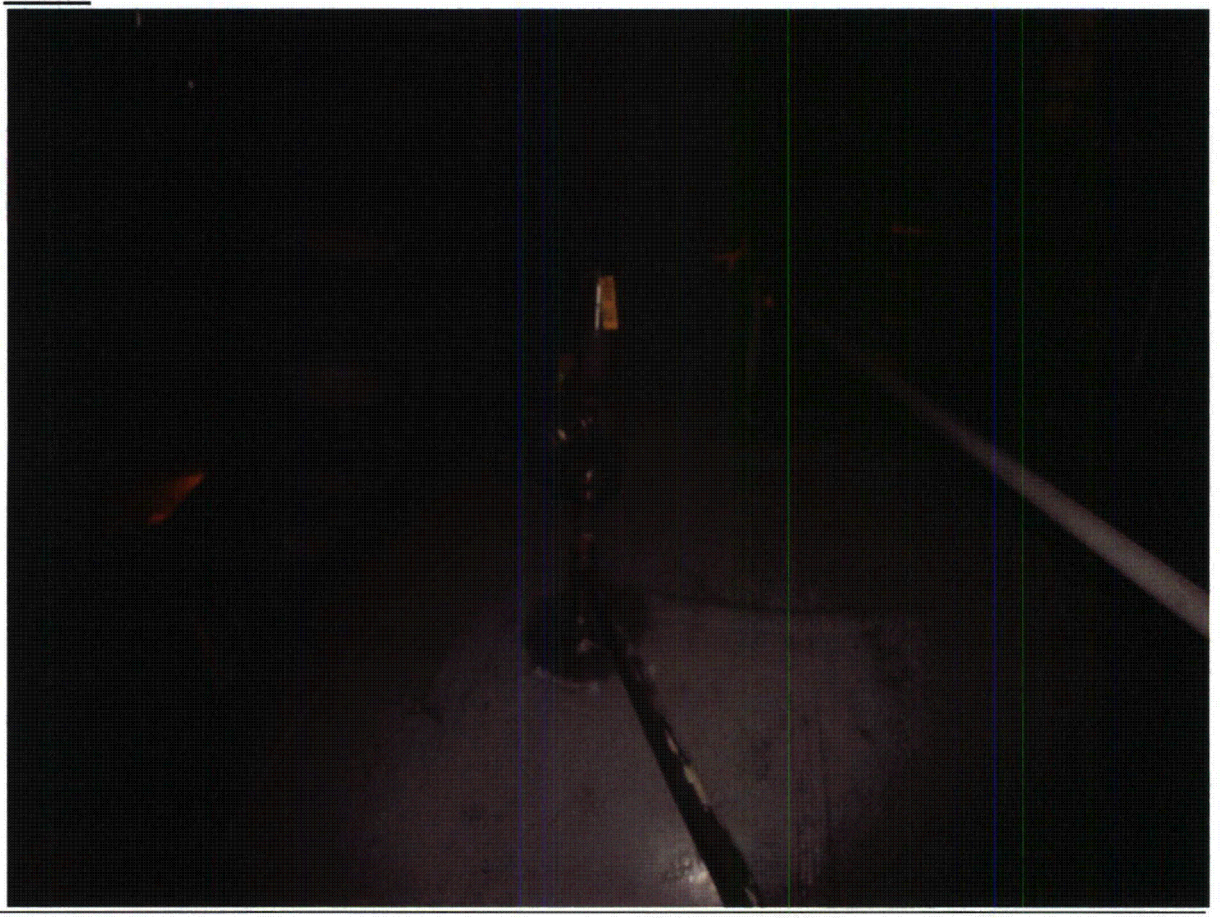
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 830A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: LOOP B ACCUMULATOR A RELIEF VLV

Photos



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

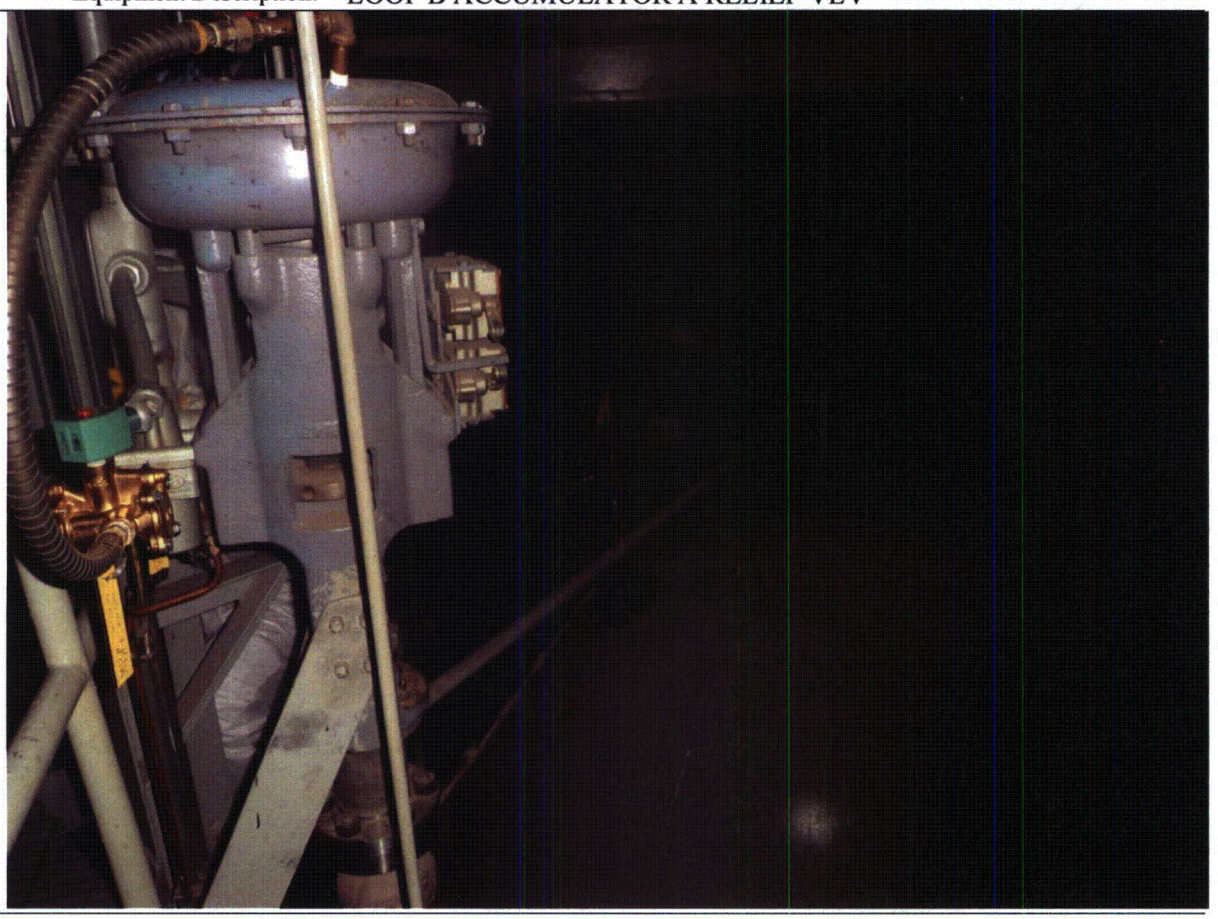
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 830A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: LOOP B ACCUMULATOR A RELIEF VLV



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 951

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: PRESSURIZER STEAM SPACE SAMPLE ISOL AOV

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Pressurizer Cubicle, 274'-6", Area 26a

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
   Anchorage shown on drawing 21489-0722 Sheet 3

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

5. Is the anchorage configuration consistent with plant documentation? Y ☐ N ☐ U ☐ N/A ☒
   (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 951

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: PRESSURIZER STEAM SPACE SAMPLE ISOL AOV

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
Light overhead, no soft targets on valve. Light attached to embedded unistrut.. Judged acceptable by team

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

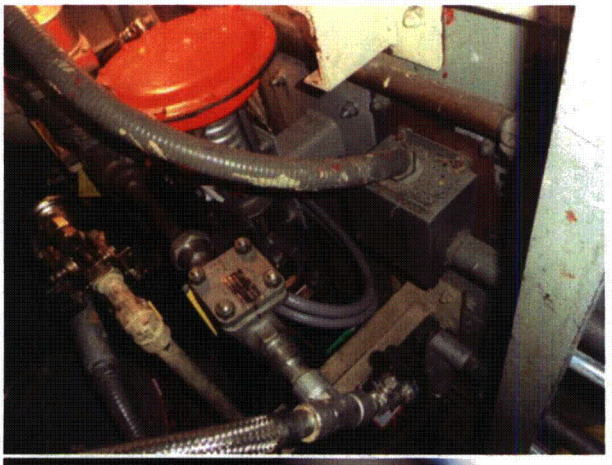
Status: Y ☒ N ☐ U ☐

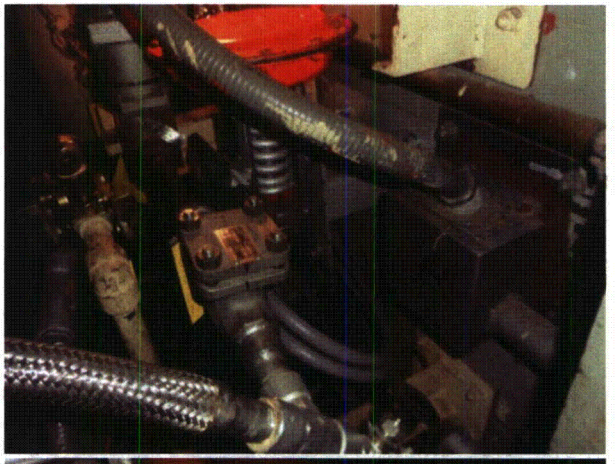
Seismic Walkdown Checklist (SWC)

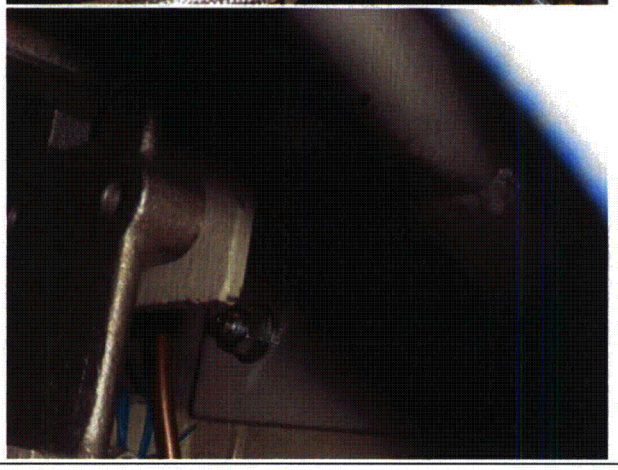
Equipment ID No.: 951

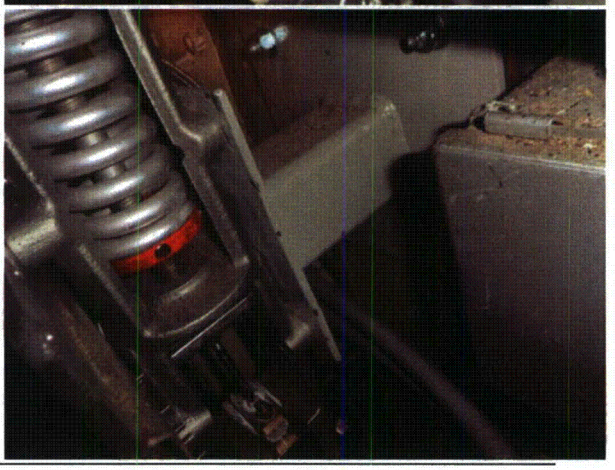
Equipment Class: (7) Fluid-Operated Valves

Equipment Description: PRESSURIZER STEAM SPACE SAMPLE ISOL AOV









ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 5871

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: A POST ACCIDENT CHAR FILTER DAMPER INLET ISOL VLV

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Basement, North Side, 235'-0", Area 26c

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

   Instrumentation cabinet for CRFC drain valves braced off of actuator plate
   Confirmed additional HVAC ductwork supports installed (Reference IPEEE outlier & drawing 33013-2805)

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 5871

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: A POST ACCIDENT CHAR FILTER DAMPER INLET ISOL VLV

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

   Flexible system, supported mainly by rod hanger. Potential yielding of unistrut anchorage due to differential (large) movement of ductwork. Not an issue as CRFC drain components are non-safety related.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

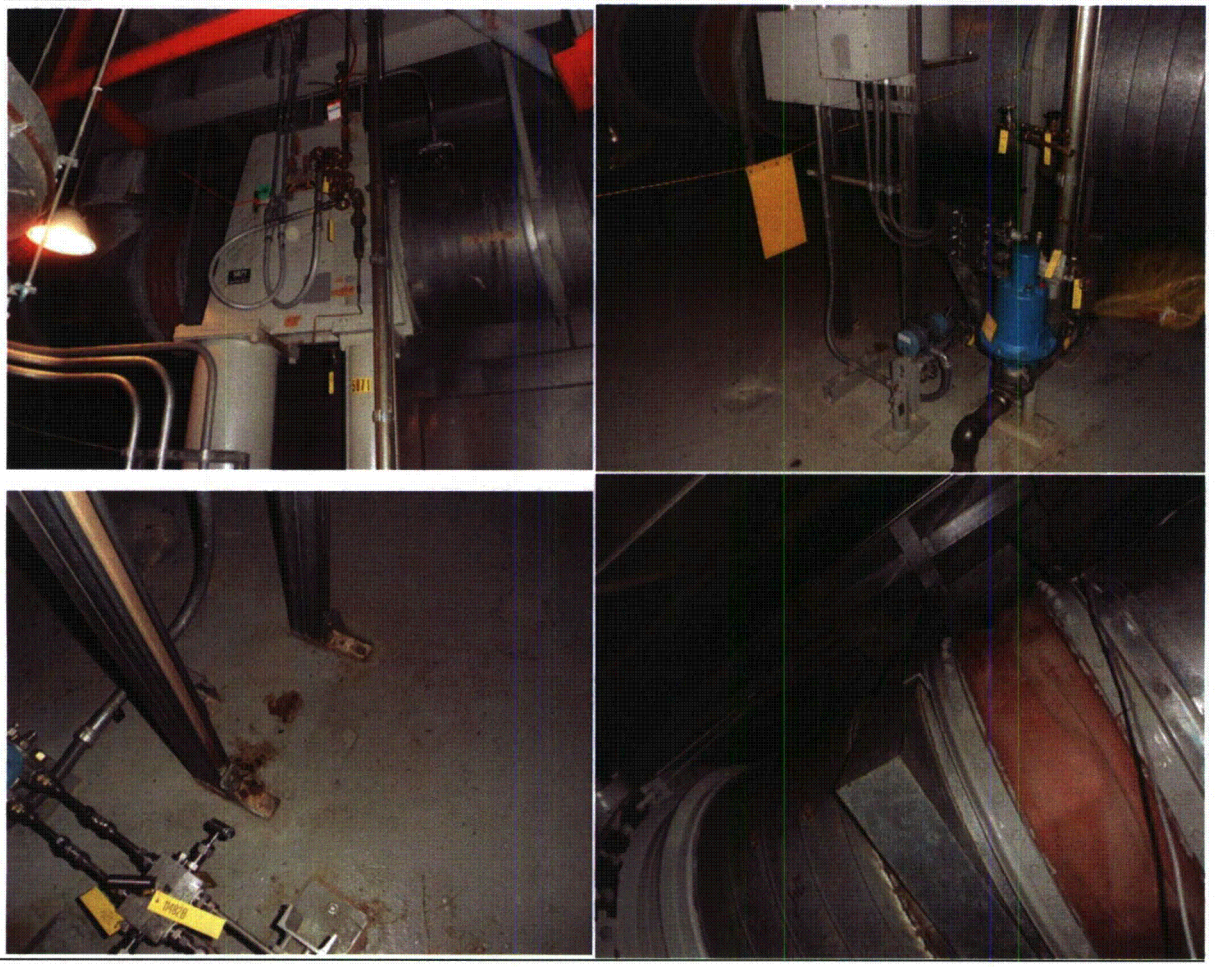
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 5871

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: A POST ACCIDENT CHAR FILTER DAMPER INLET ISOL VLV

Photos



ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8608A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: NITROGEN ACCUMULATOR RELIEF VALVE

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Intermediate Level, North Side, 253'-0", Area 26d

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☐ N ☐ U ☐ N/A ☒

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8608A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: NITROGEN ACCUMULATOR RELIEF VALVE

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
   Light and abandoned heater in overhead. Heating unit removed, only shell remains. Heater out of fall path of relief valve and is supported by two rod hangers. Heater interaction judged acceptable by team

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8608A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: NITROGEN ACCUMULATOR RELIEF VALVE

Photos

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

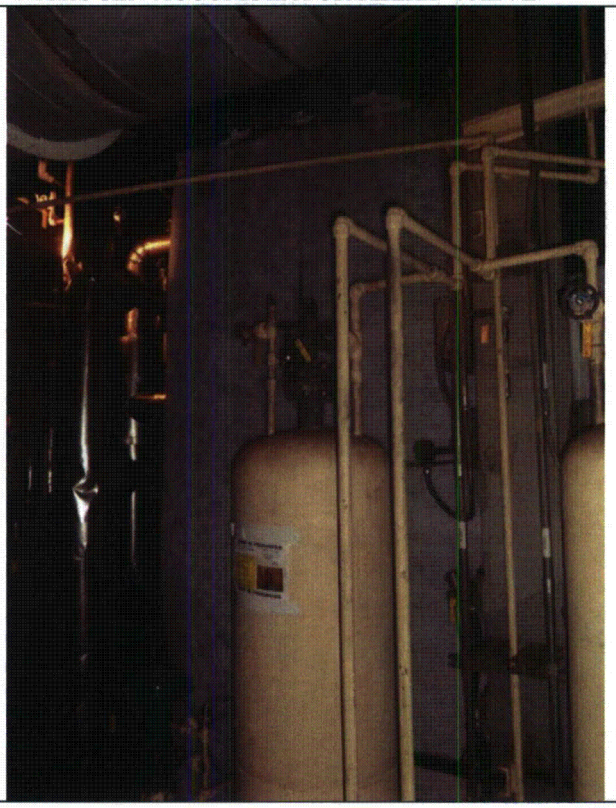
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8608A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: NITROGEN ACCUMULATOR RELIEF VALVE



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8635B

Equipment Class: (0) OTHER

Equipment Description: GATE VALVE

Project: Ginna SWEL 2

Location (Bldg, Elev, Room/Area): Auxiliary Building, 235', Area 24, AB West End-Basement

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☐ N ☐ U ☐ N/A ☒

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8635B

Equipment Class: (0) OTHER

Equipment Description: GATE VALVE

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

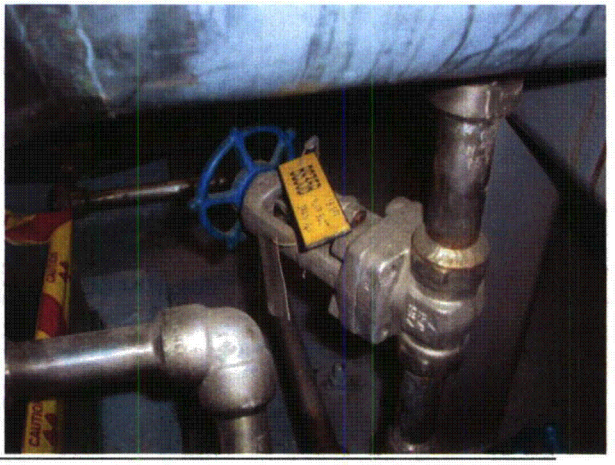
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8635B

Equipment Class: (0) OTHER

Equipment Description: GATE VALVE

Photos



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8635D

Equipment Class: (0) OTHER

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B INLET DRAIN VLV

Project: Ginna SWEL 2

Location (Bldg, Elev, Room/Area): Auxiliary Building, 235', Area 17, CVCS Holdup Tank Room

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☐ N ☐ U ☐ N/A ☒

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8635D

Equipment Class: (0) OTHER

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B INLET DRAIN VLV

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

   Temporary video camera staged near valve. Potential interaction concern, however base of camera is wide, limited interaction possibility based on elevation overlap, and valve lacks soft targets (rugged). Drain cap is in place. Condition judged acceptable by team.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
   Yes, SFP piping routed below block outs carrying existing lines. Drain valve is protected by 6" SFP header.

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Poor picture quality on initial walkdown, utilized remote monitoring video capture for clearer picture. Valve is on right in picture.

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

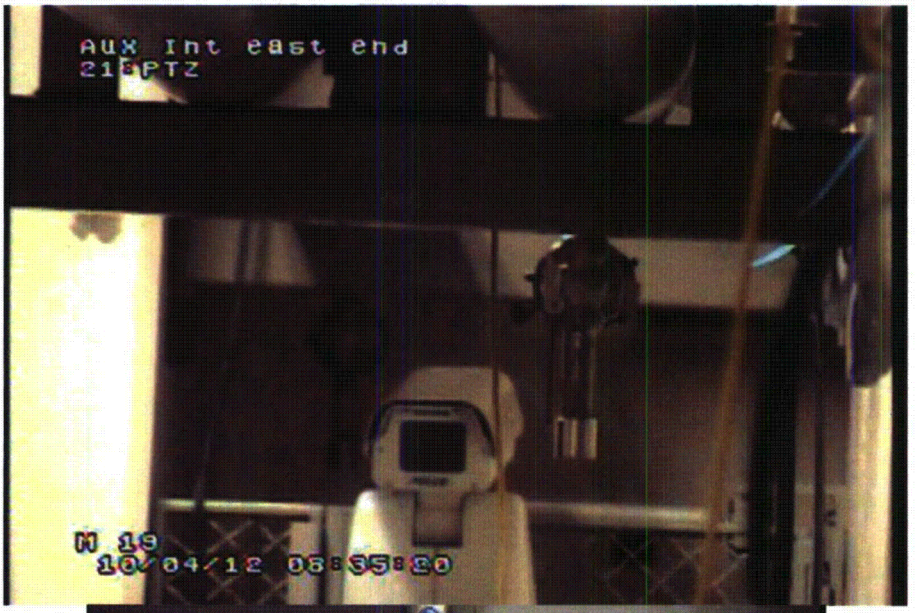
Seismic Walkdown Checklist (SWC)

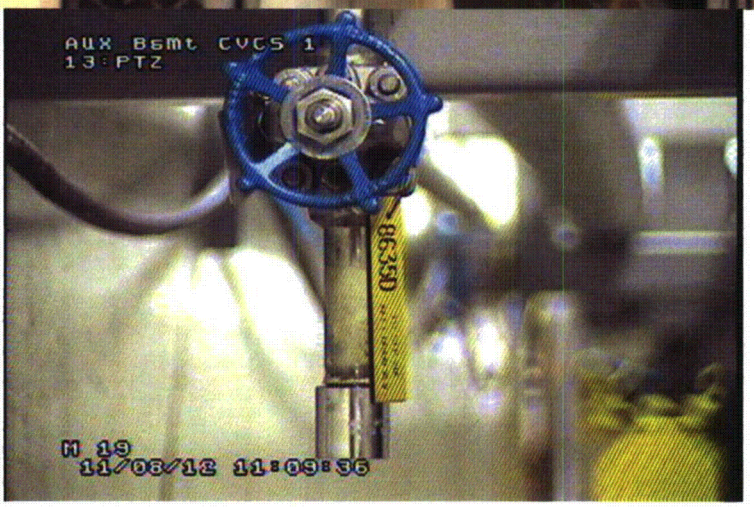
Equipment ID No.: 8635D

Equipment Class: (0) OTHER

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B INLET DRAIN VLV

Photos





ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8635G

Equipment Class: (0) OTHER

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B OUTLET DRAIN VLV

Project: Ginna SWEL 2

Location (Bldg, Elev, Room/Area): Auxiliary Building, 235', Area 17, CVCS Holdup Tank Room

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☐ N ☐ U ☐ N/A ☒

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8635G

Equipment Class: (0) OTHER

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B OUTLET DRAIN VLV

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

   Drain cap is in place.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Poor picture quality on initial walkdown, utilized remote monitoring video capture for clearer picture. Valve is on left in picture.

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8635G

Equipment Class: (0) OTHER

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B OUTLET DRAIN VLV

Photos

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8663

Equipment Class: (0) OTHER

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B OUTLET BLOCK VLV

Project: Ginna SWEL 2

Location (Bldg, Elev, Room/Area): Auxiliary Building, 235', Area 17, CVCS Holdup Tank Room

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☐ N ☐ U ☐ N/A ☒

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8663

Equipment Class: (0) OTHER

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B OUTLET BLOCK VLV

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
   Yes, existing piping systems above are routed through concrete blockouts, while SFP piping is routed in doorway. Concrete blockout provides support in event of failure of lines routed above

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 8663

Equipment Class: (0) OTHER

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B OUTLET BLOCK VLV

Photos

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☐ N ☒ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: ABCHP1B/1CRC

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

Equipment Description: CHARGING PUMP 1B / 1C MOTOR VFD RELAY CABINET

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Auxiliary Building, 253.00 ft, Area 20

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

   Reference ECP-11-000788, drawing SK-059186-C-004

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐
   (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☐ N ☒ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: ABCHP1B/1CRC

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

Equipment Description: CHARGING PUMP 1B / 1C MOTOR VFD RELAY CABINET

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

9. Do attached lines have adequate flexibility to avoid damage? Y ☐ N ☐ U ☐ N/A ☒

   Metal conduit affixed to same wall as cabinet

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☐ N ☒ U ☐

    During internal inspection of cabinet spare, loose electrical labels were found in cabinet (Foreign Material). CR-2012-008138 written, labels removed from cabinet

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☐ N ☒ U ☐

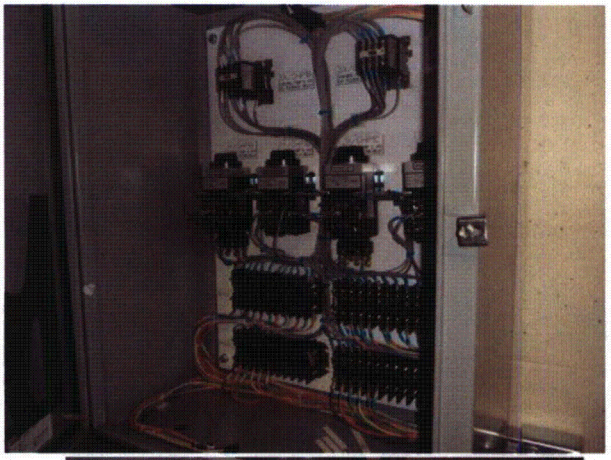
Seismic Walkdown Checklist (SWC)

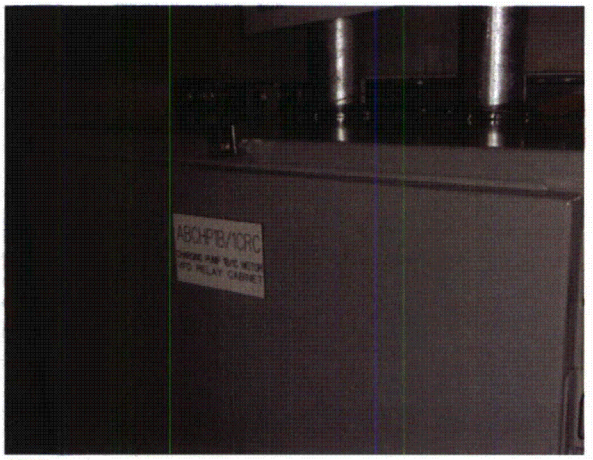
Equipment ID No.: ABCHP1B/1CRC

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

Equipment Description: CHARGING PUMP 1B / 1C MOTOR VFD RELAY CABINET

Photos





ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: ACP04 (ALTERNATE TRAIN COMPONENT FOR ACP02)

Equipment Class: (10) Air Handlers

Equipment Description: CONTAINMENT RECIRCULATING FILTER AND COOLING UNIT C

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Intermediate Level, North Side, 253'-0", Area 26d

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☒ N ☐
   D421-0006, DA-ME-99-029, MDCN 1740

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

   Missing anchor bolt at support plate at NW corner (expected), reason for supplemental anchor installation

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐
   (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
   Supplemental anchor installed in accordance with MDCN 1740 (Hilti Bolt)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: ACP04 (ALTERNATE TRAIN COMPONENT FOR ACP02)

Equipment Class: (10) Air Handlers

Equipment Description: CONTAINMENT RECIRCULATING FILTER AND COOLING UNIT C

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

   Fan and motor is bolted to frame which is located in ductwork enclosure

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

Fan Pelton 12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

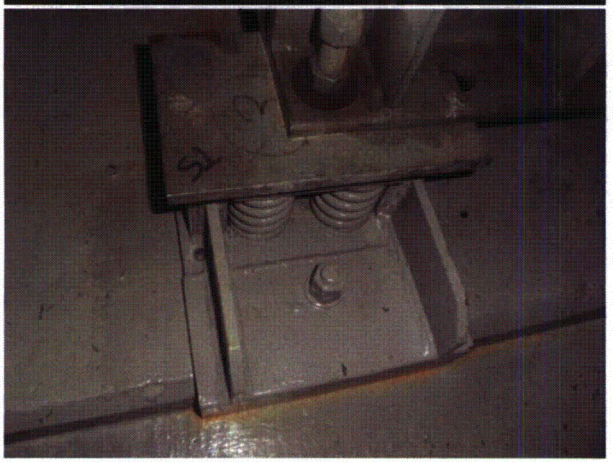
Seismic Walkdown Checklist (SWC)

Equipment ID No.: ACP04 (ALTERNATE TRAIN COMPONENT FOR ACP02)

Equipment Class: (10) Air Handlers

Equipment Description: CONTAINMENT RECIRCULATING FILTER AND COOLING UNIT C

Photos



Supplemental Anchorage Installed per MDCN-1740

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

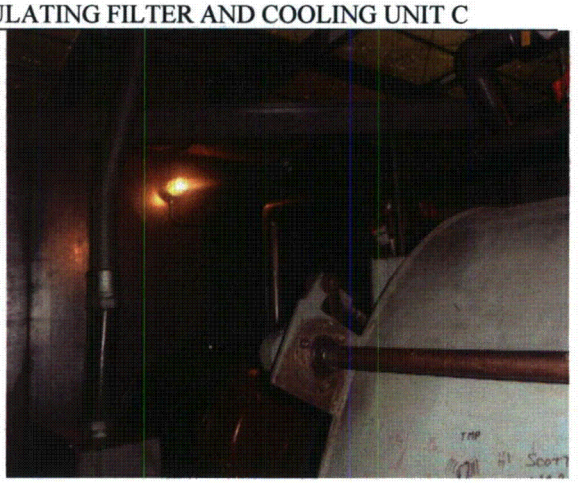
Status: Y ☒ N ☐ U ☐

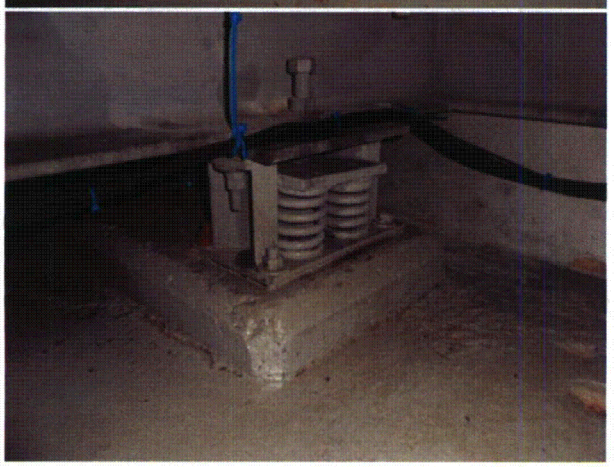
Seismic Walkdown Checklist (SWC)

Equipment ID No.: ACP04 (ALTERNATE TRAIN COMPONENT FOR ACP02)

Equipment Class: (10) Air Handlers

Equipment Description: CONTAINMENT RECIRCULATING FILTER AND COOLING UNIT C





ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: ACP06

Equipment Class: (10) Air Handlers

Equipment Description: POST ACCIDENT CHARACOL FILTER UNIT A

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Filter Mezzanine, North Side, 300'-0", Area 26e

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☒ N ☐
   Supplemental welded anchors tabs installed per IPEEE, drawing 33013-2766

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒
   The unit is welded to the support steel

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐
   (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: ACP06

Equipment Class: (10) Air Handlers

Equipment Description: POST ACCIDENT CHARACOL FILTER UNIT A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

   Permanently installed seismic scaffold adjoining unit on platform. Scaffold toeboard and netting is removed at power. Sufficient clearance exists between components and seismic scaffold. Scaffold is anchored to platform.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

    Ladder on platform grating not tied down. Units are free of soft targets. Ladder is removed from containment via Containment closeout procedure. Not an interaction concern.

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

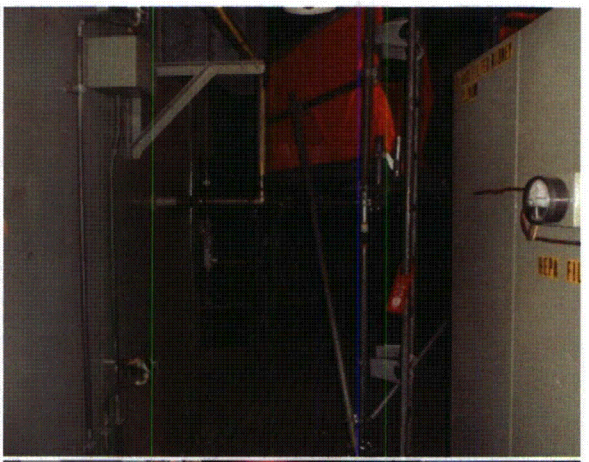
Seismic Walkdown Checklist (SWC)

Equipment ID No.: ACP06

Equipment Class: (10) Air Handlers

Equipment Description: POST ACCIDENT CHARACOL FILTER UNIT A

Photos



ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: ACP06

Equipment Class: (10) Air Handlers

Equipment Description: POST ACCIDENT CHARACOL FILTER UNIT A

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EAC13

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B

Project: Ginna SWEL 2

Location (Bldg, Elev, Room/Area): Auxiliary Building, 253', Area 21, AB West End-Intermediate Level

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☒ N ☐
   Heat exchanger replaced under ECP-2008-0100, Drawing 33013-2982 Sheet 2 utilized for verification

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐
   Recently painted

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐
   (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EAC13

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

   Lights are chained to structural steel, Non-Safety related block wall immediately south of heat exchanger. Limited height of wall, elevated heat exchanger, steel bay bracing and lack of soft targets on south side of heat exchanger provide protection against block wall failure. Heat exchanger is judged to be seismically rugged

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

   Completed in previous vendor walkdown

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

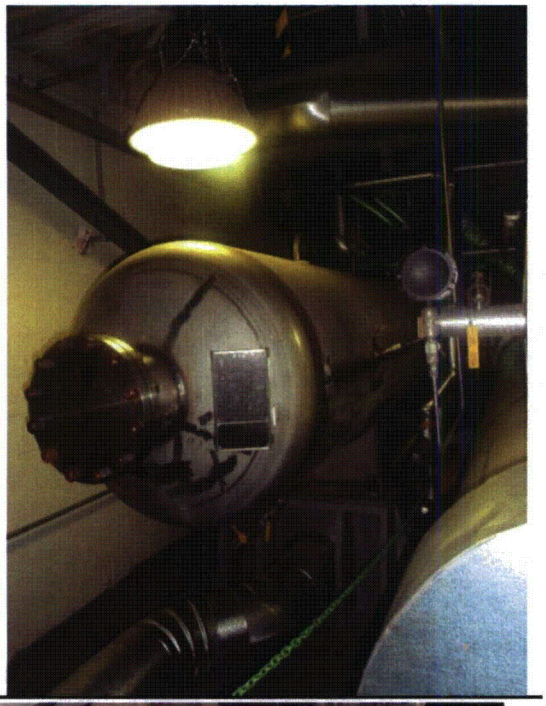
Seismic Walkdown Checklist (SWC)

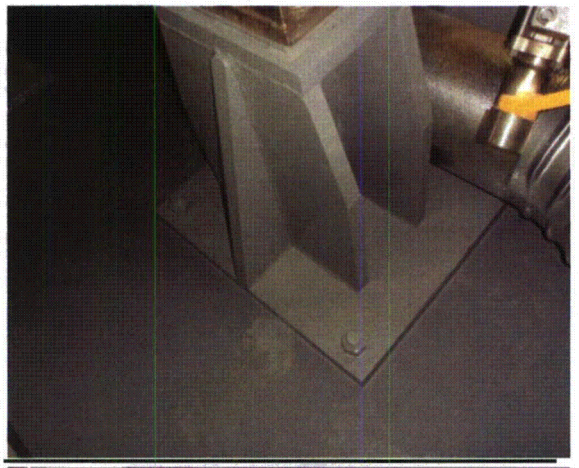
Equipment ID No.: EAC13

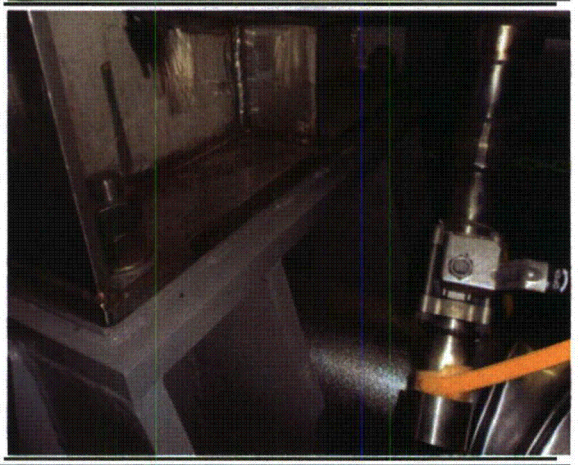
Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B

Photos







ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EAC13

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER B

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☐ N ☒ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EAC14

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER A

Project: Ginna SWEL 2

Location (Bldg, Elev, Room/Area): Auxiliary Building, 253', Area 21, AB West End-Intermediate Level

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☒ N ☐
   Drawing D422-0302 utilized for verification (Supplemental inspection performed by Ginna personnel with insulation removed for anchorage verification)

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐
   Recently painted

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☒ U ☐ N/A ☐
   East pedestal appears to have minor crack covered by paint. Potential cold joint seam in concrete. No deflection of pedestal or significant crack growth noted. CR-2012-008931 written

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐
   (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☐ N ☒ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☐ N ☒ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EAC14

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

   Completed in previous vendor walkdown

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

   Completed in previous vendor walkdown

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

   Completed in previous vendor walkdown

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sanchez Date: 12/10/2012

Jeffrey Sanchez 12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☐ N ☒ U ☐

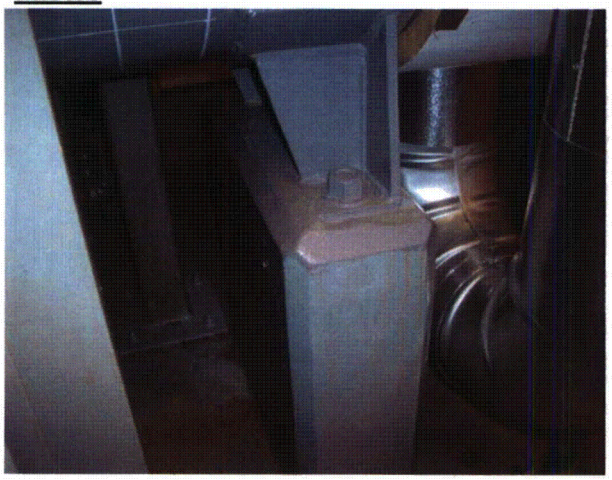
Seismic Walkdown Checklist (SWC)

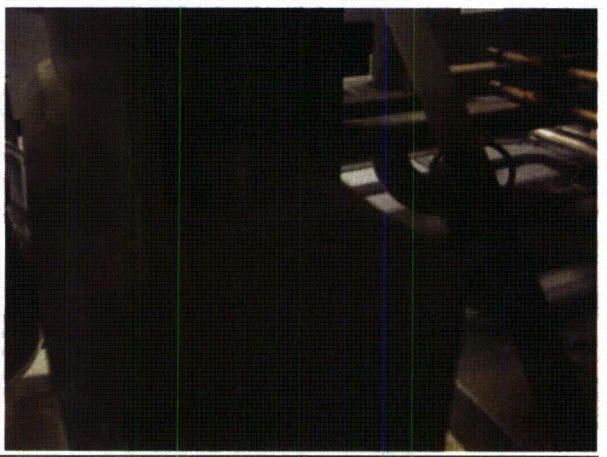
Equipment ID No.: EAC14

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER A

Photos





ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

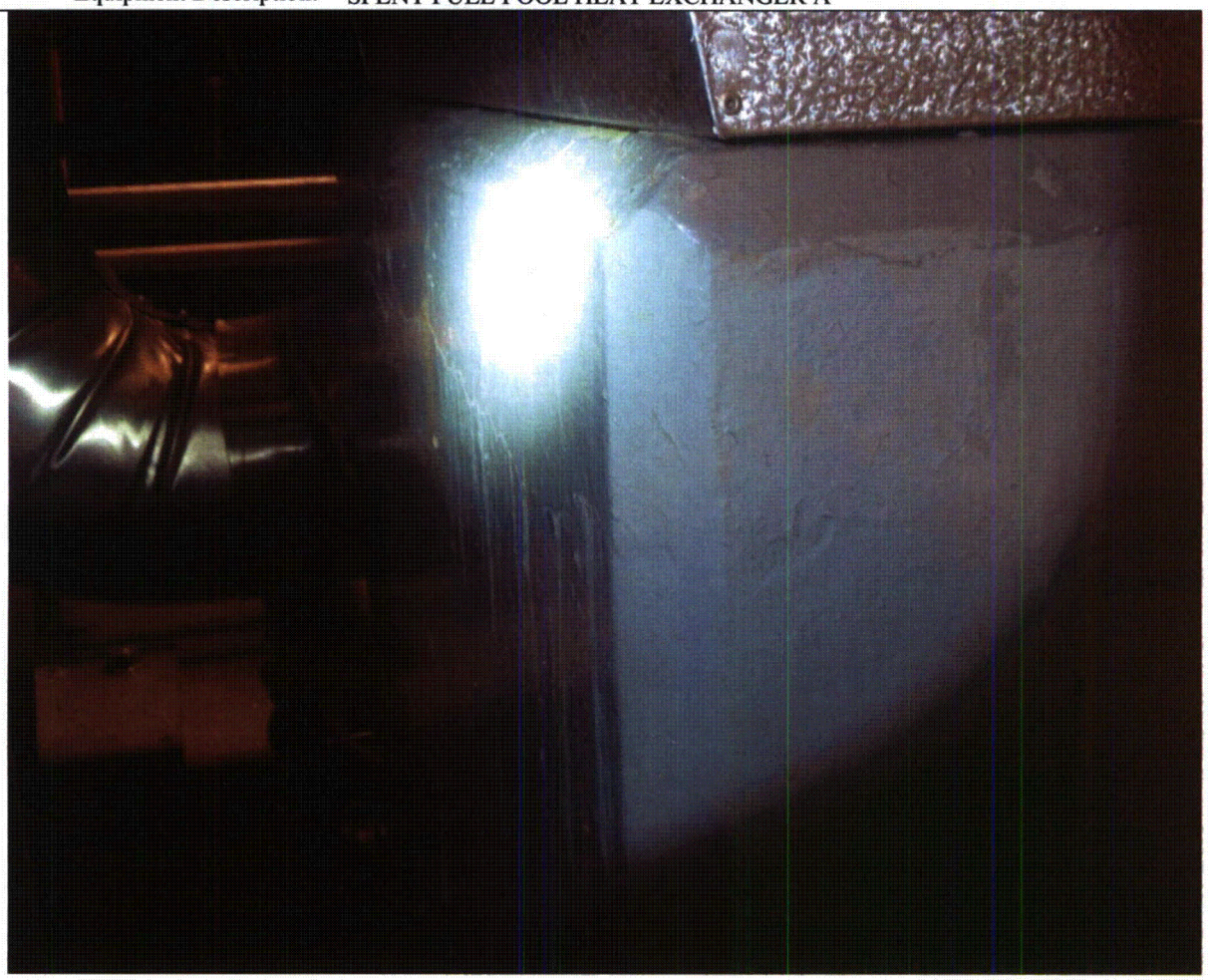
Status: Y ☐ N ☒ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EAC14

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER A



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

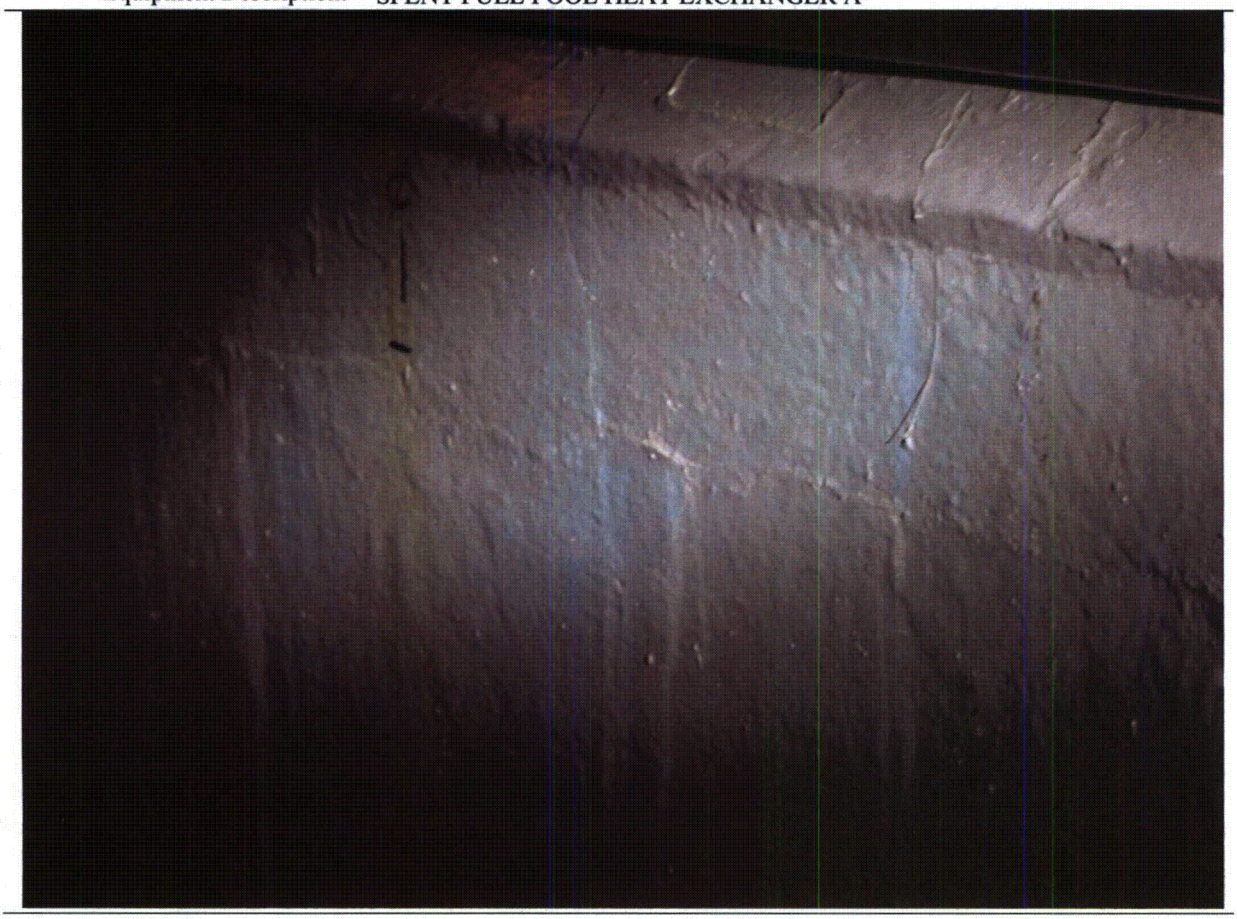
Status: Y ☐ N ☒ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EAC14

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL POOL HEAT EXCHANGER A



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: LT-504

Equipment Class: (18) Instruments on Racks

Equipment Description: STEAM GENERATOR EMS01A WIDE RANGE LEVEL TRANSMITTER

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Basement, North Side, 235'-0", Area 26c

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

   Transmitter is mounted to steel column

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: LT-504

Equipment Class: (18) Instruments on Racks

Equipment Description: STEAM GENERATOR EMS01A WIDE RANGE LEVEL TRANSMITTER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
Light suspended from conduit overhead. Light appears reasonably supported. Unistrut conduit support provides protection against failure. Judged acceptable by seismic walkdown team

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2

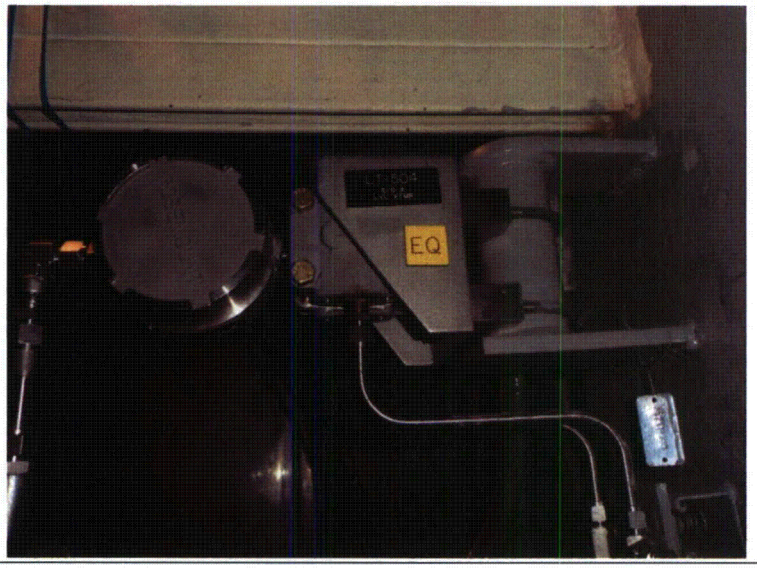
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.:	LT-504
Equipment Class:	(18) Instruments on Racks
Equipment Description:	STEAM GENERATOR EMS01A WIDE RANGE LEVEL TRANSMITTER

Photos:



ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

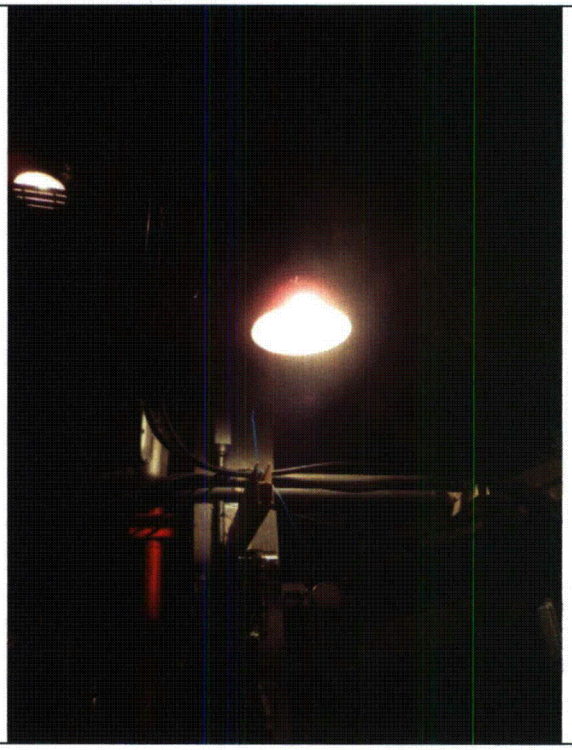
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: LT-504

Equipment Class: (18) Instruments on Racks

Equipment Description: STEAM GENERATOR EMS01A WIDE RANGE LEVEL TRANSMITTER



ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☐ N ☒ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: PAC01B

Equipment Class: (5) Horizontal Pumps

Equipment Description: RESIDUAL HEAT REMOVAL PUMP B

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Auxiliary Building Sub-basement, Area 25

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☒ N ☐
   PAC01B SEWS Rev 1, PCR-99-061, 33013-2792

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐
   (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
   Yes, verified replacement anchor (Maxi-Bolt) installed (IPEEE outlier)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☐ N ☒ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: PAC01B

Equipment Class: (5) Horizontal Pumps

Equipment Description: RESIDUAL HEAT REMOVAL PUMP B

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☐ N ☒ U ☐ N/A ☐

   Three ladders leaning against wall adjoining pump. No ladder station provided. Inspection team laid ladders on ground to remove interaction concern. CR-2012-006918 written for trending.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

   Overhead camera has supplemental cable tie off

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

Fan Pan 12/10/2012

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☐ N ☒ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: PAC01B

Equipment Class: (5) Horizontal Pumps

Equipment Description: RESIDUAL HEAT REMOVAL PUMP B

Photos

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

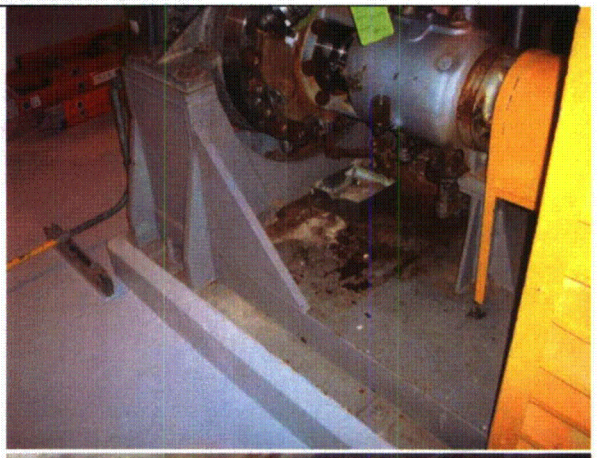
Status: Y ☐ N ☒ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: PAC01B

Equipment Class: (5) Horizontal Pumps

Equipment Description: RESIDUAL HEAT REMOVAL PUMP B



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TSI01

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: REFUELING WATER STORAGE TANK

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Auxiliary Building, Elevations 235' to 271, Area 19

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
   Supplemental Walkdown completed by Ginna personnel to inspect tank anchorage at elevation 235' and any interactions in high radiation areas. Majority of tank inspection, including collar at 271' covered under previous Seismic Walkdown Report
2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐
5. Is the anchorage configuration consistent with plant documentation? Y ☐ N ☐ U ☐ N/A ☒
   (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TSI01

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: REFUELING WATER STORAGE TANK

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

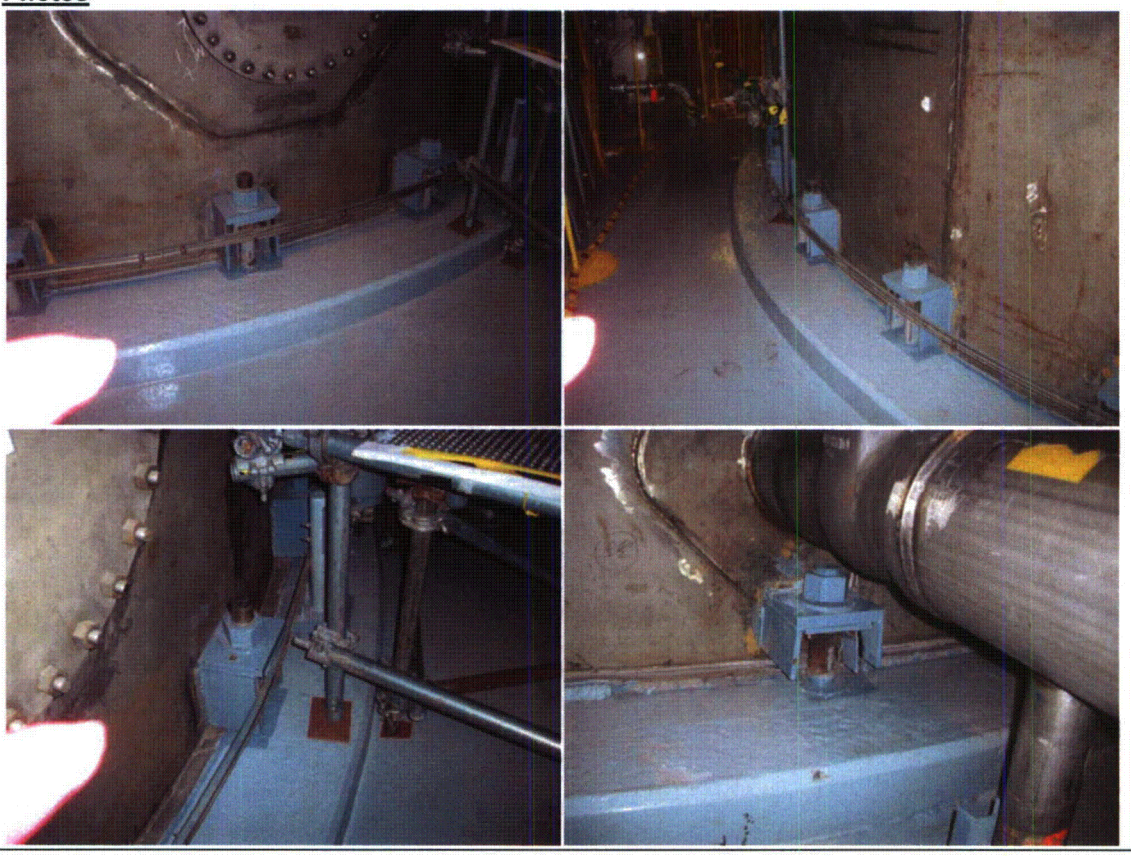
Seismic Walkdown Checklist (SWC)

Equipment ID No.: TSI01

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: REFUELING WATER STORAGE TANK

Photos



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

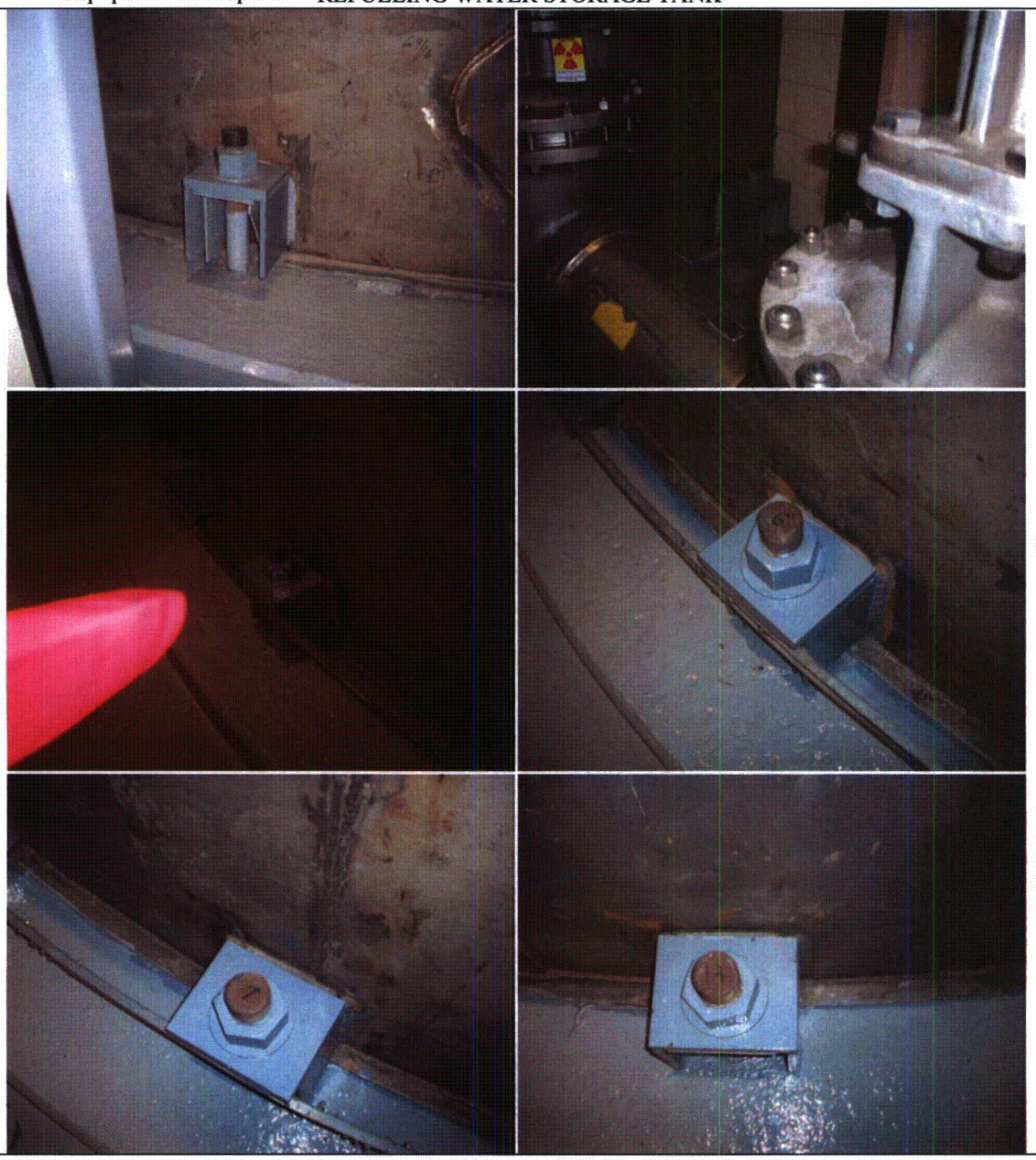
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TSI01

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: REFUELING WATER STORAGE TANK



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TSI01

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: REFUELING WATER STORAGE TANK

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TSI01

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: REFUELING WATER STORAGE TANK

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TSI01

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: REFUELING WATER STORAGE TANK

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TSI03A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SAFETY INJECTION ACCUMULATOR A

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Basement, North Side, 235'-0", Area 26c

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

   Verification Document: D421-0009

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☒ N ☐ U ☐ N/A ☐

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TSI03A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SAFETY INJECTION ACCUMULATOR A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐
Carts and miscellaneous items staged around accumulator. Accumulator is robust however surrounding components are not. Walkdown performed during refueling outage when equipment is not required. Carts and other items removed from Containment via Containment Closeout Procedure. Walkdown team judged this to not be an interaction concern during modes when the accumulator is required for operation.

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

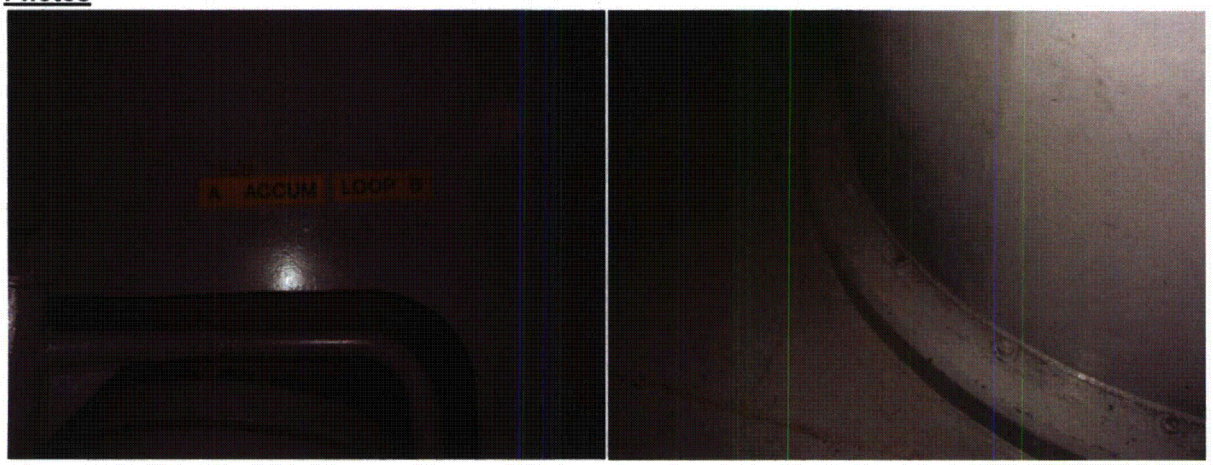
Seismic Walkdown Checklist (SWC)

Equipment ID No.: TSI03A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SAFETY INJECTION ACCUMULATOR A

Photos



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TT-2139 (Alternate train for TT-2145)

Equipment Class: (19) Temperature Sensors

Equipment Description: CRFC A AIR INLET TEMPERATURE

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Intermediate Level, North Side, 253'-0", Area 26d

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TT-2139 (Alternate train for TT-2145)

Equipment Class: (19) Temperature Sensors

Equipment Description: CRFC A AIR INLET TEMPERATURE

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
Temperature transmitter is protected by platform grating above

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2

SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

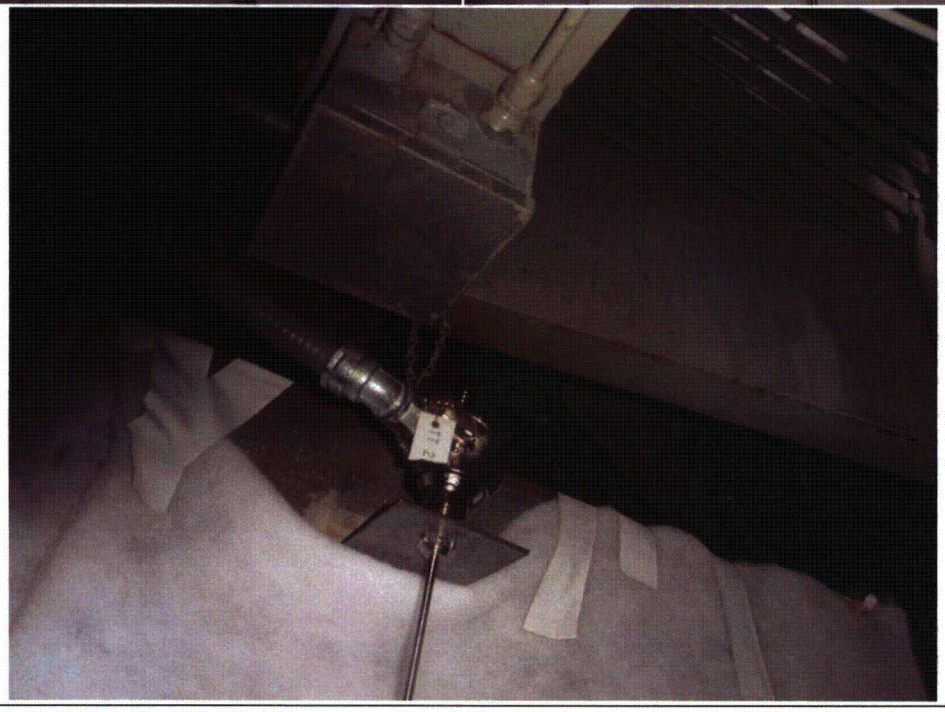
Seismic Walkdown Checklist (SWC)

Equipment ID No.: TT-2139 (Alternate train for TT-2145)

Equipment Class: (19) Temperature Sensors

Equipment Description: CRFC A AIR INLET TEMPERATURE

Photos



ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TT-2140 (Alternate train for TT-2146)

Equipment Class: (19) Temperature Sensors

Equipment Description: CRFC A AIR OUTLET TEMPERATURE

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Containment, Intermediate Level, North Side, 253'-0", Area 26d

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☐ N ☐ U ☐ N/A ☒

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y ☐ N ☐ U ☐ N/A ☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TT-2140 (Alternate train for TT-2146)

Equipment Class: (19) Temperature Sensors

Equipment Description: CRFC A AIR OUTLET TEMPERATURE

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
Temperature transmitter is protected by platform grating above

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TT-2140 (Alternate train for TT-2146)

Equipment Class: (19) Temperature Sensors

Equipment Description: CRFC A AIR OUTLET TEMPERATURE

Photos

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: VFD/CHP1B

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

Equipment Description: CHARGING PUMP 1B MOTOR VFD

Project: Ginna SWEL 1

Location (Bldg, Elev, Room/Area): Auxiliary Building, 235.00 ft, Area 27

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

   Reference ECP-11-000788, drawing SK-059186-C-010, Sheets 1 & 2

2. Is the anchorage free of bent, broken, missing or loose hardware Y ☒ N ☐ U ☐ N/A ☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

   Team concerned with large exposed thread length. Anchors stamped "R" (10" to 11" long with 4-1/2 exposed. Minimum required embedment is 4-3/4", condition is acceptable as is

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐
   (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: VFD/CHP1B

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

Equipment Description: CHARGING PUMP 1B MOTOR VFD

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐

   Ductwork and newly installed conduit well supported

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

    Internal inspection: Clean, recently installed cabinet with no signs of supplemental modifications

Comments

Evaluated by: Jeffrey Sandin Date: 12/10/2012

Date: 12/10/2012

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: VFD/CHP1B

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

Equipment Description: CHARGING PUMP 1B MOTOR VFD

Photos

ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

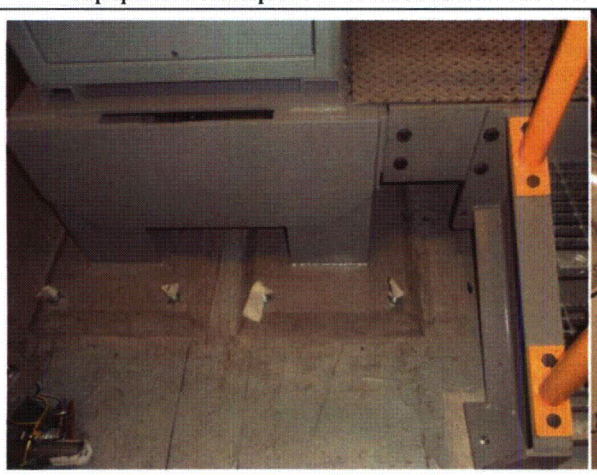
Status: Y ☒ N ☐ U ☐

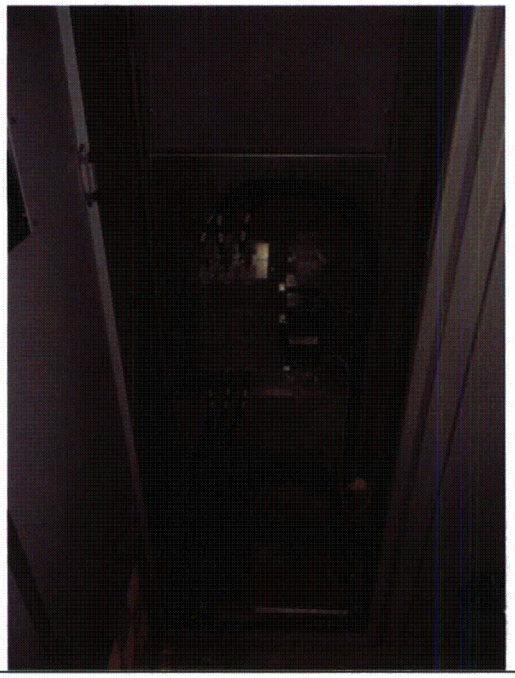
Seismic Walkdown Checklist (SWC)

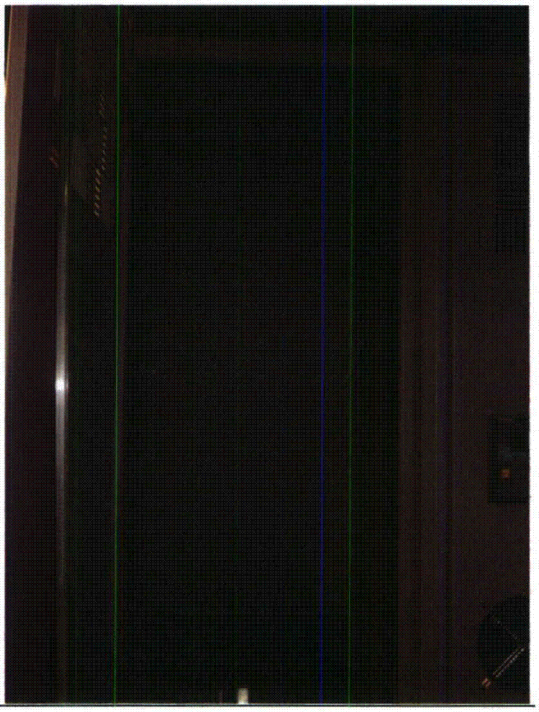
Equipment ID No.: VFD/CHP1B

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

Equipment Description: CHARGING PUMP 1B MOTOR VFD







ATTACHMENT 2
SEISMIC WALKDOWN CHECKLISTS

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC)

Equipment ID No.: VFD/CHP1B

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

Equipment Description: CHARGING PUMP 1B MOTOR VFD