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L-2012-416

10 CFR 50.54(f)

U. S. Nuclear Regulatory Commission  
Attn.: Document Control Desk  
Washington, D.C. 20555-0001

Turkey Point Units 3 and 4  
Docket Nos. 50-250 and 50-251  
Response to NRC 10 CFR 50.54(f) Request for Information Regarding Near-Term Task Force Recommendation 2.3, Seismic

References:

1. NRC Letter, Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendations 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-Ichi Accident; dated March 12, 2012, Accession No. ML12073A348.
2. NRC Letter to Nuclear Energy Institute, "Endorsement of Electric Power Research Institute (EPRI) Draft Report 1025286, 'Seismic Walkdown Guidance,' " dated May 31, 2012, Accession No. ML12145A529.
3. M. Kiley (FPL) to U.S. Nuclear Regulatory Commission (L-2012-272), "Florida Power & Light Company's 120-Day Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Seismic Aspects of Recommendation 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," Accession No. ML12198A003, June 29, 2012.

Per Reference 1, the above report is to be submitted within 180 days of the NRC's endorsement of the walkdown process and should include a list of any areas that could not be inspected due to inaccessibility and should identify a schedule for when the walkdown will be completed.

On May 31, 2012, the NRC issued its endorsement of EPRI Draft Report 1025286, Seismic Walkdown Guidance (Reference 2). Based on the Reference 2 endorsement date, the subject seismic walkdown report is due by November 27, 2012.

Per Reference 3, Florida Power & Light confirmed that it will use the NRC-endorsed EPRI Report 1025286, Seismic Walkdown Guidance. The enclosed report, Seismic Walkdown Report in Response to the 50.54(f) Information Request Regarding Fukushima Near-Term Task Force Recommendations 2.3: Seismic for Turkey Point Unit 3 and 4, was prepared in accordance with the approved EPRI guidance and provides the requested seismic walkdown information. This submittal completes FPL's response to the Reference 1, Enclosure 3 information request.

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

AODI  
NRR

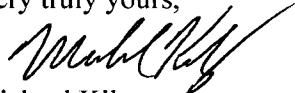
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If you have any questions or require additional information, please contact Mr. Robert J. Tomonto, Licensing Manager, at (305) 246-7327.

I declare under penalty of perjury that the foregoing is true and correct.  
Executed on November 27, 2012.

Very truly yours,



Michael Kiley  
Site Vice President  
Turkey Point Nuclear Plant

Enclosure

cc: USNRC Regional Administrator, Region II  
USNRC Project Manager, Turkey Point Nuclear Plant  
USNRC Senior Resident Inspector, Turkey Point Nuclear Plant

Turkey Point Nuclear Plant  
Docket Nos. 50-250 and 50-251

L-2012-416  
Enclosure

**Enclosure**

**Seismic Walkdown Report in Response to the 50.54(f) Information Request  
Regarding Fukushima Near-Term Task Force Recommendations 2.3:  
Seismic for Turkey Point Unit 3, Rev. 1**

**360 pages**

**Seismic Walkdown Report in Response to the 50.54(f) Information Request  
Regarding Fukushima Near-Term Task Force Recommendations 2.3:  
Seismic for Turkey Point Unit 4, Rev. 1**

**352 pages**

**SEISMIC WALKDOWN REPORT**

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

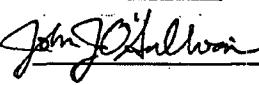
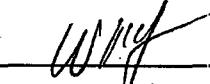
**For**

**TURKEY POINT UNIT 3  
NRC Docket No. 50-250**

Florida Power & Light Company  
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Submittal Date: November 2012

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## **Executive Summary**

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The purpose of this report is to provide information as requested by the Nuclear Regulatory Commission (NRC) in its March 12, 2012 letter issued to all power reactor licensees and holders of construction permits in active or deferred status. (Ref. 12) In particular, this report provides information requested to address Enclosure 3, Recommendation 2.3: Seismic, of the March 12, 2012 letter. (Ref. 12)

The 50.54(f) letter requires, in part, all U.S. nuclear power plants to perform seismic walkdowns to verify the current plant configuration is within the current seismic licensing basis and identify and address degraded, non-conforming or unanalyzed conditions found. This report documents the seismic walkdowns performed at Turkey Point Unit 3 in response, in part, to the 50.54(f) letter issued by the NRC.

The Nuclear Energy Institute (NEI), supported by industry personnel, cooperated with the NRC to prepare guidance for conducting seismic walkdowns as required in the 50.54(f) letter, Enclosure 3, Recommendation 2.3: Seismic. (Ref.12). The guidelines and procedures prepared by NEI and endorsed by the NRC were published through the Electric Power Research Institute (EPRI) as EPRI Technical Report 1025286, Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic, dated June 2012; henceforth, referred to as the "EPRI guidance document." (Ref. 1) Turkey Point has utilized this NRC endorsed guidance as the basis for the seismic walkdowns and this report. (Ref. 1)

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

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

### Seismic Licensing Basis

The safe shutdown earthquake for the Turkey Point site is 0.15g horizontal ground acceleration and 0.10 g vertical ground acceleration. (Ref. 2, Section 2)

### Personnel Qualifications

The walkdown team consisted of experienced site personnel with Civil/Structural or Mechanical Engineering, Operations and PRA backgrounds. The site personnel were supplemented by two vendors with significant experience in the area of seismic design and the performance of seismic walkdowns. The personnel who performed the key activities required to fulfill the objectives and requirements of the 50.54(f) letter are qualified and trained as required in the EPRI guidance document (Ref. 1).

### Selection of SSCs

One hundred (100) components were selected for the walkdown effort, including spent fuel pool items. These components were selected using the process described in detail in the EPRI guidance document, Section 3: Selection of SSCs. (Ref. 1)

### Seismic Walkdowns and Area Walk-Bys

Section 5, Appendix C, and Appendix D of this report documents the equipment Seismic Walkdowns and the Area Walk-Bys. The online seismic walkdowns for Turkey Point Unit 3 were performed September 10-14, 2012. The walkdown team consisted of two 2-person Seismic Walkdown Engineer (SWE) teams.

The seismic walkdown team inspected 90 of the 100 components on the seismic walkdown equipment list (comprised of SWEL 1 and SWEL 2). Ten components were inaccessible and future walkdowns are planned for these items. Follow-up inspections are also to be performed on electrical panels that could not be opened at the time of the initial walkdown.

Equipment Seismic Walkdowns included anchorage inspections and checks to verify as-found anchorages are consistent with design documents. The walkdown found cases where the as-found anchorage was not consistent with the design document. In other cases the document identifying anchorage design could not be identified. Instances of anchor corrosion were cited, but the extent of corrosion is not a seismic capacity concern at this time. Except for the item E16B air handling unit (AHU), no concerns with overall anchorage strength were identified. The E16B AHU was found to be lacking positive base anchorage. The operability of the unit was addressed and the unit was found to be operable.

Potential seismic interaction concerns were identified but none of the issues were considered to be hazards that rendered equipment inoperable. Other equipment interaction issues are related to clearances between equipment and adjacent items and improper seismic housekeeping. Loose or missing hardware, such as loose thumbscrews or latches, were found and cited under "Other" potentially adverse conditions.

Area Walk-Bys identified potentially adverse conditions relate to improper seismic housekeeping. Potential seismic interaction concerns were also identified but none of the issues were considered to be significant immediate hazards. In some cases potential relay chatter due to bumping of equipment is cited. Potential relay chatter issue is undesirable but the overall plant hazard related to relay chatter is typically low. For the Turkey Point USI A-46 evaluation (Reference 9), relay chatter was dismissed as a concern. One potential seismically-induced spray hazard was cited as requiring evaluation.

### Seismic Licensing Basis Evaluations

Conditions identified during the walkdowns were documented on the Seismic Walkdown Checklists (SWCs) and the Area Walkdown Checklists (AWCs), and entered into the CAP. For those conditions that operability or functionality could not be screened as acceptable, evaluations were initiated to demonstrate that the current licensing basis was met. Tables 5-2 and 5-3 in the report provide a summary of the conditions and the actions taken.

### IPEEE Vulnerabilities

In lieu of a full IPEEE seismic analysis, FPL opted to submit a "scaled back" program to resolve USI A-46 and Generic Letter 87-02 as allowed by the NRC in a letter dated November 4, 1998 (Ref. 13) issued for the review of Turkey Point IPEEE evaluations. The final results of this scaled back program for the A-46 program were submitted in a letter to the NRC, L-93-155, "Final Report of Plant Specific Seismic Adequacy Evaluation of Turkey Point Units 3 and 4 to Resolved USI A-46 and GL 87-02" (Ref. 14). The components selected for this analysis were also included in the SWEL in order to verify no outlier issues persisted.

### Peer Reviews

The Peer Review of the walkdowns consisted of two teams made up of Operations and PRA representatives and engineers with knowledge and experience in seismic inspections and assessments. The engineers made up the SWE teams, but also served to peer review each other's work. The Operations and PRA representatives also participated in some of the walkdowns for logistical support as well as peer review. Appendix F of this report contains a summary of the Peer Review. The Peer Review determined that the objectives and requirements of the 50.54(f) letter are met. Further, it was concluded by the peer reviews that the efforts completed and documented within this report are in accordance with the EPRI guidance document.

### Summary

In summary, seismic walkdowns have been completed at Turkey Point Unit 3 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. None of the conditions found resulted in loss of operability or functionality of any structures, systems or components.

Follow-on activities required to complete the efforts to address Enclosure 3 of the 50.54(f) letter include inspection of items deferred due to inaccessibility along with supplemental inspections of electrical cabinets. Area Walk-Bys will be complete, as required, during these follow-on activities.

# 1

## Introduction

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### 1.1 BACKGROUND

In response to Near-Term Task Force (NTTF) Recommendation 2.3, the Nuclear Regulatory Commission (NRC) issued a 10CFR50.54(f) letter on March 12, 2012 requesting that all licensees perform seismic walkdowns to identify and address plant degraded, non-conforming, or unanalyzed conditions, with respect to the current seismic licensing basis. The Nuclear Energy Institute (NEI), through the Electric Power Research Institute (EPRI), prepared industry guidance to assist licensees in responding to this NRC request. The industry guidance document, EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012 (Reference 1), was endorsed by the NRC on May 31, 2012. NextEra/Florida Power & Light Company (FPL) has committed to using this guidance as the basis for completing the walkdown effort.

### 1.2 PLANT OVERVIEW

The Turkey Point (PTN) site is located on the west shore of Biscayne Bay in Dade County, Florida. The site is 25 miles south of Miami and eight miles east of Florida City. The site contains two fossil units (Unit 1 and 2), two nuclear units (Units 3 and 4), and one combined cycle gas-powered unit (Unit 5). The plant's nuclear steam supply system (NSSS) was designed by Westinghouse Electric Corporation. The Containment structure and balance of plant was designed by Bechtel Corporation. The general description of the plant given above is based on the information in the UFSAR (Reference 2).

### 1.3 APPROACH

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

- Seismic Licensing Basis
- Personnel Qualifications
- Selection of SSCs
- Seismic Walkdowns and Area Walk-Bys
- Licensing Basis Evaluations
- IPEEE Vulnerabilities Resolution Report
- Peer Review

# 2

## Seismic Licensing Basis

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### 2.1 SITE SEISMICITY

Site seismicity is discussed in UFSAR (Reference 2) Section 2. On the basis of historical or statistical seismic activity, Turkey Point is located in a seismically inactive area, far from any recorded damaging shocks. Even though several of the larger historical earthquakes may have been felt in southern Florida, the amount of ground motion caused by them was not great enough to cause damage to any moderately well-built structure.

Predicated on history, building codes, geologic conditions, and earthquake probability, the design earthquake was conservatively established as 0.05 g horizontal ground acceleration. The nuclear units have also been evaluated for a 0.15 g ground acceleration to assure no loss of function of the vital systems and structures. Vertical acceleration is taken as 2/3 of the horizontal value and is considered to act concurrently.

### 2.2 SEISMIC DESIGN BASIS

The seismic design was based on the acceleration ground response spectrum curves shown in UFSAR Figures 5A-1 and 5A-2. The curves were derived from the "Housner Spectrum" normalized to 0.05g for the design earthquake and 0.15g for the maximum earthquake. The UFSAR commitment for a maximum earthquake was determined at a time when probabilistic definition of seismic input had not been developed with any degree of consistency or confidence. Therefore, the 0.15g PGA was conservatively estimated based on very limited data available at the time.

The original design basis commits Turkey Point to the 1967 proposed version of General Design Criterion (GDC) Number 2 that relates to earthquake natural phenomena as identified below and is as follows:

*"Those systems and components of reactor facilities which are essential to the prevention or to the mitigation of the consequences of nuclear accidents which could cause undue risk to the health and safety of the public shall be designed, fabricated, and erected to performance standards that will enable such systems and components to withstand, without undue risk to the health and safety of the public the forces that might reasonably be imposed by the occurrence of an extraordinary natural phenomenon such as earthquake, tornado, flooding condition, high wind or heavy ice. The design bases so established shall reflect: (a) appropriate consideration of the most severe of these natural phenomena that have been officially recorded for the site and the surrounding area and (b) an appropriate margin for withstanding forces greater than those recorded to reflect uncertainties about the historical data and their suitability as a basis for design."*

AEC Publication TID-7024 (Reference 4) was used as the basic design guide for earthquake analysis. Floor response spectra were developed from the ground spectra for the Containment Buildings and Control Building to evaluate structures, systems, and components at the various elevations of those structures. Earthquake forces were applied simultaneously in the vertical and any horizontal direction. The vertical component of acceleration at any level was taken as two-thirds of the horizontal ground acceleration. The damping factors for various types of construction are listed in Reference 2, Appendix 5A.

For concrete structures and components, the basic code for determining the section strengths for original design was ACI 318-63 (Reference 5). For steel structures and components, the basic code for determining the section strengths was the AISC Steel Construction Manual, 6th Edition (Reference 6). Later codes were used for plant upgrades. Design requirement for equipment varied by equipment type. The mechanical and electrical equipment were purchased under specifications that include a description of the seismic design criteria for the plant. Motor control centers and load centers were shake table tested to demonstrate no-loss-of-function capacity under the maximum hypothetical earthquake.

The Turkey Point units were within the scope of NRC unresolved safety issue (USI) A-46 (Reference 7), which required a re-evaluation of safety-related mechanical and electrical equipment. At about the same time the NRC asked all operating power plants to undertake an investigation of design capability to extreme external events (Reference 8). Turkey Point resolved these issues as discussed in the next section. Resolution included implementation of seismic design improvements.

### **2.3 USI A-46 AND SEISMIC IPEEE**

Generic Letter 87-02, "Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue (USI) A-46" (Reference 7) addressed seismic adequacy of equipment at older nuclear plants. Turkey Point Units 3 and 4 were within the scope of USI A-46.

The evaluation of Turkey Point for resolution of USI A-46 is reported in Reference 9. FPL developed and implemented a plant specific program to satisfy requirements of USI A-46 as agreed between FPL and the USNRC. The program consisted of developing a walkdown procedure that concentrated on anchorage concerns of USI A-46, the seismic spatial interaction concerns of USI A-17 and the design concerns for large tanks in USI A-40. The program was developed by FPL to be appropriate and cost effective for addressing GL87-02 concerns at its low seismic sites. The basic requirement for the walkdown was that the equipment be able to withstand the design basis SSE at the plant and still provide its safe shutdown function. The procedure used relied on the judgment of an expert team to meet the basic requirement. A success path of equipment using safety and non-safety equipment was selected for achieving hot shutdown of the plant within a period of 8 hours.

An assessment of the anchorage adequacy was performed on each equipment item included on the safe shutdown list. This included an assessment of the seismic demand on the equipment anchorage (forces and stresses on the anchorage), the seismic capacity of the anchorage components (attachment of the equipment to the anchorage,

the anchorage itself, and the development of the anchorage to the foundation), and whether the capacity of the weak link of the anchorage system exceeded the demand.

A seismic spatial interaction assessment was performed on each equipment item included on the safe shutdown list. The following seismic spatial interaction issues were evaluated: 1) heavy objects falling (sometimes referred to as II over I interactions), 2) heavy objects sliding, swinging, vibrating or tipping (proximity interactions) and 3) inadequate flexibility of lines to accommodate seismic-induced relative movements between utility support points. An assessment was made as to whether possible interactions existed, and if it did, could the interaction preclude the equipment item from performing a safe shutdown function. Those interactions identified as possibly precluding the equipment item's safe shutdown function were identified as outliers.

The walkdown resulted in the identification of outlier equipment items with the majority of the outliers being lack of anchorage for electrical cabinets which were not previously required to be anchored. FPL addressed all outlier issues listed and the actions taken are listed in Reference 9 Table 5.0. In many cases, FPL engineering generated Plant Change/Modification (PC/M) Packages which provided for physical modification to plant equipment resulting in additional seismic "hardening" of the equipment.

Generic Letter 88-20, Supplement 4, "Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities" (Reference 8) addressed plant-specific vulnerabilities to severe accidents. For implementation of the IPEEE, Turkey Point was classified as a "reduced scope" plant per NUREG-1407 (Reference10). As such, the review level earthquake was equal to the site SSE and completion of the USI A-46 assessment largely satisfied the seismic IPEEE requirements. FPL informed the NRC that the plant specific program developed for USI A-46 would be used to resolve GL 88-20 Supplement 4 at Turkey Point (see Reference 11).

# 3

## Personnel Qualifications

### 3.1 OVERVIEW

This section of the report identifies the personnel who participated in the NTTF 2.3 Seismic Walkdown efforts. A description of the responsibilities of each Seismic Walkdown participant's role(s) is provided in Section 2 of the EPRI Seismic Walkdown Guidance (Reference 1). Resumes contained in Appendix A provide detailed personnel qualifications information.

### 3.2 PROJECT PERSONNEL

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

Table 3-1. Personnel Roles

Name	Equipment Selection Engineer	Plant Ops.	Seismic Walkdown Engineer (SWE)	Licensing Basis Reviewer	IPEEE Reviewer	Peer Reviewer
Turkey Point (FPL)						
C. Figueroa			X	X	X	X <sup>(note 2)</sup>
T. Satyan-Sharma			X	X	X	X <sup>(note 2)</sup>
G. Tullidge	X					X
A. Restrepo	X				X	X <sup>(note 1)</sup>
T. Jones	X	X				
Stevenson & Assoc.						
J. O'Sullivan			X	X		X <sup>(note 2)</sup>
S. Baker			X	X		X <sup>(note 2)</sup>

Notes:

1. Peer Review Team Leader
2. Provided peer review of a sample of other SWE team's SWCs & AWCs.

### **3.3 EQUIPMENT SELECTION PERSONNEL**

The SWEL development was performed by the Peer Review Team Lead member of the PRA Group. The SWEL was then independently reviewed by another member of the PRA Group, by Operations, and finally by Peer Reviewers from Engineering.

### **3.4 SEISMIC WALKDOWN ENGINEERS**

The seismic walkdowns were performed by four seismic walkdown engineers (SWEs) grouped into two seismic walkdown teams (SWTs).

The lead SWEs are engineers from Stevenson and Associates (S&A). S&A is recognized internationally as a leading seismic consultant to the nuclear industry and as a regular contributor to the advancement of earthquake engineering knowledge through funded research projects. The professional staff has expertise and capabilities in earthquake engineering, structural dynamics, and structural design. S&A has performed seismic evaluations of US nuclear power plants, using either Seismic Probabilistic Risk Assessment (PRA) or Seismic Margin Assessment, to address US Nuclear Regulatory Commission (NRC) Individual Plant Evaluation for External Events (IPEEE) for over 35 US and European plants.

### **3.5 LICENSING BASIS REVIEWERS**

The Licensing Basis Reviewers consisted of the four seismic walkdown engineers. The FPL engineers had the lead in licensing basis determinations, with support from the S&A engineers.

### **3.6 IPEEE REVIEWERS**

IPEEE reviewers were engineers familiar with implementation of IPEEE at the Turkey Point site. The IPEEE Reviewers also participated in the SWEL preparation and seismic walkdowns.

### **3.7 PEER REVIEW TEAM**

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

### **3.8 ADDITIONAL PERSONNEL**

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

# 4

## Selection of SSCs

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The Seismic Walkdown Equipment List is documented in the *SWEL Selection Report*, provided in Appendix B. This report describes how the SWEL was developed to meet the requirements of EPRI Seismic Walkdown Guidance (Reference 1). The summary of the Seismic Walkdown Equipment List is included in Appendix C under Table C-1 Summary of Seismic Walkdown Checklists. The final SWEL (both SWEL 01 & SWEL 02) which details all of the component attributes used in the screening process, as well as the Master Component List, are on-file.

# **5**

## **Seismic Walkdowns and Area Walk-Bys**

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### **5.1 OVERVIEW**

The Seismic Walkdowns and Area Walk-Bys were conducted by 2-person teams of trained Seismic Walkdown Engineers, in accordance with the EPRI Seismic Walkdown Guidance (Reference 1). The walkdowns occurred on September 10-14, 2012. Components in the Containment building were inaccessible and will be inspected during the next refueling outage, currently scheduled for early 2014. The Seismic Walkdowns and Area Walk-Bys are discussed in more detail in the following sections.

### **5.2 SEISMIC WALKDOWNS**

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

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

The results of the Seismic Walkdowns have been documented on the Seismic Walkdown Checklist (SWC) provided in the EPRI guidance document, Appendix C.

Seismic Walkdowns were performed for 90 of the 100 items identified on the Turkey Point Unit 3 SWEL. The remaining items will be inspected in the refueling outage as previously noted. The associated SWCs are provided in Appendix C of this report. Additionally, photos have been included with most SWCs to provide a visual record of the item along with any comments noted on the SWC. These photos are not included to limit the size of this report but are on file. Drawings and other plant records are cited in some of the SWCs, but are not included with the SWCs because they are readily retrievable documents through the station's document management system.

Inspection for certain items could not be completed due to access restrictions. Appendix E of this report identifies the inaccessible equipment along with the plan for future Seismic Walkdowns.

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

### **5.2.1 Adverse Anchorage Conditions**

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

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

#### Visual Inspections

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

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

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

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

### **5.2.2 Anchorage Configuration Confirmation**

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

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

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

The SWC listed in Appendix C indicate the anchorage verification status for components as follows:

**N/A:** component that is line-mounted and/or is not anchored to the civil structure and therefore does not count in the anchorage confirmation total.

**Y:** component that is anchored to the civil structure and was chosen for anchorage configuration confirmation.

**N:** component which had anchorage but was not chosen for anchorage configuration confirmation.

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

**Table 5-1: Anchorage Configuration Confirmation**

Total SWEL Items	SWEL Items without Anchorage (N/A)	Minimum Required	Total Items Chosen
A	B	(A-B)/2	
100	29	36	37

### **5.2.3 Adverse Seismic Spatial Interactions**

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

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

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

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

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

### **5.2.4 Other Adverse Seismic Conditions**

In addition to adverse anchorage conditions and adverse seismic interactions, described above, other potentially adverse seismic conditions that could challenge the seismic adequacy of a SWEL item were evaluated. These inspections were mostly associated

with in-cabinet inspections of selected electrical equipment. Examples of the types of conditions that could pose potentially adverse seismic conditions include the following:

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

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

#### **5.2.5 Issues Identification during Seismic Walkdowns**

Table 5-2 provides a summary of issues identified during the equipment Seismic Walkdowns and recorded on SWCs. The tracking of issue resolution is identified in the table. Items are grouped based on the walkdown issue cited:

- Anchorage issues
- Seismic interaction issues
- Other conditions
- Anchorage documentation not available
- Anchorage inspection could not be fully completed

The majority of potentially adverse anchorage conditions found are related to documentation of as-found anchorage. In those cases either the as-found anchorage was not consistent with the available document, or the document identifying the anchorage design could not be identified. Except for the item E16B air handling unit (AHU), no concerns with overall anchorage strength were identified. There was one instance where anchor corrosion was cited, but the extent of corrosion is minor at this time. The E16B AHU was found to be lacking positive base anchorage. Low seismic ruggedness of attached piping was also cited as a concern. The operability of the unit was addressed and the unit was found to be operable.

Potential seismic interaction concerns were identified but none of the issues were considered to be significant hazards but will be addressed to reduce risk. Most equipment interaction issues are related to clearances between equipment and adjacent items and improper seismic housekeeping. Under good seismic housekeeping practice, transient and moveable items (e.g., ladders) should be restrained or stowed such that they will not slide into or fall against important plant equipment.

Items considered minor maintenance issues, such as loose or missing thumbscrews or latches, were found and cited under "Other" potentially adverse conditions. In addition, these items were entered into the Corrective Action Program under separate Action Requests (ARs). None of these items affect component anchorage.

For items requiring anchorage verification, the SWC anchorage verification checklist item was set to "Unknown" if an anchorage design document could not be found. Notwithstanding, the configuration was assessed to ensure that there was no immediate

operability concern. Also, anchorage checklist items were set to "Unknown" when the walkdown team could not see all anchors. For example, some anchors (relatively few) of control cabinets were covered by wiring. A comment is included on the corresponding SWC to explain that certain anchors out of the group could not be seen. Again, the configuration was assessed to establish that there was no immediate operability concern.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
<i>Anchorage issues</i>				
3B EDG FAN ASSEMBLIES	Anchorage does not match pattern shown on drawing 5610-C-379 Sh. 1. Unknown if more recent anchorage documentation exists. Also, one anchor at a support for the north fan appears to be missing.	As-found anchorage determined to be adequate given the size and geometry of fan assemblies. Also, item was reviewed for USI A-46 (Ref. 9). Anchorage found to be acceptable.  Revise drawings to match as-found condition.	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.
3D03 3A BATTERY RACK	Anchorage seen to be a mix of 5/8 and 1/2 diameter concrete expansion anchors (CEA's) for each rack.  Anchorage does not match drawing 5610-C-1369.	As-found anchorage is approximately equivalent to that shown on drawing. Also, Item was reviewed for USI A-46 and anchorage was found to be acceptable.  Revise drawings to match as-found condition.	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.
3D25 3B1 BATTERY CHARGER	Anchorage configuration differs from drawing 5610-C-652 Sh. 1.	As-found anchorage is similar to anchorage for other plant battery chargers and therefore judged to be adequate.  Revise drawings to match as-found condition.	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3E207B  COMPONENT COOLING HEAT EXCHANGER B	Concrete is cracked and spalling, with exposed reinforcement, at north-east anchor. The spalled area is not currently tagged in the field.	Anchorage is by cast-in-place (CIP) anchors embedded in concrete pedestals, and was judged to be acceptable.  Repair concrete.	YES	Item was entered into the corrective action program to document the condition and repair the concrete.
3S77  100 AMP 2-POLE AUTOMATIC TRANSFER SWITCH	Three anchors along right edge covered by whitish corrosion product; lower anchor may have more than minor corrosion of nut.	Item is a medium size wall mounted panel with substantial anchorage and was judged to be acceptable.  Evaluate and take corrective action to repair corroded area.	YES	Item was entered into the corrective action program to document the condition and address the corroded areas.
CONSOLE  CONTROL ROOM CONTROL CONSOLE	Anchors along the cabinet front are typically 2' on center. One anchor along the front appears to be missing.	Item is a low-height cabinet with substantial anchorage. As-found anchorage is judged to be adequate given the overall capacity of the anchorage and the configuration of the cabinets.  Plant drawings and documents need to be changed to reflect as-built configuration.	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
E16B CONTROL ROOM AIR HANDLING UNIT	Unit appears to be unanchored. Feet of unit appear to sit on vibration isolation pads (4 places).	An analysis of the as-found condition was performed and determined to be acceptable for its functionality for the seismic loading. Operability of unit confirmed by prompt operability determination (POD).  Evaluate and take corrective action.	YES	Item was entered in the corrective action program. Per POD, the AHU is considered operable. Further evaluation will be performed to determine if anchorage is needed to improve design margin.
X05 4160/480V TRANSFORMER FOR 480V LC 3B	Anchorage is welded to embedded steel. Find that 4 of 6 welds are 4" long and 2 of 6 welds are about 2" long. Anchorage does not match drawing 5610-E-9-35.	As-found anchorage was judged to be adequate based on the amount of weld provided in comparison to the configuration and mass of the transformer.  Plant drawings and documents need to be changed to reflect as-found anchorage configuration.	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.
<b><i>Seismic interaction issues</i></b>				
3C04 VERTICAL PANEL A	Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in USI A-46 inspection.	Ceiling tiles are plastic and light weight. Therefore, the hazard imposed is judged to be low.  Review indicates that after USI A-46 inspection, metal ceiling tiles were replaced with plastic ones. AR was written to verify issue close-out.	YES	During A-46 walkdown, there were metal crate ceilings. It has been replaced with light weight plastic.  Documents retrieval for the closeout is being tracked in the corrective action program.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3C06_3C05  VERTICAL PANEL B	Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in USI A-46 inspection.	Ceiling tiles are plastic and light weight. Therefore, the hazard imposed is judged to be low.  Review indicates that after USI A-46 inspection, metal ceiling tiles were replaced with plastic ones. AR was written to verify issue close-out.	YES	During A-46 walkdown, there were metal crate ceilings. It has been replaced with light weight plastic.  Documents retrieval for the closeout is being tracked in the corrective action program.
CONSOLE  CONTROL ROOM  CONTROL CONSOLE	Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in USI A-46 inspection.	Ceiling tiles are plastic and light weight. Therefore, the hazard imposed is judged to be low.  Review indicates that after USI A-46 inspection, metal ceiling tiles were replaced with plastic ones. AR was written to verify issue close-out.	YES	During A-46 walkdown, there were metal crate ceilings. It has been replaced with light weight plastic.  Documents retrieval for the closeout is being tracked in the corrective action program.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
HCV-3-121  CHG TO RCS CONTROL VALVE	HCV-3-121 is within 1/2" of the structural support for a nearby limit switch. Potential for seismic interaction. A possible method of increasing clearance would be to cut the extended part of the level transmitter bolt.	Based on the difference in mass between the valve and the tubing, it is judged that the hazard to valve functionality is low.  Evaluate and increase the clearance as needed.	YES	Item was entered into the corrective action program to document the condition and evaluate to determine if increased clearance is warranted.
MOV-3-350  EMERGENCY BORATION CONTROL VALVE	The gearbox of MOV-3-350 is approximately 1/4" from a vertical conduit (possibly abandoned).	Based on the difference in mass between the valve and the conduit, it is judged that the hazard to valve functionality is low.  Evaluate and increase the clearance as needed.	YES	Item was entered into the corrective action program to document the condition and evaluate to determine if increased clearance is warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
<i>Other conditions</i>				
3B50  3H LOADCENTER (CABINET)	<p>Lift trolley on roof of cabinet was found unrestrained side-to-side and may bang against stop. This could be a relay chatter issue.</p> <p>Provide positive restraint to roof trolley to prevent impact against stops, OR</p> <p>Verify there are no essential relays or other chatter-prone devices in the cabinet</p>	<p>Per field walkdown post-inspection it was determined that the subject lift trolley and the associated metal hook are always retracted into the rail housing. As such, a banging against the stop is unlikely to occur. In addition, the stop is welded to the rail housing. Therefore, isolated from the rigid upper frame of the cabinet with electrical equipment inside.</p> <p>As such, this condition was considered to not represent a potential or immediate operability concern</p> <p>Recommended to provide positive restraint to roof trolley to prevent impact against stops.</p>	YES	Item was entered into the corrective action program to document the condition and evaluate to provide positive restraint.
3C23B  SEQUENCER 3C23B	Potential impact with independent tube steel support crossing near the top of the cabinet in front. The gap to the TS is about 1/8" on one side, increasing to about 1/2" on the opposite side.	Per field walkdown post-inspection it was determined that the subject cabinet is top-supported and effectively rigid as well as the TS support.	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3D03 3A BATTERY RACK	Typically there is a 3/8 to 1/2" (approx.) gap between front of batteries and horizontal rail. Condition is common for all inspected racks (batteries can slide forward to rail).	Best seismic practice for battery racks is to make batteries snug against rails or spacers in all lateral directions.  Similar conditions were identified during the A-46 assessment and judged to be acceptable for operability. Further evaluation of the as-qualified condition is to be performed to determine if spacers should be installed to increase margin.	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted
3D24 3B BATTERY RACK	Typically there is a 3/8 to 1/2" (approx.) gap between front of batteries and horizontal rail. Condition is common for all inspected racks (batteries can slide forward to rail).	Best seismic practice for battery racks is to make batteries snug against rails or spacers in all lateral directions.  Similar conditions were identified during the A-46 assessment and judged to be acceptable for operability. Further evaluation of the as-qualified condition is to be performed to determine if spacers should be installed to increase margin.	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3QR35  CONTROL ROOM PROTECTION RACK	Zero gap at left end to adjacent cabinet 3QR80A (next to line-up). Suspect 3QR80A is not bolted to adjacent 3QR32 cabinet (see gaps a mid-height). Unable to fully inspect interior due to access limitations. This may be a relay chatter concern.	<p>Potential relay chatter was addressed in the PTN USI A-46 evaluation. It was concluded that the potential for relay chatter was very low and that any chatter would be managed by identifying the effect and taking appropriate action to mitigate the effect. Therefore there is no immediate operability concern.</p> <p>The resolution will be to verify that tops of cabinets are bolted together such that impact is prevented, OR</p> <p>Verify there are no essential relays or other chatter-prone devices in the cabinets.</p>	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3T36  EDG DIESEL OIL STORAGE TANK	Base plate at east and west anchors has corrosion of extension beyond wall/base weld at two locations. Not a capacity concern at this time.	<p>Based on field walk down, the tank integrity would not be adversely affected by the condition above the amount of material left in the base plate is judged to be adequate for the component to withstand its design loads.</p> <p>This is a maintenance issue. Perform maintenance as needed per final resolution determined under CAP.</p>	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted
E16B  CONTROL ROOM AIR HANDLING UNIT	There is non-rugged rod hung copper tubing in the area and tubing is attached to E16B. The tubing may be a spray hazard. Also, leakage from tubing may impair function of E16B.	<p>Operability of unit confirmed by prompt operability determination (POD).</p> <p>The impact of spray was evaluated and it would not adversely affect the function of the air handler.</p> <p>An additional AR was written to address this specific condition and to review adverse effects, if any of the copper tubing on the functionality of the air handlers. The operability screening of the AR determined that the AHU remain Operable.</p>	YES	Item was entered into the corrective action program to document the condition and determine if additional measures are warranted to restrain the tubing.

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

<b><u>Anchorage documentation not available</u></b>				
Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3C12B 3B EDG CONTROL PANEL				
	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	Control panel has been confirmed to be welded to an embedded metal frame at various locations. As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison to the mass and configuration of the panel.  Design drawings will be updated to document the as-built configuration of the anchorage.	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3D01 (DISTRIBUTION PANEL)	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Based on field walkdown, the associated distribution panel has been confirmed to have anchor bolts (Sketch provided in the Checklist) at various locations. As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison to the mass and configuration of the panel.</p> <p>Design drawings will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3E208A  SPENT FUEL PIT HEAT EXCHANGER	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	Heat exchanger has been confirmed to have anchors bolts to a concrete pedestal. (Sketch provided in the Checklist). As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison to the mass and configuration of the heat exchanger.  Design drawings and calculations will be updated to document the as-built configuration of the anchorage.	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3E239B  LC & SWGR ROOMS A/C SYSTEM - CHILLER PACKAGE 1B (TRAIN-B)	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Chiller package has been confirmed to have anchor bolts to a welded steel frame (Sketch provided in the Checklist). As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison to the mass and configuration of the chiller unit.</p> <p>Design drawings and calculations will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3P212A  SFP CLG WTR PMP A	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Based on field walkdown, the associated pump frame has been confirmed to have anchor bolts to a concrete pedestal (Sketch provided in the Checklist). As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison to the mass and configuration of the pump.</p> <p>Design drawings and calculations will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3QR35  CONTROL ROOM PROTECTION RACK	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Based on field walkdown, the associated protection rack has been confirmed to have anchor bolts (Sketch provided in the Checklist) at various locations. As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison with the mass and configuration of the cabinet.</p> <p>Design drawings will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
D51  SPARE BATTERY CHARGER	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Based on field walkdown, the associated battery charger has been confirmed to be anchor bolted to an embedded steel frame (Sketch provided in the Checklist). As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison with the mass and configuration of the cabinet.</p> <p>This is a configuration control issue. Design drawings will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.
<b><i>Anchorage inspection could not be fully completed</i></b>				
3C04  VERTICAL PANEL A	A limited number of anchors are not visible (blocked by cables, wires, etc.). Therefore SWC anchorage checks could not be fully completed. Also, concrete is not visible (covered by carpet) and concrete crack check could not be completed.	<p>Estimated that 70% or more of anchors were inspected and all visible anchors were found acceptable.</p> <p>The anchorage currently installed is judged to be adequate to withstand its design loads.</p> <p>This condition does NOT represent a potential or immediate operability concern based on as-found condition of inspected anchorage.</p>	YES	Item was entered into the corrective action program to document the assessment performed for the visible anchors.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
3C06_3C05 VERTICAL PANEL B	A limited number of anchors are not visible (blocked by cables, wires, etc.). Therefore SWC anchorage checks could not be fully completed. Also, concrete is not visible (covered by carpet) and concrete crack check could not be completed.	Estimated that 70% or more of anchors were inspected and all visible anchors were found acceptable. The anchorage currently installed is judged to be adequate to withstand its design loads. This condition does NOT represent a potential or immediate operability concern based on as-found condition of inspected anchorage.	YES	Item was entered into the corrective action program to document the assessment performed for the visible anchors.
CONSOLE CONTROL ROOM CONTROL CONSOLE	A limited number of anchors are not visible (blocked by cables, wires, etc.). Therefore SWC anchorage checks could not be fully completed. Also, concrete is not visible (covered by carpet) and concrete crack check could not be completed.	Estimated that 70% or more of anchors were inspected and all visible anchors were found acceptable. The anchorage currently installed is judged to be adequate to withstand its design loads. This condition does NOT represent a potential or immediate operability concern based on as-found condition of inspected anchorage.	YES	Item was entered into the corrective action program to document the assessment performed for the visible anchors.
3T269B EDG 3B STARTING AIR ACCUMULATOR TANK	3 of 4 anchors are visible. All visible anchors found acceptable. One anchor is buried in a concrete curb and cannot be inspected.	75% of anchors were inspected and all visible anchors were found acceptable. The anchorage currently installed is judged to be adequate to withstand its design loads. This condition does NOT represent a potential or immediate operability concern based on as-found condition of inspected anchorage.	NO	CLOSED

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
TIS-3-6413B SWGR RM 3D FAN 3V65B TEMP SWITCH	Wall mounted unit; cannot see wall anchorage fully unless switch is disassembled. After removal of cover, can only see studs to mounting plate.	Based on engineering judgment and considering the light weight of the switch, the as-found anchorage is considered acceptable.	NO	CLOSED
V76 AIR HANDLER UNIT FOR ELEC EQUIP RM A/C CONDENSER E232	Only able to confirm anchorage on one side of cabinet base. Per drawing 5610-C-1701 Sh. 5, expect that remaining anchorage is hidden from view (weld to inside of base frame, not visible unless housing is disassembled).	Seismic Review Team judged that the cabinet has a welded anchorage and is acceptable based on conformance of the visible side of the cabinet.	NO	CLOSED

## 5.3 AREA WALK-BYS

The purpose of the Area Walk-Bys is to identify potentially adverse seismic conditions associated with other SSCs located in the vicinity of the SWEL items. Vicinity is generally defined as the room containing the SWEL item. If the room is very large (e.g., Turbine Hall), then the vicinity is identified based on judgment, e.g., on the order of about 35 feet from the SWEL item. This vicinity is described on the Area Walk-By Checklist (AWC), shown in Appendix D of this report. A total of 45 AWCs were completed for Turkey Point Unit 3. Note that additional AWCs will be completed, as required, when deferred inspections are completed.

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

- Anchorage conditions (if visible without opening equipment)
- Significantly degraded equipment in the area
- A visual assessment (from the floor) of cable/conduit raceways and HVAC ducting (e.g., condition of supports or fill conditions of cable trays)
- Potentially adverse seismic interactions including those that could cause flooding, spray, and fires in the area
- Other housekeeping items that could cause adverse seismic interaction (including temporary installations and equipment storage)
- Scaffold construction was inspected for adequate bracing and anchorage
- Hazards from temporary equipment were evaluated and overall seismic housekeeping was evaluated

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

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

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

### Seismically-Induced Flooding/Spray Interactions

Seismically-induced flooding/spray interactions are the effect of possible ruptures of vessels or piping systems that could spray, flood or cascade water into the area where SWEL items are located. This type of seismic interaction was considered during the IPEEE program. Those prior evaluations were considered, as applicable, as information for the Area Walk-Bys.

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

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

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

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

The SWEs exercised their judgment to identify only those seismically-induced interactions that could lead to flooding or spray. Fire protection piping at Turkey Point Unit 3 was found to be sufficiently restrained in areas where SC-I equipment items are located and no concerns were identified with fire protection piping.

One potential seismic-induced spray interaction was identified at Turkey Point Unit 3 and included as an issue to be resolved. This is related to the E16B AHU discussed in Section 5.2.

#### Seismically-Induced Fire Interactions

Seismically-induced fire interactions can occur when equipment or systems containing hazardous/flammable material fail or rupture. Examples where seismically-induced fire interactions could occur include the following:

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

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

The Seismic Walkdown Engineers exercised their judgment to identify only those seismically-induced interactions that could lead to fires.

One potential seismic-fire interaction was identified at Turkey Point Unit 3 and included as an issue to be resolved. Valve POV-3-4883 is located in the vicinity of a main station transformer and the transformer is considered a potential fire source.

### Area Walk-By Results

Table 5-3 provides a summary of issues identified during the Area Walkdowns and recorded on AWCS. The tracking of issue resolution is identified in the table. Items are grouped based on the walkdown issue cited:

- Seismic housekeeping issues
- Other seismic interaction issues
- Other conditions

The majority of potentially adverse conditions found are related to seismic housekeeping. Potential seismic interaction concerns were identified but none of the issues were considered to be significant immediate hazards. In some cases potential relay chatter due to bumping of equipment is cited. Potential relay chatter issue is undesirable but the overall plant hazard related to relay chatter is typically low. For the Turkey Point USI A-46 evaluation (Reference 9), relay chatter was dismissed based on the low probability along with being able to manage the effects if they were to occur. As stated, one potential seismic-induced spray hazard and one potential seismic-induced fire hazard are cited as items requiring evaluation.

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

<b><i>Seismic Housekeeping Issues</i></b>				
Area ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
Area 200 BORIC ACID TANK ROOM	Large cover plates for nearby recessed area are stored adjacent to pump 4P203B.	No soft targets are vulnerable. This is a seismic housekeeping issue.  Condition was not considered to be an immediate hazard.  Take actions to ensure existing seismic housekeeping procedures are followed.	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted
Area 201 CHARGING PUMP ROOM	Temporary light near one of the charging pumps is not properly secured. A ladder near RCS filters is not tied off.	Pump casing is considered a rigid component and interaction with temp light risk is low.  Restrain OR Remove the temp light and ladder.	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted
Area 310C - CABLE SPREADING ROOM, MECH.EQ ROOM	Loose cover panels leaning against wall in front of air handlers. Potential to fall on piping and conduit.	No soft targets are vulnerable. This is a seismic housekeeping issue.  Condition was not considered to be an immediate hazard.  Take actions to ensure existing seismic housekeeping procedures are followed.	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted

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

Area ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
Area 343 - 3B MCC ROOM	A cart (breaker lift cart) behind 3A MG Set Controls cabinet is unrestrained and may hit that cabinet during earthquake. This may be a relay chatter concern.	<p>This is a seismic housekeeping issue. Potential relay chatter issue is undesirable but the overall plant hazard related to relay chatter is typically low as previously discussed.</p> <p>Take actions to ensure existing seismic housekeeping procedures are followed.</p>	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted.
Area 347B BATTERY CHARGER ROOM	Temporary resistive load bank is stored within 1/4" of 3Y05. This is judged to be a housekeeping issue.	<p>Adjacent static inverters are not considered soft targets relative to the resistive load bank. This is a seismic housekeeping issue. Condition was not considered to be an immediate hazard.</p> <p>Take actions to ensure existing seismic housekeeping procedures are followed.</p>	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted

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

Area ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
Area 360 CONTROL ROOM  Area 362 CONTROL ROOM GENERAL	<p>Loose ladders behind 3QR50; ladders have minor impact potential against base of cabinet after falling then sliding</p> <p>A tool cart on locked wheels is directly next to cabinet "Rack No. 26 Prot. Channel Set II". Potential for impact on cabinet. A loose printer on floor is next to cabinet "Rack No. 26 Control". Minor impact potential against base of cabinet.</p>	<p>This is a seismic housekeeping issue. Potential relay chatter issue is undesirable but the overall plant hazard related to relay chatter is typically low as previously discussed.</p> <p>Take actions to ensure existing seismic housekeeping procedures are followed.</p>	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted
Area 370 INTAKE AREA	<p>Large scaffold assembly in area has bracing but does not appear to have sufficient east/west anchorage near pump 3P9B. Spacing between e/w anchors is too far (about 40'). N/S anchorage of scaffold was OK.</p>	<p>No soft targets are vulnerable in this area. This is a scaffold interaction issue. Condition was not considered to be an immediate hazard.</p> <p>Take actions to ensure existing seismic housekeeping procedures are followed.</p>	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted

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

Area ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
<i>Other seismic interaction issues</i>				
Area 310C  CABLE SPREADING ROOM, MECH.EQ ROOM	Rod hung copper tubing ("Service Water" tag seen) appears to be non-seismic. Appears to be a spray hazard. This issue is tracked under component E16B.	<p>Operability of unit confirmed by prompt operability determination (POD).</p> <p>The impact of spray was evaluated and it would not adversely affect the function of the air handler.</p> <p>An additional AR was written to address this specific condition and to review adverse effects, if any of the copper tubing on the functionality of the air handlers. The operability screening of the AR determined that the AHU remain Operable.</p>	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted
Area 334  TURBINE PLANT HEAT EXCHANGER AREA	Main transformer is about 20' to south of POV-3-4883 valve. Transformer is a fire risk and is relatively close to the valve.	<p>Condition was not considered to be an immediate hazard. A condition of seismic-then-fire event is low and fire hazard would take time to develop.</p> <p>The POV would only need to close under LOCA conditions to maximize flow to the CCW heat exchangers.</p> <p>Evaluate fire hazard with respect to nearby SC-I equipment.</p>	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted

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

<b><i>Other conditions</i></b>				
Area ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
Area 220 AUXILIARYBUILDING	Bent hanger rods on overhead lights in front of D-MCC and LP 38.	Condition was not considered to be an immediate hazard. Evaluate hanger rods for strength.	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted

# **6**

## **Licensing Basis Evaluations**

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Potentially adverse conditions identified during the walkdowns were documented on the seismic walkdown and area walk-by checklists, as appropriate, and entered into the corrective action process. For those conditions that required a seismic licensing basis evaluation, an operability screening has been performed and an evaluation will be performed to provide the final resolution to be documented within the corresponding condition reports. Table 5-2 and 5-3 of this report provide the status of the subject evaluations as applicable.

# 7

## IPEEE Vulnerabilities Resolution Report

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As discussed in previously Section 2.3, for implementation of the IPEEE Turkey Point was classified as a "reduced scope" plant per NUREG-1407 (Ref. 10). As such, the review level earthquake was equal to the site SSE and completion of the USI A-46 assessment largely satisfied the seismic IPEEE requirements.

In lieu of a full IPEEE seismic analysis, FPL opted to submit a "scaled back" program to resolve USI A-46 and Generic Letter 87-02 as allowed by the NRC in a letter dated November 4, 1998 (Ref. 13) issued for the review of Turkey Point IPEEE evaluations. The final results of this scaled back program for the A-46 program were submitted in a letter to the NRC, L-93-155, "Final Report of Plant Specific Seismic Adequacy Evaluation of Turkey Point Units 3 and 4 to Resolved USI A-46 and GL 87-02" (Ref. 14). The components selected for this analysis were also included in the SWEL in order to verify no outlier issues persisted. The actions taken for USI A-46 outlier resolution are summarized in Table 7-1.

**Table 7-1: USI A-46 Outlier Resolution**

No.	Equip Class	Equip ID	Name	Outlier Issue	SRT Recommended Resolution	Status
1	6	3P9B	3B Intake Cooling Water Pump	Pump shaft length longer than can be screened by SSRAP report.	Evaluate Shaft for adequate length and clearance.	Documentation could not be found. A new item has been generated to find and/or recreate the required documentation.
2	6	3P9B	3B Intake Cooling Water Pump	Cast iron fittings on pump.	Check stresses on fittings from loads of attached piping.	Documentation could not be found. A new item has been generated to find and/or recreate the required documentation.
3	6	3P9B	3B Intake Cooling Water Pump	Anchorage needs verification.	Verify anchorage with calculation.	Anchorage adequate per PTN-3FSC-87-020, anchorage replacement.
4	6	3P9B	3B Intake Cooling Water Pump	Interaction – Fossil Unit Stack may fall.	Check adequacy of fossil stack.	Fossil stack adequate per FPL Safety Evaluation.
5	6	4P9B	4B Intake Cooling Water Pump	Pump shaft length longer than can be screened by SSRAP report.	Evaluate Shaft for adequate length and clearance.	Documentation could not be found. A new item has been generated to find and/or recreate the required documentation.
6	6	4P9B	4B Intake Cooling Water Pump	Cast iron fittings on pump.	Check stresses on fittings from loads of attached piping.	Documentation could not be found. A new item has been generated to find and/or recreate the required documentation.
7	6	4P9B	4B Intake Cooling Water Pump	Anchorage needs verification.	Verify anchorage with calculation.	Anchorage adequate per REA-TPN- 88-320, foundation repair and anchorage replacement.
8	6	4P9B	4B Intake Cooling Water Pump	Interaction – Fossil Unit Stack may fall.	Check adequacy of fossil stack.	Fossil stack adequate per FPL Safety Evaluation.
9	21	3T36	U3 Diesel Oil Storage Tank	Anchorage adequacy.	Replace chair plates with 1 1/4" thick plates and evaluate further.	Chair plates upgraded per PCM 91-169.
10	21	3T36	U3 Diesel Oil Storage Tank	Interaction – Fossil Unit Stack may fall.	Check adequacy of fossil stack.	Fossil stack adequate per FPL Safety Evaluation.

**Table 7-1: USI A-46 Outlier Resolution**

No.	Equip Class	Equip ID	Name	Outlier Issue	SRT Recommended Resolution	Status
11	21	T205B	B Boric Acid Storage Tank	Platform adequacy for torsional loads.	Check platform adequacy for torsion, and upgrade if required.	Platform upgraded per PCMs 90-440 and 90-441
12	21	3T8	U3 Condensate Storage Tank	Anchorage adequacy.	Replace chair plates with 1 ¼" thick plates and evaluate further.	Chair plates upgraded per PCM 91-170.
13	21	4T8	U4 Condensate Storage Tank	Anchorage adequacy.	Replace chair plates with 1 ¼" thick plates and evaluate further.	Chair plates upgraded per PCM 91-171.
14	21	3T1	U3 Refueling Water Storage Tank	Anchorage adequacy.	Replace chair plates with 1 ¼" thick plates and evaluate further.	Chair plates upgraded per PCM 91-172.
15	21	4T1	U4 Refueling Water Storage Tank	Anchorage adequacy.	Replace chair plates with 1 ¼" thick plates and evaluate further.	Chair plates upgraded per PCM 91-173.
16	21	3T23B	3B EDG Day Tank	Glass sight tube.	Replace glass sight tube with non-breakable material.	Addressed by CR 95-1219.
17	21	3T218	U3 Component Cooling Water Surge Tank	Platform adequacy.	Check platform adequacy, and upgrade if required.	Platform to be upgraded per PCM 90-471.
18	21	4T218	U4 Component Cooling Water Surge Tank	Platform adequacy.	Check platform adequacy, and upgrade if required.	Platform to be upgraded per PCM 90-472.
19	17	3K4B	3B EDG Skid	Glass sight tube.	Replace glass sight tube with non-breakable material.	Addressed by CR 95-1219.
20	21	3T269B	3B EDG Air Start Tanks	Seismic interaction – threaded pipe for air supply not rigidly supported.	Complete plant work order (PWO) already written for the support.	Air supply and supports replaced per PCMs 86-155 and 86-190.
21	5	3B06	3B 480V Motor Control Center	Seal welded anchorage, inadequate in tension.	Upgrade anchorage.	Anchorage upgraded per PCM 91-178.
22	5	4B06	4B 480V Motor Control Center	No anchorage.	Add anchorage.	Anchorage upgraded per PCM 91-179.
23	5	3B08	3D 480V Motor Control Center	Inadequate anchorage for overturning.	Brace top of MCC to concrete wall.	Anchorage upgraded per PCM 91-178.

**Table 7-1: USI A-46 Outlier Resolution**

No.	Equip Class	Equip ID	Name	Outlier Issue	SRT Recommended Resolution	Status
24	5	3AB	3B 4.16kV Switchgear	No anchorage.	Add anchorage.	Anchorage upgraded per PCM 91-174.
25	5	4AB	4B 4.16kV Switchgear	No anchorage.	Add anchorage.	Anchorage upgraded per PCM 91-175.
26	5	3B02	3B 480V HVPDS Load Center (Includes Transformer)	Cannot determine anchorage.	Add anchorage.	New load center installed per PCM 89-532 and new anchorage installed per PCM 91-176.
27	5	3B04	3D 480V HVPDS Load Center (Includes Transformer)	Cannot determine anchorage.	Verify anchorage and upgrade if required.	New load center installed per PCM 89-532 and new anchorage installed per PCM 91-176.
28	5	4B02	4B 480V HVPDS Load Center (Includes Transformer)	No anchorage.	Add anchorage.	New load center installed per PCM 89-533 and new anchorage installed per PCM 91-177.
29	5	4B04	4D 480V HVPDS Load Center (Includes Transformer)	No anchorage.	Add anchorage.	New load center installed per PCM 89-533 and new anchorage installed per PCM 91-177.
30	15	3D03	Battery Rack 3A	No spacers on east end of battery rack.	Add spacers on east end of battery rack.	Spacers added (ref. FPL letters JPN-PTN-92-5261 and 5707).
31	15	3D03	Battery Rack 3A	Shade on lights may fail and fall on batteries.	Add tie wire to lights.	Tie wires added per PCM 91-182.
32	15	3D03	Battery Rack 3A	Block walls not evaluated by SRT.	Verify block wall included in FPL IE 80-11 program.	FPL verified wall included in IE 80-11 program as block walls C30-1, C30-2, C30-4.
33	15	3D24	Battery Rack 3B	No spacers on east end of battery rack.	Add spacers on east end of battery rack.	Spacers added (ref. FPL letters JPN-PTN-92-5261 and 5707).
34	15	3D24	Battery Rack 3B	Shade on lights may fail and fall on batteries.	Add tie wire to lights.	Tie wires added per PCM 91-182.

**Table 7-1: USI A-46 Outlier Resolution**

No.	Equip Class	Equip ID	Name	Outlier Issue	SRT Recommended Resolution	Status
35	15	3D24	Battery Rack 3B	Block walls not evaluated by SRT.	Verify block wall included in FPL IE 80-11 program.	FPL verified wall included in IE 80-11 program as block walls A42-2, C42-16, C42-17, C42-18.
36	15	4D24	Battery Rack 4B	No spacers on east end of battery rack.	Add spacers on east end of battery rack.	Spacers added (ref. FPL letters JPN-PTN-92-5261 and 5707).
37	15	4D24	Battery Rack 4B	Shade on lights may fail and fall on batteries.	Add tie wire to lights.	Tie wires added per PCM 91-183.
38	15	4D24	Battery Rack 4B	Block walls not evaluated by SRT.	Verify block wall included in FPL IE 80-11 program.	FPL verified wall included in IE 80-11 program as block walls C30-2, C30-3, C30-4.
39	15	4D03	Battery Rack 4A	No spacers on east end of battery rack.	Add spacers on east end of battery rack.	Spacers added (ref. FPL letters JPN-PTN-92-5261 and 5707).
40	15	4D03	Battery Rack 4A	Shade on lights may fail and fall on batteries.	Add tie wire to lights.	Tie wires added per PCM 91-182.
41	15	4D03	Battery Rack 4A	Block walls not evaluated by SRT.	Verify block wall included in FPL IE 80-11 program.	FPL verified wall included in IE 80-11 program as block walls A42-2, C42-15, C42-16, C42-18.
42	14	3D01	3A Distribution Panels/Bus	One loose anchor bolt.	Tighten loose bolt.	Bolt disposition per PWO 93-010843.
43	14	4D01	4B Distribution Panels/Bus	Three loose anchor bolts.	Tighten loose bolt.	Bolt disposition per PWO 93-010844.
44	20	3C23B	3B Sequencer	Additional top bracket as found for sequencer 3A would provide added assurance and strength. This item had only one bracket.	Add top bracket as found for sequencer 3A.	Bracket added per PCM 91-180.
45	20	4C23A	4A Sequencer	Additional top bracket as found for sequencer 3A would provide added assurance and strength. This item had only one bracket.	Add two top brackets as found for sequencer 3A.	Bracket added per PCM 91-181.

**Table 7-1: USI A-46 Outlier Resolution**

No.	Equip Class	Equip ID	Name	Outlier Issue	SRT Recommended Resolution	Status
46	20	4C23B	4B Sequencer	Additional top bracket as found for sequencer 3A would provide added assurance and strength. This item had only one bracket.	Add two top brackets as found for sequencer 3A.	Bracket added per PCM 91-181.
47	21	3E207B	3B CCW Heat Exchanger	SRT could not verify reinforcement steel design of pedestal.	Verify adequacy of pedestal design.	FPL verified pedestal adequacy by calculations C-SJ511-01 and 02.
48	21	4E207B	4B CCW Heat Exchanger	SRT could not verify reinforcement steel design of pedestal.	Verify adequacy of pedestal design.	FPL verified pedestal adequacy by similarity with Item 53.
49	20	3C06	3B Vertical Panel	Interaction metal egg crate ceiling may fall on operators.	Clip in metal egg crate sections of ceiling.	Currently light weight plastic egg crate is installed.
50	20	4C06	4B Vertical Panel	Interaction metal egg crate ceiling may fall on operators.	Clip in metal egg crate sections of ceiling.	Currently light weight plastic egg crate is installed.

# 8

## Peer Review

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

# 9

## References

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1. EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012.
2. Turkey Point Updated Final Safety Analysis Report (UFSAR): Section 1, Section 2, and Section 5.
3. Not used.
4. AEC Publication TID 7024, "Nuclear Reactors and Earthquakes", August 1963.
5. ACI 318-63, Building Code Requirements for Reinforced Concrete.
6. AISC, "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings", adopted April 17, 1963.
7. USNRC, "Verification Of Seismic Adequacy Of Mechanical And Electrical Equipment In Operating Reactors, Unresolved Safety Issue (USI) A-46", Generic Letter 87-02.
8. USNRC, "Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities", Generic Letter 88-20, Supplement 4.
9. Stevenson & Associates report, "Plant Specific Seismic Adequacy Evaluation of Turkey Point Units 3 & 4 to Resolve Unresolved Safety Issue (USI) A-46 and Generic Letter (GL) 87-02," dated April 30, 1993.
10. USNRC, "Procedural and Submittal Guidance for the IPEEE for Severe Accident Vulnerabilities", NUREG-1407, June, 1991.
11. FPL Letter L-92-222, "Individual Plant Examination of External Events (IPEEE)," letter to USNRC, August 31, 1992.
12. NRC (E Leeds and M Johnson) Letter to All Power Reactor Licensees et al., "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendation 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," Enclosure 2.3, "Recommendation 2.3: Seismic," dated March 12, 2012
13. NRC Letter to FPL, "Generic Letter 88-20, Supplement 4, -Individual Plant Examination For External Events For Severe Accident Vulnerabilities- Turkey Point Nuclear Plant. Units 3 And 4", dated November 4, 1998.
14. FPL Letter L-93-155, "Final Report of Plant Specific Seismic Adequacy Evaluation of Turkey Point Units 3 and 4 to Resolved USI A-46 and GL 87-02".

# A

## Project Personnel Resumes and SWE Certificates

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### A.1 INTRODUCTION

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

- FPL: C. Figueroa, T. Satyan-Sharma, A. Restrepo, George Tullidge, T. Jones
- Stevenson & Associates: J. O'Sullivan, S. Baker

In addition, certificates from the EPRI Walkdown Training Course are included for each of the designated SWEs: C. Figueroa, T. Satyan-Sharma, J. O'Sullivan and S. Baker.

### A.2 RESUMES

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#### **Carlos Andres Figueroa**

Mr. Figueroa is a Mechanical and Civil Design Engineer I in the Turkey Point Nuclear Station at Florida Power & Light. He has one year of Mechanical Systems Engineering experience at Entergy's River Bend Station in St. Francisville, LA. Mr. Figueroa also has three years of Operations experience and four years of Civil Design Engineering experience at FPL's Turkey Point Station in South Florida. He holds a BS in Mechanical Engineering from the University of Los Andes (Bogota, Colombia) and a MS in Mechanical Engineering, from the University of Florida. He completed Training on the Near Term task Force Recommendation 2.3 – Plant Seismic Walkdowns.

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#### **T. Satyan-Sharma, P.E.**

Mr. Satyan Sharma is a Consultant to Florida Power and Light for Turkey Point Station. He has managed and was the technical lead for the SQUG Project at a Nuclear Utility. He was a Peer Reviewer on the SQUG project at other Nuclear Plants and provided third party reviews. Mr. Satyan Sharma has 40 years of experience in Nuclear Industry in both Consulting (6 years) and Utility (34 years ) supporting plant operations. Mr. Satyan Sharma has a Master of Science in Structural/Engineering Mechanics from New York University. He was a member of the SQUG Team in the development of the Generic Implementation Procedures (GIP). He has received industry training as Seismic Capability Engineer (EPRI 5-Day Training), SQUG New and Replacement Equipment and Parts (NARE) Training, and SQUG Equipment Selection & Relay Evaluation Training.

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**Alexander Restrepo**

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

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**George Tullidge**

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

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**Tim Jones**

Mr. Jones is an Operations Department Shift Manager at Turkey Point Nuclear. He has over 26 years of experience in the Operations Department and was licensed in 1994 as Reactor Operator. He received his SRO license in 1998. His years of experience include Operations, Maintenance, and Security.

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**John J. O'Sullivan, P.E.**

Mr. O'Sullivan is a Senior Consultant in the S&A Boston office. He has managed and led seismic walkdowns and fragility analyses of structures and components for use in probabilistic risk assessments. Mr. O'Sullivan has 24 years of seismic experience serving the nuclear industry. Mr. O'Sullivan has participated in more than 10 USI A-46 and IPEEE projects in response to the requirements of Generic Letters 87-02 and 88-20. Mr. O'Sullivan has a Master of Science in Structural Engineering from the Massachusetts Institute of Technology. He has received industry training as Seismic Capability Engineer (EPRI 5-day SQUG training), EPRI IPEEE Add-on, and Seismic Fragility training.

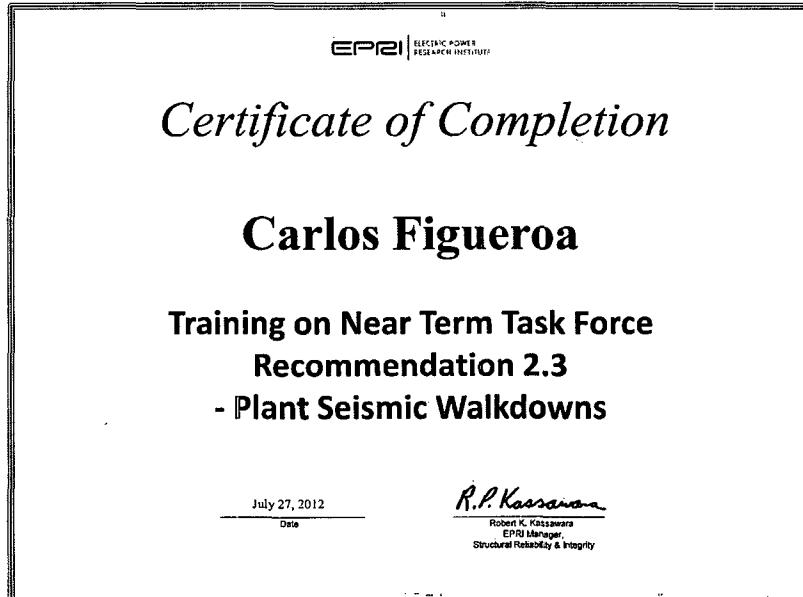
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**Seth Baker**

Mr. Baker is a Senior Engineer in the S&A Boston office. He has performed structural engineering analysis & design, finite element analysis, structural mechanics evaluations, seismic qualification managed and seismic walkdowns. Mr. Baker has a Master of

Science in Civil/Structural Engineering from Stanford University. He completed the EPRI training for NTTF 2.3 plant seismic walkdowns.

### A.3 CERTIFICATES





# Certificate of Completion

**Seth Baker**

Successfully Completed

Training on Near Term Task Force  
Recommendation 2.3 – Plant Seismic Walkdowns

*Bruce M. Lory*  
Bruce M. Lory - Instructor  
NTTF 2.3 Seismic Walkdown Course

Date: 06/26/12

**B**

## SWEL Selection Report



**FPL**

*Florida Power & Light*

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

#### Turkey Point Nuclear Station

Prepared by

Alexander Restrepo (PRA Group)

10/26/12

Date

Reviewed by

George Tullidge (PRA Group)

10/26/12

Date

Reviewed by

Tim Jones (Operations)

11/1/12

Date

Reviewed by

Carlos Figueroa (Engineering)

11/1/12

Date

## **1 Introduction**

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

The selection process was completed by applying separate screening criteria to develop SWELs 1 and 2. The documentation is laid out by first providing the screening criteria requirements, and then providing the implementation of how PTN applied that screening criteria.

## **2 Process**

The general process focused first on building a Master Component List, with attributes to support the sample selection process (Sections 3 and 4). This list was obtained by generating a NAMS query of the entire PTN Equipment Database for all components along with data such as system code, component type, location, etc. Then the screening criteria below were applied to arrive at a final SWEL 1 and SWEL 2 comprised of about 92 items and 8 items, respectively.

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

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

Because the SWEL needs to address a number of attributes, the selection was performed and reviewed by a team that includes representatives from PRA, Operations, and Engineering. This was done systematically by performing table-top virtual walkdowns and pre-walkdowns of each location to identify candidates for the SWEL as well as other issues (e.g., seismic-flood) that needed to be inspected by the walk-by.

## **3 SWEL 1 Screening Criteria**

The final SWEL 1 is contained in the Microsoft Excel workbook, "U3 (U4) PTN Fukushima SWEL" [2], in the "SWEL 1" spreadsheet on file. Each iteration of the screening process described below is contained in the Microsoft Access database, "SWEL 1" [3]. These final SWEL (both SWEL 01 & SWEL 02), as well as the Master Component List, are available in Excel format on file at Turkey Point.

### **3.1 Screening Criteria 1 – Seismic Category 1**

#### Requirement

The scope of SSCs (Systems, Structures, and Components) in the plant are limited to those that are designed to Seismic Category (SC) I requirements. This is done because only such items have a defined seismic licensing basis against which to evaluate the as-installed configuration.

Selecting these items is intended to comply with the request in the NRC 50.54(f) Letter, under the “Requested Actions” section, to “verify current plant configuration with the current license basis.”

Application

Seismic Class 1 SSCs include over 20,000 items in the PTN equipment database. A complete equipment list from the PTN equipment database was obtained via a NAMS query ran in June 2012. The Seismic Class 1 SSCs were queried from the report by choosing only those SSCs where the Seismic Class was designated with an I.

**3.2 Screening Criteria 2 – Equipment or Systems**

Requirement

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

Application

The list of all SC1 SSCs was further reduced by including only “active” components, removing all items classified as “design” or “non-equip”.

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

Requirement

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

Application

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

**3.4 Screening Criteria 4 – Sample Considerations**

Requirement

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

- A variety of types of systems

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

Application

The seismic aspects of the PTN IPEEE were resolved by the use of the FPL site-specific Seismic Program associated with Unresolved Safety Issue (USI) A-46 [4]. The equipment analyzed in this program was used as a base and compared to the screening criteria above. The remaining components in the Master Component List were reordered according to system code, component type, and then location in order to obtain a broad sample. Operations personnel were consulted with to identify new or replaced equipment that were on the truncated Master Component List.

## 4 SWEL 2 Screening Criteria

SWEL 2 began with the same Master Component List as SWEL 1. An initial screening was done retaining only SSCs related to the Spent Fuel Pool system. Screening criteria 1, 2, and 3 for SWEL 2 were performed identically to that of screening criteria 1, 2, and 4 for SWEL 1, respectively. The final SWEL 2 is contained in the Microsoft Excel workbook, "U3 (U4) PTN Fukushima SWEL" [2], in the "SWEL 2" spreadsheet on file. Each iteration of the screening process is contained in the Access database, "SWEL 2" [5]. These Microsoft Excel Workbooks, as well as the Master Component List are available in Excel format on file at Turkey Point.

### 4.1 Screening Criteria 4 – Cause Rapid Drain-Down

Requirement

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

Application

There are only two penetrations in the SFP below this level. One is a lower suction valve (\*-797), the other is the fuel transfer tube, used to move fuel from containment to the SFP. During normal operation, this tube is isolated by a blind flange on the containment side and a manual valve on the Fuel Storage Building side. Other components were included in this screening based on their importance in maintaining spent fuel pool inventory and cooling.

## **5 Walk-By Table**

Each location will also be subject to a walk-by, an examination (in less detail) of the other PRA components, as well as an inspection for other seismic issues:

- Several other passive component types: cable trays & ventilation ducts.
- Seismic-induced fire. This includes all flammable materials in each location such as hydrogen lines, gas bottles (acetylene, hydrogen), natural gas lines, and hazardous/flammable material stored in the location.
- Seismic-induced flood. This includes all flood/spray sources (tanks, piping) originating in each location, based on the Internal Flood PRA. Note, the flood sources of interest are only those originating in the location, not those coming from another location. The potential for flood propagation will be addressed in the seismic/flood analysis.
- Spatial interactions (2 / 1). This includes adverse physical interaction due to proximity, failing of other components or structures (e.g., cranes), and flexibility of attached lines and cables.

The final Walk-By Table is contained in the Microsoft Excel workbook, "U3 PTN Fukushima SWEL" [2], in the "Walkby Table" spreadsheet as well as the Master Component List are available in Excel format at Turkey Point on file.

## **6 Evaluations**

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

### ***6.1 IPEEE or USI A-46 Vulnerabilities***

The seismic assessment performed for PTN USI A-46 was reviewed for any seismic vulnerability identified. These issues were included in the SWEL table.

### ***6.2 Configuration Verification***

The EPRI guidance identifies two types of inspection for the walkdown: (a) visual inspection and (b) configuration verification. Visual inspection is typically what is performed in a walkdown, looking for obvious degraded conditions in equipment anchorage. However, configuration verification is a more involved inspection consistent with the existing plant documentation of the design basis. This is required in at least 50% of the SWEL items with anchorage. Since 28 SWEL components are MOVs (Class 8) or AOVs (or similar Class 7 components) which do not have anchorage, this leaves 50% of 72, or at least 36 components to be included in the configuration verification. For those components, the design basis was reviewed and the key attributes included in the walkdown forms to assist the inspection.

### ***6.3 New Equipment***

The EPRI Guidance directs that the SWEL should include a “robust sampling of the major new or replacement equipment installed within the past 15 years (i.e., since the approximate completion of the seismic IPEEE evaluation)”. Based on discussion with Operations and Engineering, major new or replacement equipment was identified and noted as such in the SWEL spreadsheet.

#### **6.4 Modifications**

The walkdown team allowed for changes to be made to the SWEL mid-walkdown. Many components were changed from ‘B’ train to ‘A’ train as the former was the protected train, precluding the thorough inspection of some components. Various items were also replaced or removed because they were common components already on the other unit’s SWEL or the component was no longer installed in the plant.

### **7 References**

1. “Final Report of Plant Specific Adequacy Evaluation of Turkey Point Units 3 and 4 to Resolve Unresolved Safety issue (USI) A-46 and Generic Letter (GL) 87-02,” Stevenson & Associates, April 1993.
2. “PTN Fukushima SWEL,” FPL, August 2012.
3. “SWEL 1,” FPL, August 2012.
4. EPRI TR-1025286, “Seismic Walkdown Guidance,” June 2012.
5. “SWEL 2,” FPL, August 2012.

# C

## Seismic Walkdown Checklists (SWCs)

**Table C-1. Summary of Seismic Walkdown Checklists**

## - Anchorage Configuration Confirmation Performed

	Tag ID	Component Description	Area	Equip. Class	Page
##	3B05	A-MCC (CABINET)	342 - 3A MCC	1	C-5
##	3B06	B-MCC (CABINET)	343 - 3B MCC ROOM	1	C-7
##	3B07	C-MCC (CABINET)	220 - AUXILIARY BUILDING	1	C-10
##	3B08	D-MCC (CABINET)	220 - AUXILIARY BUILDING	1	C-12
##	3B02	3B02 480V HVPDS LOAD CENTER 3B (CABINET)	341 - 480V LC ROOM	2	C-14
##	3B04	3D LC (Part of B train) (CABINET)	341 - 480V LC ROOM	2	C-16
##	3B50	3H LOAD CENTER (CABINET)	234 - NEW ELECTRICAL EQUIPMENT ROOM	2	C-18
##	3AA	3AA 4.16V SWITCHGEAR 3A (CABINET)	368 - 4160V SWITCHGEAR ROOM	3	C-20
##	3AD	4.16KV SWITCHGEAR 3AD FOR BUS 3D	429 - SWITCHGEAR ROOM 3D	3	C-22
##	X05	4160/480V TRANSFORMER FOR 480V LC 3B	341 - 480V LC ROOM	4	C-24
##	3P10B	EDG 3B OIL TRANSFER PUMP	293 - GENERAL OUTDOORS	5	C-26
##	3P201B	CHARGING PUMP B	201 - CHARGING PUMP ROOM	5	C-28
##	3P203B	BORIC ACID TRANSFER PUMP B	200 - BORIC ACID TANK ROOM	5	C-30
##	3P211B	COMPONENT COOLING PUMP B	202 - COMPONENT COOLING PUMP ROOM	5	C-32
##	3P212A	SFP CLG WTR PMP A	223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	5	C-34
##	3P214B	CONTAINMENT SPRAY PUMP B	203 - CONTAINMENT SPRAY PUMP ROOM	5	C-36
##	3P215B	HI HEAD SAFETY INJECTION PUMP 3B	206 - HI-HEAD SIS PUMP ROOM	5	C-38
##	EMERG SFP CLG PMP	EMERGENCY SPENT FUEL PIT COOLING PUMP	223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	5	C-40
##	P2B	AUXILIARY FEEDWATER PUMP B	306 - AUX FEED PUMP AREA	5	C-42
##	3P210B	RHR PUMP B	211 - RHR PUMP ROOM	6	C-44
##	3P9B	INTAKE COOLING WATER PUMP B	370 - INTAKE AREA	6	C-46
##	CV-3-1607	MAIN STEAM LINE A STM DUMP TO ATMOS CNTL VALVE	300 - STEAM DECK	7	C-48
##	CV-3-2816	TRAIN 1 S/G B FEED FLOW CONTROL VALVE	302 - FEEDWATER DECK	7	C-50
##	FCV-3-113A	BORIC ACID TO BLENDER FLOW CNTL VLV	201 - CHARGING PUMP ROOM	7	C-52
##	HCV-3-121	CHG TO RCS CONTROL VALVE	209 - PIPE & VALVE ROOM	7	C-54
##	HCV-3-758	HAND CNTL VLV FOR RHR HX FLOW CNTL	210 - RHR HEAT EXCHANGER ROOM	7	C-56
##	PCV-3-4885	PRZR PORV N2 BACKUP SUPPLY PRESSURE REGULATOR	123 - CONTAINMENT 58 FOOT ELEVATION	7	Defer
##	POV-3-2605	MN STM ISO VLV FROM S/G B	300 - STEAM DECK	7	C-58
##	POV-3-487	S/G B BYPASS FW Isolation VLV	302 - FEEDWATER DECK	7	C-60

Tag ID	Component Description	Area	Equip. Class	Page	
POV-3-4883	TPCW HEAT EXCHANGERS ISOLATION VALVE	334 - TURBINE PLANT HEAT EXCHANGER AREA	7	C-62	
SV-3-455C	PRESSURIZER PORV SOLENOID VALVE	103 - PRESSURIZER CUBICLE	7	Defer	
TCV-3-143	NON REGEN HX OUTLET TO VCT OR DEMIN TEMP CNTL VLV	201 - CHARGING PUMP ROOM	7	C-64	
MOV-3-1404	MTR OPERATED VALVE FROM STEAM GENERATOR A TO AUX FW PP TURBINES	301 - BELOW STEAM DECK	8	C-66	
MOV-3-350	EMERGENCY BORATION CONTROL VALVE	201 - CHARGING PUMP ROOM	8	C-68	
MOV-3-535	PRESSURIZER PORV BLOCK VALVE	103 - PRESSURIZER CUBICLE	8	Defer	
MOV-3-744A	RHR LO HEAD SI TO LOOP A MOTOR OPERATED VLV	121 - CONTAINMENT 14 FOOT ELEVATION OUTSIDE BIO-WALL	8	Defer	
MOV-3-751	NORMAL RHR INLET FROM RCS MOTOR OPERATED VLV	121 - CONTAINMENT 14 FOOT ELEVATION OUTSIDE BIO-WALL	8	Defer	
MOV-3-843B	HHSI TO COLD LEG MOV	203 - CONTAINMENT SPRAY PUMP ROOM	8	C-70	
MOV-3-860B	RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE	210 - RHR HEAT EXCHANGER ROOM	8	C-72	
MOV-3-861B	RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE	211 - RHR PUMP ROOM	8	C-74	
MOV-3-862A	RWST TO RHR PUMP SUCTION VALVE	211 - RHR PUMP ROOM	8	C-76	
MOV-3-863B	RHR PUMP RECIRC TO RWST	210 - RHR HEAT EXCHANGER ROOM	8	C-78	
MOV-3-864B	RWST MTR OP ISO VALVE TO SI & RHR PUMPS	217 - RWST AREA	8	C-80	
MOV-3-865A	SI ACCUM A DISCH MOTOR OPERATED VLV	121 - CONTAINMENT 14 FOOT ELEVATION OUTSIDE BIO-WALL	8	Defer	
MOV-3-869	SI TO LOOP A&B HOT LEG MTR OP ISO VLV	209 - PIPE & VALVE ROOM	8	C-82	
MOV-3-880B	CTMT SPRAY PMP B DISCH ISO VLV	203 - CONTAINMENT SPRAY PUMP ROOM	8	C-84	
SV-3-2046B	EDG 3B OIL DAY TANK INLET CONTROL SOLENOID VALVE	408 - B DIESEL GENERATOR BUILDING (UPPER LEVEL)	8	C-86	
#	N/A	EDG FAN ASSEMBLIES (RADIATOR FAN)	309 - DIESEL GENERATOR BUILDING (LOWER LEVEL)	9	C-88
	3V34B	3B EDG ROOM VENT EXHAUST FAN	409 - B DIESEL GENERATOR BUILDING ( LOWER LEVEL )	9	C-90
	3V65B	AXIAL FLOW VENTILATION FAN	429 - SWITCHGEAR ROOM 3D	9	C-92
	3E241B	LOAD CENTER ROOM 3A/B - AIR HANDLING UNIT	341 - 480V LOAD CENTER ROOM	10	C-94
	3E242B	LOAD CENTER ROOM 3C/D - AIR HANDLING UNIT (TRAIN-B)	341 - 480V LOAD CENTER ROOM	10	C-96
##	3E243A	SWITCHGEAR ROOM 3A - AIR HANDLING UNIT	368 - 4160 V SWITCHGEAR ROOM	10	C-98
	E16B	CONTROL ROOM AIR HANDLING UNIT	310 - CABLE SPREADING ROOM	10	C-100
	V76	AIR HANDLER UNIT FOR ELEC EQUIP RM A/C CONDENSER E232	234 - NEW ELECTRICAL EQUIPMENT ROOM	10	C-102
##	3E239B	LC & SWGR ROOMS A/C SYSTEM - CHILLER PACKAGE 1B (TRAIN-B)	315 - LP TURBINE NORTH AREA	11	C-104
	3C2B COMPRESSOR	EDG 3B AIR COMPRESSOR	409 - B DIESEL GENERATOR BUILDING ( LOWER LEVEL )	12	C-106
##	3D01	3D01 (DISTRIBUTION PANEL)	310 - CABLE SPREADING ROOM	14	C-108
	3D23	3D23 (DISTRIBUTION PANEL)	347 - CONTROL ROOM INVERTER ROOM	14	C-111
##	3S77	100 AMP 2-POLE AUTOMATIC TRANSFER SWITCH	234 - NEW ELECTRICAL EQUIPMENT ROOM	14	C-113
	3D03	3A BATTERY RACK	310 - CABLE SPREADING ROOM	15	C-115
##	3D24	3B BATTERY RACK	347 - CONTROL ROOM INVERTER ROOM	15	C-117
	3D25	3B1 BATTERY CHARGER	347 - CONTROL ROOM INVERTER ROOM	16	C-119
##	3D25A	3B2 BATTERY CHARGER	234 - NEW ELECTRICAL EQUIPMENT ROOM	16	C-121

Tag ID	Component Description	Area	Equip. Class	Page
## 3Y05	STATIC INVERTER 3C 125 VDC/120 VAC 7.5 KVA	347 - CONTROL ROOM INVERTER ROOM	16	C-123
3Y07	STATIC INVERTER 3D 125 VDC/120 VAC 7.5 KVA	347 - CONTROL ROOM INVERTER ROOM	16	C-125
## D51	SPARE BATTERY CHARGER	234 - NEW ELECTRICAL EQUIPMENT ROOM	16	C-127
## 3K4B	3B DIESEL GENERATOR	409 - DIESEL GENERATOR BUILDING (LOWER LEVEL)	17	C-129
## 3QR35	CONTROL ROOM PROTECTION RACK	310 - CABLE SPREADING ROOM	18	C-131
TIS-3-6413B	SWGR RM 3D FAN 3V65B TEMP SWITCH	429 - SWITCHGEAR ROOM 3D	19	C-134
TW-3-412C	DELTA T-TAVG CH I COLD LEG 1 THERMOWELL	104 - RCP A CUBICLE	19	Defer
3C04	VERTICAL PANEL A	360 - CONTROL ROOM, VERTICAL PANEL	20	C-136
## 3C06/3C05	VERTICAL PANEL B	360 - CONTROL ROOM VERTICAL PANEL	20	C-138
## 3C12B	3B EDG CONTROL PANEL	409 - DIESEL GENERATOR BUILDING (LOWER LEVEL)	20	C-140
## 3C23A	SEQUENCER 3C23A - CABINET	368 - 4160 V SWITCHGEAR ROOM	20	C-142
3C23B	SEQUENCER 3C23B - CABINET	368 - 4160 V SWITCHGEAR ROOM	20	C-144
3C264	3C264 - ALTERNATE SHUTDOWN PANEL	368 - 4160 V SWITCHGEAR ROOM	20	C-146
CONSOLE	CONTROL ROOM CONTROL CONSOLE	362 - CONTROL ROOM CONTROL CONSOLE	20	C-148
## 3E206B	RHR HEAT EXCHANGER B	210 - RHR HEAT EXCHANGER ROOM	21	C-151
3E207B	COMPONENT COOLING HEAT EXCHANGER B	202 - COMPONENT COOLING PUMP ROOM	21	C-153
## 3E208A	SPENT FUEL PIT HEAT EXCHANGER	223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	21	C-155
3P214B HEAT EXCHANGER	SEAL WATER HEAT EXCHANGER FOR CONTAINMENT SPRAY PUMP B	203 - CONTAINMENT SPRAY PUMP ROOM	21	C-157
## 3T1	REFUELING WTR STORAGE TK	217 - RWST	21	C-159
## 3T218	COMPONENT COOLING SURGE TANK	212 - SPENT FUEL PIT ROOM	21	Defer
## 3T229B	SI ACCUM B	114 - ACCUMULATOR B AREA	21	Defer
## 3T23B	EDG 3B FUEL OIL DAY TANK	408 - B DIESEL GENERATOR BUILDING (UPPER LEVEL)	21	C-161
3T269B	EDG 3B STARTING AIR ACCUMULATOR TANK	409 - B DIESEL GENERATOR BUILDING (LOWER LEVEL)	21	C-163
## 3T36	EDG DIESEL OIL STORAGE TANK	293 - GENERAL OUTDOORS	21	C-165
## 3T8	CONDENSATE STORAGE TANK	331 - CONDENSATE STORAGE TANK	21	C-167
3V30B	EMERGENCY CONTAINMENT COOLER B	123 - CONTAINMENT 58 FOOT ELEV.	21	Defer
## T205B	BORIC ACID STORAGE TANK B	200 - BORIC ACID TANK ROOM	21	C-169
3-12-031	TUBE GATE ISOLATION VALVE	212 - SPENT FUEL PIT ROOM	0	C-171
3-797	SFP COOLING WATER PUMP LOW SUCTION VALVE	223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM (Cask Wash Area)	0	C-173
3-910	SFP CLG PMP A SUCT ISO VLV	223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	0	C-175
3K200	BORIC ACID BLENDER	201 - CHARGING PUMP ROOM	0	C-177
3NP212	SPENT FUEL PIT COOLING PUMP TRANSFER SWITCH	223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	0	C-179
BD-2	CREVS INTAKE BALANCING DAMPER	347 - CONTROL ROOM INVERTER RM	0	C-181
BS-3-1402	BASKET STRAINER TO INTAKE COOLING WTR SUPPLY FOR CCW HX A	202 - COMPONENT COOLING PUMP ROOM	0	C-183
CFU-1	COMPENSATORY FILTER UNIT	347 - CONTROL ROOM INVERTER RM	0	C-185
LT-3-651	SPENT FUEL PIT LEVEL TRANSMITTER	212 - SPENT FUEL PIT ROOM	0	C-187

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

Per the EPRI guidance document, the top row of each checklist summarizes the status as follows:

<b>Status</b>	<b>Meaning</b>
Y	All relevant checks were answered Yes and no further action is required.
N	At least one check is answered No and follow-up is required.
U	At least one check could not be answered due to lack of information and follow-up is required.

Section 5.2.5 of this report identifies planned actions for items requiring follow-up.

Class (01) Motor Control Centers

3B05 SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B05

Equipment Class: (1) Motor Control Centers

Equipment Description: A-MCC (CABINET)

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 342

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

*MCC is within environmental enclosure. See external anchorage of welded tabs in front and fillet welds in rear.*

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

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

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B05

Equipment Class: (1) Motor Control Centers

Equipment Description: A-MCC (CABINET)

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

---

Interaction Effects

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

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

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

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

*There may be spray sources for non-SC-I piping nearby, but MCC is protected by enclosure.*

---

Other Adverse Conditions

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

*Opened enclosure doors and inspected front of MCC. Saw one broken thumbscrew in Section 30524, not considered an adverse condition because this is a spare compartment and broken screw is middle one of three locations along door edge.*

---

Comments

Walkdown by Team B

3B06 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3B06

Equipment Class: (1) Motor Control Centers

Equipment Description: B-MCC (CABINET)

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 343

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

*Opened bottom kick-panels to view base anchorage and viewed top  
supports from ladder. MCC welded at the base by (12) x 3" long welds  
to embedded steel. Max. weld spacing is 36". MCC has three top  
supports with two 5/8 CEA per support. Anchorage matches drawing  
5613-C-1790 Sh. 2.*

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3B06

Equipment Class: (1) Motor Control Centers

Equipment Description: B-MCC (CABINET)

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

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

*Loose thumbscrews seen on section 30618, 30652 (cited as potential adverse).*

Other

*MCC rear face is close to wall, but top support will limit seismic front/back displacement to a very low magnitude, so judged acceptable.  
In the side/side direction, an approximately 1-1/4" gap exists to cabinet TB3829, acceptable for side/side response.*

---

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B06

Equipment Class: (1) Motor Control Centers

Equipment Description: B-MCC (CABINET)

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Comments

Walkdown by Team B

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3B07 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B07  
Equipment Class: (1) Motor Control Centers  
Equipment Description: C-MCC (CABINET)  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 220  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B07

Equipment Class: (1) Motor Control Centers

Equipment Description: C-MCC (CABINET)

*MCC kick plates (lower plates) were opened and the internal anchorage was inspected.*

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

*MCC kick plates (lower plates) were opened and the interior was inspected. No other adverse conditions were found inside the MCC. Opening the remaining cubicles would require significant dismantling.*

---

Comments

Walkdown by Team A

---

3B08 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3B08  
Equipment Class: (1) Motor Control Centers  
Equipment Description: D-MCC (CABINET)  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 220  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Bracing from the top of the cabinet to the wall was verified as consistent with drawing 5613-C-1790 Sh. 4 Rev. 0. Internal base anchorage was inspected by opening kick plates and was found to be consistent with PTN-C-91-178-001 Rev. 0.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B08

Equipment Class: (1) Motor Control Centers

Equipment Description: D-MCC (CABINET)

---

#### Interaction Effects

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

*Adjacent overhead light is approximately 2" from the MCC. The light is hung from a ceiling mounted unistrut support with a 5" long threaded rod. The rod-to-unistrut connection is rigid enough to preclude any pendulum action. No risk of seismic interaction.*

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

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

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

---

#### Other Adverse Conditions

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

*MCC kick plates (lower plates) were opened and the interior was inspected. No other adverse conditions were found inside the MCC. Opening the remaining cubicles would require significant dismantling.*

---

#### Comments

Walkdown by Team A

Class (02) Low Voltage Switchgear

3B02 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B02

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 3B02 480V HVPDS LOAD CENTER 3B (CABINET)

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 341

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

*Small crack in floor at rear but stops short of cabinet pad.*

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

*See 1-1/2" fillet welds at base at 12" o/c or less front and rear. No shims installed. Matches 5613-C-1789.*

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B02

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 3B02 480V HVPDS LOAD CENTER 3B (CABINET)

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

---

Interaction Effects

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

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

*There are masonry walls in the area. See AWC for comments.*

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

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

---

Other Adverse Conditions

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

*Inspected exterior of cabinet. No loose or missing hardware. Also opened 1 of 3 lower doors and found no loose or missing hardware.*

---

Comments

Walkdown by Team B

3B04 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3B04  
Equipment Class: (2) Low Voltage Switchgear  
Equipment Description: 3D LC (Part of B train) (CABINET)  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 341  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

*Welds along base, front and rear, 1-1/2" long and 12" o/c or less.  
Matches 5613-C-1789.*

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B04

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 3D LC (Part of B train) (CABINET)

---

#### Interaction Effects

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

---

#### Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Inspected exterior of cabinet. No loose or missing hardware. Also opened 2 of 3 lower doors and found no loose or missing hardware.*

---

#### Comments

Walkdown by Team B

---

3B50 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B50

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 3H LOAD CENTER (CABINET)

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 234

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

*Cabinet is welded to steel base frame and frame is anchored to concrete floor with CEA's.*

*Inspected steel frame anchorage to concrete floor. Also opened front lower doors and saw stitch weld of cabinet base to base frame.*

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

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

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B50

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 3H LOAD CENTER (CABINET)

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

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

*Inspected exterior and lower interior of cabinet (opened all lower doors). One loose thumbscrew in front lower door (later tightened). One loose thumbscrew in rear door.*

*Also, lift trolley on roof of cabinet appears unrestrained side-to-side and may bang against stop. This may be a relay chatter issue.*

---

Comments

Walkdown by Team B

Class (03) Medium Voltage Switchgear.

3AA SWC

Status:

Seismic Walkdown Checklist (SWC)

Y N  U

Equipment ID No.: 3AA

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 3AA 4.16V SWITCHGEAR 3A (CABINET)

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 368

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

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

*Cabinet has internal anchorage. No permission to open cabinet.  
Defer inspection.*

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

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

5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Refer to 5613-C-1791 for anchorage design basis.*

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3AA

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 3AA 4.16V SWITCHGEAR 3A (CABINET)

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

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

*Inspected exterior of cabinet; no loose or missing hardware found.*

---

Comments

Walkdown by Team B

3AD SWC

Status: Y N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3AD

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4.16KV SWITCHGEAR 3AD FOR BUS 3D

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 429

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown  
*Cabinet anchorage is internal; not permitted to open cabinet at this time. Defer inspection.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Unknown
  
5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Unknown

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3AD

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4.16KV SWITCHGEAR 3AD FOR BUS 3D

---

Interaction Effects

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

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

*Light are well supported; cable tray is lightly loaded.*

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

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

---

Other Adverse Conditions

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

*A door thumb screw was not engaged, section 3AD02. Also a number of thumb screws on back panels were not snug.*

---

Comments

Walkdown by Team B

Class (04) Transformers

X05 SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: X05

Equipment Class: (4) Transformers

Equipment Description: 4160/480VTRANSFORMER FOR 480V LC 3B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 341

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

*Welds to embedments.*

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

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

5. Is the anchorage configuration consistent with plant documentation? No  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

*See field sketch, 4 of 6 welds are 4" long and 2 of 6 welds are about 2" long. Does not match drawing 5610-E-9-35 (also see 5160-C-114 Sh. 2 Note 8).*

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: X05

Equipment Class: (4) Transformers

Equipment Description: 4160/480VTRANSFORMER FOR 480V LC 3B

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? No

---

Interaction Effects

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

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

*There are masonry walls in the area. See AWC for comments.*

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team B

---

Class (05) Horizontal Pumps

3P10B SWC

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P10B

Equipment Class: (5) Horizontal Pumps

Equipment Description: EDG 3B OIL TRANSFER PUMP

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 293

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

*Anchorage is (4) x 1/2 diameter anchors at base of steel pedestal into concrete pad. Anchorage matches 5610-C-1694.*

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P10B

Equipment Class: (5) Horizontal Pumps

Equipment Description: EDG 3B OIL TRANSFER PUMP

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

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

*Fire pipe main nearby is well supported and not a concern.*

---

Comments

Walkdown by Team B

---

3P201B SWC

Status:

Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3P201B

Equipment Class: (5) Horizontal Pumps

Equipment Description: CHARGING PUMP B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 201

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

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

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

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

5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage is consistent with drawing 5610-C-375 Sh. 1 Rev. 8*

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P201B

Equipment Class: (5) Horizontal Pumps

Equipment Description: CHARGING PUMP B

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

3P203B SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3P203B  
Equipment Class: (5) Horizontal Pumps  
Equipment Description: BORIC ACID TRANSFER PUMP B  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 200  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
*Anchorage consistent with drawing 5610-C-254 Sh. 2 Rev. 0*

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P203B

Equipment Class: (5) Horizontal Pumps

Equipment Description: BORIC ACID TRANSFER PUMP B

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

3P211B SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3P211B  
Equipment Class: (5) Horizontal Pumps  
Equipment Description: COMPONENT COOLING PUMP B  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 202  
Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage consistent with drawing 5610-C-277 Rev. 13*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P211B  
Equipment Class: (5) Horizontal Pumps  
Equipment Description: COMPONENT COOLING PUMP B

---

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*Fire piping in area well supported (welded and threaded lines). Spray nozzles have good clearance.* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

3P212A SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y N  U

Equipment ID No.: 3P212A

Equipment Class: (5) Horizontal Pumps

Equipment Description: SFP CLG WTR PMP A

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 223

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Need to verify anchorage with plant documentation. Noted 6 - 1/2" diameter anchor bolts in the field (see sketch).* Unknown
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P212A  
Equipment Class: (5) Horizontal Pumps  
Equipment Description: SFP CLG WTR PMP A

---

Interaction Effects

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

3P214B SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y    N    U

Equipment ID No.: 3P214B  
Equipment Class: (5) Horizontal Pumps  
Equipment Description: CONTAINMENT SPRAY PUMP B  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 203

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation?      Not Applicable  
(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?      Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P214B

Equipment Class: (5) Horizontal Pumps

Equipment Description: CONTAINMENT SPRAY PUMP B

---

Interaction Effects

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

3P215B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P215B

Equipment Class: (5) Horizontal Pumps

Equipment Description: HI HEAD SAFETY INJECTION PUMP 3B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 206

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation?      Not Applicable  
(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?      Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P215B

Equipment Class: (5) Horizontal Pumps

Equipment Description: HI HEAD SAFETY INJECTION PUMP 3B

---

Interaction Effects

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

EMERG SFP CLG PMP SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EMERG SFP CLG PMP

Equipment Class: (5) Horizontal Pumps

Equipment Description: EMERGENCY SPENT FUEL PIT COOLING PUMP

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 223

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EMERG SFP CLG PMP  
Equipment Class: (5) Horizontal Pumps  
Equipment Description: EMERGENCY SPENT FUEL PIT COOLING PUMP

---

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes  
*Pump is approximately 3/4" vertical distance from nearby wall mounted bracing. Due to the rigidity of the pump assembly and the bracing the gap is deemed adequate to preclude seismic interaction.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

P2B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: P2B

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUXILIARY FEEDWATER PUMP B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 306

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See (6) x 3/4 diameter CIP bolts. Matches 5160-C-375 Sh. 1.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: P2B

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUXILIARY FEEDWATER PUMP B

---

Interaction Effects

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

*Grating above OK, see AWC.*

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team B

Class (06) Vertical Pumps

3P210B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P210B

Equipment Class: (6) Vertical Pumps

Equipment Description: RHR PUMP B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 4.00 ft, 211

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y    N    U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P210B

Equipment Class: (6) Vertical Pumps

Equipment Description: RHR PUMP B

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

---

Interaction Effects

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

*Gap between pump control panel/cabinet and staircase is adequate (approx. 3").*

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

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

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

---

Other Adverse Conditions

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

*Pump control panel/cabinet has two loose bolts and one missing on the cover plate. Does not present a seismic hazard.*

---

Comments

Walkdown by Team A

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## 3P9B SWC

Status:  Y  N  U  
 Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P9B

Equipment Class: (6) Vertical Pumps

Equipment Description: INTAKE COOLING WATER PUMP B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 370

Manufacturer/Model:

## Instructions for Completing Checklist

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

Anchorage

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

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

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

*Surface rust seen. Southeast bolt has most rust but no significant  
degradation of capacity at this time.*

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

*Visual cracks are present in pad and top of slab but judged to be of  
minor significance.*

*Pump is anchored with deeply embedded cast-in-place bolts and  
anchorage strength not significantly affected.*

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

*See (4) x 1-1/4 diameter bolts (appear to be cast-in-place). Matches  
5610-C-61 Sh1 (see also Note 10 of that drawing).*

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P9B

Equipment Class: (6) Vertical Pumps

Equipment Description: INTAKE COOLING WATER PUMP B

---

#### Interaction Effects

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

*Braced scaffold around pump with >= 2-1/2" clearance; no impact on soft targets even if scaffold displaces. See AWC for scaffold evaluation.*

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

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

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

---

#### Other Adverse Conditions

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

---

#### Comments

Walkdown by Team B

Class (07) Fluid-Operated Valves

CV-3-1607 SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: CV-3-1607

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MAIN STEAM LINE A STM DUMP TO ATMOS CNTL VALVE

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 300

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: CV-3-1607

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MAIN STEAM LINE A STM DUMP TO ATMOS CNTL VALVE

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

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

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CV-3-2816 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: CV-3-2816  
Equipment Class: (7) Fluid-Operated Valves  
Equipment Description: TRAIN 1 S/G B FEED FLOW CONTROL VALVE  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 302  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: CV-3-2816

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: TRAIN 1 S/G B FEED FLOW CONTROL VALVE

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#### Interaction Effects

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

*SOV for valve is near adjacent insulation cap (see photos); configuration is OK because support configuration is very stiff. Valve body is also near cap but the body is very rugged and not vulnerable.*

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

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

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

---

#### Other Adverse Conditions

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

*Valve is within missile-shielded outdoor area.*

---

#### Comments

Walkdown by Team B

FCV-3-113A SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: FCV-3-113A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: BORIC ACID TO BLENDER FLOW CNTL VLV

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 201

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: FCV-3-113A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: BORIC ACID TO BLENDER FLOW CNTL VLV

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

HCV-3-121 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

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Equipment ID No.: HCV-3-121

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CHG TO RCS CONTROL VALVE

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 209

Manufacturer/Model:

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Instructions for Completing Checklist

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

Anchorage

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

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: HCV-3-121

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CHG TO RCS CONTROL VALVE

---

#### Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? No  
*HCV-3-121 is within 1/2" of the structural support for a nearby limit switch. Potential for seismic interaction. A possible method of increasing clearance would be to cut the extended part of the level transmitter bolt.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

---

#### Other Adverse Conditions

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

---

#### Comments

Walkdown by Team A

HCV-3-758 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: HCV-3-758  
Equipment Class: (7) Fluid-Operated Valves  
Equipment Description: HAND CNTL VLV FOR RHR HX FLOW CNTL  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 10.00 ft, 210A  
Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:

Seismic Walkdown Checklist (SWC)

Y    N    U

Equipment ID No.: HCV-3-758

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HAND CNTL VLV FOR RHR HX FLOW CNTL

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

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Comments

Walkdown by Team A

POV-3-2605 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

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Equipment ID No.: POV-3-2605

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MN STM ISO VLV FROM S/G B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 300

Manufacturer/Model:

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Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: POV-3-2605

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MN STM ISO VLV FROM S/G B

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

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POV-3-487 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: POV-3-487

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: S/G B BYPASS FW Isolation VLV

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 302

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: POV-3-487

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: S/G B BYPASS FW Isolation VLV

---

#### Interaction Effects

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

*One section of operator is against insulation of adjacent pipe. Judged acceptable because contact area is relatively soft and pipes are very stiff.*

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

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes  
*There is scaffold in the area; see AWC for comments.*

---

#### Other Adverse Conditions

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

---

#### Comments

Walkdown by Team B

POV-3-4883 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: POV-3-4883  
Equipment Class: (7) Fluid-Operated Valves  
Equipment Description: TPCW HEAT EXCHANGERS ISOLATION VALVE  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 334  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: POV-3-4883

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: TPCW HEAT EXCHANGERS ISOLATION VALVE

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#### Interaction Effects

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

*Main transmission lines are overhead but valve is screened by steel framing and pipes if cable breaks and falls.*

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

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

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

*Some non-SC-I piping in area, see AWC for comments.*

---

#### Other Adverse Conditions

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

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#### Comments

Walkdown by Team B

TCV-3-143 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: TCV-3-143  
Equipment Class: (7) Fluid-Operated Valves  
Equipment Description: NON REGEN HX OUTLET TO VCT OR DEMIN TEMP CNTL VLV  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 201  
Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TCV-3-143

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: NON REGEN HX OUTLET TO VCT OR DEMIN TEMP CNTL VLV

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

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Comments

Walkdown by Team A

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Class (08) Motor-Operated and Solenoid-Operated Valves

MOV-3-1404 SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-1404

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

Equipment Description: MTR OPERATED VALVE FROM STEAM GENERATOR A TO AUX FW PP  
TURBINES

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 301

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-1404

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

MTR OPERATED VALVE FROM STEAM GENERATOR A TO AUX FW PP

Equipment Description: TURBINES

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

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

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MOV-3-350 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

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Equipment ID No.: MOV-3-350

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

Equipment Description: EMERGENCY BORATION CONTROL VALVE

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 201

Manufacturer/Model:

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Instructions for Completing Checklist

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

Anchorage

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

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: MOV-3-350

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

Equipment Description: EMERGENCY BORATION CONTROL VALVE

---

#### Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? No

*The gearbox of MOV-3-350 is approximately 1/4" from a vertical conduit (possibly abandoned).*

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

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

---

#### Other Adverse Conditions

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

---

#### Comments

Walkdown by Team A

MOV-3-843B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-843B

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

Equipment Description: HHSI TO COLD LEG MOV

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 203

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-843B

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

Equipment Description: HHSI TO COLD LEG MOV

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

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Comments

Walkdown by Team A

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MOV-3-860B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-860B  
Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves  
Equipment Description: RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE

Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 10.00 ft, 210B

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-860B

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

Equipment Description: RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE

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Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

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Comments

Walkdown by Team A

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MOV-3-861B SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: MOV-3-861B  
Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves  
Equipment Description: RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 4.00 ft, 211  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-861B

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

Equipment Description: RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE

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Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

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Comments

Walkdown by Team A

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MOV-3-862A SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-862A  
Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves  
Equipment Description: RWST TO RHR PUMP SUCTION VALVE  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 4.00 ft, 211  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-862A

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

Equipment Description: RWST TO RHR PUMP SUCTION VALVE

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Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

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Comments

Walkdown by Team A

MOV-3-863B SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: MOV-3-863B  
Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves  
Equipment Description: RHR PUMP RECIRC TO RWST  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 10.00 ft, 210A  
Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: MOV-3-863B

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

Equipment Description: RHR PUMP RECIRC TO RWST

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#### Interaction Effects

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

---

#### Other Adverse Conditions

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

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#### Comments

Walkdown by Team A

MOV-3-864B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-864B  
Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves  
Equipment Description: RWST MTR OP ISO VALVE TO SI & RHR PUMPS  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 217  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-864B

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

Equipment Description: RWST MTR OP ISO VALVE TO SI & RHR PUMPS

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Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

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Comments

Walkdown by Team A

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MOV-3-869 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-869  
Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves  
Equipment Description: SI TO LOOP A&B HOT LEG MTR OP ISO VLV  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 209

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: MOV-3-869

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

Equipment Description: SI TO LOOP A&B HOT LEG MTR OP ISO VLV

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

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Comments

Walkdown by Team A

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MOV-3-880B SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: MOV-3-880B  
Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves  
Equipment Description: CTMT SPRAY PMP B DISCH ISO VLV  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 203  
Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:

Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: MOV-3-880B

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

Equipment Description: CTMT SPRAY PMP B DISCH ISO VLV

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

SV-3-2046B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: SV-3-2046B

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

Equipment Description: EDG 3B OIL DAY TANK INLET CONTROL SOLENOID VALVE

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 408

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SV-3-2046B

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

Equipment Description: EDG 3B OIL DAY TANK INLET CONTROL SOLENOID VALVE

---

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*Nothing overhead.*

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

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

---

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Pipe support conditions were reviewed and judged OK.*

---

Comments

Walkdown by Team B

Class (09) Fans

3B EDG FAN ASSEMBLIES SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3B EDG FAN ASSEMBLIES

Equipment Class: (9) Fans

Equipment Description: EDG FAN ASSEMBLIES (RADIATOR FAN)

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 309

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? No

*See sketch. One anchor on support "A" on north fan is broken.*

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

*Mild rust seen, acceptable.*

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

5. Is the anchorage configuration consistent with plant documentation? No  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

*See field sketch for anchorage.*

*For south fan see (3) x 3/4" anchors at support A, (4) x 1/2" CEA's at support B and no anchors visible at support C.*

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3B EDG FAN ASSEMBLIES

Equipment Class: (9) Fans

Equipment Description: EDG FAN ASSEMBLIES (RADIATOR FAN)

*Anchorage of north fan is similar except for one A anchor stud appears to be broken off (no nut seen).*

6. Anchorage does not match patterns shown on 5610-C-379 Sh. 1.  
Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? No

---

#### Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*Overhead duct spans across room, wall to fans. Support judged OK (short span).* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes  
*Flexible connections for coolant lines.*
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

#### Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?  
*Support of coolant lines inspected and judged acceptable.* Yes

---

#### Comments

Walkdown by Team B

3V34B SWC

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

Equipment ID No.: 3V34B

Equipment Class: (9) Fans

Equipment Description: 3B EDG ROOM VENT EXHAUST FAN

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 409

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
  
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes  
*See (7) x 1/2 diameter (estimate) CEA around perimeter (see photo).  
Unused holes near some anchors judged OK (judged anchor was moved to avoid rebar interference).*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
  
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
  
  
5. Is the anchorage configuration consistent with plant documentation?      Not Applicable  
*(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?      Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3V34B

Equipment Class: (9) Fans

Equipment Description: 3B EDG ROOM VENT EXHAUST FAN

*See about 3/8 gap between wall and base at lower right anchor.*

*Judged not significant based on very good overall anchorage capacity.*

---

Interaction Effects

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team B

---

3V65B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3V65B

Equipment Class: (9) Fans

Equipment Description: AXIAL FLOW VENTILATION FAN

Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 429

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

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

*See (4) thru bolts to steel frame (estimate as 1/2 diameter). Frame is hung from above*

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

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

5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3V65B

Equipment Class: (9) Fans

Equipment Description: AXIAL FLOW VENTILATION FAN

---

Interaction Effects

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team B

Class (10) Air Handlers

3E241B SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3E241B

Equipment Class: (10) Air Handlers

Equipment Description: LOAD CENTER ROOM 3A/B - AIR HANDLING UNIT

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 341

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3E241B

Equipment Class: (10) Air Handlers

Equipment Description: LOAD CENTER ROOM 3A/B - AIR HANDLING UNIT

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

*Anchorage very similar to 3E242B.*

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Rear face is 3-1/4" from wall, OK.*

---

Comments

Walkdown by Team B

3E242B SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3E242B  
Equipment Class: (10) Air Handlers  
Equipment Description: LOAD CENTER ROOM 3C/D - AIR HANDLING UNIT (TRAIN-B)  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 341  
Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3E242B

Equipment Class: (10) Air Handlers

Equipment Description: LOAD CENTER ROOM 3C/D - AIR HANDLING UNIT (TRAIN-B)

*Anchorage very similar to 3E242A.*

---

Interaction Effects

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

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

*Very little overhead.*

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

*Flexible conduit runs tight between fan housing and pipe, but pipe has soft insulation so judged acceptable.*

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team B

---

3E243A SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

---

Equipment ID No.: 3E243A

Equipment Class: (10) Air Handlers

Equipment Description: SWITCHGEAR ROOM 3A - AIR HANDLING UNIT

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 368

Manufacturer/Model:

---

**Instructions for Completing Checklist**

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

---

**Anchorage**

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

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

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

*Mild surface rust seen on connection hardware.*

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

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

*Anchorage found is (6) x 1/2" diameter concrete expansion anchor  
(CEA) thru steel plate embedded in grout pad. Anchorage matches  
drawing 5613-C-1738 Sh. 3.*

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

---

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3E243A

Equipment Class: (10) Air Handlers

Equipment Description: SWITCHGEAR ROOM 3A - AIR HANDLING UNIT

---

Interaction Effects

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team B

E16B SWC

Status: Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: E16B

Equipment Class: (10) Air Handlers

Equipment Description: CONTROL ROOM AIR HANDLING UNIT

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 310

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: E16B

Equipment Class: (10) Air Handlers

Equipment Description: CONTROL ROOM AIR HANDLING UNIT

*Unit appears to be unanchored. Feet of unit appear to sit on vibration isolation pads (4 places).*

---

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*There are a masonry walls in the area. See AWC for comments.*  
*Air duct is supported by floor framing, OK.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? No  
*There is non-rugged rod hung copper tubing in the area and tubing is attached to E16B. Unlikely that this piping is seismically designed.*

---

Comments

Covered by Area 310C AWC.

---

V76 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y N  U

Equipment ID No.: V76

Equipment Class: (10) Air Handlers

Equipment Description: AIR HANDLER UNIT FOR ELEC EQUIP RM A/C CONDENSER E232

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 234

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

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

*See below.*

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

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

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

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

Status: Y N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: V76

Equipment Class: (10) Air Handlers

Equipment Description: AIR HANDLER UNIT FOR ELEC EQUIP RM A/C CONDENSER E232

*Only able to confirm anchorage on one side of cabinet base. Per drawing 5610-C-1701 Sh. 5, expect that remaining anchorage is hidden from view (weld to inside of base frame, not visible unless housing is disassembled).*

Interaction Effects

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

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*2" clearance to the wall behind judged to be sufficient.*

Comments

Walkdown by Team B

Class (11) Chillers

3E239B SWC

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3E239B

Equipment Class: (11) Chillers

Equipment Description: LC & SWGR ROOMS A/C SYSTEM - CHILLER PACKAGE 1B (TRAIN-B)

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 315

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage is (10) x 5/8 diameter thru bolts to steel platform. See field sketch. Need correct anchor drawing to verify (unknown).* Unknown

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3E239B

Equipment Class: (11) Chillers

Equipment Description: LC & SWGR ROOMS A/C SYSTEM - CHILLER PACKAGE 1B (TRAIN-B)

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

---

Interaction Effects

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

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

*Light pole adjacent to 3E239B is welded to platform, OK.*

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team B

---

Class (12) Air Compressors

3C2B COMPRESSOR SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3C2B COMPRESSOR  
Equipment Class: (12) Air Compressors  
Equipment Description: EDG 3B AIR COMPRESSOR  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 409  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
See (6) x 1/2 diameter anchors (3 per side). Matches drawing 5610-C-379 Sh. 2. Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3C2B COMPRESSOR

Equipment Class: (12) Air Compressors

Equipment Description: EDG 3B AIR COMPRESSOR

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

---

Interaction Effects

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

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

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

*Flexible connection for air line, see photo.*

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

*Scaffold around compressor, OK. See AWC for comments.*

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team B

---

Class (14) Distribution Panels

3D01 SWC

Status: Y N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3D01

Equipment Class: (14) Distribution Panels

Equipment Description: 3D01 (DISTRIBUTION PANEL)

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 310

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown  
*See apparent anchor locations missing anchor bolts; unknown if this is OK per design basis.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Opened all kick panels, saw bolt heads (apparent anchorage); see field sketch. Need correct anchor drawing to verify (unknown).* Unknown

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3D01

Equipment Class: (14) Distribution Panels

Equipment Description: 3D01 (DISTRIBUTION PANEL)

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

---

Interaction Effects

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

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

*There are a masonry walls in the area. See AWC for comments.*

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

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

*About 1-1/8" gap to wall behind; judged OK for shake space.*

---

Other Adverse Conditions

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

*Inspected exterior. Saw missing screws in cover panel. Also saw some loose thumb screws in line-up.*

Other

*Inspected exterior. Front grill of distribution panel may rattle, but very minor issue, OK.*

*Inspected interior from open kick panels. No anomalies.*

---

Comments

Y N  U

Status:

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3D01

Equipment Class: (14) Distribution Panels

Equipment Description: 3D01 (DISTRIBUTION PANEL)

Walkdown by Team B

3D23 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y N  U

Equipment ID No.: 3D23

Equipment Class: (14) Distribution Panels

Equipment Description: 3D23 (DISTRIBUTION PANEL)

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 347B

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3D23

Equipment Class: (14) Distribution Panels

Equipment Description: 3D23 (DISTRIBUTION PANEL)

*Cabinet has internal anchorage. Not possible to open cabinet at power per Turkey Point Operations. Defer to bus outage to check anchorage and interior.*

---

Interaction Effects

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

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

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

*Some rigid lines going into the cable tray overhead, but the tray is flexible.*

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

3S77 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3S77

Equipment Class: (14) Distribution Panels

Equipment Description: 100 AMP 2-POLE AUTOMATIC TRANSFER SWITCH

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 234

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? No

*Three anchors along right edge covered by whitish corrosion product; lower anchor may have more than minor corrosion of nut.*

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

*See one crack near top of cabinet, but not close to anchor.*

5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? No

Status: Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3S77

Equipment Class: (14) Distribution Panels

Equipment Description: 100 AMP 2-POLE AUTOMATIC TRANSFER SWITCH

---

#### Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*There are masonry walls in the area. See AWC for comments.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes  
*There were lightweight portable work lamps (plastic housing) hung near cabinet, not considered a credible hazard,*

---

#### Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Inspected exterior and interior of cabinet (opened front doors). No loose or missing hardware.*

---

#### Comments

Walkdown by Team B

Class (15) Batteries on Racks

3D03 SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3D03

Equipment Class: (15) Batteries on Racks

Equipment Description: 3A BATTERY RACK

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 310

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? No  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage seen to be a mix of (12) x 5/8 and (4) x 1/2 diameter CEA's for each rack. See field sketch. Anchorage does not match 5610-C-1369.*

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3D03

Equipment Class: (15) Batteries on Racks

Equipment Description: 3A BATTERY RACK

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? No

---

Interaction Effects

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

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

*There are a masonry walls in the area. See AWC for comments.*

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

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

---

Other Adverse Conditions

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

*Typically there is a 3/8 to 1/2" (approx.) gap between front of batteries and horizontal rail. Issue is common for all inspected racks. Unknown if this is acceptable (batteries can slide forward to rail).*

---

Comments

Walkdown by Team B

3D24 SWC

Status: Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3D24

Equipment Class: (15) Batteries on Racks

Equipment Description: 3B BATTERY RACK

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 347D

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
*Anchorage is consistent with drawing 5610-C-1369 Rev. 5*

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

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3D24

Equipment Class: (15) Batteries on Racks

Equipment Description: 3B BATTERY RACK

---

#### Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*There is a masonry wall behind the cabinet. Per drawing 5160-C-1728, the wall is safety related and acceptable for design basis.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

---

#### Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?  
*Typically there is a 3/8 to 1/2" (approx.) gap between front of batteries and horizontal rail. Issue is common for all inspected racks. Unknown if this is acceptable (batteries can slide forward to rail).*

---

#### Comments

Walkdown by Team A

Class (16) Inverters

3D25 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3D25

Equipment Class: (16) Inverters

Equipment Description: 3B1 BATTERY CHARGER

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 347B

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage configuration differs from drawing 5610-C-652 Sh. 1 (see field sketch).* No

Status:

Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3D25

Equipment Class: (16) Inverters

Equipment Description: 3B1 BATTERY CHARGER

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? No

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

*Inspected exterior and interior of cabinet (opened lower doors). No loose or missing hardware. The upper panels would require excessive dismantling to remove.*

---

Comments

Walkdown by Team A

3D25A SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3D25A  
Equipment Class: (16) Inverters  
Equipment Description: 3B2 BATTERY CHARGER  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 234  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

*All anchors were seen (rear anchors viewed from stairway).*

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

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

5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3D25A

Equipment Class: (16) Inverters

Equipment Description: 3B2 BATTERY CHARGER

*Battery charger is anchorage to steel frame with thru bolts, similar to D51.*

---

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*Light above fairly stiff and won't fall. May possibly swing & hit hood over charger, not significant.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Inspected exterior and lower interior of cabinet (opened lower doors). No loose or missing hardware.*

---

Comments

Walkdown by Team B

3Y05 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3Y05  
Equipment Class: (16) Inverters  
Equipment Description: STATIC INVERTER 3C 125 VDC/120 VAC 7.5 KVA  
(CABINET)  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 347B

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage consistent with drawing 5610-C-652 Sh. 2 Rev. 0*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  
Seismic Walkdown Checklist (SWC)

Y    N    U

Equipment ID No.: 3Y05

Equipment Class: (16) Inverters

STATIC INVERTER 3C 125 VDC/120 VAC 7.5 KVA

Equipment Description: (CABINET)

---

#### Interaction Effects

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

*Temporary resistive load bank is stored within 1/4" of 3Y05. This is judged to be a housekeeping issue and is cited in AWC. Not a credible hazard to 3Y05.*

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

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

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

---

#### Other Adverse Conditions

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

*Inspected exterior and interior of cabinet (opened bottom doors). No loose or missing hardware. Opening upper panels would require excessive dismantling.*

---

#### Comments

Walkdown by Team A

3Y07 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3Y07

Equipment Class: (16) Inverters

STATIC INVERTER 3D 125 VDC/120 VAC 7.5 KVA

Equipment Description: (CABINET)

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 347A

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Yes

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3Y07

Equipment Class: (16) Inverters

Equipment Description: STATIC INVERTER 3D 125 VDC/120 VAC 7.5 KVA  
(CABINET)

---

Interaction Effects

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

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

*There are a masonry walls in the area. Per drawing 5160-C-1728 Rev. 0, the walls are safety related and acceptable for design basis.*

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

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

---

Other Adverse Conditions

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

*Inspected exterior and interior of cabinet (opened all doors). No loose or missing hardware.*

---

Comments

Walkdown by Team A

D51 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y N  U

Equipment ID No.: D51  
Equipment Class: (16) Inverters  
Equipment Description: SPARE BATTERY CHARGER  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 234  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface Yes  
oxidation?
  
4. Is the anchorage free of visible cracks in the concrete near the Yes  
anchors?
  
5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
*Anchorage is (8) x 5/8 diameter thru bolts into steel frame; see field  
sketch. Need correct anchor drawing to verify (unknown).*
  
6. Based on the above anchorage evaluations, is the anchorage free of Unknown  
potentially adverse seismic conditions?

Status: Y N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: D51

Equipment Class: (16) Inverters

Equipment Description: SPARE BATTERY CHARGER

---

Interaction Effects

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

---

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?  
*Inspected exterior and lower interior of cabinet (opened lower doors).  
No loose or missing hardware.* Yes

---

Comments

Walkdown by Team B

Class (17) Engine-Generators

3K4B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3K4B  
Equipment Class: (17) Engine-Generators  
Equipment Description: 3B DIESEL GENERATOR  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 409  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
See (7) x 1-1/8 C/P bolts per side, 14 total. Anchorage matches drawings 5610-C-379 Sh. 1 and 561--C-904. Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3K4B

Equipment Class: (17) Engine-Generators

Equipment Description: 3B DIESEL GENERATOR

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

---

Interaction Effects

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

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

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

*Reviewed support conditions for air start and fuel lines in detail; found to be acceptable.*

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

---

Other Adverse Conditions

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

*Entire skid appears to be on vibration isolation pads (rubber) with anchor bolts thru the pads (see photos). There also appears to be a rubber plate washer below each anchor nut.*

*The item was reviewed for USI A-46 and both anchorage and support conditions were found to be acceptable. In addition the load path to anchorage appears rugged and there is no significant concern with functionality of EDG given relatively low seismic load.*

---

Comments

Walkdown by Team B

Class (18) Instruments on Racks

3QR35 SWC

Status: Y N  U  
Seismic Walkdown Checklist (SWC)

---

Equipment ID No.: 3QR35

Equipment Class: (18) Instruments on Racks

Equipment Description: CONTROL ROOM PROTECTION RACK

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 310

Manufacturer/Model:

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Instructions for Completing Checklist

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

---

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
  2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown  
*See apparent anchor location missing anchor bolt; unknown if this is OK per design basis.*
  
  3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
  4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes  
*Some visual crack in vicinity, but not near anchors.*
  
  5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage is (5) x 3/8 anchors at corners of some sections. See field sketch. Need correct anchor drawing to verify (unknown).*
-

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3QR35

Equipment Class: (18) Instruments on Racks

Equipment Description: CONTROL ROOM PROTECTION RACK

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

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

*Zero gap at left end to adjacent cabinet 3QR80A (next to line-up). Suspect 3QR80A is not bolted to adjacent 3QR32 cabinet (see gaps along length). This may be a relay chatter concern.*

Other

*Inspected exterior and interior of cabinet (opened all front doors). No loose or missing hardware.*

---

Comments

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3QR35

Equipment Class: (18) Instruments on Racks

Equipment Description: CONTROL ROOM PROTECTION RACK

Walkdown by Team B

Class (19) Temperature Sensors

TIS-3-6413B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: TIS-3-6413B  
Equipment Class: (19) Temperature Sensors  
Equipment Description: SWGR RM 3D FAN 3V65B TEMP SWITCH  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 429  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
  
2. Is the anchorage free of bent, broken, missing or loose hardware?      Unknown  
*Wall mounted unit; cannot see wall anchorage fully unless switch is disassembled. After removal of cover, can only see studs to mounting plate.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Unknown
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: TIS-3-6413B

Equipment Class: (19) Temperature Sensors

Equipment Description: SWGR RM 3D FAN 3V65B TEMP SWITCH

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

*Note: Very light item; anchorage failure not credible.*

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team B

---

Class (20) Instrumentation and Control Panels and Cabinets

3C04 SWC

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3C04

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

Equipment Description: VERTICAL PANEL A

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 360

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

*Yes for visible anchors.*

*Unknown for anchors that are not visible (blocked by cables, wires, etc.). See the field sketch, expect that (2) in rear and (4) in front anchors are present but not visible.*

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

*Same as above.*

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

*Per PTN-0-J-C-90-0003, expect that anchors are embedded in concrete curb. Cannot see curb, therefore crack inspection results are unknown.*

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

Status:

Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3C04

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

Equipment Description: VERTICAL PANEL A

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

*Per PTN-0-J-C-90-0003 Sh. 44, expect 1/2" anchors <= 24" o/c.  
Visible anchors are consistent with this design. See field sketch.*

---

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? No

*Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in A-46 inspection.  
Unknown if this was resolved by analysis.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? No

*Ceiling tiles are a concern; see above.*

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

---

Other Adverse Conditions

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

*Inspected exterior and interior of cabinet. Back of cabinet is open (no doors). Some hanging loops of cable seen, but not a concern. Also see Dell PC on a shelf. The PC is clamped down and shelf is strong; OK (see photo). Also no loose or missing hardware.*

---

Comments

Walkdown by Team B

3C06\_3C05 SWC

Status: Y N  U  
Seismic Walkdown Checklist (SWC)

---

Equipment ID No.: 3C06\_3C05

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

Equipment Description: VERTICAL PANEL B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 360

Manufacturer/Model: /

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Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
  2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown  
*Yes for visible anchors.*  
*Unknown for anchors that are not visible (blocked by cables, wires, etc.). See the field sketch, expect that (2) in rear and (3) front anchors are present but not visible.*
  
  3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown  
*Same as above.*
  
  4. Is the anchorage free of visible cracks in the concrete near the anchors? Unknown  
*Per PTN-0-J-C-90-0003, expect that anchors are embedded in concrete curb. Cannot see curb, therefore crack inspection results are unknown.*
  
  5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Per PTN-0-J-C-90-0003 Sh. 44, expect 1/2" anchors <= 24" o/c.  
Visible anchors are consistent with this design. Cannot see all anchors so verification status is unknown. See field sketch.*
-

Status:  
Seismic Walkdown Checklist (SWC)

Y N  U

Equipment ID No.: 3C06\_3C05

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

Equipment Description: VERTICAL PANEL B

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

---

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? No

*Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in A-46 inspection. Unknown if this was resolved by analysis.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? No  
*Ceiling tiles are a concern; see above.*

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

---

Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Inspected exterior and interior of cabinet. Back of cabinet is open (no doors). Some hanging loops of cable seen, but not a concern. No loose or missing hardware.*

---

Comments

Walkdown by Team B

---

3C12B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3C12B

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

Equipment Description: 3B EDG CONTROL PANEL

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 409

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See (4) fillet welds to embedded angle at edge of floor penetration, see field sketch. See also 5610-C-379 Sh. 1. Need document to verify weld pattern dimensions (unknown, not shown on 5610-C-397 Sh. 1, may verify against anchorage stress analysis).* Unknown
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3C12B

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

Equipment Description: 3B EDG CONTROL PANEL

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

*Inspected exterior and interior of cabinet (opened front door). No loose or missing hardware on exterior. In interior, for one small plug-in electrical device at lower right corner of compartment device latch was not engaged (similar items above that one all had latches engaged).*

---

Comments

Walkdown by Team B

3C23A SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3C23A  
Equipment Class: (20) Instrumentation and Control Panels and Cabinets  
Equipment Description: SEQUENCER 3C23A - CABINET  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 368  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See two top supports anchored to concrete wall (one 1/2 diameter anchor per support). See (4) x anchor bolts in right section and (1) x anchor bolt in left section (5 total). Anchorage matches calculation PTN-BFJC-92-039 Attach. 1 Sheet 5.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3C23A

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

Equipment Description: SEQUENCER 3C23A - CABINET

---

#### Interaction Effects

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

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

*Cable tray above on rigid wall brackets, good support. Adjacent light on chains won't fall and won't hit cabinet when it swings.*

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

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

---

#### Other Adverse Conditions

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

*Inspected external of cabinet and internal of cabinet (opened doors on both sections). No loose or missing hardware.*

---

#### Comments

Walkdown by Team B

3C23B SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y N  U

Equipment ID No.: 3C23B

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

Equipment Description: SEQUENCER 3C23B - CABINET

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 368

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

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

*Cabinet anchorage is internal. No permission to open cabinet. Defer anchorage inspection.*

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

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

*Visual cracks are present but judged to be of minor significance.  
Appear to be surface cracks only.*

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

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

Status: Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3C23B

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

Equipment Description: SEQUENCER 3C23B - CABINET

---

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*There is a masonry wall behind the cabinet. The wall is safety related and acceptable for design basis (see AWC).* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

Other Adverse Conditions

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

*Potential impact with independent tube steel support crossing near the top of the cabinet in front. The gap to the TS is about 1/8" on one side, increasing to about 1/2" on the opposite side. This may be an issue for relay chatter.*

*There is a 3/8" gap in side/side direction to a Unistrut. Judged to be acceptable based on high stiffness of items in that direction.*

*Other:*

*Inspected exterior of cabinet. No loose or missing hardware.*

---

Comments

Walkdown by Team B

3C264 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3C264

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

Equipment Description: 3C264 - ALTERNATE SHUTDOWN PANEL

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 368

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?  
*See one floor crack in vicinity of right rear anchor (concrete expansion anchor). Not close to CEA, so OK.*      Yes
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See (9) x 1/2 CEA's thru steel baseplate; baseplate is welded to embedded steel.*      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3C264

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

Equipment Description: 3C264 - ALTERNATE SHUTDOWN PANEL

---

#### Interaction Effects

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

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

*Block walls nearby; walls are safety related so OK (see AWC).*

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

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

---

#### Other Adverse Conditions

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

*Inspected exterior and interior of cabinet (opened all doors). No loose or missing hardware.*

*Overhead threaded pipe found to be drain pipe from air handler; pipe is normally dry so not a spray hazard.*

---

#### Comments

Walkdown by Team B

CONSOLE SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: CONSOLE

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

Equipment Description: CONTROL ROOM CONTROL CONSOLE

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 362

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? No

*Based on inspection, nominal anchorage is 1/2 diameter anchor, 24" o/c along sides.*

*Viewed all front anchors except one location was covered by wires.  
Also, one location seen to be missing an anchor (see empty hole).*

*Most rear anchors cannot be seen, covered by wires.*

*Viewed side anchors, OK.*

*No issues with visible anchors.*

*No:*

*One location known to be missing an anchor bolt; unknown if this is OK per design basis.*

*Can't inspect some anchors, covered by wires.*

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

Status: Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: CONSOLE

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

Equipment Description: CONTROL ROOM CONTROL CONSOLE

*No corrosion seen for visible anchors. Unknown for covered anchors.*

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

*Expect cabinet sits on concrete curb. Cannot see curb & not able to inspect.*

5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? No

---

#### Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? No

*Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in A-46 inspection. Unknown if this was resolved by analysis.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? No  
*Ceiling tiles are a concern; see above.*

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

---

#### Other Adverse Conditions

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: CONSOLE

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

Equipment Description: CONTROL ROOM CONTROL CONSOLE

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

*Inspected exterior and interior of cabinet (opened all doors). No loose or missing hardware.*

---

Comments

Walkdown by Team B

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Class (21) Tanks and Heat Exchangers

3E206B SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3E206B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: RHR HEAT EXCHANGER B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 4.00 ft, 210

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage consistent with drawing 5610-C-271 Sh. 1 Rev. 9*

Status:  
Seismic Walkdown Checklist (SWC)

Y    N    U

Equipment ID No.: 3E206B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: RHR HEAT EXCHANGER B

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

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

3E207B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3E207B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING HEAT EXCHANGER B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 202

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status: Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3E207B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING HEAT EXCHANGER B

---

Interaction Effects

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

---

Other Adverse Conditions

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

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Comments

Walkdown by Team A

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3E208A SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y N  U

Equipment ID No.: 3E208A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL PIT HEAT EXCHANGER

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 223

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

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

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

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

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

*Anchorage configuration needs to be verified against plant  
documentation. Need to confirm 4 - 1" diameter and 4 - 3/4" diameter  
cast in place bolts on the east pedestal and 4 - 3/4" diameter cast in  
place bolts on the west pedestal (see attached sketch).*

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

Status: Y N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3E208A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL PIT HEAT EXCHANGER

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Interaction Effects

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

---

Other Adverse Conditions

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

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Comments

Walkdown by Team A

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3P214B HEAT EXCHANGER SWC

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P214B HEAT EXCHANGER

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SEAL WATER HEAT EXCHANGER FOR CONTAINMENT SPRAY PUMP B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 203

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3P214B HEAT EXCHANGER  
Equipment Class: (21) Tanks and Heat Exchangers  
Equipment Description: SEAL WATER HEAT EXCHANGER FOR CONTAINMENT SPRAY PUMP B

---

Interaction Effects

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

---

Other Adverse Conditions

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

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Comments

Walkdown by Team A

## 3T1 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.:	3T1
Equipment Class:	(21) Tanks and Heat Exchangers
Equipment Description:	REFUELING WTR STORAGE TK
Project:	Turkey Point 3 SWEL
Location (Bldg, Elev, Room/Area):	Unit 3, 18.00 ft, 217

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

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

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

*Some anchor bolts have a reduced cross section due to corrosion.  
This condition was identified and analyzed under NCR-92-0315, which  
shows that sufficient margin still exists.*

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

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

*Anchorage consistent with drawing 5610-C-375 Sh. 1 Rev. 8 and new  
chair top plates are consistent with PCM 91-172.*

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

Status:  Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3T1

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: REFUELING WTR STORAGE TK

---

Interaction Effects

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

3T23B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3T23B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: EDG 3B FUEL OIL DAY TANK

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 408

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See (4) x 3/4 diameter CIP bolts. Matches drawing 5610-C-379 Sh. 1.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3T23B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: EDG 3B FUEL OIL DAY TANK

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Interaction Effects

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team B

3T269B SWC

Status:	Y    N <input checked="" type="checkbox"/> U
Seismic Walkdown Checklist (SWC)	
Equipment ID No.:	3T269B
Equipment Class:	(21) Tanks and Heat Exchangers
Equipment Description:	EDG 3B STARTING AIR ACCUMULATOR TANK
Project:	Turkey Point 3 SWEL
Location (Bldg, Elev, Room/Area):	Unit 3, 18.00 ft, 409
Manufacturer/Model:	
<b>Instructions for Completing Checklist</b>	
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.	
<b>Anchorage</b>	
1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?	No
2. Is the anchorage free of bent, broken, missing or loose hardware?	Unknown
<i>See 3 of 4 anchors, (1/2 diameter threaded stud visible). All visible anchors OK. One anchor is buried in a concrete curb and cannot be inspected.</i>	
3. Is the anchorage free of corrosion that is more than mild surface oxidation? <i>Same as above.</i>	Unknown
4. Is the anchorage free of visible cracks in the concrete near the anchors?	Yes
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Unknown

Status: Y N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3T269B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: EDG 3B STARTING AIR ACCUMULATOR TANK

---

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?  
*Scaffold around tank OK; see AWC for comments.* Yes

Other Adverse Conditions

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

Comments

Walkdown by Team B

---

3T36 SWC

Status: Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3T36

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: EDG DIESEL OIL STORAGE TANK

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 293

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

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

3. Is the anchorage free of corrosion that is more than mild surface Yes  
oxidation?  
*See some rust on base plate, addressed in "Other" below.*

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

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

*See (6) x 1-1/4 diameter CIP anchors. Matches 5610-C-375 Sh. 1.  
Bolt chair top plates are thickened, consistent with calculation PTN-BFJC-91-016.*

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

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3T36

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: EDG DIESEL OIL STORAGE TANK

---

#### Interaction Effects

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

---

#### Other Adverse Conditions

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? No  
*Base plate at east and west anchors (2 places) has significant corrosion of extension beyond wall/base weld. Not a capacity concern at this time but may become a problem if corrosion progresses to weld.*

---

#### Comments

Walkdown by Team B

3T8 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3T8

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: CONDENSATE STORAGE TANK

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 331

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
See (16) x 1-3/8 CIP anchors; matches drawing 5610-C-375 Sh. 1.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3T8

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: CONDENSATE STORAGE TANK

*See four thickened chair top plates ( $t \geq 1"$  visible). Other top plates are 1/2" thick visible. Per PTN-BFJC-91-016, other plates are thickened and milled to fit into chair side plates so OK.*

---

Interaction Effects

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

*Overhead grating is a missile shield and will have high ruggedness.*

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team B

---

T205B SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: T205B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: BORIC ACID STORAGE TANK B

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 27.00 ft, 200

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage consistent with drawing PTN-C-90-440-004 Rev. 0*
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: T205B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: BORIC ACID STORAGE TANK B

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

Class (00) Other

3-12-031 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3-12-031  
Equipment Class: (0) Other  
Equipment Description: TUBE GATE ISOLATION VALVE  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 212B

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y    N    U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3-12-031

Equipment Class: (0) Other

Equipment Description: TUBE GATE ISOLATION VALVE

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

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

3-797 SWC

Status:  Y  N  U  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3-797

Equipment Class: (0) Other

Equipment Description: SFP COOLING WATER PUMP LOW SUCTION VALVE

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 223B

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3-797

Equipment Class: (0) Other

Equipment Description: SFP COOLING WATER PUMP LOW SUCTION VALVE

---

#### Interaction Effects

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

*Valve handwheel is within 1" of wall mounted conduit. The valve line penetrates through the wall at a nearby location. Given that both the valve and conduit are restrained by the wall, there will be no differential movement between the two, thus precluding any potential seismic interaction.*

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

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

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

---

#### Other Adverse Conditions

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

---

#### Comments

Walkdown by Team A

3-910 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y    N    U

Equipment ID No.: 3-910

Equipment Class: (0) Other

Equipment Description: SFP CLG PMP A SUCT ISO VLV

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 223

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3-910

Equipment Class: (0) Other

Equipment Description: SFP CLG PMP A SUCT ISO VLV

---

Interaction Effects

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

3K200 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: 3K200

Equipment Class: (0) Other

Equipment Description: BORIC ACID BLENDER

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 201

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3K200

Equipment Class: (0) Other

Equipment Description: BORIC ACID BLENDER

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

3NP212 SWC

Status:

Seismic Walkdown Checklist (SWC)

Y    N    U

Equipment ID No.: 3NP212

Equipment Class: (0) Other

Equipment Description: SPENT FUEL PIT COOLING PUMP TRANSFER SWITCH

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 223

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 3NP212

Equipment Class: (0) Other

Equipment Description: SPENT FUEL PIT COOLING PUMP TRANSFER SWITCH

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

BD-2 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: BD-2

Equipment Class: (0) Other

Equipment Description: CREVS INTAKE BALANCING DAMPER

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 347C

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: BD-2

Equipment Class: (0) Other

Equipment Description: CREVS INTAKE BALANCING DAMPER

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

BS-3-1402 SWC

Y  N  U

Status:  
Seismic Walkdown Checklist (SWC)

Equipment ID No.: BS-3-1402

Equipment Class: (0) Other

Equipment Description: BASKET STRAINER TO INTAKE COOLING WTR SUPPLY FOR CCW HX  
A

Project: Turkey Point 3 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 3, 18.00 ft, 202

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes  
*Southwest base plate appears more corroded than others. Difficult to assess the severity of corrosion due to painting and residue buildup.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes  
*Visual cracks are present but judged to be of minor significance.  
Appear to be surface cracks only.*
5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
*(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? Yes

Status:

Y  N  U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: BS-3-1402

Equipment Class: (0) Other

Equipment Description: BASKET STRAINER TO INTAKE COOLING WTR SUPPLY FOR CCW HX

A

---

Interaction Effects

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

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

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

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

---

Other Adverse Conditions

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

---

Comments

Walkdown by Team A

---

CFU-1 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: CFU-1  
Equipment Class: (0) Other  
Equipment Description: COMPENSATORY FILTER UNIT  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 30.00 ft, 347  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Yes

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: CFU-1

Equipment Class: (0) Other

Equipment Description: COMPENSATORY FILTER UNIT

---

#### Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*There are masonry walls in the area. Per drawing 5160-C-1728, the walls are safety related and acceptable for design basis*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

#### Other Adverse Conditions

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

---

#### Comments

Walkdown by Team A

LT-3-651 SWC

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: LT-3-651  
Equipment Class: (0) Other  
Equipment Description: SPENT FUEL PIT LEVEL TRANSMITTER  
Project: Turkey Point 3 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 3, 42.00 ft, 212A  
Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

Status:  
Seismic Walkdown Checklist (SWC)

Y  N  U

Equipment ID No.: LT-3-651

Equipment Class: (0) Other

Equipment Description: SPENT FUEL PIT LEVEL TRANSMITTER

---

#### Interaction Effects

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

*The cantilever tube support for the transmitter rests on the lip of the spent fuel pool, but is not attached to it. Based on the rigidity of the support, low mass of the support, and low zpa, the cantilever support will not vibrate/tap against the lip of the spent fuel pool.*

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

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

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

---

#### Other Adverse Conditions

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

---

#### Comments

Walkdown by Team A

# D

## Area Walk-By Checklists (AWCs)

Table D-1. Summary of Area Walkdown Checklists

Area Walk-by	Description	ID	Page
Area 200	Area 200 - BORIC ACID TANK ROOM	T205B 3P203B	D-4
Area 201	Area 201 - CHARGING PUMP ROOM	MOV-3-350 3P201B FCV-3-113A 3K200 TCV-3-143	D-6
Area 202	Area 202 - COMPONENT COOLING PUMP ROOM	3P211B BS-3-1402 3E207B	D-8
Area 203	Area 203 - CONTAINMENT SPRAY PUMP ROOM	MOV-3-880B MOV-3-843B 3P214B 3P214B HEAT EXCHANGER	D-10
Area 206	Area 206 - HI-HEAD SIS PUMP ROOM	3P215B	D-12
Area 209	Area 209 - PIPE & VALVE ROOM	HCV-3-121 MOV-3-869	D-14
Area 210A	Area 210 - RHR HEAT EXCHANGER ROOM	3E206B HCV-3-758 MOV-3-863B	D-16
Area 210B	Area 210B - RHR HEAT EXCHANGER UPPER ROOM	MOV-3-860B	D-18
Area 211	Area 211 - RHR PUMP ROOM	MOV-3-862A 3P210B MOV-3-861B	D-20
Area 212A	Area 212A - SPENT FUEL PIT ROOM NORTH SIDE	3T218 LT-3-651	D-22
Area 212B	Area 212B - SPENT FUEL PIT ROOM SOUTH SIDE	3-12-031	D-24
Area 217	Area 217 - RWST AREA	MOV-3-864B 3T1	D-26
Area 220	Area 220 - AUXILIARY BUILDING	3B08 3B07	D-28

Area Walk-by	Description	ID	Page
Area 223	Area 223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	3-910 3E208A EMERG SFP CLG PMP 3NP212 3P212A	D-30
Area 223B	Area 223B - CASK WASH AREA	3-797	D-32
Area 234A	Area 234A - NEW ELECTRICAL EQUIPMENT ROOM, 18' LEVEL	3S77 3B50 V76	D-34
Area 234B	Area 234B - NEW ELECTRICAL EQUIPMENT ROOM, 27' PLATFORM	3D25A D51	D-36
Area 293	Area 293 - GENERAL OUTDOORS	3P10B 3T36	D-38
Area 300	Area 300 - STEAM DECK	CV-3-1607 POV-3-2605	D-40
Area 301	Area 301 - BELOW STEAM DECK	MOV-3-1404	D-42
Area 302	Area 302 - FEEDWATER DECK	POV-3-487 CV-3-2816	D-44
Area 306	Area 306 - AUX FEED PUMP AREA	P2B	D-46
Area 309	Area 309 - DIESEL GENERATOR BUILDING (LOWER LEVEL)	3B EDG FAN ASSEMBLIES	D-48
Area 310A	Area 310A - CABLE SPREADING ROOM, 3A BATTERY ROOM	3D03	D-50
Area 310B	Area 310B - AREA NEAR MG SET	3D01	D-52
Area 310C	Area 310C - CABLE SPREADING ROOM, MECH.EQ ROOM (E16 AIR HANDLERS)	E16B	D-54
Area 310D	Area 310D - CABLE SPREADING ROOM, AREA NEAR 3QR35	3QR35	D-56
Area 315	Area 315 - LP TURBINE NORTH AREA	3E239B	D-58
Area 331	Area 331 - CONDENSATE STORAGE TANK	3T8	D-60
Area 334	Area 334 - TURBINE PLANT HEAT EXCHANGER AREA	POV-3-4883	D-62
Area 341	Area 341 - 480V LC ROOM	3B04 3B02 X05 3E242B 3E241B	D-64
Area 342	Area 342 - 3A MCC	3B05	D-66
Area 343	Area 343 - 3B MCC ROOM	3B06	D-68

Area Walk-by	Description	ID	Page
Area 347A	Area 347 - CONTROL ROOM INVERTER ROOM	3Y07	D-70
Area 347B	Area 347B - BATTERY CHARGER ROOM	3Y05 3D23 3D25	D-72
Area 347C	Area 347C - CREVS ROOM	CFU-1 BD-2	D-74
Area 347D	Area 347D - 3B BATTERY ROOM	3D24	D-76
Area 360	Area 360 - CONTROL ROOM	3C06_3C05 3C04	D-78
Area 362	Area 362 - CONTROL ROOM	CONSOLE	D-80
Area 368A	Area 368A - 4160V SWITCHGEAR ROOM A	3AA 3E243A 3C23A	D-82
Area 368B	Area 368A - 4160V SWITCHGEAR ROOM B	3C264 3C23B	D-84
Area 370	Area 370 - INTAKE AREA	3P9B	D-86
Area 408	Area 408 - B DIESEL GENERATOR BUILDING (UPPER LEVEL)	SV-3-2046B 3T23B	D-88
Area 409	Area 409 - B DIESEL GENERATOR BUILDING (LOWER LEVEL)	3K4B 3C2B COMPRESSOR 3V34B 3C12B 3T269B	D-90
Area 429	Area 429 - SWITCHGEAR ROOM 3D	TIS-3-6413B 3V65B 3AD	D-92

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

Per the EPRI guidance document, the top row of each checklist summarizes the status as follows:

Status	Meaning
Y	All relevant checks were answered Yes and no further action is required.
N	At least one check was answered No and follow-up is required.
U	At least one check could not be answered due to lack of information and follow-up is required.

Section 5.3 of this report identifies planned actions for items requiring follow-up.

Area 200

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 200

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 200

---

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? No

*Large cover plates for nearby recessed area are stored adjacent to pump 4P203B.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

**Comments**

Walkdown by Team A

---

Area 201

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 201

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 201

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? No  
*Temporary light near one of the charging pumps is not properly secured.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes  
*Ladder near RCS filters is not tied off.*

---

**Comments**

Walkdown by Team A

---

Area 202

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 202

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  
*Platform adjacent to BS-3-1402 basket strainer has cracked grouting at anchorage. This is not a seismic concern as the concrete remains uncracked.*      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes  
*Fire piping in area well supported (welded and threaded lines). Spray nozzles have good clearance.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?      Yes  
*Fire piping in area well supported (welded and threaded lines). Spray nozzles have good clearance.*
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 202

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

---

**Comments**

Walkdown by Team A

---

Area 203

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 203

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?      Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 203

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

---

**Comments**

Walkdown by Team A

---

Area 206

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 206

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 206

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

**Comments**

Walkdown by Team A

---

Area 209

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 209

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 209

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

**Comments**

Walkdown by Team A

---

Area 210A

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 210A

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 210A

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

**Comments**

Walkdown by Team A

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Area 210B

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):    Area 210B

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?                          Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?                          Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?                          Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?                          Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?                          Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?                          Yes

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 210B

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes  
Scaffold in area found to be adequately braced and anchored.
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

---

**Comments**

Walkdown by Team A

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Area 211

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 211

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 211

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Large piece of insulation stored on scaffold above sump pumps. The insulation could potentially slide off the scaffold and impact the pumps during a seismic event.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

---

**Comments**

Walkdown by Team A

---

Area 212A

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 212A

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 212A

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

**Comments**

Walkdown by Team A

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Area 212B

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 212B

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 212B

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

**Comments**

Walkdown by Team A

---

Area 217

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 217

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 217

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes  
*Scaffolding is adequately braced and tied off to adjacent structures.*
- Portable electric load center has all wheels locked.
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

**Comments**

Walkdown by Team A

---

Area 220

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 220

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? No  
*Bent hanger rods on overhead lights in front of D-MCC and LP 38.*
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 220

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes  
*Door on LP 38 is not closed and latched. This is a non-safety panel & not an adverse seismic issue.*

---

**Comments**

Walkdown by Team A

---

Area 223

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 223

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 223

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

**Comments**

Walkdown by Team A

---

Area 223B

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 223B

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 223B

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? No  
*Open and unlatched door on distribution panel DP322.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team A

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Area 234A

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 234A

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?  
*Both V76 and V77 air handlers appear to be anchored on one side only but per drawing part of anchorage is hidden from view so OK; see SWC for V76.* Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes  
*Fire piping in area sufficiently supported.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 234A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Large heavy cart, "Continuous Load Unit" on locked wheels 33" from 3B50 cabinet. It is noted that restraint is with plastic strap and this seems too weak as a restraint. However it is not considered a credible hazard to nearby equipment because of large gap.*

*Loose equipment box in corner >20" from 3B50. Not considered a credible interaction hazard because impact load potential is very low. Chair behind not a credible hazard (won't hit 3B50).*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There are a masonry walls in the area. The walls are shown on drawing 5160-C-1701 Sh. 1 and 2 and designs are designated as "Seismic Category I" (Sh. 1) and "Seismically Designed" (Sh. 2).*

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**Comments**

Walkdown by Team B

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Area 234B

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 234B

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?  
*Verified air handler V-78, on wall-mounted platform, is anchored to platform.* Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes  
*Support of fire piping main along wall inspected and judged OK.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 234B

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

*There are a masonry walls in the area. The walls are shown on drawing 5160-C-1701 Sh. 1 and 2 and designs are designated as "Seismic Category I" (Sh. 1) and "Seismically Designed" (Sh. 2).*

**Comments**

Walkdown by Team B

Area 293

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 293

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
  
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
  
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Outdoor area, not much overhead.*      Yes
  
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes
  
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Fire piping main near 3P10B is well supported. Also equipment (outdoors) is resistant to spray.*      Yes
  
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?  
*DG fuel lines are SC-I and not a credible fire hazard.*      Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 293

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team B

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Area 300

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 300

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 300

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

**Comments**

Walkdown by Team A

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Area 301

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 301

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 301

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team A

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Area 302

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 302

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*There are overhead beams for hoists/trolleys. Trolleys are not present. No concerns.* Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Pipes in the area found to be well supported.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 302

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes  
*One loose small platform (one step) found, far from any equipment, not an issue.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

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**Comments**

Walkdown by Team B

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Area 306

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 306

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
  
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
  
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
  
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Checked grating above, saw fillet welds attaching grating to steel beams.*      Yes
  
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?      Yes
  
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 306

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team B

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Area 309

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 309

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Duct overhead OK; see EDG Fan SWC.* Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes  
*Coolant pipes supported by fan and walls, OK.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Coolant pipes supported by fan and walls, OK.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 309

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

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**Comments**

Area near EDG Fan Assemblies.

Walkdown by Team B

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Area 310A

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 310A

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes  
*No fire piping is the area.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 310A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There are a masonry walls in the area. Per drawing 5160-C-1727, the walls are safety related and acceptable for design basis (walls C-30-1, -2, -3).*

**Comments**

Walkdown by Team B

Area 310B

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 310B

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes  
*No fire piping is the area. See possible sanitary drain line along wall by 3A Battery room, not a concern.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?      Yes  
*No fire piping is the area. See possible sanitary drain line along wall by 3A Battery room, not a concern.*
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 310B

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There are a masonry walls in the area. Per drawing 5160-C-1727, the walls are safety related and acceptable for design basis (walls C-30-1, -2, -3, -4)*

**Comments**

Walkdown by Team B

Area 310C

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 310C

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? No  
*Air handlers appear unanchored, see E16B SWC.*
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? No  
*Rod hung copper tubing ("Service Water" tag seen) appears to be non-seismic. Connects to air handlers.*
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 310C

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Loose steel cover panels leaning against wall in front of air handlers.  
Potential to fall on piping and conduit.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

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**Comments**

Walkdown by Team B

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Area 310D

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 310D

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?  
*No significant concerns. No apparent hazards from non-safety cabinets.* Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Floor supported cable tray, OK.* Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*See red piping in area, well supported. Per plant engineers, piping is a gas system (expect halon).* Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*See red piping in area, well supported. Per plant engineers, piping is a gas system (expect halon).* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 310D

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes  
*No scaffold in the area.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team B

---

Area 315

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 315

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Outdoor location open above. Light pole near 3E239B welded to platform, OK.* Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Location ensures equipment is resistant to spray.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 315

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes  
*Checked scaffold southeast of platform. Good design and well anchored.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes  
*Shed to west of platform judged OK; location ensures good lateral strength (resists high wind loads). Shed is light so seismic load is low.*

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**Comments**

Walkdown by Team B

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Area 331

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 331

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Grating above is missile shield and is rugged.* Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*See some possible non SC-I piping in area. Area is open to outdoors and is resistant to spray.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 331

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team B

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Area 334

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 334

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?  
*Nearby tanks, pipe supports, steel framing are well anchored. Main transformer to south may be unanchored but is far away.* Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes  
*Expect non-SC-I piping is in area, but outdoor location ensures equipment is not vulnerable to spray.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes  
*Expect non-SC-I piping is in area, but outdoor location ensures equipment is not vulnerable to spray.*
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? No  
*Main transformer is about 20' to south of POV-3-4883 valve. Transformer is a fire risk and relatively close to the valve.*

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 334

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team B

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Area 341

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 341

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
  
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
  
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
  
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes
  
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*No fire piping is the area.*      Yes
  
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 341

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Breaker lift cart in corner behind cabinet 3X06 is tied off - OK. Also restrains a small ladder.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There are a masonry walls in the area. Per drawing 5160-C-1727, the walls are safety related and acceptable for design basis (walls T-31-1B, -2B, -3B).*

**Comments**

AWC covers both LC rooms.

Walkdown by Team B

Area 342

Status:

Y  N  U

### Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 342

#### Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?  
*Small dry transformer (3X031) appears unanchored but far from MCC's and other equipment (>4'); not considered a credible hazard.*
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  
Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Low concrete slab above, not much above 3A MCC. Cabletray is well supported.*  
Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
Yes  
*Low concrete slab above, not much above 3A MCC. Cabletray is well supported.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*MCC is in an enclosure, so not vulnerable to spray.*  
Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?  
*No flammables in immediate area. Hydrogen lines seen > 35' away from 3A MCC.  
Bus duct overhead in area is well supported.*  
Yes

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 342

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

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**Comments**

Walkdown by Team B

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Area 343

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 343

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes  
*Lights supported above cabinets on tube hangers.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes  
*No fire piping is the area.*
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 343

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*No issues near MCC 3B. A cart (breaker lift cart?) behind 3A MG Set Controls cabinet is unrestrained and may hit that cabinet during earthquake. See photos.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

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**Comments**

Walkdown by Team B

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Area 347A

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 347A

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 347A

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes  
*Scaffold in area found to be adequately braced and anchored.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team A

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Area 347B

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 347B

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 347B

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

No:

*Temporary resistive load bank is stored within 1/4" of 3Y05. This is judged to be a housekeeping issue.*

Other:

*Scaffold in area found to be adequately braced and anchored.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There are a masonry walls in the area. Per drawing 5160-C-1728 Rev. 0, the walls are safety related and acceptable for design basis.*

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**Comments**

Walkdown by Team A

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Area 347C

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 347C

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
  
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
  
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
  
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes
  
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?      Yes
  
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 347C

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes  
*Large rectangular steel plate stored on CFU-1 skid is unsecured, but will not impact equipment if sliding occurs.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team A

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Area 347D

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 347D

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 347D

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team A

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Area 360

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 360

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? No  
*Egg crate ceiling tiles above main area of Control Room are not tied to framing and can fall on operators and soft targets. This issue was cited in A-46 inspection. Unknown if this was resolved by analysis.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 360

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Loose ladders behind 3QR50 have minor impact potential against base of cabinet after falling then sliding.*

*A tool cart on wheels (locked) is directly next to cabinet "Rack No. 26 Prot. Channel Set II". Potential for impact on cabinet.*

*A loose printer on floor is next to cabinet "Rack No. 26 Control". Minor impact potential against base of cabinet.*

*Some loose plastic chairs on wheels seen; minor impact potential against cabinets.*

*All of the above are housekeeping issues related to potential relay chatter. Unknown if relay chatter concerns are relevant to the above cabinets.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There is a masonry wall in the area. Per drawing 5160-C-1728, the wall is safety related and acceptable for design basis (walls A-42-2).*

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**Comments**

Walkdown by Team B

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Area 362

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 362

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? No  
*Egg crate ceiling tiles may fall; see Area 360 AWC.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 362

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team B

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Area 368A

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 368A

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?  
*Assumed that MCC 3L behind 3AA (along wall) is anchored. Opened 3C23A-1 and saw it was well anchored.*  
*Small dry transformer 3X034 appears to be unanchored, but is >42" from 3AA. Not a credible hazard.* Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Some chain hung lights. One light behaind 3AA can swing and hit conduit entry box atop 3AA (6-3/4" gap). Not a credible hazard because gap is large and any impact is remote from devices.* Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*No fire piping in area.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 368A

*Small dry transformer 3X034 appears to be unanchored, but not a credible fire hazard (won't topple).*

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes

*Loose spear breakers in front of 3AA ablong wall >35" from 3AA. Not a credible hazard.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

*There are a masonry walls in the area. Per drawing 5160-C-1730, the walls are safety related and acceptable for design basis (walls T-18-5A, -6A, -7A).*

**Comments**

Add sub-areas for AWC: 368A, 368B.

Walkdown by Team B

Area 368B

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 368B

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?  
*Assumed that MCC 3M adjacent to 3AB is anchored.*
  
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
  
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
  
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*There are chain hung lights; no concerns to note.* Yes
  
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*No fire piping in area. Also saw threaded drain lines from room cooler. Drain lines are dry and not a hazard.* Yes
  
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 368B

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Loose breakers, similar to 368A area. Not a credible hazard.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*Masonry walls between 368A and 368B areas are safety related. See 368A AWC.*

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**Comments**

Walkdown by Team B

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Area 370

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 370

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Crane runway structure is braced and appears rugged.* Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Pump is in and outdoors area, open above; equipment is resistance to spray.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 370

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? No  
*Large scaffold assembly in area has bracing but does not appear to have sufficient east/west anchorage near pump 3P9B. Spacing between e/w anchors is too far (about 40'). N/S anchorage of scaffold was OK.*
- See 3P9B SWC for photos.
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team B

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Area 408

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 408

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
  
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
  
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
  
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes  
*Fire piping is room is well supported and spray nozzles are not vulnerable. See photos for 3T23B.*
  
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Fire piping is room is well supported and spray nozzles are not vulnerable. See photos for 3T23B.*      Yes
  
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?  
*DG fuel piping and tank is SC-I and not a credible hazard.*      Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 408

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes
- 

**Comments**

Walkdown by Team B

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Area 409

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 409

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes  
*Fire piping in area well supported (welded and threaded lines). Spray nozzles have good clearance.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Fire piping in area well supported (welded and threaded lines). Spray nozzles have good clearance.*      Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?  
*DG fuel piping and tank is SC-I and not a credible hazard.*      Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 409

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes  
*Scaffold over air tanks and compressor found to be well braced and is anchored at two levels. No concerns.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team B

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Area 429

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 429

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Lights on Unistrut frames, well supported.*      Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*No fire piping in area.*      Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y    N    U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area):      Area 429

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes
- Loose breaker in corner of room, >42" from 3AD and >28" from conduit to 3S75 wall panel, OK.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

---

**Comments**

Walkdown by Team B

---

# E

## Plan for Future Seismic Walkdown of Inaccessible Equipment

---

This appendix identifies equipment that was partly or completely inaccessible for inspection during the walkdown. The tables below address three categories of equipment:

Table E-1	Item was completely inaccessible due to radiological, safety or other issues. Area corresponding to the item was also inaccessible.
Table E-2	Anchorage of item was internal and team was denied permission to open due to personnel hazard or hazard to plant operation.
Table E-3	Status of inspections of electrical cabinet for "Other Adverse Conditions" under SWC Check 11. For some cabinets, inspection did not include all compartments/sections because of safety concerns or hazard to plant operation.

The inspections for Turkey Point Unit 3 deferred components and inaccessible components will be performed during the Refueling Outage currently scheduled for early 2014. An action request (AR) has been issued to plan for and implement additional cabinet internal inspections.

**Table E-1. Completely Inaccessible Equipment**

Component ID	Description	Reason for Inaccessibility
3T229B	SI ACCUM B	Item is within Containment and plant was operating at the time of inspection.
3V30B	EMERGENCY CONTAINMENT COOLER B	Same as above
MOV-3-535	PRESSURIZER PORV BLOCK VALVE	Same as above
MOV-3-744A	RHR LO HEAD SI TO LOOP A MOTOR OPERATED VLV	Same as above
MOV-3-751	NORMAL RHR INLET FROM RCS MOTOR OPERATED VLV	Same as above
MOV-3-865A	SI ACCUM A DISCH MOTOR OPERATED VLV	Same as above
PCV-3-4885	PRZR PORV N2 BACKUP SUPPLY PRESSURE REGULATOR	Same as above
SV-3-455C	PRESSURIZER PORV SOLENOID VALVE	Same as above
TW-3-412C	DELTA T-TAVG CH I COLD LEG 1 THERMOWELL	Same as above
3T218	COMPONENT COOLING SURGE TANK	Surge tank area not accessible during walkdown, plant security issues.

**Table E-2. Internal anchorage of equipment not accessible for inspection**

Component ID	Description	Reason for Inaccessibility
3AA	3AB 4.16V SWITCHGEAR 3A (CABINET)	Electrical hazard
3AD	4.16KV SWITCHGEAR 3AD FOR BUS 3D	Electrical hazard
3D23	3D23 (DISTRIBUTION PANEL)	Electrical hazard
3C23B	SEQUENCER 3C23B-CABINET	Hazard to plant operation

**Table E-3. Status of internal inspection of electrical cabinets**

<b>Component ID</b>	<b>Description</b>	<b>Class</b>	<b>Status</b>
3B05	A-MCC (CABINET)	01	MCC is within an environment enclosure. Opened enclosure doors and inspected front of MCC.
3B06	B-MCC (CABINET)	01	MCC kick plates (lower plates) were opened and the interior was inspected.
3B07	C-MCC (CABINET)	01	Same as above.
3B08	D-MCC (CABINET)	01	Same as above.
3B04	3D LC (Part of B train)	02	Permission to open spare compartments. Opened 2 of 3 lower doors.
3B02	3B02 480V HVPDS LOAD CENTER 3B (CABINET)	02	Permission to open spare compartments. Opened 1 of 3 lower doors.
3B50	3H LOAD CENTER (CABINET)	02	Permission to open spare compartments. Opened 3 of 3 lower doors.
3AD	4.16KV SWITCHGEAR 3AD FOR BUS 3D	03	See Table E.2
3AA	3AB 4.16V SWITCHGEAR 3A (CABINET)	03	See Table E.2
3D23	3D23 (DISTRIBUTION PANEL)	14	See Table E.2
3D01	3D01 (DISTRIBUTION PANEL)	14	Not accessible due to plant operation/safety hazard.
D51	SPARE BATTERY CHARGER	16	Permission to open lower compartments. Opened 2 of 2 lower doors.
3Y05	STATIC INVERTER 3C 125 VDC/120 VAC 7.5 KVA (CABINET)	16	Same as above.
3Y07	STATIC INVERTER 3D 125 VDC/120 VAC 7.5 KVA (CABINET)	16	Same as above.
3D25A	3B2 BATTERY CHARGER	16	Same as above.
3D25	3B1 BATTERY CHARGER	16	Same as above.
3C23B	SEQUENCER 3C23B - CABINET	20	See Table E.2

**F**

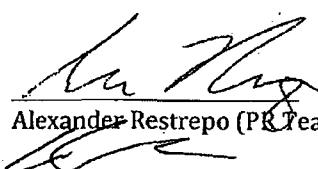
## Peer Review Report

**Peer Review Report for the  
Seismic Walkdown Inspection of Turkey Point Nuclear  
Station (NRC Near Term Task Force Recommendation  
2.3)**

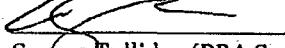
Turkey Point Nuclear Station

October 2012

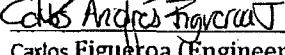
Prepared by

 10/26/12  
Alexander Restrepo (PR Team Lead) Date

Reviewed by

 10/26/12  
George Tullidge (PRA Group) Date

Reviewed by

 10/11/12  
Carlos Figueroa (Engineering) Date

Reviewed by

 10/11/12  
Tim Jones (Operations) Date

## **1. INTRODUCTION**

This report documents the peer review of the seismic walkdowns performed for Turkey Point Nuclear Station in September 2012, in support of the NRC Near Term Task Force (NTTF) Recommendation 2.3. This document describes the peer review team and process (Section 3), the peer review of the SWEL selection (Section 4), and the peer review of the seismic walkdown (Section 5).

The peer review was performed consistent with Section 6 of the EPRI-TR-1025286<sup>(REF 1)</sup> guidance document and addresses the following specific activities:

- Review of the selection of components for the Seismic Walkdown Equipment List (Section 4)
- Review of a sample of the checklists prepared for the Seismic Walkdowns & Walk-Bys (Section 5.1)
- Review of any licensing basis evaluations (Section 5.2)
- Review of the decisions for entering the potentially adverse conditions into the plant's Corrective Action Program (Section 5.2)
- Review of the final submittal report (Section 6).

## **2. BACKGROUND**

This peer review covers three portions of the seismic walkdown: (a) the preparation of the SWEL, (b) the actual walkdown, and (c) the final submittal report.

The Seismic Walkdown Equipment List (SWEL) was prepared in July and August and finalized in September, based on revisions that occurred during the walkdowns. Section 3 describes the process of peer reviewing the SWEL.

The vast majority of the seismic walkdowns occurred September 11 through September 20. The peer review of the walkdowns occurred in the afternoons of those same dates. This portion of the peer review is documented in Section 4.

Two entire areas – the containments – were deferred for each unit for completion during each following respective outage. This allowed the walkdown to occur with less radiation exposure to the walkdown team.

Four components could not be examined entirely with the bus powered: Essential 4KV switchgear Buses 3AB and 4AB, and the protected sequencers during walkdowns which were 3C23B and 4C23B. Consequently, the walkdowns for these components were postponed until the next scheduled outage when they can be scheduled to be removed from service for maintenance. These inspection deferrals are being tracked under the Corrective Action Program (CAP) by two separate Actions Requests, one for each unit.

### **3. PEER REVIEW TEAM & PROCESS**

The Turkey Point (PTN) Peer Review Team consisted of individuals from PTN operations, civil engineering, licensing, and PRA as well as structural/seismic engineers from Stevenson & Associates. These individuals participated in phases of preparation, performance, and peer review of the seismic walkdowns. This section documents the peer review process and how the Peer Review Team interacted with the Seismic Walkdown Engineering Teams.

#### **3.1 Peer Review Team**

The affiliation, role, and qualifications for each Peer Review Team member are summarized in the following table.

Name	Group	Role *	Qualifications **
Tim Jones	PTN Operations	PR – SWEL	(e), (f)
Tirumani Satyan Sharma	PTN Licensing	SWE Team #1 PR – SWE Team A	(a), (b), (c), (d)
Carlos Figueroa	PTN Civil Engineering	SWE Team #2 PR – SWE Team B	(a), (b), (c), (e)
John O'Sullivan	Stevenson & Assoc. (consultant eng.)	SWE Team #1 PR – SWE Team A	(a), (b), (c)
Seth Baker	Stevenson & Assoc. (consultant eng.)	SWE Team #2 PR – SWE Team B	(a), (b), (c)
Alexander Restrepo	PTN PRA Group	PR Team Lead PTN – SWEL	(a), (e)
George Tullidge	PSL PRA Group	SWEL Review	(e)

Notes:

\* Role: PR (peer review), SWEL (seismic walkdown equipment list), SWE (seismic walkdown engineer)

\*\* Qualifications:

- (a) Completed EPRI NTTF 2.3 Seismic Walkdown Training
- (b) Seismic engineering experience
- (c) Degree in mechanical engineering or civil/structural engineering
- (d) Seismic PRA / IPEEE experience
- (e) Knowledge of plant operations, documentation
- (f) Plant Operations member

#### **3.2 Peer Review Process**

##### **PR Team Lead**

A. Restrepo served as the Peer Review Team Lead. In that role, he was responsible for coordinating the peer review and assembling this report. As described below, he also performed some additional roles as part of the walkdown team PR. He also had the lead in the SWEL preparation, so he was not part of that PR process. As such, the SWEL was independently reviewed by a PRA Engineer from PSL, a Senior License Operator from PTN and one of the Peer Reviewers from PTN. Finally, he did not participate as an active team member during the seismic walkdown process and did not perform any other work besides the one described above. Therefore, his roll as the lead peer reviewer is considered acceptable

### **SWEL Preparation**

The SWEL was prepared by A. Restrepo, who is a PTN PRA engineer, with PTN Operations experience and familiarity with the PTN IPEEE Report and the PTN PRA model.

The SWEL was reviewed by a team that included a PRA engineer (G. Tullidge), a licensing engineer (T. Satyan Sharma), a civil engineer (A. Figueroa), and an Operations representative (T. Jones). All of these individuals are familiar with the design and layout of the plant and plant documentation.

### **Seismic Walkdown**

The primary seismic walkdown was conducted with two teams, each with two qualified structural/seismic engineers. The Peer Review of the walkdowns consisted of a Peer Review Team Lead with Operations and PRA knowledge, and structural/seismic engineers. The structural/seismic engineers made up the SWE teams, but also served to peer review each other's work. The Peer Review Team Lead also participated in many of the walkdowns for logistical support as well as peer review. The ultimate judgments regarding licensing basis were made by qualified PTN structural engineers.

- Seismic Walkdown Engineers (SWE):
  - SWE Team #1 - J. O'Sullivan (team lead), T. Satyan Sharma
  - SWE Team #2 - S. Baker (team lead), C. Figueroa
- PR Team Lead – A. Restrepo
- PR SWE Team A –S. Baker (team lead), C. Figueroa
- PR SWE Team B – J. O'Sullivan (team lead), T. Satyan Sharma
- Licensing Basis Reviewers – T. Satyan Sharma, C. Figueroa
- IPEEE Reviewers – A. Restrepo

### **Final Report**

The final seismic walkdown report was prepared by the Stevenson & Assoc. consultants, with review by Turkey Point representatives from Operations, design structural engineering, and PRA.

- Preparers–J. O'Sullivan, S. Baker
- Reviewers - T. Satyan Sharma, C. Figueroa

---

#### **4. PEER REVIEW – SELECTION OF COMPONENTS FOR SWEL**

The purpose of this section is to describe the process to perform the peer review of the selected components that were included in the Seismic Walkdown Equipment List (SWEL). This peer review was based on review of the SWEL Selection Report<sup>(REF 2)</sup>.

The guidance in Section 3: *Selection of SSCs* of the EPRI Technical Report<sup>(REF 1)</sup> was used as the basis for this review. Specifically, this peer review utilized the checklist in Appendix F: *Checklist for Peer Review of SSC Selection of the EPRI Technical Report* in Reference 1. Attachment 1 of this peer review report documents the completed checklist.

This peer review determined that the SSCs selected for the SWEL 1 seismic walkdowns represent a diverse sample of equipment required to perform the five safety functions and to meet the sample selection attributes, including:

- Various types of systems
- Major new and replacement equipment
- Various types of equipment
- Various environments
- Equipment enhanced based on the findings of the IPEEE
- Risk insight consideration

For SWEL 2 development, the peer review determined that spent fuel related items were adequately considered and were appropriately included or excluded.

This peer review resulted in no additional findings. All peer review comments requiring resolution were incorporated prior to completion of the SWEL Selection Report.

This peer review concludes that the process for selecting SSCs to be included on the Seismic Walkdown Equipment List appropriately followed the process outlined in Reference 1. It is further concluded that the SWEL sufficiently represents a broad population of plant Seismic Category 1 equipment and systems to meet the objectives of the NRC 50.54(f) Letter.

---

## **5. PEER REVIEW – SEISMIC WALKDOWN**

The peer review of the seismic walkdown was performed by the PR Teams on September 11-20, following the walkdowns for those days. Additional peer reviews occurred following the walkdowns as documented in this report.

### ***5.1 Review of Sample Checklists & Area Walk-bys***

The peer review meetings consisted of each SWE Team (#1 and #2) presenting samples from their Seismic Walkdown Checklist (SWC) and Area Walk-by Checklist (AWC) that they had completed earlier that day. This peer review meeting following the day's walkdown activities allowed for immediate feedback between each walkdown team as well as common agreement on how some issues would be addressed.

Table 5-1 lists the sample of 14 components from each unit from the Seismic Walkdown Checklist (SWC) that were discussed in the peer review meetings. These samples represent about 14% of each unit's SWEL population of 100 components. The sample includes a variety of types of components (heat exchanger, valve, pump, tank, instrument rack, unit sub, transformer, fan, MCC, compressor, power panel, and control panel) and component locations (RHR pits, intake, RCA, DG Bldg, and Essential Switchgear room).

Table 5-1 also lists the sample of 6 areas per unit from the Area Walk-by Checklist (AWC) that were discussed in the peer review. These samples represent about 20% of the total AWC population of 30 areas.

When reviewing the components and areas during the afternoon peer review sessions, the following topics were addressed:

- Concrete cracks – For each team, concrete cracks were observed in the concrete floors where components were anchored. Since the guidance does not give discretion for the significance of the crack, the peer review team agreed that the concrete cracks near anchorage should be recorded as "U" (unresolved). Then, following further review, these findings could be changed to "YES" for minor surface cracks or "NO" for concrete crack near anchorage that may need further review.
- Physical interaction – Several of the samples were examples of close spacing between the SWEL component and a hard object (such as a hand rail), with the potential for interaction. In each case, the spacing was judged adequate, but this did reinforce the importance of careful field examination of each component.
- Seismic housekeeping – Seismic housekeeping was assessed in each area and found to be acceptable. Storage boxes were tied off or separated from equipment in designated areas. The presence of stanchions to rope off the protected train equipment was noted. It was agreed that these do not represent significant seismic risk due to the weight distribution (heavy base) and the light-weight nature of these stanchions.

- Seismic scaffolding – A number of areas had scaffolding. In each case, the scaffolding was carefully braced to provide seismic strength and documented on the scaffolding. This was observed by both walkdown teams.
- Non-safety piping in SR buildings – NS piping in all walk-by areas was observed to be well supported.

### **5.2 Review of Licensing Basis Evaluations & Corrective Action Process**

The final report provides a list of the anomalies encountered during the Turkey Point seismic walkdown inspections and how they were addressed. The review of those anomalies demonstrates a thorough and reasonable process for the review of open issues. There were no added comments offered by the peer review team.

## **6. REVIEW FINAL SUBMITTAL REPORT & SIGN-OFF**

The final submittal report has been reviewed by Turkey Point representatives from structural engineering, Operations, and the PRA Group, and found to meet the requirements of the EPRI 1025286 – Seismic Walkdown Guidance <sup>(REF. 1)</sup>.

## **7. REFERENCES**

1. EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, June 2012.
2. Turkey Point Report, *Selection of the Turkey Point Nuclear Station Seismic Walkdown Equipment List (SWEL) for the Requirement 2.3 Walkdown*, Rev 01, September 2012.

**Table 5-1: Table of Sample Components from Seismic Walkdown Checklist (SWC)**

Walkdown Team (PR Team)	Equipment Identification	Walkby Area Identification
Unit 3 - SWE Team #1 (PR Team A)	LT-3-651 HCV-3-121 3B08 3P212A EMERG SPF CLG PMP 3-797 3E207B	209 220  202
Unit 3 - SWE Team #2 (PR Team B)	3P9B 3T36 3C23A 3B05 3K4B 3D03 3S77	370  409  234
Unit 4 - SWE Team #1 (PR Team A)	4B07 T205C 4E208A 4P212A 4E206B 4T1 4P214B	223 210 217
Unit 4 - SWE Team #2 (PR Team B)	4C23A 4k4A 4T8 4T259A 4X05 4C12A 4QR35	368  432  310

## **ATTACHMENT 1: PEER REVIEW CHECKLIST**

### **Peer Review Checklist for SWEL**

#### **Instructions for Completing Checklist**

This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (SWEL) in accordance with Section 6: Peer Review. The space below each question in this checklist should be used to describe any findings identified during the peer review process and how the SWEL may have changed to address those findings. Additional space is provided at the end of this checklist for documenting other comments.

- 
1. Were the five safety functions adequately represented in the SWEL 1 selection?      Y N

*[Requirement met.]*

*[Remarks:]*

---

2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:

- a. Various types of systems?      Y N

*[Requirement met.]*

*[Remarks:]*

- b. Major new and replacement equipment?      Y N

*[Requirement met.]*

*[Remarks:]*

- c. Various types of equipment?      Y N

*[Requirement met.]*

*[Remarks:]*

- d. Various environments?      Y N

*[Requirement met.]*

*[Remarks:]*

- e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program?      Y N

*[Requirement met.]*

*[Remarks:]*

### **Peer Review Checklist for SWEL**

f. Were risk insights considered in the development of SWEL 1?  Y  N

Requirement met.

Remarks:

3. For SWEL 2:

a. Were spent fuel pool related items considered, and if applicable included in SWEL 2?  Y  N

Requirement met.

Remarks:

b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2?  Y  N

Requirement met.

Remarks:

4. Provide any other comments related to the peer review of the SWELs.

5. Have all peer review comments been adequately addressed in the final SWEL?  Y  N

Peer Reviewer  
#1:

Carlos Figueroa Date: 11/15/12

Carlos Figueroa

Peer Reviewer  
#2:

T-Satyan Sharma Date: 11/15/12

T-Satyan Sharma

**SEISMIC WALKDOWN REPORT**

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

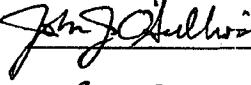
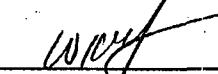
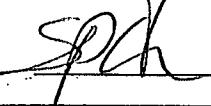
**For**

**TURKEY POINT UNIT 4  
NRC Docket No. 50-251**

Florida Power & Light Company  
Turkey Point Nuclear Plant  
9760 SW 344th Street  
Florida City, FL 33035

Prepared by:  
Stevenson & Associates  
275 Mishawum Road, Suite 200  
Woburn, MA 01801

Submittal Date: November 2012

	Name & Title	Affiliation	Signature	Date
Preparer:	John J. O'Sullivan Senior Consultant	S&A		11/26/2012
Reviewer:	Seth Baker Senior Engineer	S&A		11/26/2012
Approver:	Walter Djordjevic Senior Consultant	S&A		11/26/2012
Site Sponsor:	Sergio Chaviano Special Projects Manager, Site Fukushima Lead	FPL		11/26/12

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## **Executive Summary**

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The purpose of this report is to provide information as requested by the Nuclear Regulatory Commission (NRC) in its March 12, 2012 letter issued to all power reactor licensees and holders of construction permits in active or deferred status. (Ref. 12) In particular, this report provides information requested to address Enclosure 3, Recommendation 2.3: Seismic, of the March 12, 2012 letter. (Ref. 12)

The 50.54(f) letter requires, in part, all U.S. nuclear power plants to perform seismic walkdowns to verify the current plant configuration is within the current seismic licensing basis and identify and address degraded, non-conforming or unanalyzed conditions found. This report documents the seismic walkdowns performed at Turkey Point Unit 4 in response, in part, to the 50.54(f) letter issued by the NRC.

The Nuclear Energy Institute (NEI), supported by industry personnel, cooperated with the NRC to prepare guidance for conducting seismic walkdowns as required in the 50.54(f) letter, Enclosure 3, Recommendation 2.3: Seismic. (Ref.12). The guidelines and procedures prepared by NEI and endorsed by the NRC were published through the Electric Power Research Institute (EPRI) as EPRI Technical Report 1025286, Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic, dated June 2012; henceforth, referred to as the "EPRI guidance document." (Ref. 1) Turkey Point has utilized this NRC endorsed guidance as the basis for the seismic walkdowns and this report. (Ref. 1)

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

- Seismic Licensing Basis
- Personnel Qualifications
- Selection of Systems, Structures, and Components (SSC)
- Seismic Walkdowns and Area Walk-Bys
- Seismic Licensing Basis Evaluations
- IPPEE Vulnerabilities Resolution Report
- Peer Review

### **Seismic Licensing Basis**

The safe shutdown earthquake for the Turkey Point site is 0.15g horizontal ground acceleration and 0.10 g vertical ground acceleration. (Ref. 2, Section 2)

### Personnel Qualifications

The walkdown team consisted of experienced site personnel with Civil/Structural or Mechanical Engineering, Operations and PRA backgrounds. The site personnel were supplemented by two vendors with significant experience in the area of seismic design and the performance of seismic walkdowns. The personnel who performed the key activities required to fulfill the objectives and requirements of the 50.54(f) letter are qualified and trained as required in the EPRI guidance document (Ref. 1).

### Selection of SSCs

Ninety-eight (98) components were selected for the walkdown effort, including spent fuel pool items. These components were selected using the process described in detail in the EPRI guidance document, Section 3: Selection of SSCs. (Ref. 1)

### Seismic Walkdowns and Area Walk-Bys

Section 5, Appendix C, and Appendix D of this report documents the equipment Seismic Walkdowns and the Area Walk-Bys. The online seismic walkdowns for Turkey Point Unit 4 were performed September 17-21, 2012. The walkdown team consisted of two 2-person Seismic Walkdown Engineer (SWE) teams.

The seismic walkdown team inspected 88 of the 98 components on the seismic walkdown equipment list (comprised of SWEL 1 and SWEL 2). Ten components were inaccessible and future walkdowns are planned for these items. Follow-up inspections are also to be performed on electrical panels that could not be opened at the time of the initial walkdown.

Equipment Seismic Walkdowns included anchorage inspections and checks to verify as-found anchorages are consistent with design documents. The walkdown found cases where the as-found anchorage was not consistent with the design document. In other cases the document identifying anchorage design could not be identified. Instances of anchor corrosion were cited, but the extent of corrosion is not a seismic capacity concern at this time. Except for the item E16A air handling unit (AHU), no concerns with overall anchorage strength were identified. The E16A AHU was found to be lacking positive base anchorage. The operability of the unit was addressed and the unit was found to be operable.

Potential seismic interaction concerns were identified but none of the issues were considered to be hazards that rendered equipment inoperable. Other equipment interaction issues are related to clearances between equipment and adjacent items and improper seismic housekeeping. Loose or missing hardware, such as loose thumbscrews or latches, were found and cited under "Other" potentially adverse conditions.

Area Walk-Bys identified potentially adverse conditions relate to improper seismic housekeeping. Potential seismic interaction concerns were also identified but none of the issues were considered to be significant immediate hazards. In some cases potential relay chatter due to bumping of equipment is cited. Potential relay chatter issue is undesirable but the overall plant hazard related to relay chatter is typically low. For the Turkey Point USI A-46 evaluation (Reference 9), relay chatter was dismissed as a concern. One potential seismically-induced spray hazard was cited as requiring evaluation.

### Seismic Licensing Basis Evaluations

Conditions identified during the walkdowns were documented on the Seismic Walkdown Checklists (SWCs) and the Area Walkdown Checklists (AWCs), and entered into the CAP. For those conditions that operability or functionality could not be screened as acceptable, evaluations were initiated to demonstrate that the current licensing basis was met. Tables 5-2 and 5-3 in the report provide a summary of the conditions and the actions taken.

### IPEEE Vulnerabilities

In lieu of a full IPEEE seismic analysis, FPL opted to submit a "scaled back" program to resolve USI A-46 and Generic Letter 87-02 as allowed by the NRC in a letter dated November 4, 1998 (Ref. 13) issued for the review of Turkey Point IPEEE evaluations. The final results of this scaled back program for the A-46 program were submitted in a letter to the NRC, L-93-155, "Final Report of Plant Specific Seismic Adequacy Evaluation of Turkey Point Units 3 and 4 to Resolved USI A-46 and GL 87-02" (Ref. 14). The components selected for this analysis were also included in the SWEL in order to verify no outlier issues persisted.

### Peer Reviews

The Peer Review of the walkdowns consisted of two teams made up of Operations and PRA representatives and engineers with knowledge and experience in seismic inspections and assessments. The engineers made up the SWE teams, but also served to peer review each other's work. The Operations and PRA representatives also participated in some of the walkdowns for logistical support as well as peer review. Appendix F of this report contains a summary of the Peer Review. The Peer Review determined that the objectives and requirements of the 50.54(f) letter are met. Further, it was concluded by the peer reviews that the efforts completed and documented within this report are in accordance with the EPRI guidance document.

### Summary

In summary, seismic walkdowns have been completed at Turkey Point Unit 4 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. None of the conditions found resulted in loss of operability or functionality of any structures, systems or components.

Follow-on activities required to complete the efforts to address Enclosure 3 of the 50.54(f) letter include inspection of items deferred due to inaccessibility along with supplemental inspections of electrical cabinets. Area Walk-Bys will be complete, as required, during these follow-on activities.

# 1

## Introduction

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### 1.1 BACKGROUND

In response to Near-Term Task Force (NTTF) Recommendation 2.3, the Nuclear Regulatory Commission (NRC) issued a 10CFR50.54(f) letter on March 12, 2012 requesting that all licensees perform seismic walkdowns to identify and address plant degraded, non-conforming, or unanalyzed conditions, with respect to the current seismic licensing basis. The Nuclear Energy Institute (NEI), through the Electric Power Research Institute (EPRI), prepared industry guidance to assist licensees in responding to this NRC request. The industry guidance document, EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012 (Reference 1), was endorsed by the NRC on May 31, 2012. NextEra/Florida Power & Light Company (FPL) has committed to using this guidance as the basis for completing the walkdown effort.

### 1.2 PLANT OVERVIEW

The Turkey Point (PTN) site is located on the west shore of Biscayne Bay in Dade County, Florida. The site is 25 miles south of Miami and eight miles east of Florida City. The site contains two fossil units (Unit 1 and 2), two nuclear units (Units 3 and 4), and one combined cycle gas-powered unit (Unit 5). The plant's nuclear steam supply system (NSSS) was designed by Westinghouse Electric Corporation. The Containment structure and balance of plant was designed by Bechtel Corporation. The general description of the plant given above is based on the information in the UFSAR (Reference 2).

### 1.3 APPROACH

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

- Seismic Licensing Basis
- Personnel Qualifications
- Selection of SSCs
- Seismic Walkdowns and Area Walk-Bys
- Licensing Basis Evaluations
- IPEEE Vulnerabilities Resolution Report
- Peer Review

# 2

## Seismic Licensing Basis

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### 2.1 SITE SEISMICITY

Site seismicity is discussed in UFSAR (Reference 2) Section 2. On the basis of historical or statistical seismic activity, Turkey Point is located in a seismically inactive area, far from any recorded damaging shocks. Even though several of the larger historical earthquakes may have been felt in southern Florida, the amount of ground motion caused by them was not great enough to cause damage to any moderately well-built structure.

Predicated on history, building codes, geologic conditions, and earthquake probability, the design earthquake was conservatively established as 0.05 g horizontal ground acceleration. The nuclear units have also been evaluated for a 0.15 g ground acceleration to assure no loss of function of the vital systems and structures. Vertical acceleration is taken as 2/3 of the horizontal value and is considered to act concurrently.

### 2.2 SEISMIC DESIGN BASIS

The seismic design was based on the acceleration ground response spectrum curves shown in UFSAR Figures 5A-1 and 5A-2. The curves were derived from the "Housner Spectrum" normalized to 0.05g for the design earthquake and 0.15g for the maximum earthquake. The UFSAR commitment for a maximum earthquake was determined at a time when probabilistic definition of seismic input had not been developed with any degree of consistency or confidence. Therefore, the 0.15g PGA was conservatively estimated based on very limited data available at the time.

The original design basis commits Turkey Point to the 1967 proposed version of General Design Criterion (GDC) Number 2 that relates to earthquake natural phenomena as identified below and is as follows:

*"Those systems and components of reactor facilities which are essential to the prevention or to the mitigation of the consequences of nuclear accidents which could cause undue risk to the health and safety of the public shall be designed, fabricated, and erected to performance standards that will enable such systems and components to withstand, without undue risk to the health and safety of the public the forces that might reasonably be imposed by the occurrence of an extraordinary natural phenomenon such as earthquake, tornado, flooding condition, high wind or heavy ice. The design bases so established shall reflect: (a) appropriate consideration of the most severe of these natural phenomena that have been officially recorded for the site and the surrounding area and (b) an appropriate margin for withstanding forces greater than those recorded to reflect uncertainties about the historical data and their suitability as a basis for design."*

AEC Publication TID-7024 (Reference 4) was used as the basic design guide for earthquake analysis. Floor response spectra were developed from the ground spectra for the Containment Buildings and Control Building to evaluate structures, systems, and components at the various elevations of those structures. Earthquake forces were applied simultaneously in the vertical and any horizontal direction. The vertical component of acceleration at any level was taken as two-thirds of the horizontal ground acceleration. The damping factors for various types of construction are listed in Reference 2, Appendix 5A.

For concrete structures and components, the basic code for determining the section strengths for original design was ACI 318-63 (Reference 5). For steel structures and components, the basic code for determining the section strengths was the AISC Steel Construction Manual, 6th Edition (Reference 6). Later codes were used for plant upgrades. Design requirement for equipment varied by equipment type. The mechanical and electrical equipment were purchased under specifications that include a description of the seismic design criteria for the plant. Motor control centers and load centers were shake table tested to demonstrate no-loss-of-function capacity under the maximum hypothetical earthquake.

The Turkey Point units were within the scope of NRC unresolved safety issue (USI) A-46 (Reference 7), which required a re-evaluation of safety-related mechanical and electrical equipment. At about the same time the NRC asked all operating power plants to undertake an investigation of design capability to extreme external events (Reference 8). Turkey Point resolved these issues as discussed in the next section. Resolution included implementation of seismic design improvements.

### **2.3 USI A-46 AND SEISMIC IPEEE**

Generic Letter 87-02, "Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue (USI) A-46" (Reference 7) addressed seismic adequacy of equipment at older nuclear plants. Turkey Point Units 3 and 4 were within the scope of USI A-46.

The evaluation of Turkey Point for resolution of USI A-46 is reported in Reference 9. FPL developed and implemented a plant specific program to satisfy requirements of USI A-46 as agreed between FPL and the USNRC. The program consisted of developing a walkdown procedure that concentrated on anchorage concerns of USI A-46, the seismic spatial interaction concerns of USI A-17 and the design concerns for large tanks in USI A-40. The program was developed by FPL to be appropriate and cost effective for addressing GL87-02 concerns at its low seismic sites. The basic requirement for the walkdown was that the equipment be able to withstand the design basis SSE at the plant and still provide its safe shutdown function. The procedure used relied on the judgment of an expert team to meet the basic requirement. A success path of equipment using safety and non-safety equipment was selected for achieving hot shutdown of the plant within a period of 8 hours.

An assessment of the anchorage adequacy was performed on each equipment item included on the safe shutdown list. This included an assessment of the seismic demand on the equipment anchorage (forces and stresses on the anchorage), the seismic capacity of the anchorage components (attachment of the equipment to the anchorage,

the anchorage itself, and the development of the anchorage to the foundation), and whether the capacity of the weak link of the anchorage system exceeded the demand.

A seismic spatial interaction assessment was performed on each equipment item included on the safe shutdown list. The following seismic spatial interaction issues were evaluated: 1) heavy objects falling (sometimes referred to as II over I interactions), 2) heavy objects sliding, swinging, vibrating or tipping (proximity interactions) and 3) inadequate flexibility of lines to accommodate seismic-induced relative movements between utility support points. An assessment was made as to whether possible interactions existed, and if it did, could the interaction preclude the equipment item from performing a safe shutdown function. Those interactions identified as possibly precluding the equipment item's safe shutdown function were identified as outliers.

The walkdown resulted in the identification of outlier equipment items with the majority of the outliers being lack of anchorage for electrical cabinets which were not previously required to be anchored. FPL addressed all outlier issues listed and the actions taken are listed in Reference 9 Table 5.0. In many cases, FPL engineering generated Plant Change/Modification (PC/M) Packages which provided for physical modification to plant equipment resulting in additional seismic "hardening" of the equipment.

Generic Letter 88-20, Supplement 4, "Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities" (Reference 8), addressed plant-specific vulnerabilities to severe accidents. For implementation of the IPEEE, Turkey Point was classified as a "reduced scope" plant per NUREG-1407 (Reference10). As such, the review level earthquake was equal to the site SSE and completion of the USI A-46 assessment largely satisfied the seismic IPEEE requirements. FPL informed the NRC that the plant specific program developed for USI A-46 would be used to resolve GL 88-20 Supplement 4 at Turkey Point (see Reference 11).

# 3

## Personnel Qualifications

### 3.1 OVERVIEW

This section of the report identifies the personnel who participated in the NTTF 2.3 Seismic Walkdown efforts. A description of the responsibilities of each Seismic Walkdown participant's role(s) is provided in Section 2 of the EPRI Seismic Walkdown Guidance (Reference 1). Resumes contained in Appendix A provide detailed personnel qualifications information.

### 3.2 PROJECT PERSONNEL

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

Table 3-1. Personnel Roles

Name	Equipment Selection Engineer	Plant Ops.	Seismic Walkdown Engineer (SWE)	Licensing Basis Reviewer	IPEEE Reviewer	Peer Reviewer
Turkey Point (FPL)						
C. Figueroa			X	X	X	X <sup>(note 2)</sup>
T. Satyan-Sharma			X	X	X	X <sup>(note 2)</sup>
G. Tullidge	X					X
A. Restrepo	X				X	X <sup>(note 1)</sup>
T. Jones	X	X				
Stevenson & Assoc.						
J. O'Sullivan			X	X		X <sup>(note 2)</sup>
S. Baker			X	X		X <sup>(note 2)</sup>

Notes:

1. Peer Review Team Leader
2. Provided peer review of a sample of other SWE team's SWCs & AWCs.

### **3.3 EQUIPMENT SELECTION PERSONNEL**

The SWEL development was performed by a the Peer Review Team Lead member of the PRA Group. The SWEL was then independently reviewed by another member of the PRA Group, by Operations, and finally by Peer Reviewers from Engineering.

### **3.4 SEISMIC WALKDOWN ENGINEERS**

The seismic walkdowns were performed by four seismic walkdown engineers (SWEs) grouped into two seismic walkdown teams (SWTs).

The lead SWEs are engineers from Stevenson and Associates (S&A). S&A is recognized internationally as a leading seismic consultant to the nuclear industry and as a regular contributor to the advancement of earthquake engineering knowledge through funded research projects. The professional staff has expertise and capabilities in earthquake engineering, structural dynamics, and structural design. S&A has performed seismic evaluations of US nuclear power plants, using either Seismic Probabilistic Risk Assessment (PRA) or Seismic Margin Assessment, to address US Nuclear Regulatory Commission (NRC) Individual Plant Evaluation for External Events (IPEEE) for over 35 US and European plants.

### **3.5 LICENSING BASIS REVIEWERS**

The Licensing Basis Reviewers consisted of the four seismic walkdown engineers. The FPL engineers had the lead in licensing basis determinations, with support from the S&A engineers.

### **3.6 IPEEE REVIEWERS**

IPEEE reviewers were engineers familiar with implementation of IPEEE at the Turkey Point site. The IPEEE Reviewers also participated in the SWEL preparation and seismic walkdowns.

### **3.7 PEER REVIEW TEAM**

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

### **3.8 ADDITIONAL PERSONNEL**

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

# **4**

## **Selection of SSCs**

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The Seismic Walkdown Equipment List is documented in the *SWEL Selection Report*, provided in Appendix B. This report describes how the SWEL was developed to meet the requirements of EPRI Seismic Walkdown Guidance (Reference 1). The summary of the Seismic Walkdown Equipment List is included in Appendix C under Table C-1 Summary of Seismic Walkdown Checklists. The final SWEL (both SWEL 01 & SWEL 02) which details all of the component attributes used in the screening process, as well as the Master Component List, are on-file.

# **5**

## **Seismic Walkdowns and Area Walk-Bys**

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### **5.1 OVERVIEW**

The Seismic Walkdowns and Area Walk-Bys were conducted by 2-person teams of trained Seismic Walkdown Engineers, in accordance with the EPRI Seismic Walkdown Guidance (Reference 1). The walkdowns occurred on September 17-21, 2012. Components in the Containment building were inaccessible and will be inspected prior to the end of the first quarter in 2013 which falls within the window of the next refueling outage. The Seismic Walkdowns and Area Walk-Bys are discussed in more detail in the following sections.

### **5.2 SEISMIC WALKDOWNS**

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

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

The results of the Seismic Walkdowns have been documented on the Seismic Walkdown Checklist (SWC) provided in the EPRI guidance document, Appendix C.

Seismic Walkdowns were performed for 88 of the 98 items identified on the Turkey Point Unit 4 SWEL. The remaining items will be inspected in the refueling outage as previously noted. The associated SWCs are provided in Appendix C of this report. Additionally, photos have been included with most SWCs to provide a visual record of the item along with any comments noted on the SWC. These photos are not included to limit the size of this report but are on file. Drawings and other plant records are cited in some of the SWCs, but are not included with the SWCs because they are readily retrievable documents through the station's document management system.

Inspection for certain items could not be completed due to access restrictions. Appendix E of this report identifies the inaccessible equipment along with the plan for future Seismic Walkdowns.

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

### **5.2.1 Adverse Anchorage Conditions**

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

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

#### Visual Inspections

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

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

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

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

### **5.2.2 Anchorage Configuration Confirmation**

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

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

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

The SWC listed in Appendix C indicate the anchorage verification status for components as follows:

**N/A:** component that is line-mounted and/or is not anchored to the civil structure and therefore does not count in the anchorage confirmation total.

**Y:** component that is anchored to the civil structure and was chosen for anchorage configuration confirmation.

**N:** component which had anchorage but was not chosen for anchorage configuration confirmation.

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

**Table 5-1: Anchorage Configuration Confirmation**

Total SWEL Items	SWEL Items without Anchorage (N/A)	Minimum Required	Total Items Chosen
(A)	(B)	(A - B) / 2	
98	29	35	37

### **5.2.3 Adverse Seismic Spatial Interactions**

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

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

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

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

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

### **5.2.4 Other Adverse Seismic Conditions**

In addition to adverse anchorage conditions and adverse seismic interactions, described above, other potentially adverse seismic conditions that could challenge the seismic adequacy of a SWEL item were evaluated. These inspections were mostly associated

with in-cabinet inspections of selected electrical equipment. Examples of the types of conditions that could pose potentially adverse seismic conditions include the following:

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

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

#### **5.2.5 Issues Identification during Seismic Walkdowns**

Table 5-2 provides a summary of issues identified during the equipment Seismic Walkdowns and recorded on SWCs. The tracking of issue resolution is identified in the table. Items are grouped based on the walkdown issue cited:

- Anchorage issues
- Seismic interaction issues
- Other conditions
- Anchorage documentation not available
- Anchorage inspection could not be fully completed

Many of the potentially adverse anchorage conditions found are related to documentation of as-found anchorage. In those cases either the as-found anchorage was not consistent with the available document, or the document identifying the anchorage design could not be identified. Except for the item E16A air handling unit (AHU), no immediate concerns with overall anchorage strength were identified. There are instances where anchor corrosion is cited, but the extent of corrosion is not an immediate seismic capacity concern. The E16A AHU was found to be lacking positive base anchorage. Low seismic ruggedness of attached piping was also cited as a concern. The operability of the unit was addressed and the unit was found to be operable.

Potential seismic interaction concerns were identified but none of the issues were considered to be significant hazards but will be addressed to reduce risk. Most equipment interaction issues are related to clearances between equipment and adjacent items and improper seismic housekeeping. Under good seismic housekeeping practice, transient and moveable items (e.g., ladders) should be restrained or stowed such that they will not slide into or fall against important plant equipment. Loose or missing hardware, such as loose thumbscrews or latches, were found and cited under "Other" potentially adverse conditions.

For items requiring anchorage verification, the SWC anchorage verification checklist item was set to "Unknown" if an anchorage design document could not be found. Notwithstanding, the configuration was assessed to ensure that there was no immediate operability concern. Also, anchorage checklist items were set to "Unknown" when the walkdown team could not see all anchors. For example, some anchors (relatively few)

of control cabinets were covered by wiring. A comment is included on the corresponding SWC to explain that certain anchors out of the group could not be seen. Again, the configuration was assessed to establish that there was no immediate operability concern.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
<b>Anchorage Issues</b>				
4B07 C-MCC (CABINET)	<p>Member sizes for struts of upper wall supports are not consistent with drawing 5614-C-1790 Sh. 3. Also, two missing bolts are seen internally at the base anchorage and anchorage configuration cannot be verified (required number of base anchors not identified). Also there is corrosion at the lower back angles inside the MCC. Also a hairline crack in floor in front of cubicle 40762 travels into the concrete pad.</p>	<p>This is a top supported MCC located at a low elevation. Item is subject to relatively low seismic load with negligible tension on base anchors.</p> <p>The anchorage of the unit was upgraded as part of USI A-46 resolution.</p> <p>The corrosion is not an immediate capacity concern because there is an adequate room for the base shear load path.</p> <p>Plant drawings and documents need to be changed to reflect as-found anchorage configuration.</p> <p>Perform maintenance to evaluate and correct MCC base corrosion.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.
4D03 4B BATTERY RACK	<p>Anchorage seen to be a mix of 5/8 and 3/8 diameter concrete expansion anchors (CEAs) each rack. Anchorage does not match 5610-C-1369.</p>	<p>As-found anchorage is approx. equivalent to that shown on drawing. Also, Item was reviewed for USI A-46 and anchorage was found to be acceptable.</p> <p>Plant drawings and documents need to be changed to reflect as-found anchorage configuration.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
4D24 4A BATTERY RACK	Anchorage seen to be a mix of 5/8 and 1/2 diameter CEA's. Anchorage does not match 5610-C-1369.	As-found anchorage is approximately equivalent to that shown on drawing. Also, Item was reviewed for USI A-46 and anchorage was found to be acceptable.  Revise drawings to match as-found condition.	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.
4P9B INTAKE COOLING WATER PUMP B	Bolts have rust and there is some flaking. Also top of anchor stud has rust beyond surface for some anchors.	As-found anchorage is not significantly degraded at this time.  Perform maintenance to clean the bolts.	YES	Item was entered into the corrective action program to document the condition and address the corroded areas.
4T1 REFUELING WTR STORAGE TK	Moderate corrosion on anchor bolts at several locations.	Per PTN calculation PTN-BFJC-91-016 anchorage strength is controlled by concrete pullout failure and there is substantial margin with respect to bolt axial stress. Therefore it is judged that as-found anchorage has not significantly degraded at this time.  Perform maintenance.	YES	Item was entered into the corrective action program to document the condition and address the corroded areas.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
4T8 CONDENSATE STORAGE TANK	Due to past corrosion, a group of 1-3/8 anchors at the south and southwest have reduced bolt cross-sectional areas where bolts enter the top of the pad. The reduced strength of the bolts needs to be verified as acceptable.  The bolts have been painted so ongoing corrosion does not appear to be an issue.	Per PTN calculation PTN-BFJC-91-016 anchorage strength is controlled by concrete pullout failure and there is substantial margin with respect to bolt axial stress. Therefore it is judged that as-found anchorage has not significantly degraded at this time.  Update PTN-BFJC-91-016 to reflect as-found anchorage configuration (reduced cross sections for some bolts).	YES	Item was entered into the corrective action program to document the condition, update the documentation as warranted and address the corroded areas.
4Y05 STATIC INVERTER 4C 125 VDC/120 VAC 7.5 KVA	Anchorage is (5) x 5/8 diameter CEAs. Anchorage does not match 5610-C-652 Sh. 2.	As-found anchorage has substantial strength and is not deficient given overall capacity of the currently installed one.  Plant drawings and documents need to be changed to reflect as-found anchorage configuration.	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.
CONSOLE CONTROL ROOM CONTROL CONSOLE	Anchors along the cabinet front are typically 2' on center. Two locations in rear seen to be missing an anchor (see empty holes).	Item is a low-height cabinet with substantial anchorage. As-found anchorage is judged to be not significantly degraded given overall capacity of anchorage.  Plant drawings and documents need to be changed to reflect as-built configuration.	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
E16A  CONTROL ROOM AIR HANDLING UNIT	Unit appears to be unanchored. Feet of unit appear to sit on vibration isolation pads (4 places).	An analysis of the as-found condition was performed and determined to be acceptable for its functionality for the seismic loading. Operability of unit confirmed by prompt operability determination (POD).  Evaluate and take corrective action.	YES	Item was entered in the corrective action program. Per POD, the AHU is considered operable. Further evaluation will be performed to determine if anchorage is needed to improve design margin.
4D25  4A1 BATTERY CHARGER	Floor crack seen in front area, may continue near CEA at front. No cracks seen in rear area.	Even with floor crack, as-found anchorage has substantial strength and is not deficient given overall capacity of anchorage.  Perform evaluation as-found anchorage configuration with knockdown for crack.	YES	Item was entered into the corrective action program to document the condition and repair the concrete as needed.
X05  4160/480V TRANSFORMER FOR 480V LC 4B	Anchorage is welded to embedded steel. 4 of 6 welds are 4" long and 2 of 6 welds are about 2" long.  Anchorage does not match drawing 5610-E-9-35.	As-found welded anchorage has substantial strength and is not deficient given overall capacity of this type of configuration.  Plant drawings and documents need to be changed to reflect as-found anchorage configuration.	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
<b><i>Seismic Interaction Issues</i></b>				
4C04 VERTICAL PANEL A	Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in USI A-46 inspection.	Ceiling tiles are plastic and light weight. Therefore, the hazard imposed is judged to be low.  Review indicates that after USI A-46 inspection, metal ceiling tiles were replaced with plastic ones. AR was written to verify issue close-out.	YES	During A-46 walkdown, there were metal crate ceilings. It has been replaced with light weight plastic.  Documents retrieval for the closeout is being tracked in the corrective action program.
4C06_4C05 VERTICAL PANEL B	Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in USI A-46 inspection.	Ceiling tiles are plastic and light weight. As such, the hazard imposed is judged to be low.  Review indicates that after USI A-46 inspection, metal ceiling tiles were replaced with plastic ones. AR was written to verify issue close-out.	YES	During A-46 walkdown, there were metal crate ceilings. It has been replaced with light weight plastic.  Documents retrieval for the closeout is being tracked in the corrective action program.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
CONSOLE CONTROL ROOM CONTROL CONSOLE	Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in USI A-46 inspection.	Ceiling tiles are plastic and light weight. As such, the hazard imposed is judged to be low.  Review indicates that after USI A-46 inspection, metal ceiling tiles were replaced with plastic ones. AR was written to verify issue close-out.	YES	During A-46 walkdown, there were metal crate ceilings. It has been replaced with light weight plastic.  Documents retrieval for the closeout is being tracked in the corrective action program.
4K4A 4A DIESEL GENERATOR	Two pendulum lights above on-skid panel at southwest may be a hazard. Lights will bang against hard surfaces and light shade may fall and are a potential hazard to soft targets on DG skid.	The condition is undesirable but the hazard is low.  Verify shades are rugged and will not fall OR install safety wires to prevent shade from falling.	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted.
4P203B BORIC ACID TRANSFER PUMP B	Large cover plates for a nearby recessed area are stored next to the pump.	No soft targets are vulnerable. This is a seismic housekeeping issue.  Condition was not considered to be an immediate hazard.  Take actions to ensure existing seismic housekeeping procedures are followed.	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
HCV-4-121 CHG TO RCS CONTROL VALVE	Limit switch electrical elbow is within 1/2" of an adjacent valve.	<p>Based on the difference in mass between the valve and the tubing, it is judged that the hazard to valve functionality is low.</p> <p>Evaluate and increase the clearance as needed.</p>	YES	Item was entered into the corrective action program to document the condition and evaluate to determine if increased clearance is warranted.
HCV-4-758 HAND CNTL VLV FOR RHR HX FLOW CNTL	Valve HCV-4-758 is in contact with the support for instrument air line at the floor level.	<p>Considering the fact that valves are rugged and the difference in mass of the valve and the instrument line it was judged that the hazard to valve functionality is low.</p> <p>Verify valve ruggedness for impact load OR increase clearance to an acceptable level.</p>	YES	Item was entered into the corrective action program to document the condition and evaluate to determine if increased clearance is warranted.
MOV-4-350 EMERGENCY BORATION CONTROL VALVE	Gearbox is approximately 3/4" from an adjacent electrical conduit.	<p>Considering the fact that gear box is a rugged component and the difference in mass of the gear box and the electrical conduit, it was judged that the hazard to the gear box functionality is low.</p> <p>Verify the electrical conduit interface load is low OR increase clearance to an acceptable level.</p>	YES	Item was entered into the corrective action program to document the condition and evaluate to determine if increased clearance is warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
<i>Other conditions</i>				
4B50 4H LOAD CENTER (CABINET)	Lift trolley on roof of cabinet appears unrestrained side-to-side and may bang against stop. This may be a relay chatter issue.	<p>Per field walkdown post-inspection it was determined that the subject lift trolley and the associated metal hook are always retracted into the rail housing. As such, a banging against the stop is unlikely to occur. In addition, the stop is welded to the rail housing. Therefore, isolated from the rigid upper frame of the cabinet with electrical equipment inside.</p> <p>As such, this condition was considered to not represent a potential or immediate operability concern</p> <p>Recommended to provide positive restraint to roof trolley to prevent impact against stops.</p>	YES	Item was entered into the corrective action program to document the condition and evaluate to provide positive restraint.
4D03 4B BATTERY RACK	Typically there is a 3/8 to 1/2" (approx.) gap between front of batteries and horizontal rail. Condition is common for all inspected racks. Unknown if this is acceptable (batteries can slide forward to rail).	<p>Best seismic practice for battery racks is to make batteries snug against rails or spacers in all lateral directions.</p> <p>Similar conditions were identified during the A-46 assessment and judged to be acceptable for operability. Further evaluation of the as-qualified condition is to be performed to determine if spacers should be installed to increase margin.</p>	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
4D24 4A BATTERY RACK	<p>Same as above.</p> <p>Typically there is a 3/8 to 1/2" (approx.) gap between front of batteries and horizontal rail. Condition is common for all inspected racks.</p> <p>Unknown if this is acceptable (batteries can slide forward to rail).</p>	<p>Best seismic practice for battery racks is to make batteries snug against rails or spacers in all lateral directions.</p> <p>Similar conditions were identified during the A-46 assessment and judged to be acceptable for operability. Further evaluation of the as-qualified condition is to be performed to determine if spacers should be installed to increase margin.</p>	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted
E16A CONTROL ROOM AIR HANDLING UNIT	<p>There is non-rugged rod hung copper tubing in the area and tubing is attached to E16A. The tubing may be a spray hazard. Also, leakage from tubing may impair function of E16A.</p>	<p>Operability of unit confirmed by prompt operability determination (POD).</p> <p>The impact of spray was evaluated and it would not adversely affect the function of the air handler.</p> <p>An additional AR was written to address this specific condition and to review adverse effects, if any of the copper tubing on the functionality of the air handlers. The operability screening of the AR determined that the AHU remain Operable.</p>	YES	Item was entered into the corrective action program to document the condition and determine if additional measures are warranted to restrain the tubing.

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

<b><i>Anchorage documentation not available</i></b>				
Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
4C13A  4A EDG CONTROL PANEL	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Control panel has been confirmed to be welded to an embedded metal frame at various locations. As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison to the mass and configuration of the panel.</p> <p>Design drawings will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted
4D01  (DISTRIBUTION PANEL)	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Based on field walkdown, the associated distribution panel has been confirmed to have anchor bolts (Sketch provided in the Checklist) at various locations. As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison to the mass and configuration of the panel.</p> <p>Design drawings will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
4E208A  SPENT FUEL PIT HEAT EXCHANGER	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Heat exchanger has been confirmed to have anchors bolts to a concrete pedestal (Sketch provided in the Checklist). As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison to the mass and configuration of the heat exchanger.</p> <p>Design drawings and calculations will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted
4E239B  LC & SWGR ROOMS A/C SYSTEM - CHILLER PACKAGE 1B (TRAIN-B)	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Chiller package has been confirmed to have anchor bolts to a welded steel frame (Sketch provided in the Checklist). As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison to the mass and configuration of the chiller unit.</p> <p>Design drawings and calculations will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
4P212A  SFP CLG WTR PMP A	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Based on field walkdown, the associated pump frame has been confirmed to have anchor bolts to a concrete pedestal (Sketch provided in the Checklist). As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison to the mass and configuration of the pump.</p> <p>Design drawings and calculations will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.
4P241A  EDG 4A OIL TRANSFER PUMP	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Based on field walkdown, the associated pump frame has been confirmed to have anchor bolts to a concrete pedestal (Sketch provided in the Checklist). As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison to the mass and configuration of the pump.</p> <p>Design drawings will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
4QR35  CONTROL ROOM PROTECTION RACK	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Based on field walkdown, the associated protection rack has been confirmed to have anchor bolts (Sketch provided in the Checklist) at various locations. As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison with the mass and configuration of the cabinet.</p> <p>Design drawings will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.
4D02  4B1 BATTERY CHARGER	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Based on field walkdown, the associated battery charger has been confirmed to be anchor bolted to an embedded steel frame (Sketch provided in the Checklist). As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison with the mass and configuration of the cabinet.</p> <p>This is a configuration control issue. Design drawings will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
4D25  4A1 BATTERY CHARGER	Item is designated for anchorage verification; a document that identifies anchorage design was not located.	<p>Based on field walkdown, the associated battery charger has been confirmed to be anchor bolted to an embedded steel frame (Sketch provided in the Checklist). As such, it would not be adversely affected by seismic loads. The anchorage currently installed is judged to be adequate to withstand its design loads based on the capacity of the anchorage in comparison with the mass and configuration of the cabinet.</p> <p>This is a configuration control issue. Design drawings will be updated to document the as-built configuration of the anchorage.</p>	YES	Item was entered into the corrective action program to document the condition and update the documentation as warranted.
<i>Anchorage inspection could not be fully completed</i>				
4C04  VERTICAL PANEL A	A limited number of anchors are not visible (blocked by cables, wires, etc.). Therefore SWC anchorage checks could not be fully completed. Also, concrete is not visible (covered by carpet) and concrete crack check could not be completed.	<p>Estimated that 70% or more of anchors were inspected and all visible anchors were found acceptable.</p> <p>The anchorage currently installed is judged to be adequate to withstand its design loads</p> <p>This condition does NOT represent a potential or immediate operability concern based on as-found condition of inspected anchorage.</p>	YES	Item was entered into the corrective action program to document the assessment performed for the visible anchors.

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
4C06_4C05 VERTICAL PANEL B	A limited number of anchors are not visible (blocked by cables, wires, etc.). Therefore SWC anchorage checks could not be fully completed. Also, concrete is not visible (covered by carpet) and concrete crack check could not be completed.	Estimated that 70% or more of anchors were inspected and all visible anchors were found acceptable. The anchorage currently installed is judged to be adequate to withstand its design loads. This condition does NOT represent a potential or immediate operability concern based on as-found condition of inspected anchorage.	YES	Item was entered into the corrective action program to document the assessment performed for the visible anchors.
CONSOLE CONTROL ROOM CONTROL CONSOLE	A limited number of anchors are not visible (blocked by cables, wires, etc.). Therefore SWC anchorage checks could not be fully completed. Also, concrete is not visible (covered by carpet) and concrete crack check could not be completed.	Estimated that 70% or more of anchors were inspected and all visible anchors were found acceptable. The anchorage currently installed is judged to be adequate to withstand its design loads. This condition does NOT represent a potential or immediate operability concern based on as-found condition of inspected anchorage.	YES	Item was entered into the corrective action program to document the assessment performed for the visible anchors.
4C23A SEQUENCER 4C23A – CABINET	See both floor anchors in right section and one of two in left section. Expected floor anchor location in left section is covered by wires.	75% of anchors were inspected and all visible anchors were found acceptable. The anchorage currently installed is judged to be adequate to withstand its design loads This condition does NOT represent a potential or immediate operability concern based on as-found condition of inspected anchorage.	YES	Under evaluation
4B EDG FAN ASSEMBLIES	See base welds to embedment along inner edge for fan assembly. Welds along outer edges are not accessible for inspection. Visible anchorage is consistent with drawing 5614-C-1589 Sh. 1.	The visible portion of the as-found anchorage is consistent with drawing. Therefore, the Seismic Review Team judged that the component's anchorage is acceptable based on conformance on the accessible side.	NO	CLOSED

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

Equipment ID	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
TIS-4-6413B SWGR RM 4D FAN 4V65B TEMP SWITCH	Wall mounted unit; cannot see wall anchorage fully unless switch is disassembled. After removal of cover, can only see studs to mounting plate.	Based on Engineering judgment and considering the light weight of the switch, the as-found anchorage is considered acceptable.	NO	CLOSED
V77 AIR HANDLER UNIT FOR ELEC EQUIP RM A/C CONDENSER E233	Only able to confirm anchorage on one side of cabinet base. Per drawing 5610-C-1701 Sh. 5, expect that remaining anchorage is hidden from view (welds to inside of base frame; welds are not visible unless housing is disassembled).	Seismic Review Team judged that the cabinet has a welded anchorage and is acceptable based on conformance on the visible side of the cabinet.	NO	CLOSED

### **5.3 AREA WALK-BYS**

The purpose of the Area Walk-Bys is to identify potentially adverse seismic conditions associated with other SSCs located in the vicinity of the SWEL items. Vicinity is generally defined as the room containing the SWEL item. If the room is very large (e.g., Turbine Hall), then the vicinity is identified based on judgment, e.g., on the order of about 35 feet from the SWEL item. This vicinity is described on the Area Walk-By Checklist (AWC), shown in Appendix D of this report. A total of 47 AWCs were completed for Turkey Point Unit 4. Note that additional AWCs will be completed, as required, when deferred inspections are completed.

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

- Anchorage conditions (if visible without opening equipment)
- Significantly degraded equipment in the area
- A visual assessment (from the floor) of cable/conduit raceways and HVAC ducting (e.g., condition of supports or fill conditions of cable trays)
- Potentially adverse seismic interactions including those that could cause flooding, spray, and fires in the area
- Other housekeeping items that could cause adverse seismic interaction (including temporary installations and equipment storage)
- Scaffold construction was inspected for adequate bracing and anchorage
- Hazards from temporary equipment were evaluated and overall seismic housekeeping was evaluated

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

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

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

#### Seismically-Induced Flooding/Spray Interactions

Seismically-induced flooding/spray interactions are the effect of possible ruptures of vessels or piping systems that could spray, flood or cascade water into the area where SWEL items are located. This type of seismic interaction was considered during the IPEEE program. Those prior evaluations were considered, as applicable, as information for the Area Walk-Bys.

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

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

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

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

The SWEs exercised their judgment to identify only those seismically-induced interactions that could lead to flooding or spray. Fire protection piping at Turkey Point Unit 4 was found to be sufficiently restrained in areas where SC-I equipment items are located and no concerns were identified with fire protection piping.

One potential seismic-induced spray interaction was identified at Turkey Point Unit 4 and included as an issue to be resolved. This is related to the E16A AHU discussed in Section 5.2.

#### Seismically-Induced Fire Interactions

Seismically-induced fire interactions can occur when equipment or systems containing hazardous/flammable material fail or rupture. Examples where seismically-induced fire interactions could occur include the following:

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

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

The Seismic Walkdown Engineers exercised their judgment to identify only those seismically-induced interactions that could lead to fires. No potential seismic-fire interactions were identified for Turkey Point Unit 4.

#### Area Walk-By Results

Table 5-3 provides a summary of issues identified during the Area Walkdowns and recorded on AWCs. The tracking of issue resolution is identified in the table. Items are grouped based on the walkdown issue cited:

- Seismic housekeeping issues
- Other seismic interaction issues
- Other conditions

The majority of potentially adverse conditions found are related to seismic housekeeping. Potential seismic interaction concerns were identified but none of the issues were considered to be significant immediate hazards. In some cases potential relay chatter due to bumping of equipment is cited. Potential relay chatter issue is undesirable but the overall plant hazard related to relay chatter is typically low. For the Turkey Point USI A-46 evaluation (Reference 9), relay chatter was dismissed based on the low probability along with being able to manage the effects if they were to occur. As stated, one potential seismic-induced spray hazard was cited as an item requiring evaluation.

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

Area	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
<b><i>Seismic Housekeeping Issues</i></b>				
Area 223  SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	Hand wheel for valve 4-913 is within 1/8" of an adjacent line. Temporary light is hooked to an instrument air line on the east side of the heat exchanger. Scaffolding above 4-816B is not adequately braced in the east-west direction.	The hazard to valve functionality is judged to be low. Verify valve ruggedness for impact load OR increase clearance to an acceptable level.  Heat exchanger is considered a rigid component and interaction with temp light risk is low.	Yes	Item was entered into the corrective action program to document the condition and evaluate to determine if increased clearance is warranted.
Area 310C -  CABLE SPREADING ROOM, MECH.EQ ROOM	Loose cover panels leaning against wall in front of air handlers. Potential to fall on piping and conduit.	No soft targets are vulnerable. This is a seismic housekeeping issue.  Condition was not considered to be an immediate hazard.  Take actions to ensure existing seismic housekeeping procedures are followed.	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted
Area 360  CONTROL ROOM	Unrestrained "Man-Machine Interface" cart on wheels (see photo) is close to Rack No 14, "Protection Ch. Set III". This is potential relay chatter concern.	This is a seismic housekeeping issue. Potential relay chatter issue is undesirable but the overall plant hazard related to relay chatter is typically low as previously discussed.  Take actions to ensure existing seismic housekeeping procedures are followed.	YES	Item was entered into the corrective action program to document the condition and implement the resolution as noted

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

Area	Potentially Adverse Seismic Condition	Resolution	Entered into CAP	Current Status
Area 425 - EMERGENCY DIESEL 4A AIR START AREA.	12' ladder on wall behind air tanks is stowed but can slide on brackets and also swing. Ladder can hit tubing line near RV-4-1456A.	Remove OR restrain the ladder.  Take actions to ensure existing seismic housekeeping procedures are followed.	Yes	Item was entered into the corrective action program to document the condition and implement the resolution as noted
<i>Other seismic interaction issues</i>				
Area 310C - CABLE SPREADING ROOM, MECH. EQ. ROOM	Rod hung copper tubing ("Service Water" tag seen) appears to be non-seismic. Appears to be a spray hazard. This issue is tracked under component E16A.	Operability of unit confirmed by prompt operability determination (POD). The impact of spray was evaluated and it would not adversely affect the function of the air handler.  An additional AR was written to address this specific condition and to review adverse effects, if any of the copper tubing on the functionality of the air handlers. The operability screening of the AR determined that the AHU remains Operable.	YES	Item was entered into the corrective action program to document the condition and determine if additional measures are warranted to restrain the tubing.
<i>Other conditions</i>				
Area 203 CONTAINMENT SPRAY PUMP ROOM	Two bent hanger rods above MOV-4-843B.	Condition was not considered to be an immediate hazard. Evaluate hanger rods for strength.	Yes	Item was entered into the corrective action program to document the condition and implement the resolution as noted

# **6**

## **Licensing Basis Evaluations**

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Potentially adverse conditions identified during the walkdowns were documented on the seismic walkdown and area walk-by checklists, as appropriate, and entered into the corrective action process. For those conditions that required a seismic licensing basis evaluation, an operability screening has been performed and an evaluation will be performed to provide the final resolution to be documented within the corresponding condition reports. Table 5-2 and 5-3 of this report provide the status of the subject evaluations as applicable.

# 7

## IPEEE Vulnerabilities Resolution Report

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As discussed in previously Section 2.3, for implementation of the IPEEE Turkey Point was classified as a “reduced scope” plant per NUREG-1407 (Ref. 10). As such, the review level earthquake was equal to the site SSE and completion of the USI A-46 assessment largely satisfied the seismic IPEEE requirements.

In lieu of a full IPEEE seismic analysis, FPL opted to submit a “scaled back” program to resolve USI A-46 and Generic Letter 87-02 as allowed by the NRC in a letter dated November 4, 1998 (Ref. 13) issued for the review of Turkey Point IPEEE evaluations. The final results of this scaled back program for the A-46 program were submitted in a letter to the NRC, L-93-155, “Final Report of Plant Specific Seismic Adequacy Evaluation of Turkey Point Units 3 and 4 to Resolved USI A-46 and GL 87-02” (Ref. 14). The components selected for this analysis were also included in the SWEL in order to verify no outlier issues persisted. The actions taken for USI A-46 outlier resolution are summarized in Table 7-1.

Table 7-1: USI A-46 Outlier Resolution

No.	Equip Class	Equip ID	Name	Outlier Issue	SRT Recommended Resolution	Status
1	6	3P9B	3B Intake Cooling Water Pump	Pump shaft length longer than can be screened by SSRAP report.	Evaluate Shaft for adequate length and clearance.	Documentation could not be found. A new item has been generated to find and/or recreate the required documentation.
2	6	3P9B	3B Intake Cooling Water Pump	Cast iron fittings on pump.	Check stresses on fittings from loads of attached piping.	Documentation could not be found. A new item has been generated to find and/or recreate the required documentation.
3	6	3P9B	3B Intake Cooling Water Pump	Anchorage needs verification.	Verify anchorage with calculation.	Anchorage adequate per PTN-3FSC-87-020, anchorage replacement.
4	6	3P9B	3B Intake Cooling Water Pump	Interaction – Fossil Unit Stack may fall.	Check adequacy of fossil stack.	Fossil stack adequate per FPL Safety Evaluation.
5	6	4P9B	4B Intake Cooling Water Pump	Pump shaft length longer than can be screened by SSRAP report.	Evaluate Shaft for adequate length and clearance.	Documentation could not be found. A new item has been generated to find and/or recreate the required documentation.
6	6	4P9B	4B Intake Cooling Water Pump	Cast iron fittings on pump.	Check stresses on fittings from loads of attached piping.	Documentation could not be found. A new item has been generated to find and/or recreate the required documentation.
7	6	4P9B	4B Intake Cooling Water Pump	Anchorage needs verification.	Verify anchorage with calculation.	Anchorage adequate per REA-TPN- 88-320, foundation repair and anchorage replacement.
8	6	4P9B	4B Intake Cooling Water Pump	Interaction – Fossil Unit Stack may fall.	Check adequacy of fossil stack.	Fossil stack adequate per FPL Safety Evaluation.
9	21	3T36	U3 Diesel Oil Storage Tank	Anchorage adequacy.	Replace chair plates with 1 ¼" thick plates and evaluate further.	Chair plates upgraded per PCM 91-169.
10	21	3T36	U3 Diesel Oil Storage Tank	Interaction – Fossil Unit Stack may fall.	Check adequacy of fossil stack.	Fossil stack adequate per FPL Safety Evaluation.

Table 7-1: USI A-46 Outlier Resolution

No.	Equip Class	Equip ID	Name	Outlier Issue	SRT Recommended Resolution	Status
11	21	T205B	B Boric Acid Storage Tank	Platform adequacy for torsional loads.	Check platform adequacy for torsion, and upgrade if required.	Platform upgraded per PCMs 90-440 and 90-441
12	21	3T8	U3 Condensate Storage Tank	Anchorage adequacy.	Replace chair plates with 1 ¼" thick plates and evaluate further.	Chair plates upgraded per PCM 91-170.
13	21	4T8	U4 Condensate Storage Tank	Anchorage adequacy.	Replace chair plates with 1 ¼" thick plates and evaluate further.	Chair plates upgraded per PCM 91-171.
14	21	3T1	U3 Refueling Water Storage Tank	Anchorage adequacy.	Replace chair plates with 1 ¼" thick plates and evaluate further.	Chair plates upgraded per PCM 91-172.
15	21	4T1	U4 Refueling Water Storage Tank	Anchorage adequacy.	Replace chair plates with 1 ¼" thick plates and evaluate further.	Chair plates upgraded per PCM 91-173.
16	21	3T23B	3B EDG Day Tank	Glass sight tube.	Replace glass sight tube with non-breakable material.	Addressed by CR 95-1219.
17	21	3T218	U3 Component Cooling Water Surge Tank	Platform adequacy.	Check platform adequacy, and upgrade if required.	Platform to be upgraded per PCM 90-471.
18	21	4T218	U4 Component Cooling Water Surge Tank	Platform adequacy.	Check platform adequacy, and upgrade if required.	Platform to be upgraded per PCM 90-472.
19	17	3K4B	3B EDG Skid	Glass sight tube.	Replace glass sight tube with non-breakable material.	Addressed by CR 95-1219.
20	21	3T269B	3B EDG Air Start Tanks	Seismic interaction – threaded pipe for air supply not rigidly supported.	Complete plant work order (PWO) already written for the support.	Air supply and supports replaced per PCMs 86-155 and 86-190.
21	5	3B06	3B 480V Motor Control Center	Seal welded anchorage, inadequate in tension.	Upgrade anchorage.	Anchorage upgraded per PCM 91-178.
22	5	4B06	4B 480V Motor Control Center	No anchorage.	Add anchorage.	Anchorage upgraded per PCM 91-179.
23	5	3B08	3D 480V Motor Control Center	Inadequate anchorage for overturning.	Brace top of MCC to concrete wall.	Anchorage upgraded per PCM 91-178.

Table 7-1: USI A-46 Outlier Resolution

No.	Equip Class	Equip ID	Name	Outlier Issue	SRT Recommended Resolution	Status
24	5	3AB	3B 4.16kV Switchgear	No anchorage.	Add anchorage.	Anchorage upgraded per PCM 91-174.
25	5	4AB	4B 4.16kV Switchgear	No anchorage.	Add anchorage.	Anchorage upgraded per PCM 91-175.
26	5	3B02	3B 480V HVPDS Load Center (Includes Transformer)	Cannot determine anchorage.	Add anchorage.	New load center installed per PCM 89-532 and new anchorage installed per PCM 91-176.
27	5	3B04	3D 480V HVPDS Load Center (Includes Transformer)	Cannot determine anchorage.	Verify anchorage and upgrade if required.	New load center installed per PCM 89-532 and new anchorage installed per PCM 91-176.
28	5	4B02	4B 480V HVPDS Load Center (Includes Transformer)	No anchorage.	Add anchorage.	New load center installed per PCM 89-533 and new anchorage installed per PCM 91-177.
29	5	4B04	4D 480V HVPDS Load Center (Includes Transformer)	No anchorage.	Add anchorage.	New load center installed per PCM 89-533 and new anchorage installed per PCM 91-177.
30	15	3D03	Battery Rack 3A	No spacers on east end of battery rack.	Add spacers on east end of battery rack.	Spacers added (ref. FPL letters JPN-PTN-92-5261 and 5707).
31	15	3D03	Battery Rack 3A	Shade on lights may fail and fall on batteries.	Add tie wire to lights.	Tie wires added per PCM 91-182.
32	15	3D03	Battery Rack 3A	Block walls not evaluated by SRT.	Verify block wall included in FPL IE 80-11 program.	FPL verified wall included in IE 80-11 program as block walls C30-1, C30-2, C30-4.
33	15	3D24	Battery Rack 3B	No spacers on east end of battery rack.	Add spacers on east end of battery rack.	Spacers added (ref. FPL letters JPN-PTN-92-5261 and 5707).
34	15	3D24	Battery Rack 3B	Shade on lights may fail and fall on batteries.	Add tie wire to lights.	Tie wires added per PCM 91-182.

**Table 7-1: USI A-46 Outlier Resolution**

No.	Equip Class	Equip ID	Name	Outlier Issue	SRT Recommended Resolution	Status
35	15	3D24	Battery Rack 3B	Block walls not evaluated by SRT.	Verify block wall included in FPL IE 80-11 program.	FPL verified wall included in IE 80-11 program as block walls A42-2, C42-16, C42-17, C42-18.
36	15	4D24	Battery Rack 4B	No spacers on east end of battery rack.	Add spacers on east end of battery rack.	Spacers added (ref. FPL letters JPN-PTN-92-5261 and 5707).
37	15	4D24	Battery Rack 4B	Shade on lights may fail and fall on batteries.	Add tie wire to lights.	Tie wires added per PCM 91-183.
38	15	4D24	Battery Rack 4B	Block walls not evaluated by SRT.	Verify block wall included in FPL IE 80-11 program.	FPL verified wall included in IE 80-11 program as block walls C30-2, C30-3, C30-4.
39	15	4D03	Battery Rack 4A	No spacers on east end of battery rack.	Add spacers on east end of battery rack.	Spacers added (ref. FPL letters JPN-PTN-92-5261 and 5707).
40	15	4D03	Battery Rack 4A	Shade on lights may fail and fall on batteries.	Add tie wire to lights.	Tie wires added per PCM 91-182.
41	15	4D03	Battery Rack 4A	Block walls not evaluated by SRT.	Verify block wall included in FPL IE 80-11 program.	FPL verified wall included in IE 80-11 program as block walls A42-2, C42-15, C42-16, C42-18.
42	14	3D01	3A Distribution Panels/Bus	One loose anchor bolt.	Tighten loose bolt.	Bolt disposition per PWO 93-010843.
43	14	4D01	4B Distribution Panels/Bus	Three loose anchor bolts.	Tighten loose bolt.	Bolt disposition per PWO 93-010844.
44	20	3C23B	3B Sequencer	Additional top bracket as found for sequencer 3A would provide added assurance and strength. This item had only one bracket.	Add top bracket as found for sequencer 3A.	Bracket added per PCM 91-180.
45	20	4C23A	4A Sequencer	Additional top bracket as found for sequencer 3A would provide added assurance and strength. This item had only one bracket.	Add two top brackets as found for sequencer 3A.	Bracket added per PCM 91-181.

**Table 7-1: USI A-46 Outlier Resolution**

No.	Equip Class	Equip ID	Name	Outlier Issue	SRT Recommended Resolution	Status
46	20	4C23B	4B Sequencer	Additional top bracket as found for sequencer 3A would provide added assurance and strength. This item had only one bracket.	Add two top brackets as found for sequencer 3A.	Bracket added per PCM 91-181.
47	21	3E207B	3B CCW Heat Exchanger	SRT could not verify reinforcement steel design of pedestal.	Verify adequacy of pedestal design.	FPL verified pedestal adequacy by calculations C-SJ511-01 and 02.
48	21	4E207B	4B CCW Heat Exchanger	SRT could not verify reinforcement steel design of pedestal.	Verify adequacy of pedestal design.	FPL verified pedestal adequacy by similarity with Item 53.
49	20	3C06	3B Vertical Panel	Interaction metal egg crate ceiling may fall on operators.	Clip in metal egg crate sections of ceiling.	Currently light weight plastic egg crate is installed.
50	20	4C06	4B Vertical Panel	Interaction metal egg crate ceiling may fall on operators.	Clip in metal egg crate sections of ceiling.	Currently light weight plastic egg crate is installed.

# 8

## Peer Review

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

# 9

## References

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1. EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012.
2. Turkey Point Updated Final Safety Analysis Report (UFSAR): Section 1, Section 2, and Section 5.
3. Not used.
4. AEC Publication TID 7024, "Nuclear Reactors and Earthquakes", August 1963.
5. ACI 318-63, Building Code Requirements for Reinforced Concrete.
6. AISC, "Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings", adopted April 17, 1963.
7. USNRC, "Verification Of Seismic Adequacy Of Mechanical And Electrical Equipment In Operating Reactors, Unresolved Safety Issue (USI) A-46", Generic Letter 87-02.
8. USNRC, "Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities", Generic Letter 88-20, Supplement 4.
9. Stevenson & Associates report, "Plant Specific Seismic Adequacy Evaluation of Turkey Point Units 3 & 4 to Resolve Unresolved Safety Issue (USI) A-46 and Generic Letter (GL) 87-02," dated April 30, 1993.
10. USNRC, "Procedural and Submittal Guidance for the IPEEE for Severe Accident Vulnerabilities", NUREG-1407, June, 1991.
11. FPL Letter L-92-222, "Individual Plant Examination of External Events (IPEEE)," letter to USNRC, August 31, 1992.
12. NRC (E Leeds and M Johnson) Letter to All Power Reactor Licensees et al., "Request for Information Pursuant to Title 10 of the Code of Federal Regulations 50.54(f) Regarding Recommendation 2.1, 2.3, and 9.3, of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," Enclosure 2.3, "Recommendation 2.3: Seismic," dated March 12, 2012
13. NRC Letter to FPL, "Generic Letter 88-20, Supplement 4, -Individual Plant Examination For External Events For Severe Accident Vulnerabilities- Turkey Point Nuclear Plant. Units 3 And 4", dated November 4, 1998.
14. FPL Letter L-93-155, "Final Report of Plant Specific Seismic Adequacy Evaluation of Turkey Point Units 3 and 4 to Resolved USI A-46 and GL 87-02".

# A

## Project Personnel Resumes and SWE Certificates

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### A.1 INTRODUCTION

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

- FPL: C. Figueroa, T. Satyan-Sharma, A. Restrepo, George Tullidge, T. Jones
- Stevenson & Associates: J. O'Sullivan, S. Baker

In addition, certificates from the EPRI Walkdown Training Course are included for each of the designated SWEs: C. Figueroa, T. Satyan-Sharma, J. O'Sullivan and S. Baker.

### A.2 RESUMES

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#### **Carlos Andres Figueroa**

Mr. Figueroa is a Mechanical and Civil Design Engineer I in the Turkey Point Nuclear Station at Florida Power & Light. He has one year of Mechanical Systems Engineering experience at Entergy's River Bend Station in St. Francisville, LA. Mr. Figueroa also has three years of Operations experience and four years of Civil Design Engineering experience at FPL's Turkey Point Station in South Florida. He holds a BS in Mechanical Engineering from the University of Los Andes (Bogota, Colombia) and a MS in Mechanical Engineering, from the University of Florida. He completed Training on the Near Term task Force Recommendation 2.3 – Plant Seismic Walkdowns.

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#### **T. Satyan-Sharma, P.E.**

Mr. Satyan Sharma is a Consultant to Florida Power and Light for Turkey Point Station. He has managed and was the technical lead for the SQUG Project at a Nuclear Utility. He was a Peer Reviewer on the SQUG project at other Nuclear Plants and provided third party reviews. Mr. Satyan Sharma has 40 years of experience in Nuclear Industry in both Consulting (6 years) and Utility (34 years ) supporting plant operations. Mr. Satyan Sharma has a Master of Science in Structural/Engineering Mechanics from New York University. He was a member of the SQUG Team in the development of the Generic Implementation Procedures (GIP). He has received industry training as Seismic Capability Engineer (EPRI 5-Day Training), SQUG New and Replacement Equipment and Parts (NARE) Training, and SQUG Equipment Selection & Relay Evaluation Training.

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**Alexander Restrepo**

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

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**George Tullidge**

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

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**Tim Jones**

Mr. Jones is an Operations Department Shift Manager at Turkey Point Nuclear. He has over 26 years of experience in the Operations Department and was licensed in 1994 as Reactor Operator. He received his SRO license in 1998. His years of experience include Operations, Maintenance, and Security.

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**John J. O'Sullivan, P.E.**

Mr. O'Sullivan is a Senior Consultant in the S&A Boston office. He has managed and led seismic walkdowns and fragility analyses of structures and components for use in probabilistic risk assessments. Mr. O'Sullivan has 24 years of seismic experience serving the nuclear industry. Mr. O'Sullivan has participated in more than 10 USI A-46 and IPEEE projects in response to the requirements of Generic Letters 87-02 and 88-20. Mr. O'Sullivan has a Master of Science in Structural Engineering from the Massachusetts Institute of Technology. He has received industry training as Seismic Capability Engineer (EPRI 5-day SQUG training), EPRI IPEEE Add-on, and Seismic Fragility training.

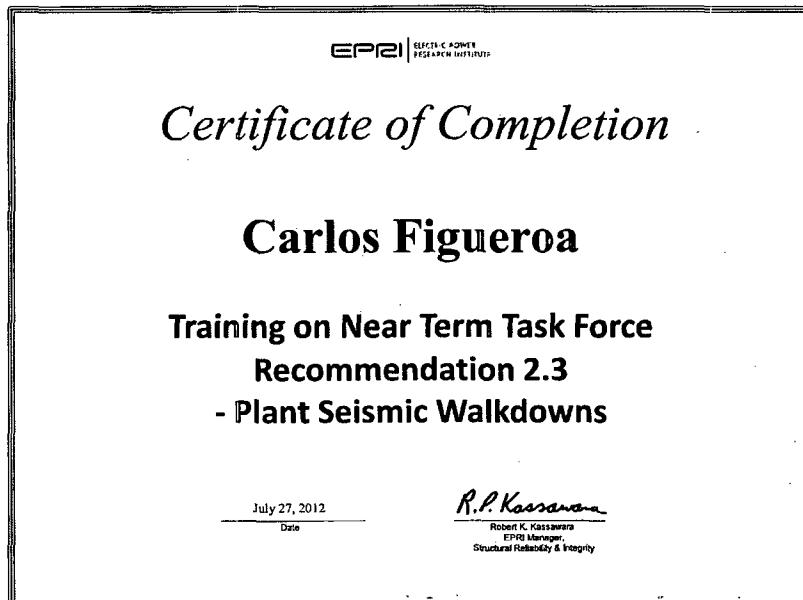
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**Seth Baker**

Mr. Baker is a Senior Engineer in the S&A Boston office. He has performed structural engineering analysis & design, finite element analysis, structural mechanics evaluations, seismic qualification managed and seismic walkdowns. Mr. Baker has a Master of

Science in Civil/Structural Engineering from Stanford University. He completed the EPRI training for NTTF 2.3 plant seismic walkdowns.

### A.3 CERTIFICATES





# Certificate of Completion

**Seth Baker**

Successfully Completed

Training on Near Term Task Force  
Recommendation 2.3 – Plant Seismic Walkdowns

*Bruce M. Lory*  
Bruce M. Lory, Instructor  
NTTF 2.3 Seismic Walkdown Course

Date: 06/26/12

# B

## SWEL Selection Report



*Florida Power & Light*

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

#### Turkey Point Nuclear Station

Prepared by

*Alexander Restrepo*  
Alexander Restrepo (PRA Group)

10/26/12  
Date

Reviewed by

*George Tullidge*  
George Tullidge (PRA Group)

10/26/12  
Date

Reviewed by

*Tim Jones*  
Tim Jones (Operations)

10/11/12  
Date

Reviewed by

*Carlos Figueroa*  
Carlos Figueroa (Engineering)

10/11/12  
Date

## **1 Introduction**

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

The selection process was completed by applying separate screening criteria to develop SWELs 1 and 2. The documentation is laid out by first providing the screening criteria requirements, and then providing the implementation of how PTN applied that screening criteria.

## **2 Process**

The general process focused first on building a Master Component List, with attributes to support the sample selection process (Sections 3 and 4). This list was obtained by generating a NAMS query of the entire PTN Equipment Database for all components along with data such as system code, component type, location, etc. Then the screening criteria below were applied to arrive at a final SWEL 1 and SWEL 2 comprised of about 92 items and 8 items, respectively.

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

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

Because the SWEL needs to address a number of attributes, the selection was performed and reviewed by a team that includes representatives from PRA, Operations, and Engineering. This was done systematically by performing table-top virtual walkdowns and pre-walkdowns of each location to identify candidates for the SWEL as well as other issues (e.g., seismic-flood) that needed to be inspected by the walk-by.

## **3 SWEL 1 Screening Criteria**

The final SWEL 1 is contained in the Microsoft Excel workbook, "U3 (U4) PTN Fukushima SWEL" [2], in the "SWEL 1" spreadsheet on-file. Each iteration of the screening process described below is contained in the Microsoft Access database, "SWEL 1" [3]. These final SWEL (both SWEL 01 & SWEL 02), as well as the Master Component List, are available in Excel format on-file at Turkey Point.

### **3.1 Screening Criteria 1 – Seismic Category 1**

#### **Requirement**

The scope of SSCs (Systems, Structures, and Components) in the plant are limited to those that are designed to Seismic Category (SC) I requirements. This is done because only such items have a defined seismic licensing basis against which to evaluate the as-installed configuration.

Selecting these items is intended to comply with the request in the NRC 50.54(f) Letter, under the “Requested Actions” section, to “verify current plant configuration with the current license basis.”

Application

Seismic Class 1 SSCs include over 20,000 items in the PTN equipment database. A complete equipment list from the PTN equipment database was obtained via a NAMS query ran in June 2012. The Seismic Class 1 SSCs were queried from the report by choosing only those SSCs where the Seismic Class was designated with an I.

**3.2 Screening Criteria 2 – Equipment or Systems**

Requirement

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

Application

The list of all SC1 SSCs was further reduced by including only “active” components, removing all items classified as “design” or “non-equip”.

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

Requirement

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

Application

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

**3.4 Screening Criteria 4 – Sample Considerations**

Requirement

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

- A variety of types of systems

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

Application

The seismic aspects of the PTN IPEEE were resolved by the use of the FPL site-specific Seismic Program associated with Unresolved Safety Issue (USI) A-46 [4]. The equipment analyzed in this program was used as a base and compared to the screening criteria above. The remaining components in the Master Component List were reordered according to system code, component type, and then location in order to obtain a broad sample. Operations personnel were consulted with to identify new or replaced equipment that were on the truncated Master Component List.

## 4 SWEL 2 Screening Criteria

SWEL 2 began with the same Master Component List as SWEL 1. An initial screening was done retaining only SSCs related to the Spent Fuel Pool system. Screening criteria 1, 2, and 3 for SWEL 2 were performed identically to that of screening criteria 1, 2, and 4 for SWEL 1, respectively. The final SWEL 2 is contained in the Microsoft Excel workbook, "U3 (U4) PTN Fukushima SWEL" [2], in the "SWEL 2" spreadsheet on-file. Each iteration of the screening process is contained in the Access database, "SWEL 2" [5]. These Microsoft Excel Workbooks, as well as the Master Component List are available in Excel format on-file at Turkey Point.

### 4.1 Screening Criteria 4 – Cause Rapid Drain-Down

Requirement

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

Application

There are only two penetrations in the SFP below this level. One is a lower suction valve (\*-797), the other is the fuel transfer tube, used to move fuel from containment to the SFP. During normal operation, this tube is isolated by a blind flange on the containment side and a manual valve on the Fuel Storage Building side. Other components were included in this screening based on their importance in maintaining spent fuel pool inventory and cooling.

## **5 Walk-By Table**

Each location will also be subject to a walk-by, an examination (in less detail) of the other PRA components, as well as an inspection for other seismic issues:

- Several other passive component types: cable trays & ventilation ducts.
- Seismic-induced fire. This includes all flammable materials in each location such as hydrogen lines, gas bottles (acetylene, hydrogen), natural gas lines, and hazardous/flammable material stored in the location.
- Seismic-induced flood. This includes all flood/spray sources (tanks, piping) originating in each location, based on the Internal Flood PRA. Note, the flood sources of interest are only those originating in the location, not those coming from another location. The potential for flood propagation will be addressed in the seismic/flood analysis.
- Spatial interactions (2 / 1). This includes adverse physical interaction due to proximity, failing of other components or structures (e.g., cranes), and flexibility of attached lines and cables.

The final Walk-By Table is contained in the Microsoft Excel workbook, "U3 PTN Fukushima SWEL" [2], in the "Walkby Table" spreadsheet as well as the Master Component List are available in Excel format at Turkey Point on-file.

## **6 Evaluations**

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

### ***6.1 IPEEE or USI A-46 Vulnerabilities***

The seismic assessment performed for PTN USI A-46 was reviewed for any seismic vulnerability identified. These issues were included in the SWEL table.

### ***6.2 Configuration Verification***

The EPRI guidance identifies two types of inspection for the walkdown: (a) visual inspection and (b) configuration verification. Visual inspection is typically what is performed in a walkdown, looking for obvious degraded conditions in equipment anchorage. However, configuration verification is a more involved inspection consistent with the existing plant documentation of the design basis. This is required in at least 50% of the SWEL items with anchorage. Since 28 SWEL components are MOVs (Class 8) or AOVs (or similar Class 7 components) which do not have anchorage, this leaves 50% of 72, or at least 36 components to be included in the configuration verification. For those components, the design basis was reviewed and the key attributes included in the walkdown forms to assist the inspection.

### ***6.3 New Equipment***

The EPRI Guidance directs that the SWEL should include a "robust sampling of the major new or replacement equipment installed within the past 15 years (i.e., since the approximate completion of the seismic IPEEE evaluation)". Based on discussion with Operations and Engineering, major new or replacement equipment was identified and noted as such in the SWEL spreadsheet.

#### **6.4 Modifications**

The walkdown team allowed for changes to be made to the SWEL mid-walkdown. Many components were changed from 'B' train to 'A' train as the former was the protected train, precluding the thorough inspection of some components. Various items were also replaced or removed because they were common components already on the other unit's SWEL or the component was no longer installed in the plant.

### **7 References**

1. "Final Report of Plant Specific Adequacy Evaluation of Turkey Point Units 3 and 4 to Resolve Unresolved Safety issue (USI) A-46 and Generic Letter (GL) 87-02," Stevenson & Associates, April 1993.
2. "PTN Fukushima SWEL," FPL, August 2012.
3. "SWEL 1," FPL, August 2012.
4. EPRI TR-1025286, "Seismic Walkdown Guidance," June 2012.
5. "SWEL 2," FPL, August 2012.

# C

## Seismic Walkdown Checklists (SWCs)

**Table C-1. Summary of Seismic Walkdown Checklists**

## - Anchorage Configuration Confirmation Performed

	Tag ID	Component Description	Area	Equip. Class	Page
	4B05	A-MCC (CABINET)	342 - 4A MCC	1	C-5
##	4B06	B-MCC (CABINET)	343 - 4B MCC ROOM	1	C-7
##	4B07	C-MCC (CABINET)	215 - NORTH-SOUTH HALLWAY	1	C-9
##	4B08	D-MCC (CABINET)	234 - NEW ELECTRICAL EQUIPMENT ROOM	1	C-10
##	4B02	4B02 480V HVPDS LOAD CENTER 4B (CABINET)	341 - 480V LC ROOM	2	C-13
##	4B04	4D LC (Part of B train) (CABINET)	341 - 480V LC ROOM	2	C-15
	4B50	4H LOAD CENTER (CABINET)	234 - NEW ELECTRICAL EQUIPMENT ROOM	2	C-17
##	4AB	4AB 4.16V SWITCHGEAR 4B (CABINET)	368 - 4160V SWITCHGEAR ROOM	3	C-19
	4AD	4.16KV SWITCHGEAR 4AD FOR BUS 4D	430 - SWITCHGEAR ROOM 4D	3	C-21
##	X05	4160/480V TRANSFORMER FOR 480V LC 4B	341 - 480V LC ROOM	4	C-23
##	4P201B	CHARGING PUMP B	201 - CHARGING PUMP ROOM	5	C-25
##	4P203B	BORIC ACID TRANSFER PUMP B	200 - BORIC ACID TANK ROOM	5	C-27
##	4P211B	COMPONENT COOLING PUMP B	202 - COMPONENT COOLING PUMP RM	5	C-29
##	4P212A	SFP CLG WTR PMP A	223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	5	C-31
	4P214B	CONTAINMENT SPRAY PUMP B	203 - CONTAINMENT SPRAY PUMP ROOM	5	C-33
	4P215B	HI HEAD SAFETY INJECTION PUMP 4B	206 - HI-HEAD SIS PUMP ROOM	5	C-35
##	4P241A	EDG 4A OIL TRANSFER PUMP	431 - EMERGENCY DIESEL 4A DIESEL OIL TRANSFER PUMP ROOM	5	C-37
	EMERG SFP CLG PMP	EMERGENCY SPENT FUEL PIT COOLING PUMP	223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	5	C-39
##	P2C	AUXILIARY FEEDWATER PUMP C	306 - AUX FEED PUMP AREA	5	C-41
	4P210B	RHR PUMP B	211 - RHR PUMP ROOM	6	C-43
##	4P9B	INTAKE COOLING WATER PUMP B	370 - INTAKE AREA	6	C-45
	CV-4-1607	MAIN STEAM LINE A STM DUMP TO ATMOS CNTL VALVE	300 - STEAM DECK	7	C-47
	CV-4-2818	TRAIN 1 S/G C FEED FLOW CONTROL VALVE	302 - FEEDWATER DECK	7	C-49
	FCV-4-113A	BORIC ACID TO BLENDER FLOW CNTL VLV	201 - CHARGING PUMP ROOM	7	C-51
	FCV-4-488	STEAM GENERATOR B MAIN FEEDWATER FLOW CONTROL VALVE	302 - FEEDWATER DECK	7	C-53
	HCV-4-121	CHG TO RCS CONTROL VALVE	209 - PIPE & VALVE ROOM	7	C-55
	HCV-4-758	HAND CNTL VLV FOR RHR HX FLOW CNTL	210 - RHR HEAT EXCHANGER ROOM	7	C-57
	PCV-4-4885	PRZR PORV N2 BACKUP SUPPLY PRESSURE REGULATOR	123 - CONTAINMENT 58 FOOT ELEVATION	7	Defer

Tag ID	Component Description	Area	Equip. Class	Page
POV-4-2605	MN STM ISO VLV FROM S/G B	300 - STEAM DECK	7	C-59
POV-4-4883	TPCW HEAT EXCHANGERS ISOLATION VALVE	334 - TURBINE PLANT HEAT EXCHANGER AREA	7	C-61
SV-4-455C	PRESSURIZER PORV SOLENOID VALVE	103 - PRESSURIZER CUBICLE	7	Defer
TCV-4-143	NON REGEN HX OUTLET TO VCT OR DEMIN TEMP CNTL VLV	201 - CHARGING PUMP ROOM	7	C-63
MOV-4-1404	MTR OPERATED VALVE FROM STEAM GEN A TO AUX FW PP TURBINES	301 - BELOW STEAM DECK	8	C-65
MOV-4-350	EMERGENCY BORATION CONTROL VALVE	201 - CHARGING PUMP ROOM	8	C-67
MOV-4-535	PRESSURIZER PORV BLOCK VALVE	103 - PRESSURIZER CUBICLE	8	Defer
MOV-4-744A	RHR LO HEAD SI TO LOOP A MOTOR OPERATED VLV	121 - CONTAINMENT 14 FOOT ELEVATION OUTSIDE BIO-WALL	8	Defer
MOV-4-751	NORMAL RHR INLET FROM RCS MOTOR OPERATED VLV	121 - CONTAINMENT 14 FOOT ELEVATION OUTSIDE BIO-WALL	8	Defer
MOV-4-843B	HHSI TO COLD LEG MOV	203 - CONTAINMENT SPRAY PUMP RM	8	C-69
MOV-4-860B	RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE	210 - RHR HEAT EXCHANGER ROOM	8	C-71
MOV-4-861B	RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE	211 - RHR PUMP ROOM	8	C-73
MOV-4-862A	RWST TO RHR PUMP SUCTION VALVE	211 - RHR PUMP ROOM	8	C-75
MOV-4-863B	RHR PUMP RECIRC TO RWST	210 - RHR HEAT EXCHANGER ROOM	8	C-77
MOV-4-864B	RWST MTR OP ISO VALVE TO SI & RHR PUMPS	217 - RWST AREA	8	C-79
MOV-4-865A	SI ACCUM A DISCH MOTOR OPERATED VLV	121 - CONTAINMENT 14 FOOT ELEVATION OUTSIDE BIO-WALL	8	Defer
MOV-4-869	SI TO LOOP A&B HOT LEG MTR OP ISO VLV	209 - PIPE & VALVE ROOM	8	C-81
MOV-4-880B	CTMT SPRAY PMP B DISCH ISO VLV	203 - CONTAINMENT SPRAY PUMP ROOM	8	C-83
SV-4-3434A	EDG 4A OIL DAY TANK INLET CONTROL SOLENOID VALVE	407 - A DIESEL GENERATOR BUILDING ( LOWER LEVEL )	8	C-85
4V64A	4A EDG ROOM VENT EXHAUST FAN	424 - EMERGENCY DIESEL 4A CONTROL ROOM	9	C-87
4V65B	AXIAL FLOW VENTILATION FAN	430 - SWITCHGEAR ROOM 4D	9	C-89
## N/A	EDG FAN ASSEMBLIES (RADIATOR FAN)	309 - DIESEL GENERATOR BUILDING ( LOWER LEVEL )	9	C-91
## 4E241B	LOAD CENTER ROOM 4A/B - AIR HANDLING UNIT	341 - 480V LOAD CENTER ROOM	10	C-93
4E242B	LOAD CENTER ROOM 4C/D - AIR HANDLING UNIT (TRAIN-B)	341 - 480V LOAD CENTER ROOM	10	C-95
4E243B	SWITCHGEAR ROOM 4B - AIR HANDLING UNIT	368 - 4160 V SWITCHGEAR ROOM	10	C-97
E16A	CONTROL ROOM AIR HANDLING UNIT	310 - CABLE SPREADING ROOM	10	C-99
V77	AIR HANDLER UNIT FOR ELEC EQUIP RM A/C CONDENSER E233	234 - NEW ELECTRICAL EQUIPMENT ROOM	10	C-101
## 4E239B	LC & SWGR ROOMS A/C SYSTEM - CHILLER PACKAGE 1B (TRAIN-B)	315 - LP TURBINE NORTH AREA	11	C-103
4CM226A	EDG 4A AIR COMPRESSOR	425 - EMERGENCY DIESEL 4A AIR START AREA.	12	C-105
## 4D01	4D01 (DISTRIBUTION PANEL)	310 - CABLE SPREADING ROOM	14	C-107
## 4D23	4D23 (DISTRIBUTION PANEL)	347 - CONTROL ROOM INVERTER ROOM	14	C-109
4S77	100 AMP 2-POLE AUTOMATIC TRANSFER SWITCH	234 - NEW ELECTRICAL EQUIPMENT ROOM	14	C-111
## 4D03	4B BATTERY RACK	346 - BATTERY ROOM	15	C-113
## 4D24	4A BATTERY RACK	347 - CONTROL ROOM INVERTER ROOM	15	C-115
## 4D02	4B1 BATTERY CHARGER	310 - CABLE SPREADING ROOM	16	C-117

Tag ID	Component Description	Area	Equip. Class	Page
## 4D02A	4B2 BATTERY CHARGER	234 - NEW ELECTRICAL EQUIPMENT ROOM	16	C-119
## 4D25	4A1 BATTERY CHARGER	347 - CONTROL ROOM INVERTER ROOM	16	C-121
## 4Y05	STATIC INVERTER 4C 125 VDC/120 VAC 7.5 KVA (CABINET)	347 - CONTROL ROOM INVERTER ROOM	16	C-123
## 4Y07	STATIC INVERTER 4D 125 VDC/120 VAC 7.5 KVA (CABINET)	347 - CONTROL ROOM INVERTER ROOM	16	C-125
## 4K4A	4A DIESEL GENERATOR	423 - EMERGENCY DIESEL 4A	17	C-127
## 4QR35	CONTROL ROOM PROTECTION RACK	361 - CONTROL ROOM GENERAL	18	C-129
TIS-4-6413B	SWGR RM 4D FAN 4V65B TEMP SWITCH	430 - SWITCHGEAR ROOM 4D	19	C-131
TW-4-412C	DELTA T-TAVG CH I COLD LEG 1 THERMOWELL	104 - RCP A CUBICLE	19	Defer
4C04	VERTICAL PANEL A	360 - CONTROL ROOM VERTICAL PANEL	20	C-133
## 4C06/4C05	VERTICAL PANEL B	360 - CONTROL ROOM VERTICAL PANEL	20	C-135
## 4C13A	4A EDG CONTROL PANEL	427 - EMERGENCY DIESEL 4A CONTROL ROOM	20	C-137
## 4C23A	SEQUENCER 4C23A - CABINET	368 - 4160 V SWITCHGEAR ROOM	20	C-139
4C23B	SEQUENCER 4C23B - CABINET	368 - 4160 V SWITCHGEAR ROOM	20	C-141
4C264	4C264 - ALTERNATE SHUTDOWN PANEL	368 - 4KV SWGR. ROOM B SIDE	20	C-143
CONSOLE	CONTROL ROOM CONTROL CONSOLE	362 - CONTROL ROOM CONTROL CONSOLE	20	C-145
4P214B HEAT EXCHANGER	SEAL WATER HEAT EXCHANGER FOR CONTAINMENT SPRAY PUMP B	203 - CONTAINMENT SPRAY PUMP ROOM	21	C-148
## 4E206B	RHR HEAT EXCHANGER B	210 - RHR HEAT EXCHANGER ROOM	21	C-150
4E207B	COMPONENT COOLING HEAT EXCHANGER B	202 - COMPONENT COOLING PUMP ROOM	21	C-152
## 4E208A	SPENT FUEL PIT HEAT EXCHANGER	223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	21	C-154
## 4T1	REFUELING WTR STORAGE TK	217 - RWST	21	C-156
## 4T218	COMPONENT COOLING SURGE TANK	212 - SPENT FUEL PIT ROOM	21	Defer
## 4T229B	SI ACCUM B	114 - ACCUMULATOR B AREA	21	Defer
4T259A	DIESEL OIL STORAGE TANK 4A	432 - EMERGENCY DIESEL 4A DIESEL OIL STORAGE TANK ROOM	21	C-158
## 4T260A	DIESEL OIL DAY TANK 4A FOR EDG	423 - EMERGENCY DIESEL 4A	21	C-160
4T270A	EDG 4A STARTING AIR ACCUMULATOR TANK	425 - EMERGENCY DIESEL 4A AIR START AREA.	21	C-162
## 4T8	CONDENSATE STORAGE TANK	331 - CONDENSATE STORAGE TANK	21	C-164
4V30B	EMERGENCY CONTAINMENT COOLER B	123 - CONTAINMENT 58 FOOT ELEVATION	21	Defer
## T205C	BORIC ACID STORAGE TANK C	200 - BORIC ACID TANK ROOM	21	C-166
4-12-031	TUBE GATE ISOLATION VALVE	212 - SPENT FUEL PIT ROOM	0	C-168
4-797	SFP COOLING WATER PUMP LOW SUCTION VALVE	223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	0	C-170
4-910	SFP CLG PMP A SUCT ISO VLV	223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	0	C-172
4K200	BORIC ACID BLENDER	201 - CHARGING PUMP ROOM	0	C-174
BD-1	CREVS INTAKE BALANCING DAMPER	347 - CONTROL ROOM INVERTER ROOM	0	C-176
BS-4-1402	BASKET STRAINER TO INTAKE COOLING WTR SUPPLY FOR CCW HX A	202 - COMPONENT COOLING PUMP ROOM	0	C-178
LT-4-651	SPENT FUEL PIT LEVEL TRANSMITTER	212 - SPENT FUEL PIT ROOM	0	C-180

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

Per the EPRI guidance document, the top row of each checklist summarizes the status as follows:

Status	Meaning
Y	All relevant checks were answered Yes and no further action is required.
N	At least one check was answered No and follow-up is required.
U	At least one check could not be answered due to unavailable information and follow-up is required.

Section 5.2.5 of this report identifies planned actions for items requiring follow-up.

**Class (01) Motor Control Centers**  
4B05 SWC

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B05

Equipment Class: (1) Motor Control Centers

Equipment Description: A-MCC (CABINET)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 342

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
  
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes  
*MCC is within environmental enclosure. See external anchorage of welded tabs in front and fillet welds in rear to embedded C6.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes  
*Concrete floor is cracked behind MCC, but the cracks are on other side of structural joint, so not an issue for MCC anchorage.*
  
5. Is the anchorage configuration consistent with plant documentation?      Not Applicable  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B05

Equipment Class: (1) Motor Control Centers

Equipment Description: A-MCC (CABINET)

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

---

**Interaction Effects**

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

*MCC is within an environmental enclosure.*

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

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

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

*There may be spray sources for non-SC-I piping nearby, but MCC is protected by enclosure.*

---

**Other Adverse Conditions**

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

*Opened enclosure doors and inspected front of MCC. Saw one missing cover panel screw at top of section labeled "40530".*

---

**Comments**

Walkdown by Team B

4B06 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B06

Equipment Class: (1) Motor Control Centers

Equipment Description: B-MCC (CABINET)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev, Room/Area): Unit 4, 18.00 ft, 343

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

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

*Checked wall and floor anchors.*

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

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

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

*See welded tabs at base, 12 places at < 36" o/c and three top supports. Two 5/8 anchors per top support. Matches 5614-C-1790 Sheet 2.*

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

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B06

Equipment Class: (1) Motor Control Centers

Equipment Description: B-MCC (CABINET)

---

**Interaction Effects**

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

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
- Inspected exterior and lower interior of cabinet (opened kick-panels at all anchors). No loose or missing hardware. MCC rear face is close to wall, but top support will limit seismic front/back displacement to a very low magnitude, so judged acceptable.*

---

**Comments**

Walkdown by Team B

4B07 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B07

Equipment Class: (1) Motor Control Centers

Equipment Description: C-MCC (CABINET)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 215

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

2. Is the anchorage free of bent, broken, missing or loose hardware? No

*Saw two missing/broken bolts on back base clip in cubicle 40788 and 40702.*

3. Is the anchorage free of corrosion that is more than mild surface No  
oxidation?

*Moderate corrosion at the lower back angles inside the MCC. Lots of large pieces of peeled paint inside.*

4. Is the anchorage free of visible cracks in the concrete near the No  
anchors?

*Hairline crack in floor in front of cubicle 40762 and travels into pad.*

5. Is the anchorage configuration consistent with plant documentation? No  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

*Upper wall supports are inconsistent with drawing 5614-C-1790 Sh. 3 Rev. 0*

*Internal base anchorage needs to be verified with plant drawing (see field sketch).*

6. Based on the above anchorage evaluations, is the anchorage free of No  
potentially adverse seismic conditions?

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B07

Equipment Class: (1) Motor Control Centers

Equipment Description: C-MCC (CABINET)

---

**Interaction Effects**

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

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes
- All kick plates were opened to inspect the interior. Deficiencies are noted in the anchorage section. Upper plates would require excessive dismantling to inspect interior.*

---

**Comments**

Walkdown by Team A

4B08 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.:	4B08
Equipment Class:	(1) Motor Control Centers
Equipment Description:	D-MCC (CABINET)
Project:	Turkey Point 4 SWEL
Location (Bldg, Elev, Room/Area):	Unit 4, 18.00 ft, 215
Manufacturer/Model:	

#### **Instructions for Completing Checklist**

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

#### **Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
  
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
  
5. Is the anchorage configuration consistent with plant documentation?      Not Applicable  
(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?      Yes

#### **Interaction Effects**

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

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B08

Equipment Class: (1) Motor Control Centers

Equipment Description: D-MCC (CABINET)

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

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

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

---

**Other Adverse Conditions**

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

*MCC contains both Unit 3 and Unit 4 components. Kick panels  
opened during Unit 3 walkdown and internals were inspected.*

---

**Comments**

Walkdown by Team A

---

**Class (02) Low Voltage Switchgear**  
4B02 SWC

Y  N  U

**Status:**  
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B02  
Equipment Class: (2) Low Voltage Switchgear  
Equipment Description: 4B02 480V HVPDS LOAD CENTER 4B (CABINET)  
Project: Turkey Point 4 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 341  
Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See welds to embedments front and rear; matches 5614-C-1789. No shims installed.*

Status:

Y    N    U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B02

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 4B02 480V HVPDS LOAD CENTER 4B (CABINET)

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

---

**Interaction Effects**

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

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

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?

*Inspected exterior of cabinet. Three loose thumb screws at back of rightmost section.*

---

**Comments**

Walkdown by Team B

4B04 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B04

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 4D LC (Part of B train) (CABINET)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 341

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See welds to embedments front and rear; matches 5614-C-1789.  
Shims installed in some locations.*
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B04

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 4D LC (Part of B train) (CABINET)

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?

*There are masonry walls in the area. See AWC for comments.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?

*Inspected exterior of cabinet, one loose thumbscrew at rear.*

---

**Comments**

Walkdown by Team B

4B50 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B50

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 4H LOAD CENTER (CABINET)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 234

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

*Cabinet is welded to steel base frame and frame is anchored to concrete floor with 3/4 diameter CEA's. Inspected steel frame anchorage to concrete floor. Also opened front lower doors and saw stitch weld of cabinet base to base frame.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4B50

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 4H LOAD CENTER (CABINET)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? No

No  
*Inspected exterior and lower interior of cabinet (opened all lower doors). One loose thumbscrew in rear door.*

*Lift trolley on roof of cabinet is unrestrained side/side and may bang.  
This is a potential relay chatter issue.*

---

**Comments**

Walkdown by Team B

**Class (03) Medium Voltage Switchgear**  
4AB SWC

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4AB  
Equipment Class: (3) Medium Voltage Switchgear  
Equipment Description: 4AB 4.16V SWITCHGEAR 4B (CABINET)  
Project: Turkey Point 4 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 368  
Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown  
*Cabinet has internal anchorage. No permission to open cabinet.  
Defer inspection.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown
4. Is the anchorage free of visible cracks in the concrete near the anchors? Unknown
5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4AB

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4AB 4.16V SWITCHGEAR 4B (CABINET)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

*There are masonry walls in the area. See AWC for comments.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? No

*No*

*Missing cover panel bolts (2 places) at rear of 4AB02 section.*

*Other*

*One missing relay cover panel nut (1 of 4) in empty relay slot (spare location). Not considered an adverse condition.*

---

**Comments**

Walkdown by Team B

4AD SWC

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4AD

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4.16KV SWITCHGEAR 4AD FOR BUS 4D

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 430

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown

*Cabinet anchorage is internal; not permitted to open cabinet at this time. Defer inspection.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown

4. Is the anchorage free of visible cracks in the concrete near the anchors? Unknown

5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4AD

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4.16KV SWITCHGEAR 4AD FOR BUS 4D

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? No  
Two thumbscrews are loose in front.

---

**Comments**

Walkdown by Team B

**Class (04) Transformers**

X05 SWC

Status:

Y  N  U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: X05  
Equipment Class: (4) Transformers  
Equipment Description: 4160/480V TRANSFORMER FOR 480V LC 4B  
Project: Turkey Point 4 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 341  
Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? No  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*4 of 6 welds are 4" long and 2 of 6 welds are about 1-1/2" long. Does not match drawing 5610-E-9-35 (also see 5160-C-114 Sh. 2 Note 8).*

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: X05

Equipment Class: (4) Transformers

Equipment Description: 4160/480V TRANSFORMER FOR 480V LC 4B

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? No

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

*There are masonry walls in the area. See AWC for comments.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? No

*There are two loose bolts on right side cover panel.*

---

**Comments**

Walkdown by Team B

---

**Class (05) Horizontal Pumps**

4P201B SWC

Status:

 Y  N  U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P201B

Equipment Class: (5) Horizontal Pumps

Equipment Description: CHARGING PUMP B

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 201

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface Yes  
oxidation?
  
4. Is the anchorage free of visible cracks in the concrete near the Yes  
anchors?
  
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
*Anchorage consistent with drawing 5610-C-277 and 5610-C-904*

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P201B

Equipment Class: (5) Horizontal Pumps

Equipment Description: CHARGING PUMP B

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

*Fire piping in area well supported (welded and threaded lines). Spray nozzles have good clearance.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

4P203B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P203B

Equipment Class: (5) Horizontal Pumps

Equipment Description: BORIC ACID TRANSFER PUMP B

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 200

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage consistent with drawing 5610-C-254 Sh. 1 Rev. 12*
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P203B  
Equipment Class: (5) Horizontal Pumps  
Equipment Description: BORIC ACID TRANSFER PUMP B

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? No

*Large cover plates for a nearby recessed area are stored next to the pump.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

---

4P211B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P211B

Equipment Class: (5) Horizontal Pumps

Equipment Description: COMPONENT COOLING PUMP B

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 202

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage consistent with drawing 5610-C-277 Rev. 13*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y    N    U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P211B

Equipment Class: (5) Horizontal Pumps

Equipment Description: COMPONENT COOLING PUMP B

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*Fire piping in area well supported (welded and threaded lines). Spray nozzles have good clearance.* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

4P212A SWC

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P212A

Equipment Class: (5) Horizontal Pumps

Equipment Description: SFP CLG WTR PMP A

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 223

Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Need to verify anchorage with plant documentation. Noted 6 - 1/2" diameter anchor bolts in the field.* Unknown
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P212A  
Equipment Class: (5) Horizontal Pumps  
Equipment Description: SFP CLG WTR PMP A

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

4P214B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P214B

Equipment Class: (5) Horizontal Pumps

Equipment Description: CONTAINMENT SPRAY PUMP B

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 203

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P214B  
Equipment Class: (5) Horizontal Pumps  
Equipment Description: CONTAINMENT SPRAY PUMP B

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*Overhead CCW line has welded connections and is rigidly supported to wall.* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

4P215B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P215B

Equipment Class: (5) Horizontal Pumps

Equipment Description: HI HEAD SAFETY INJECTION PUMP 4B

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 206

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
  
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P215B

Equipment Class: (5) Horizontal Pumps

Equipment Description: HI HEAD SAFETY INJECTION PUMP 4B

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

4P241A SWC

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P241A

Equipment Class: (5) Horizontal Pumps

Equipment Description: EDG 4A OIL TRANSFER PUMP

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 431

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?  
*One small area at edge of grout pad damage; not considered an adverse condition.* Yes
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See (6) x 3/4 diameter CIP anchors (3 per side); need correct anchor drawing to verify (unknown).* Unknown
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P241A  
Equipment Class: (5) Horizontal Pumps  
Equipment Description: EDG 4A OIL TRANSFER PUMP

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes  
*Overhead grating is tied down with clips.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Ventilation duct is well supported on the wall.*

---

**Comments**

Walkdown by Team B

EMERG SFP CLG PMP SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: EMERG SFP CLG PMP

Equipment Class: (5) Horizontal Pumps

Equipment Description: EMERGENCY SPENT FUEL PIT COOLING PUMP

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 223

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: EMERG SFP CLG PMP  
Equipment Class: (5) Horizontal Pumps  
Equipment Description: EMERGENCY SPENT FUEL PIT COOLING PUMP

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

P2C SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: P2C

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUXILIARY FEEDWATER PUMP C

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 306

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

*On two rear anchors, see top of stud is just below top of nut; nut engagement judged to be sufficient.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See (6) x 3/4 diameter CIP bolts. Matches 5160-C-375 Sh. 1.*

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: P2C

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUXILIARY FEEDWATER PUMP C

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

**Class (06) Vertical Pumps**

4P210B SWC

Status:

 Y    N    U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P210B

Equipment Class: (6) Vertical Pumps

Equipment Description: RHR PUMP B

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 4.00 ft, 211

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P210B

Equipment Class: (6) Vertical Pumps

Equipment Description: RHR PUMP B

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

4P9B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P9B

Equipment Class: (6) Vertical Pumps

Equipment Description: INTAKE COOLING WATER PUMP B

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 370

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface No  
oxidation?

*Bolts have rust and there is some flaking. Also top of anchor stud has  
rust beyond surface for some anchors.*

4. Is the anchorage free of visible cracks in the concrete near the Yes  
anchors?

*Visual cracks in pad and in slab. Anchorage is deeply embedded  
cast-in-place bolts and cracks are judged to be of minor significance.*

5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)

*See (4) x 1" diameter bolts (appear to be cast-in-place). Matches  
5610-C-61 Sh1.*

6. Based on the above anchorage evaluations, is the anchorage free of No  
potentially adverse seismic conditions?

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P9B

Equipment Class: (6) Vertical Pumps

Equipment Description: INTAKE COOLING WATER PUMP B

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Scaffold OK, see AWC.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*Outdoor area.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team B

**Class (07) Fluid-Operated Valves**

CV-4-1607 SWC

Status:

 Y  N  U**Seismic Walkdown Checklist (SWC)**Equipment ID No.: CV-4-1607Equipment Class: (7) Fluid-Operated ValvesEquipment Description: MAIN STEAM LINE A STM DUMP TO ATMOS CNTL VALVEProject: Turkey Point 4 SWELLocation (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 300

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
  
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-4-1607

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MAIN STEAM LINE A STM DUMP TO ATMOS CNTL VALVE

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*1" clearance between valve and adjacent insulation. Based on rigidity of valve and piping, there will be very little differential displacement, so OK. Conduit behind valve has low mass and is not considered a credible interaction hazard.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

CV-4-2818 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-4-2818

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: TRAIN 1 S/G C FEED FLOW CONTROL VALVE

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 302

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-4-2818

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: TRAIN 1 S/G C FEED FLOW CONTROL VALVE

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

Scaffold OK, see AWC.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

FCV-4-113A SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FCV-4-113A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: BORIC ACID TO BLENDER FLOW CNTL VLV

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 201

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FCV-4-113A

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: BORIC ACID TO BLENDER FLOW CNTL VLV

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

FCV-4-488 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FCV-4-488

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: STEAM GENERATOR B MAIN FEEDWATER FLOW CONTROL VALVE

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 302

Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FCV-4-488

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: STEAM GENERATOR B MAIN FEEDWATER FLOW CONTROL VALVE

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Scaffold OK, see AWC.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

*Good flexibility of attached lines.*

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

HCV-4-121 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HCV-4-121

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CHG TO RCS CONTROL VALVE

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 209

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HCV-4-121  
Equipment Class: (7) Fluid-Operated Valves  
Equipment Description: CHG TO RCS CONTROL VALVE

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? No  
*Limit switch electrical elbow is within 1/2" of an adjacent valve.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

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**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

HCV-4-758 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HCV-4-758

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HAND CNTL VLV FOR RHR HX FLOW CNTL

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 10.00 ft, 210B

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
  
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: HCV-4-758

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: HAND CNTL VLV FOR RHR HX FLOW CNTL

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? No

*Valve HCV-4-758 is in contact with the support for instrument air line at the floor level.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

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**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

POV-4-2605 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: POV-4-2605

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MN STM ISO VLV FROM S/G B

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 300

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y    N    U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: POV-4-2605

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: MN STM ISO VLV FROM S/G B

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team B

POV-4-4883 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: POV-4-4883

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: TPCW HEAT EXCHANGERS ISOLATION VALVE

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 334

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y     N     U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: POV-4-4883

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: TPCW HEAT EXCHANGERS ISOLATION VALVE

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team B

TCV-4-143 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: TCV-4-143

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: NON REGEN HX OUTLET TO VCT OR DEMIN TEMP CNTL VLV

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 201

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: TCV-4-143

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: NON REGEN HX OUTLET TO VCT OR DEMIN TEMP CNTL VLV

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Gap between valve and adjacent conduit is adequate, approximately 2"*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

*Dry boric acid corrosion is tagged and tracked within PTN's boric acid program.*

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**Comments**

Walkdown by Team A

**Class (08) Motor-Operated and Solenoid-Operated Valves**  
MOV-4-1404 SWC

Status:

Y    N    U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-1404

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: MTR OPERATED VALVE FROM STEAM GENERATOR A TO AUX FW PP TURBINES

Project: Turkey Point 4 SWEL

Location (Bldg, Elev, Room/Area): Unit 4, 42.00 ft, 301

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-1404

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: MTR OPERATED VALVE FROM STEAM GENERATOR A TO AUX FW PP

TURBINES

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Small area enclosed by missile shielding.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team B

MOV-4-350 SWC

Status:

Y    N    U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-350

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: EMERGENCY BORATION CONTROL VALVE

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 201

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-350

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: EMERGENCY BORATION CONTROL VALVE

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? No

*Gearbox is approximately 3/4" from an adjacent electrical conduit.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

MOV-4-843B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-843B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HHSI TO COLD LEG MOV

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 203

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-843B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: HHSI TO COLD LEG MOV

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Adequate clearance between handwheel and TB4150.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

MOV-4-860B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-860B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 10.00 ft, 210B

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-860B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

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**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

MOV-4-861B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-861B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 4.00 ft, 211

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-861B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: RECIRC SUMP TO RHR PUMP SUCTION MOTOR OPERATED VALVE

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

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**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

MOV-4-862A SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-862A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: RWST TO RHR PUMP SUCTION VALVE

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 4.00 ft, 211

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y    N    U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-862A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: RWST TO RHR PUMP SUCTION VALVE

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

MOV-4-863B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-863B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: RHR PUMP RECIRC TO RWST

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 10.00 ft, 210A

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
  
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-863B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: RHR PUMP RECIRC TO RWST

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

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**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

MOV-4-864B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-864B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: RWST MTR OP ISO VALVE TO SI & RHR PUMPS

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 217

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-864B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: RWST MTR OP ISO VALVE TO SI & RHR PUMPS

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

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**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

MOV-4-869 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-869

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: SI TO LOOP A&B HOT LEG MTR OP ISO VLV

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 209

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y    N    U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-869

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: SI TO LOOP A&B HOT LEG MTR OP ISO VLV

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

MOV-4-880B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-880B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: CTMT SPRAY PMP B DISCH ISO VLV

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 203

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
  
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: MOV-4-880B

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: CTMT SPRAY PMP B DISCH ISO VLV

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*Nearby containment spray test line has welded connections and is rigidly supported.* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

SV-4-3434A SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: SV-4-3434A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: EDG 4A OIL DAY TANK INLET CONTROL SOLENOID VALVE

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 423

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: SV-4-3434A

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: EDG 4A OIL DAY TANK INLET CONTROL SOLENOID VALVE

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?

*No lights above.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team B

**Class (09) Fans**  
4V64A SWC

Y    N    U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4V64A  
Equipment Class: (9) Fans  
Equipment Description: 4A EDG ROOM VENT EXHAUST FAN  
Project: Turkey Point 4 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 424  
Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
See (8) x 5/8 diameter thru bolts to steel frame. Frame is hung from above.      Not Applicable

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4V64A

Equipment Class: (9) Fans

Equipment Description: 4A EDG ROOM VENT EXHAUST FAN

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team B

4V65B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4V65B

Equipment Class: (9) Fans

Equipment Description: AXIAL FLOW VENTILATION FAN

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 430

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

*See (4) thru bolts to steel frame (estimate as 1/2 diameter). Frame is hung from above*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

*On steel frame.*

5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4V65B

Equipment Class: (9) Fans

Equipment Description: AXIAL FLOW VENTILATION FAN

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

*Very little overhead.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

*Lines have good flexibility.*

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

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**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team B

## EDG FAN ASSEMBLIES SWC

Status:

Y N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: EDG FAN ASSEMBLIES

Equipment Class: (9) Fans

Equipment Description: EDG FAN ASSEMBLIES (RADIATOR FAN)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 309

Manufacturer/Model:

#### Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

#### Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown  
*Yes for visible welds on inside edge of equipment base.  
Unknown for expected welds on outer edge of base. Not visible from inside or from outside.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown  
*Same as above.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Unknown  
*Same as above.*
5. Is the anchorage configuration consistent with plant documentation? Unknown  
*(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
Along inside long edge of base, see (6) welds to embedments, see field sketch. Visible anchorage is consistent with drawing 5614-C-1589 Sh. 1. Unknown for expected welds along outer edge, not visible.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: EDG FAN ASSEMBLIES

Equipment Class: (9) Fans

Equipment Description: EDG FAN ASSEMBLIES (RADIATOR FAN)

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

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**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team B

**Class (10) Air Handlers**

4E241B SWC

Status:

 Y    N    U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E241B

Equipment Class: (10) Air Handlers

Equipment Description: LOAD CENTER ROOM 4A/B - AIR HANDLING UNIT

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 341

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?  
*Mild rust on unit base to C3 bolts.* Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See (6) x 1/2 diameter anchors thru weldment baseplate and grout pad into floor. Anchorage matches 5614-C-1738 Sh. 3.* Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E241B

Equipment Class: (10) Air Handlers

Equipment Description: LOAD CENTER ROOM 4A/B - AIR HANDLING UNIT

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?

*There are masonry walls in the area. See AWC for comments.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team B

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4E242B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E242B

Equipment Class: (10) Air Handlers

Equipment Description: LOAD CENTER ROOM 4C/D - AIR HANDLING UNIT (TRAIN-B)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 341

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation?      Not Applicable  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage is similar to 4E241B.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E242B  
Equipment Class: (10) Air Handlers  
Equipment Description: LOAD CENTER ROOM 4C/D - AIR HANDLING UNIT (TRAIN-B)

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*There are masonry walls in the area. See AWC for comments.* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?  
*Rusting of base weldment near front edge requires maintenance.* No

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**Comments**

Walkdown by Team B

4E243B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E243B

Equipment Class: (10) Air Handlers

Equipment Description: SWITCHGEAR ROOM 4B - AIR HANDLING UNIT

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 368

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
  
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?  
*Some minor rust on unit base.*      Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?  
*Small crack in grout pad at front right. Crack judged to be of minor significance.*      Yes
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage found is (6) x 1/2" diameter concrete expansion anchor (CEA) thru steel plate embedded in grout pad. Anchorage is similar to that shown for U4 air handlers on 5614-C-1738 Sh. 3.*      Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y    N    U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E243B  
Equipment Class: (10) Air Handlers  
Equipment Description: SWITCHGEAR ROOM 4B - AIR HANDLING UNIT

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

E16A SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: E16A

Equipment Class: (10) Air Handlers

Equipment Description: CONTROL ROOM AIR HANDLING UNIT

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 310

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? No

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: E16A  
Equipment Class: (10) Air Handlers  
Equipment Description: CONTROL ROOM AIR HANDLING UNIT  
*Unit appears to be unanchored. Feet of unit appear to sit on vibration isolation pads (4 places).*

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*There are a masonry walls in the area. See AWC for comments.  
Air duct is supported by floor framing, OK.* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?  
*There is non-rugged rod hung copper tubing in the area and tubing is attached to E16A. Unknown if this piping is seismically designed.* No

---

**Comments**

Walkdown by Team B

V77 SWC

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: V77

Equipment Class: (10) Air Handlers

Equipment Description: AIR HANDLER UNIT FOR ELEC EQUIP RM A/C CONDENSER E233

Project: Turkey Point 4 SWEL

Location (Bldg, Elev, Room/Area): Unit 4, 18.00 ft, 234

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Unknown  
*See below.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Unknown
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: V77

Equipment Class: (10) Air Handlers

Equipment Description: AIR HANDLER UNIT FOR ELEC EQUIP RM A/C CONDENSER E233

*Only able to confirm anchorage on one side of cabinet base. Per drawing 5610-C-1701 Sh. 5, expect that remaining anchorage is hidden from view (weld to inside of base frame, not visible unless housing is disassembled.)*

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

**Comments**

Walkdown by Team B

**Class (11) Chillers**  
4E239B SWC

Y N  U

Status:

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E239B

Equipment Class: (11) Chillers

Equipment Description: LC & SWGR ROOMS A/C SYSTEM - CHILLER PACKAGE 1B (TRAIN-B)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 315

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage is (10) x 5/8 diameter thru bolts to steel platform. See field sketch. Need correct anchor drawing to verify (unknown).*

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E239B

Equipment Class: (11) Chillers

Equipment Description: LC & SWGR ROOMS A/C SYSTEM - CHILLER PACKAGE 1B (TRAIN-B)

6. Based on the above anchorage evaluations, is the anchorage free of Unknown potentially adverse seismic conditions?

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*Outdoor area open above. Temporary light nearby OK, see AWC.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

**Class (12) Air Compressors**

4CM226A SWC

 Y    N    U

Status:

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4CM226A

Equipment Class: (12) Air Compressors

Equipment Description: EDG 4A AIR COMPRESSOR

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 425

Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4CM226A

Equipment Class: (12) Air Compressors

Equipment Description: EDG 4A AIR COMPRESSOR

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes  
*See (6) thru bolts to steel skid, 5/8 diameter.*

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes  
*Very good flexibility for air line.*

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

**Class (14) Distribution Panels**

4D01 SWC

Status:

Y N  U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D01

Equipment Class: (14) Distribution Panels

Equipment Description: 4D01 (DISTRIBUTION PANEL)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev, Room/Area): Unit 4, 30.00 ft, 310

Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown  
*See loose anchor bolts; see field sketch. Unknown if this is OK per design basis.  
Also some anchor locations cannot be seen (unknown).*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown  
*OK for visible anchors, some anchor locations cannot be seen (unknown).*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage is shown on field sketch, see (22) x 3/8 diameter (estimated size) anchors plus two more probably blocked from view.  
Need correct anchor drawing to verify (unknown). Also two anchor locations cannot be seen (unknown).*
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D01

Equipment Class: (14) Distribution Panels

Equipment Description: 4D01 (DISTRIBUTION PANEL)

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*There are masonry walls in the area. See AWC for comments.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?  
*About 1" gap to wall behind cabinet; judged to be sufficient shake space.*

---

**Comments**

Walkdown by Team B

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4D23 SWC

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D23

Equipment Class: (14) Distribution Panels

Equipment Description: 4D23 (DISTRIBUTION PANEL)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 347

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown

*Cabinet anchorage is internal. No permission to open cabinet. Defer anchorage inspection.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown

*Same as above.*

4. Is the anchorage free of visible cracks in the concrete near the anchors? Unknown

*See crack in floor at front of cabinet that has potential to moderately affect concrete expansion anchor strength. Unknown if it passes through such an anchor.*

5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D23

Equipment Class: (14) Distribution Panels

Equipment Description: 4D23 (DISTRIBUTION PANEL)

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*About 1-1/2" clearance to wall plate behind cabinet. Judged to be acceptable for shake space.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

*Inspected exterior of cabinet. No loose or missing hardware.*

---

**Comments**

Walkdown by Team C

4S77 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4S77

Equipment Class: (14) Distribution Panels

Equipment Description: 100 AMP 2-POLE AUTOMATIC TRANSFER SWITCH

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 234

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
  
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?  
*Small grout patch at upper left not considered a crack issue.*      Yes
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See (12) x 1/2 CEA to wall.*      Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4S77

Equipment Class: (14) Distribution Panels

Equipment Description: 100 AMP 2-POLE AUTOMATIC TRANSFER SWITCH

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

*Inspected exterior and interior of cabinet (opened front door). No loose or missing hardware.*

---

**Comments**

Walkdown by Team B

**Class (15) Batteries on Racks**

4D03 SWC

Status:

Y  N  U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D03

Equipment Class: (15) Batteries on Racks

Equipment Description: 4B BATTERY RACK

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 346

Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation?  
*Some mild rust seen in some cases.* Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage seen to be a mix of 5/8 and 3/8 diameter CEA's each rack.  
See field sketch. Anchorage does not match 5610-C-1369.* No

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D03

Equipment Class: (15) Batteries on Racks

Equipment Description: 4B BATTERY RACK

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? No

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?

*There are masonry walls in the area. See AWC for comments.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? No

*Typically there is a 3/8 to 1/2" (approx.) gap between front of batteries and horizontal rail. Issue is common for all inspected racks. Unknown if this is acceptable (batteries can slide forward to rail).*

---

**Comments**

Walkdown by Team B

4D24 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D24

Equipment Class: (15) Batteries on Racks

Equipment Description: 4A BATTERY RACK

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 347

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? No  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage seen to be a mix of 5/8 and 1/2 diameter CEA's. See field sketch. Anchorage does not match 5610-C-1369.*
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? No

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D24

Equipment Class: (15) Batteries on Racks

Equipment Description: 4A BATTERY RACK

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*There are masonry walls in the area. See AWC for comments.*  
*Vertical sanitary line in corner of room judged not to be a collapse hazard.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?  
*Typically there is a 3/8" (approx.) gap between front of batteries and horizontal rail. Issue is common for all inspected racks. Unknown if this is acceptable (batteries can slide forward to rail).*

---

**Comments**

Walkdown by Team C

**Class (16) Inverters**  
4D02 SWC

Y N  U

Status:

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D02

Equipment Class: (16) Inverters

Equipment Description: 4B1 BATTERY CHARGER

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 310

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage is (8) x 5/8 diameter thru bolts to steel frame; frame is anchored with 5/8 CEA to floor. See field sketch. Need correct anchor drawing to verify (unknown).*

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D02

Equipment Class: (16) Inverters

Equipment Description: 4B1 BATTERY CHARGER

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?

*There are masonry walls in the area. See AWC for comments.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Inspected exterior of cabinet. No loose or missing hardware.*

---

**Comments**

Walkdown by Team B

---

4D02A SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D02A

Equipment Class: (16) Inverters

Equipment Description: 4B2 BATTERY CHARGER

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 234

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface Yes  
oxidation?

4. Is the anchorage free of visible cracks in the concrete near the Yes  
anchors?  
*Anchorage is thru bolts to steel frame.*

5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)

*Anchorage is (8) x 5/8 diameter thru bolts to C8 sleepers; C8's are  
welded to floor plate. Floor plate is anchored with (8) x 5/8 CEA.  
Anchorage matches 5610-C-1701 Sh. 1 (refer to drawing grid F5).*

6. Based on the above anchorage evaluations, is the anchorage free of Yes  
potentially adverse seismic conditions?

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D02A  
Equipment Class: (16) Inverters  
Equipment Description: 4B2 BATTERY CHARGER

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*There is a masonry wall near the cabinet. See AWC for comments.* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?  
*Inspected exterior and interior. Opened lower lowers, no loose/missing hardware.* Yes

---

**Comments**

Walkdown by Team B

---

4D25 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D25

Equipment Class: (16) Inverters

Equipment Description: 4A1 BATTERY CHARGER

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 347

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface Yes  
oxidation?

4. Is the anchorage free of visible cracks in the concrete near the No  
anchors?  
*Floor crack seen in front area, may continue near CEA at front. No  
cracks seen in rear area.*

5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
*See (8) x 5/8 thru bolts to C8 and (8) x 5/8 CEA to floor thru base  
plate. Similar to "4B1 Battery Charger". See field sketch for the "4B1  
Battery Charger". Need correct anchor drawing to verify (unknown).*

6. Based on the above anchorage evaluations, is the anchorage free of No  
potentially adverse seismic conditions?

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4D25

Equipment Class: (16) Inverters

Equipment Description: 4A1 BATTERY CHARGER

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Scaffold around cabinet is braced and anchored, OK.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

*Inspected exterior and interior of cabinet (opened lower front doors).*

*No loose or missing hardware.*

---

**Comments**

Walkdown by Team A

4Y05 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4Y05

Equipment Class: (16) Inverters

STATIC INVERTER 4C 125 VDC/120 VAC 7.5 KVA  
(CABINET)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 347

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface Yes  
oxidation?

4. Is the anchorage free of visible cracks in the concrete near the Yes  
anchors?  
*Visual hairlines cracks in grout pad are present but judged to be of  
minor significance.*

5. Is the anchorage configuration consistent with plant documentation? No  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
*Anchorage is (5) x 5/8 diameter CEA's. See field sketch. Anchorage  
does not match 5610-C-652 Sh. 2.*

6. Based on the above anchorage evaluations, is the anchorage free of No  
potentially adverse seismic conditions?

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4Y05

Equipment Class: (16) Inverters

Equipment Description: STATIC INVERTER 4C 125 VDC/120 VAC 7.5 KVA  
(CABINET)

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*There is a 1-1/2" gap between cabinet and handrail. Judged to be acceptable for shake space.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

*There are masonry walls in the area. See AWC for comments.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

*Inspected exterior of cabinet. No loose or missing hardware.*

---

**Comments**

Walkdown by Team C

4Y07 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4Y07

Equipment Class: (16) Inverters

STATIC INVERTER 4D 125 VDC/120 VAC 7.5 KVA  
(CABINET)

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 347

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes  
*Visual crack is present at front but judged to be of minor significance.*

5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4Y07

Equipment Class: (16) Inverters

STATIC INVERTER 4D 125 VDC/120 VAC 7.5 KVA

Equipment Description: (CABINET)

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*About 2-3/4" gap to wall. Judged to be acceptable for shake space.  
See AWC for scaffold comments.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

*Inspected exterior of cabinet. No loose or missing hardware.*

---

**Comments**

Walkdown by Team C

**Class (17) Engine-Generators**

4K4A SWC

Status:

Y  N  U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4K4A

Equipment Class: (17) Engine-Generators

Equipment Description: 4A DIESEL GENERATOR

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 423

Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?  
*See hairline cracks (may be paint cracks only) at west end of skid, two anchor locations. Cracks are judged to be of minor significance.* Yes
  
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See (12) x 1-1/4" CIP bolt along each long side plus (2) more each short side; (28) total anchor bolts. Matches drawing 5614-C-1589 Sh. 1.* Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4K4A

Equipment Class: (17) Engine-Generators

Equipment Description: 4A DIESEL GENERATOR

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? No

*Two pendulum lights above on-skid panel at southwest may be a hazard. Lights will bang against hard surfaces and light shade may fall and hit soft targets on skid.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes  
*Overhead crane is restrained.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

*Attached lines have good flexibility. See photos.*

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

**Class (18) Instruments on Racks**  
4QR35 SWC

Status: Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4QR35  
Equipment Class: (18) Instruments on Racks  
Equipment Description: CONTROL ROOM PROTECTION RACK  
Project: Turkey Point 4 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 310  
Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors?  
*See floor cracks on right side but not near anchors.* Yes
  
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage is shown on field sketch, see (8) x 3/8 diameter (estimated size) anchors. Need correct anchor drawing to verify (unknown). Also anchor locations at right end have gap between cabinet base and floor (see stack of washers).* Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4QR35

Equipment Class: (18) Instruments on Racks

Equipment Description: CONTROL ROOM PROTECTION RACK

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

*Inspected exterior and interior of cabinet (opened all doors of line-up).  
No loose or missing hardware.*

---

**Comments**

Walkdown by Team B

**Class (19) Temperature Sensors**

TIS-4-6413B SWC

Status:

Y N  U**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: TIS-4-6413B

Equipment Class: (19) Temperature Sensors

Equipment Description: SWGR RM 4D FAN 4V65B TEMP SWITCH

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 430

Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown  
*Wall mounted unit; cannot see wall anchorage fully unless switch is disassembled. After removal of cover, can only see studs to mounting plate.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes  
*No cracks in wall.*
  
5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: TIS-4-6413B

Equipment Class: (19) Temperature Sensors

Equipment Description: SWGR RM 4D FAN 4V65B TEMP SWITCH

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

*Note: Very light item; anchorage failure not credible.*

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

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**Class (20) Instrumentation and Control Panels and Cabinets**  
4C04 SWC

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C04

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: VERTICAL PANEL A

Project: Turkey Point 4 SWEL

Location (Bldg, Elev, Room/Area): Unit 4, 42.00 ft, 360

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown

*Yes for visible anchors.*

*Unknown for anchors that are not visible (blocked by cables, wires, etc.). See the field sketch, expect that (1) in rear and (5) front anchors are present but not visible.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown

*Same as above.*

4. Is the anchorage free of visible cracks in the concrete near the anchors? Unknown

*Per PTN-0-J-C-90-0003, expect that anchors are embedded in concrete curb. Cannot see curb, therefore crack inspection results are unknown.*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C04

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: VERTICAL PANEL A

Per PTN-0-J-C-90-0003 Sh. 44, expect 1/2" anchors <= 24" o/c.

Visible anchors are consistant with this design. See field sketch.

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? No  
*Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in A-46 inspection. Unknown if this was resolved by analysis.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? No  
*Ceiling tiles are a concern; see above.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Inspected exterior and interior of cabinet. Back of cabinet is open (no doors). Some hanging loops of cable seen, but not a concern. Also see Dell PC on a shelf. The PC is clamped down and shelf is strong; OK (see photo). Also no loose or missing hardware.*

---

**Comments**

Walkdown by Team B

4C06\_4C05 SWC

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C06\_4C05

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: VERTICAL PANEL B

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 360

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown

Yes for visible anchors.

Unknown for anchors that are not visible (blocked by cables, wires, etc.). See the field sketch. Expect that (6 or 7) front anchors are present but not visible.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown

Same as above.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Unknown

Per PTN-0-J-C-90-0003, expect that anchors are embedded in concrete curb. Cannot see curb, therefore crack inspection results are unknown.

5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Per PTN-0-J-C-90-0003 Sh. 44, expect 1/2" anchors <= 24" o/c.

Visible anchors are consistent with this design. Cannot see all anchors so verification status is unknown. See field sketch.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C06\_4C05

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: VERTICAL PANEL B

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? No

*Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in A-46 inspection. Unknown if this was resolved by analysis.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? No  
*Ceiling tiles are a concern; see above.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

*Inspected exterior and interior of cabinet. Back of cabinet is open (no doors). Some hanging loops of cable seen, but not a concern. No loose or missing hardware.*

---

**Comments**

Walkdown by Team B

4C13A SWC

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C13A

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: 4A EDG CONTROL PANEL

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 427

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface Yes  
oxidation?

4. Is the anchorage free of visible cracks in the concrete near the Yes  
anchors?  
*Visual cracks are present but judged to be of minor significance.  
Appear to be surface cracks only.*

5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
*See welds to floor embedments, see field sketch. Need correct  
anchor drawing to verify (unknown).*

6. Based on the above anchorage evaluations, is the anchorage free of Unknown  
potentially adverse seismic conditions?

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C13A

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: 4A EDG CONTROL PANEL

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

*Overhead light may bang against adjacent overhead items. Light is judged rugged, so OK. Bulb may break but not considered a hazard.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

*Inspected exterior and interior of cabinet (opened rear door). No loose or missing hardware.*

---

**Comments**

Walkdown by Team B /

4C23A SWC

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C23A

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: SEQUENCER 4C23A - CABINET

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 368

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes

2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown

*Inspected floor and wall anchors.*

*Unknown: One floor anchor expected to be present is not visible (block by wires).*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown

*Same as above.*

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

*No floor or wall cracks visible.*

5. Is the anchorage configuration consistent with plant documentation? Unknown  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

*See (2) floor anchors in right section and (1) in left section. One floor anchor in left section probably covered by wires. See field sketch. Also see two wall anchors (one per side).*

*Configuration is consistent with PTN-BFJC-92-039 Attach. 1 Sheet 9 except unknown for one floor anchor not visible. Top anchorage matches 5614-C-1792.*

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C23A

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: SEQUENCER 4C23A - CABINET

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?  
*Inspected exterior and interior of cabinet (opened all doors). No loose or missing hardware.* Yes

---

**Comments**

Walkdown by Team B

---

4C23B SWC

Status:

Y     N     U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C23B

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: SEQUENCER 4C23B - CABINET

Project: Turkey Point 4 SWEL

Location (Bldg, Elev, Room/Area): Unit 4, 18.00 ft, 368

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?  
*Visual cracks are present but judged to be of minor significance.  
Appear to be surface cracks only.*      Yes
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See two floor anchors per cabinet (4 total) and two wall anchors.*      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y    N    U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C23B

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: SEQUENCER 4C23B - CABINET

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?

*There is a masonry wall behind the cabinet. Per drawing 5160-C-1730, the wall is safety related and acceptable for design basis (wall T-18-6A).*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?

*Inspected exterior and interior of cabinet (opened all doors). No loose or missing hardware.*

---

**Comments**

Walkdown by Team B

4C264 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C264

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: 4C264 - ALTERNATE SHUTDOWN PANEL

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 368

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

*Anchorage is combination of CEA's and weld to embedments.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

*One cracks visible but not near an anchor.*

5. Is the anchorage configuration consistent with plant documentation?  
(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? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4C264

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: 4C264 - ALTERNATE SHUTDOWN PANEL

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?

*There are masonry walls in the area. See AWC for comments.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? No

*No*

*Lower left latch of transparent front panel (guard panel) is not engaged.*

*Other*

*Inspected exterior and interior of cabinet (opened all doors). No loose or missing hardware.*

---

**Comments**

Walkdown by Team B

CONSOLE SWC

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CONSOLE

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CONTROL ROOM CONTROL CONSOLE

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 362

Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Unknown

*Based on inspection, nominal anchorage is 1/2 diameter anchor, 24" o/c along edges.*

*See field sketch. Viewed all front anchors except one location was covered by wires.*

*Expect that all rear anchors were seen. Two locations in rear seen to be missing an anchor (see empty holes).*

*No side anchors seen.*

*No issues with visible anchors.*

*Unknown:*

*Two rear anchor locations known to be missing an anchor bolt; unknown if this is OK per design basis. Can't inspect some anchors, covered by wires.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Unknown

*Same as above.*

4. Is the anchorage free of visible cracks in the concrete near the anchors? Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CONSOLE

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CONTROL ROOM CONTROL CONSOLE

*Expect cabinet sits on concrete curb. Cannot see curb & not able to inspect.*

5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
*(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? Unknown

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? No  
*Egg crate ceiling tiles above are not tied to framing and can fall on operators and soft targets. This issue was cited in A-46 inspection. Unknown if this was resolved by analysis.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? No  
*Ceiling tiles are a concern; see above.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? No

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CONSOLE

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CONTROL ROOM CONTROL CONSOLE

*Inspected exterior and interior of cabinet (opened all doors). One small electrical box seen lying on floor of cabinet nestled in wires.*

*Discussed with operators and found to be non-safety device and not a concern (see photo). No other issues.*

**Comments**

Walkdown by Team B

**Class (21) Tanks and Heat Exchangers**  
4P214B HEAT EXCHANGER SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P214B HEAT EXCHANGER  
Equipment Class: (21) Tanks and Heat Exchangers  
Equipment Description: SEAL WATER HEAT EXCHANGER FOR CONTAINMENT SPRAY PUMP B  
Project: Turkey Point 4 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 203  
Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4P214B HEAT EXCHANGER

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SEAL WATER HEAT EXCHANGER FOR CONTAINMENT SPRAY PUMP B

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

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4E206B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E206B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: RHR HEAT EXCHANGER B

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 4.00 ft, 210A

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Anchorage consistent with 5610-C-271 Sh. 1 Rev. 9*
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E206B  
Equipment Class: (21) Tanks and Heat Exchangers  
Equipment Description: RHR HEAT EXCHANGER B

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

4E207B SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E207B

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: COMPONENT COOLING HEAT EXCHANGER B

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 202

Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E207B  
Equipment Class: (21) Tanks and Heat Exchangers  
Equipment Description: COMPONENT COOLING HEAT EXCHANGER B

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*Fire piping in area well supported (welded and threaded lines). Spray nozzles have good clearance.* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

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4E208A SWC

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E208A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SPENT FUEL PIT HEAT EXCHANGER

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 223

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Need to verify anchorage with plant documentation. Noted 4 - 3/4" diameter anchor bolts per pedestal (8 total) in the field.* Unknown
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Unknown

Status:

Y N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4E208A  
Equipment Class: (21) Tanks and Heat Exchangers  
Equipment Description: SPENT FUEL PIT HEAT EXCHANGER

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes  
*Heat exchanger is approximately 1/2" from a vertical pipe support.  
Based on the transverse stiffness of the heat exchanger it is not  
possible for seismic interaction.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes  
*Adequate spacing exists between scaffolding and the heat exchanger.  
Overhead chain hoists are properly clamped to beams and chains are stored in a safe position.*

---

**Comments**

Walkdown by Team A

4T1 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.:

4T1

Equipment Class:

(21) Tanks and Heat Exchangers

Equipment Description:

REFUELING WTR STORAGE TK

Project:

Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area):

Unit 4, 18.00 ft, 217

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface No  
oxidation?

*Moderate corrosion on anchor bolts at several locations.*

4. Is the anchorage free of visible cracks in the concrete near the Yes  
anchors?

5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)

*Anchorage consistent with drawing 5610-C-375 Sh. 1 Rev. 8*

6. Based on the above anchorage evaluations, is the anchorage free of No  
potentially adverse seismic conditions?

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4T1

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: REFUELING WTR STORAGE TK

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Scaffolding deficiencies discussed under area walkby checklist for Area 217 – RWST.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

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4T259A SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4T259A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: DIESEL OIL STORAGE TANK 4A

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 432

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?  
  
*Tank is integral with building (lined concrete vault). No anchorage required.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes  
  
*Tank is integral with building (lined concrete vault). No anchorage required.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes  
  
*No cracks seen at base of tank in transfer pump area.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes  
  
*No cracks seen at base of tank in transfer pump area.*
5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4T259A  
Equipment Class: (21) Tanks and Heat Exchangers  
Equipment Description: DIESEL OIL STORAGE TANK 4A

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes  
*Inspected penetrations in transfer pump area.*
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

4T260A SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4T260A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: DIESEL OIL DAY TANK 4A FOR EDG

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 423

Manufacturer/Model:

**Instructions for Completing Checklist**

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**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface Yes  
oxidation?

4. Is the anchorage free of visible cracks in the concrete near the Yes  
anchors?

5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)

*Anchorage is (8) x 3/4 CIP bolts (4 per saddle). Matches drawing  
5614-C-1589 Sh. 1.*

6. Based on the above anchorage evaluations, is the anchorage free of Yes  
potentially adverse seismic conditions?

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4T260A  
Equipment Class: (21) Tanks and Heat Exchangers  
Equipment Description: DIESEL OIL DAY TANK 4A FOR EDG

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*Overhead duct is well supported.* Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

4T270A SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4T270A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: EDG 4A STARTING AIR ACCUMULATOR TANK

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 425

Manufacturer/Model:

**Instructions for Completing Checklist**

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**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*See (6) x 3/4 diameter thru bolts to steel skid around base.*      Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4T270A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: EDG 4A STARTING AIR ACCUMULATOR TANK

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**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

4T8 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4T8

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: CONDENSATE STORAGE TANK

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 331

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface No  
oxidation?

*Due to past corrosion, a group of 1-3/8 anchors at the south and southwest have reduced bolt cross-sectional areas where bolts enter the top of the pad. The reduced strength of the bolts needs to be verified as acceptable. The bolts have been painted so ongoing corrosion does not appear to be an issue.*

4. Is the anchorage free of visible cracks in the concrete near the Yes  
anchors?

5. Is the anchorage configuration consistent with plant documentation? -  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4T8

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: CONDENSATE STORAGE TANK

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? No

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

*Missile shield above, OK.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team B

T205C SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: T205C

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: BORIC ACID STORAGE TANK C

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 27.00 ft, 200

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of Yes  
the 50% of SWEL items requiring such verification)?

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

3. Is the anchorage free of corrosion that is more than mild surface Yes  
oxidation?

4. Is the anchorage free of visible cracks in the concrete near the Yes  
anchors?

5. Is the anchorage configuration consistent with plant documentation? Yes  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)

*Anchorage consistent with PCM 90-440*

6. Based on the above anchorage evaluations, is the anchorage free of Yes  
potentially adverse seismic conditions?

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: T205C

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: BORIC ACID STORAGE TANK C

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*East side of tank is within 1/2" of hanger support for CCW. Based on the location of wall penetrations and other supports for the CCW, as well as the insulation around the tank, there is adequate stiffness and clearance to preclude potential seismic interaction.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

**Class (00) Other**  
4-12-031 SWC

Y  N  U

**Status:**  
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4-12-031  
Equipment Class: (0) Other  
Equipment Description: TUBE GATE ISOLATION VALVE  
Project: Turkey Point 4 SWEL  
Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 212A  
Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)      Not Applicable

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4-12-031

Equipment Class: (0) Other

Equipment Description: TUBE GATE ISOLATION VALVE

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

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**Comments**

Walkdown by Team A

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4-797 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4-797

Equipment Class: (0) Other

Equipment Description: SFP COOLING WATER PUMP LOW SUCTION VALVE

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 30.00 ft, 223B

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4-797

Equipment Class: (0) Other

Equipment Description: SFP COOLING WATER PUMP LOW SUCTION VALVE

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

4-910 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4-910

Equipment Class: (0) Other

Equipment Description: SFP CLG PMP A SUCT ISO VLV

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 223

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4-910

Equipment Class: (0) Other

Equipment Description: SFP CLG PMP A SUCT ISO VLV

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Adequate gap between valve and adjacent line.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

4K200 SWC

Y  N  U

Status:  
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4K200

Equipment Class: (0) Other

Equipment Description: BORIC ACID BLENDER

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 201

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Not Applicable
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Not Applicable
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Not Applicable
5. Is the anchorage configuration consistent with plant documentation?      Not Applicable  
(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?      Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 4K200

Equipment Class: (0) Other

Equipment Description: BORIC ACID BLENDER

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

BD-1 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.:

BD-1

Equipment Class:

(0) Other

Equipment Description:

CREVS INTAKE BALANCING DAMPER

Project:

Turkey Point 4 SWEL

Location (Bldg, Elev,

Room/Area):

Unit 4, 42.00 ft, 347

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No

2. Is the anchorage free of bent, broken, missing or loose hardware? Yes

*Welded supports to floor mounted frame.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes

*Checked floor area around frame posts.*

5. Is the anchorage configuration consistent with plant documentation? Not Applicable  
(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? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BD-1

Equipment Class: (0) Other

Equipment Description: CREVS INTAKE BALANCING DAMPER

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?

*There are a masonry walls in the area. Per drawing 5160-C-1728, the walls are safety related and acceptable for design basis (A-42-1, -3, -4).*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team C

BS-4-1402 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BS-4-1402

Equipment Class: (0) Other

BASKET STRAINER TO INTAKE COOLING WTR SUPPLY FOR CCW HX  
A

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 18.00 ft, 202

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BS-4-1402

Equipment Class: (0) Other

Equipment Description: BASKET STRAINER TO INTAKE COOLING WTR SUPPLY FOR CCW HX  
A

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?

*Fire piping in area well supported (welded and threaded lines). Spray nozzles have good clearance.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

LT-4-651 SWC

Status:

Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LT-4-651

Equipment Class: (0) Other

Equipment Description: SPENT FUEL PIT LEVEL TRANSMITTER

Project: Turkey Point 4 SWEL

Location (Bldg, Elev,  
Room/Area): Unit 4, 42.00 ft, 212B

Manufacturer/Model:

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?      No
2. Is the anchorage free of bent, broken, missing or loose hardware?      Yes
3. Is the anchorage free of corrosion that is more than mild surface oxidation?      Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors?      Yes
5. Is the anchorage configuration consistent with plant documentation?      Not Applicable  
(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?      Yes

Status:

Y    N    U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LT-4-651

Equipment Class: (0) Other

Equipment Description: SPENT FUEL PIT LEVEL TRANSMITTER

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Adjacent tent scaffold is adequately braced to nearby wall and railing.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

---

**Other Adverse Conditions**

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

---

**Comments**

Walkdown by Team A

# D

## Area Walk-By Checklists (AWCs)

Table D-1. Summary of Area Walkdown Checklists

Area Walk-by	Description	ID	Page
Area 200	Area 200 - BORIC ACID TANK ROOM	4P203B T205C	D-4
Area 201	Area 201 - CHARGING PUMP ROOM	4K200 4P201B FCV-4-113A TCV-4-143 MOV-4-350	D-6
Area 202	Area 202 - COMPONENT COOLING PUMP ROOM	BS-4-1402 4P211B 4E207B	D-8
Area 203	Area 203 - CONTAINMENT SPRAY PUMP ROOM	4P214B MOV-4-880B MOV-4-843B 4P214B HEAT EXCHANGER	D-10
Area 206	Area 206 - HI-HEAD SIS PUMP ROOM	4P215B	D-12
Area 209	Area 209 - PIPE & VALVE ROOM	HCV-4-121 MOV-4-869	D-14
Area 210A	Area 210 - RHR HEAT EXCHANGER ROOM LOWER	MOV-4-863B 4E206B	D-16
Area 210B	Area 210B - RHR HEAT EXCHANGER ROOM UPPER	HCV-4-758 MOV-4-860B	D-18
Area 211	Area 211 - RHR PUMP ROOM	4P210B MOV-4-861B MOV-4-862A	D-20
Area 212A	Area 212A - SPENT FUEL PIT ROOM NORTH SIDE	4-12-031 4T218	D-22
Area 212B	Area 212B - SPENT FUEL PIT ROOM SOUTH SIDE	LT-4-651	D-24
Area 215	Area 215 - NORTH-SOUTH HALLWAY	4B08 4B07	D-26
Area 217	Area 217 - RWST	MOV-4-864B 4T1	D-28
Area 223	Area 223 - SPENT FUEL PIT PUMP/HEAT EXCHANGER ROOM	4-910 4P212A EMERG SFP CLG PMP 4E208A	D-30
Area 223B	Area 223B - CASK WASH AREA	4-797	D-32
Area 234A	Area 234A - NEW ELECTRICAL EQUIPMENT ROOM, 18' ELEVATION	4B50 V77 4S77 4D02A	D-34
Area 300	Area 300 - STEAM DECK	CV-4-1607 POV-4-2605	D-36
Area 301	Area 301 - BELOW STEAM DECK	MOV-4-1404	D-38
Area 302	Area 302 - FEEDWATER DECK	FCV-4-488 CV-4-2818	D-40
Area 306	Area 306 - AUX FEED PUMP AREA	P2C	D-42
Area 309	Area 309 - DIESEL GENERATOR BUILDING (LOWER LEVEL)	EDG FAN ASSEMBLIES	D-44

Area Walk-by	Description	ID	Page
Area 310B	Area 310B - CABLE SPREADING ROOM, AREA NEAR MG SET	4D01 4D02	D-46
Area 310C	Area 310C - CABLE SPREADING ROOM, MECH. EQ. ROOM (E16 AIR HANDLERS)	E16A	D-48
Area 310D	Area 310D - CABLE SPREADING ROOM, AREA NEAR 4QR35	4QR35	D-50
Area 315	Area 315 - LP TURBINE NORTH AREA	4E239B	D-52
Area 331	Area 331 - CONDENSATE STORAGE TANK	4T8	D-54
Area 334	Area 334 - TURBINE PLANT HEAT EXCHANGER AREA	POV-4-4883	D-56
Area 341	Area 341 - 480V LC ROOM	4B04 4B02 X05 4E241B 4E242B	D-58
Area 342	Area 342 - 3A MCC	4B05	D-60
Area 343	Area 343 - 3B MCC ROOM	4B06	D-62
Area 346	Area 346 - 4B BATTERY ROOM	4D03	D-64
Area 347A	Area 347 - CONTROL ROOM INVERTER ROOM - U4 DC EQUIP ROOM	4D23 4D25 4Y07	D-66
Area 347B	Area 347 - CONTROL ROOM INVERTER ROOM - U3 DC EQUIP ROOM	4Y05	D-68
Area 347C	Area 347 - CONTROL ROOM INVERTER ROOM - 4A BATTERY ROOM	4D24	D-70
Area 347D	Area 347 - CONTROL ROOM INVERTER ROOM - CREVS ROOM	BD-1	D-72
Area 360	Area 360 - CONTROL ROOM	4C06_4C05 4C04	D-74
Area 362	Area 362 - CONTROL ROOM CONTROL CONSOLEAWC	CONSOLE	D-76
Area 368A	Area 368 - 4160 V SWITCHGEAR ROOM A	4C23A	D-78
Area 368B	Area 368 - 4160 V SWITCHGEAR ROOM B	4AB 4E243B 4C23B 4C264	D-80
Area 370	Area 370 - INTAKE AREA	4P9B	D-82
Area 423	4A DIESEL GENERATOR	SV-4-3434A 4K4A 4T260A	D-84
Area 424	Area 424 - EMERGENCY DIESEL 4A	4V64A	D-86
Area 425	Area 425 - EMERGENCY DIESEL 4A AIR START AREA.	4CM226A 4T270A	D-88
Area 427	Area 427 - EMERGENCY DIESEL 4A CONTROL ROOM	4C13A	D-90
Area 430	Area 430 - SWITCHGEAR ROOM 4D	4V65B TIS-4-6413B 4AD	D-92
Area 431	Area 431 - EMERGENCY DIESEL 4A DIESEL OIL TRANSFER PUMP ROOM	4P241A	D-94
Area 432	EMERGENCY DIESEL 4A DIESEL OIL STORAGE TANK ROOM	4T259A	D-96

Note: Detailed signed records of the checklists are available at the site.

Per the EPRI guidance document, the top row of each checklist summarizes the status as follows:

Status	Meaning
Y	All relevant checks were answered Yes and no further action is required.
N	At least one check was answered No and follow-up is required.
U	At least one check could not be answered due to unavailable information and follow-up is required.

Section 5.3 of this report identifies planned actions for items requiring follow-up.

Area 200

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 200

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 200

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team A

---

Area 201

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 201

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? No  
*Nut and washer missing at base plate of support for PS-4-201B*
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? No  
*Bent hanger rod supporting overhead nitrogen line.*
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 201

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

*Scaffold in area found to be adequately braced and anchored.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team A

---

Area 202

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 202

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Overhead grating is secured.*      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Fire piping in area well supported (welded and threaded lines). Spray nozzles have good clearance.*      Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Area Walk-By Checklist (AWC)

Y    N    U

Location (Bldg, Elev, Room/Area):      Area 202

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes
- Scaffold near heat exchangers and north wall found to be adequately braced and anchored.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

---

Comments

Walkdown by Team A

---

Area 203

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 203

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? No  
*Two bent hanger rods above MOV-4-843B.*
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 203

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team A

---

Area 206

Status:

Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 206

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*The motor cable box on the 4A pump is flush against wall. Due to the flexibility of the box and the fact that only a few cables are passing through the relatively large box-to-motor interface, any seismic interaction between the wall and the box would not affect the operation of the pump.* Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Overhead seal water lines are well supported and have welded connections.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 206

---

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

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Comments

Walkdown by Team A

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Area 209

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 209

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
  
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
  
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
  
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes
  
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?      Yes
  
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Area Walk-By Checklist (AWC)

Y    N    U

Location (Bldg, Elev, Room/Area):      Area 209

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Scaffold in area found to be adequately braced and anchored.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

---

Comments

Walkdown by Team A

---

Area 210A

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 210A

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 210A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

*Scaffold in area found to be adequately braced and anchored.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team A

---

Area 210B

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 210B

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 210B

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

*Scaffold in area found to be adequately braced and anchored.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team A

---

Area 211

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 211

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?      Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 211

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Scaffold in area found to be adequately braced and anchored.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

---

Comments

Walkdown by Team A

---

Area 212A

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 212A

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 212A

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team A

---

Area 212B

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 212B

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 212B

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team A

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Area 215

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 215

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Not Applicable
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Not Applicable
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Not Applicable
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Not Applicable
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Not Applicable
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Not Applicable

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 215

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Not Applicable
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

---

Comments

Area 215 was inspected during Unit 3 walkdowns and is documented under "Area 220 - Auxiliary Building".

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Walkdown by Team A

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Area 217

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 217

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 217

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?
- Scaffolding on west side of RWST is unbraced with the only one lateral support at the top. The scaffolding is in the process of being disassembled and the current configuration is therefore deemed acceptable. PTN was notified of the condition.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?
- Yes

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Comments

Walkdown by Team A

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Area 223

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 223

**Instructions for Completing Checklist**

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?  
*A hanger rod support for 12" diameter pipe above the heat exchanger appears to have shifted, as indicated by an unpainted portion of the pipe being exposed. There is a tag on the support, possibly indicating that the issue had been previously identified. The hanger rod is still able to support the pipe and is not considered to be an adverse seismic condition, therefore no hazard exists. PTN was notified of the condition.* Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Handwheel for valve 4-913 is within 1/8" of an adjacent line.* No
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

**Area Walk-By Checklist (AWC)**

Location (Bldg, Elev, Room/Area): Area 223

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7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? No

No:

*Temporary light is hooked to an instrument air line on the east side of the heat exchanger.*

No:

*Scaffolding above 4-816B is not adequately braced in the east-west direction.*

Other:

*Hoist chains are stored in a safe position, away from equipment.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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**Comments**

Walkdown by Team A

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Area 223B

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 223B

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 223B

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Door on DP422 is unlatched and open.*

No

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

Yes

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Comments

Walkdown by Team A

---

Area 234A

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 234A

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?  
*Both V76 and V77 air handlers appear to be anchored on one side only but per drawing part of anchorage is hidden from view so OK; see SWC for V77.* Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes  
*Fire piping in area sufficiently supported.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes  
*Fire piping in area sufficiently supported.*
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y     N     U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):    Area 234A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Large heavy cart, "Continuous Load Unit" on wheels 33" from cabinet (see also AWC). Not considered a credible hazard to nearby equipment because of large gap. It is noted that restraint is with plastic strap and this seems weak as a restraint.*

*Loose equipment box in corner >20" from 3B50. Not considered a credible interaction hazard because impact load potential is very low. Chair behind not a credible hazard (won't hit 3B50).*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There are a masonry walls in the area. The walls are shown on drawing 5160-C-1701 Sh. 1 and 2 and designs are designated as "Seismic Category I" (Sh. 1) and "Seismically Designed" (Sh. 2).*

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Comments

Walkdown by Team B

---

Area 300

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 300

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Outside area enclosed by missile shield.* Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 300

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Scaffold in area found to be adequately braced and anchored.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

---

Comments

Walkdown by Team B

---

Area 301

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 301

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 301

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team B

---

Area 302

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 302

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 302

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

*There is a lot of scaffold in the area. Scaffold found to be well braced and anchored.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

*Checked temporary platform above; no issues.*

---

Comments

Walkdown by Team B

---

Area 306

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 306

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 306

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes
- Area was also inspected for Unit 3.*

---

Comments

Walkdown by Team B

---

Area 309

Status:  
Area Walk-By Checklist (AWC)

Y    N    U

Location (Bldg, Elev, Room/Area):      Area 309

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes  
*Area is overlapped by Area 424. See comments for Area 424.*
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?      Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 309

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

---

Comments

Walkdown by Team B

---

Area 310B

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 310B

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Lights are stiff, won't hit cabinets.* Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 310B

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There are a masonry walls in the area. Per drawing 5160-C-1727, the walls are safety related and acceptable for design basis (wall C-30-3).*

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Comments

Walkdown by Team B

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Area 310C

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 310C

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? No  
*Air handlers appear unanchored, see E16A SWC.*
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? No  
*Rod hung copper tubing ("Service Water" tag seen) appears to be non-seismic. Connects to air handlers.*
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 310C

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? No

*Loose steel cover panels leaning against wall in front of air handlers.  
Potential to fall.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team B

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Area 310D

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 310D

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Floor supported cable tray, OK.*      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*See red piping in area, well supported. Per plant engineers, piping is a gas system (expect halon).*      Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 310D

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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Comments

Walkdown by Team B

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Area 315

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 315

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Outdoor location open above.* Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Light pole near 4E239B welded to platform, OK.* Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Location ensures equipment is resistant to spray.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 315

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Temporary light on Turbine deck judged OK. Won't topple (heavy base) and can't slide into equipment.*

*Adjacent scaffold well braced and anchored.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*Shed to west of platform judged OK; location ensures good lateral strength (resists high wind loads). Shed is light so seismic load is low.*

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Comments

Walkdown by Team B

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Area 331

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 331

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Outdoor location ensures equipment is not vulnerable to spray.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 331

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

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Comments

Walkdown by Team B

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Area 334

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 334

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?  
*One anchor on nearby Basket Strainer has been corroded then painted over; overall anchorage of strainer is still good so judged acceptable.*      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Outdoor area open above.*      Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Outdoor location ensures equipment is not vulnerable to spray.*      Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 334

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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Comments

Walkdown by Team B

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Area 341

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 341

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*No fire piping in the area.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 341

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

No issues.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

*There are a masonry walls in the area. Per drawing 5160-C-1729, the walls are safety related and acceptable for design basis (walls T-31-1B, -2B, -3B).*

Comments

Walkdown by Team B

Area 342

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 342

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*MCC is in an enclosure, so not vulnerable to spray.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?  
*Hydrogen lines > 35' away.* Yes

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 342

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes  
*Checked scaffold in the area, judged to be sufficiently braced and anchored. Saw a loose cart on two wheels, wheels locked in up position off ground. Cart was far from equipment and not a hazard.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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Comments

Walkdown by Team B

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Area 343

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 343

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*No fire piping in the area.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 343

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

*No issues.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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Comments

Walkdown by Team B

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Area 346

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 346

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*No fire piping in the area.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 346

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There are a masonry walls in the area. Per drawing 5160-C-1727, the walls are safety related and acceptable for design basis (walls C-30-2, -3, -4).*

Comments

Walkdown by Team B

Area 347A

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 347A

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 347A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Scaffold in area found to be adequately braced and anchored.*

Yes

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There are masonry walls in the area. Per drawing 5160-C-1728, the walls are safety related and acceptable for design basis (walls A-42-1,-2,-3,-4; C-42-15,-16,-17,-18).*

Yes

Comments

Walkdown by Team C

Area 347B

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 347B

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes  
*Domestic water supply to wall sink reviewed. Sink is supported by drain line. Judged not to be a spray hazard.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes  
*Domestic water supply to wall sink reviewed. Sink is supported by drain line. Judged not to be a spray hazard.*
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Area Walk-By Checklist (AWC)

Y     N     U

Location (Bldg, Elev, Room/Area): Area 347B

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

*There are masonry walls in the area. Per drawing 5160-C-1728, the walls are safety related and acceptable for design basis (walls A-42-1, -2,-3,-4; C-42-15,-16,-17,-18).*

Comments

Walkdown by Team C

Area 347C

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 347C

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Light shades safety wired to supports.* Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 347C

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

*There are masonry walls in the area. Per drawing 5160-C-1728, the walls are safety related and acceptable for design basis (walls A-42-1, -2,-3,-4; C-42-15,-16,-17,-18).*

Comments

Walkdown by Team C

Area 347D

Status:  
Area Walk-By Checklist (AWC)

Y    N    U

Location (Bldg, Elev, Room/Area):      Area 347D

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
  
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
  
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
  
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes
  
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?      Yes
  
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 347D

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Area also covered by Unit 3 walkdown; see Unit 3 AWC for comments.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There are masonry walls in the area. Per drawing 5160-C-1728, the walls are safety related and acceptable for design basis (walls A-42-1, -2,-3,-4; C-42-15,-16,-17,-18).*

Comments

Walkdown by Team C

Area 360

Status:

Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 360

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? No  
*Egg crate ceiling tiles above main area of Control Room are not tied to framing and can fall on operators and soft targets. This issue was cited in A-46 inspection. Unknown if this was resolved by analysis.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 360

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Unrestrained "Man-Machine Interface" cart on wheels (see photo) is close to Rack No 14, "Protection Ch. Set III". Cart may impact against cabinet.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There is a masonry wall in the area. Per drawing 5160-C-1728, the wall is safety related and acceptable for design basis (walls A-42-2).*

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Comments

Walkdown by Team B

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Area 362

Status:  
Area Walk-By Checklist (AWC)

Y    N    U

Location (Bldg, Elev, Room/Area):      Area 362

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Egg crate ceiling tiles may fall; see Area 360 AWC comments.*      No
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?      Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 362

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

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Comments

Walkdown by Team B

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Area 368A

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 368A

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes  
*No fire piping in the area.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 368A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

No issues.

Yes

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*There are a masonry walls in the area. Per drawing 5160-C-1730, the walls are safety related and acceptable for design basis (walls T-18-5A, -6A, -7A).*

Yes

Comments

Walkdown by Team B

Area 368B

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 368B

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?      Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*No fire piping in the area.*      Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 368B

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

*Scaffold overhead seen to be well braced and anchored.*

*Loose breaker >31" from 4AB; based on large gap to equipment not a credible hazard.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

*There are a masonry walls in the area. Per drawing 5160-C-1730, the walls are safety related and acceptable for design basis (walls T-18-5A, -6A, -7A).*

Comments

Walkdown by Team B

Area 370

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 370

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Cable tray on crane support framing, well supported.* Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes  
*Outdoor location ensures equipment is not vulnerable to spray.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes  
*Outdoor location ensures equipment is not vulnerable to spray.*
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 370

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

*Scaffold in area is well braced and anchored to hard points.*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team B

---

Area 423

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 423

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?  
*Phone stand is well anchored.* Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Support conditions are very good.* Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Two pendulum lights may be a hazard; see 4K4A SWC.* No
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Fire piping in area well supported. Spray nozzles have good clearance.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 423

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes  
*Overhead crane is restrained.*

---

Comments

Walkdown by Team B

---

Area 424

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 424

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?  
*The 4V64A fan is assigned to this area. Area 424 is the overhead of Area 423. See comments for Area 423.* Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 424

- 
7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team B

---

Area 425

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 425

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes  
*Fire piping in area well supported.*
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 425

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? No  
*12' ladder on wall behind air tanks is stowed but can slide on brackets and also swing. Ladder can hit tubing line near RV-4-1456A, see photos. This is judged to be a potentially adverse condition.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes

---

Comments

Walkdown by Team B

---

Area 427

Status:  
Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 427

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Exhaust fan overhead is well secured. See 4C13A SWC for comments on light.* Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*No fire piping in the area.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 427

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

*Saw loose plastic step stool, not a concern.*

Yes

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

Yes

---

Comments

Walkdown by Team B

---

Area 430

Status:

Area Walk-By Checklist (AWC)

Y    N    U

Location (Bldg, Elev, Room/Area):      Area 430

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?      Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions?      Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?  
*Very little overhead.*      Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)?  
*Lights that are hung are well above equipment and not an impact hazard.*      Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*No fire piping is the area.*      Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?      Yes

Status:

Y    N    U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area):      Area 430

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?      Yes  
*Loose breaker in corner, 42" from 4AD. Large gap to equipment so not a credible hazard.*
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?      Yes

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Comments

Walkdown by Team B

---

Area 431

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 431

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?  
*Fire piping in area well supported. Spray nozzles have good clearance.* Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 431

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Yes  
*Overhead grating is tied down with clips.*

---

Comments

Walkdown by Team B

---

Area 432

Status:

Area Walk-By Checklist (AWC)

Y  N  U

Location (Bldg, Elev, Room/Area): Area 432

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items.

The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Yes
2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Yes
3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Yes
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Yes
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Yes
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Yes

Status:

Y  N  U

Area Walk-By Checklist (AWC)

Location (Bldg, Elev, Room/Area): Area 432

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Yes

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

*Inspected internal area near transfer pump and external area (two outside walls).*

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Comments

Walkdown by Team B

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# E

## Plan for Future Seismic Walkdown of Inaccessible Equipment

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This appendix identifies equipment that was partly or completely inaccessible for inspection during the walkdown. The tables below address three categories of equipment:

Table E-1	Item was completely inaccessible due to radiological, safety or other issues. Area corresponding to the item was also inaccessible.
Table E-2	Anchorage of item was internal and team was denied permission to open due to personnel hazard or hazard to plant operation.
Table E-3	Status of inspections of electrical cabinet for "Other Adverse Conditions" under SWC Check 11. For some cabinets, inspection did not include all compartments/sections because of safety concerns or hazard to plant operation.

The inspections for Turkey Point Unit 4 deferred components and inaccessible components will be performed prior to the end of the first quarter in 2013 which falls within the window of the next refueling outage. An action request (AR) has been issued to plan for and implement additional cabinet internal inspections.

**Table E-1. Completely Inaccessible Equipment**

<b>Component ID</b>	<b>Description</b>	<b>Reason for Inaccessibility</b>
4T229B	SI ACCUM B	Item is within Containment and plant was operating at the time of inspection.
4V30B	EMERGENCY CONTAINMENT COOLER B	Same as above
MOV-4-535	PRESSURIZER PORV BLOCK VALVE	Same as above
MOV-4-744A	RHR LO HEAD SI TO LOOP A MOTOR OPERATED VLV	Same as above
MOV-4-751	NORMAL RHR INLET FROM RCS MOTOR OPERATED VLV	Same as above
MOV-4-865A	SI ACCUM A DISCH MOTOR OPERATED VLV	Same as above
PCV-4-4885	PRZR PORV N2 BACKUP SUPPLY PRESSURE REGULATOR	Same as above
SV-4-455C	PRESSURIZER PORV SOLENOID VALVE	Same as above
TW-4-412C	DELTA T-TAVG CH I COLD LEG 1 THERMOWELL	Same as above
4T218	COMPONENT COOLING SURGE TANK	Surge tank area not accessible during walkdown, plant security issues.

**Table E-2. Internal anchorage of equipment not accessible for inspection**

<b>Component ID</b>	<b>Description</b>	<b>Reason for Inaccessibility</b>
4AB	4AB 4.16V SWITCHGEAR 4A (CABINET)	Electrical hazard
4AD	4.16KV SWITCHGEAR 4AD FOR BUS 4D	Electrical hazard
4D23	4D23 (DISTRIBUTION PANEL)	Electrical hazard

**Table E-3. Status of internal inspection of electrical cabinets**

<b>Component ID</b>	<b>Description</b>	<b>Class</b>	<b>Status</b>
4B05	A-MCC (CABINET)	01	MCC is within an environment enclosure. Opened enclosure doors and inspected front of MCC.
4B06	B-MCC (CABINET)	01	MCC kick plates (lower plates) were opened and the interior was inspected.
4B07	C-MCC (CABINET)	01	Same as above.
4B08	D-MCC (CABINET)	01	Same as above.
4B02	4B02 480V HVPDS LOAD CENTER 4B (CABINET)	02	Not accessible due to plant operation/safety hazard.
4B04	4D LC (Part of B train)	02	Same as above.
4B50	4H LOAD CENTER (CABINET)	02	Permission to open spare compartments. Opened 3 of 3 lower doors.
4AB	4AB 4.16V SWITCHGEAR 4A (CABINET)	03	See Table E.2
4AD	4.16KV SWITCHGEAR 4AD FOR BUS 4D	03	See Table E.2
4D01	4D01 (DISTRIBUTION PANEL)	14	Kick plates (lower plates) were opened and the interior was inspected.
4D23	4D24 (DISTRIBUTION PANEL)	14	See Table E.2
4D02A	4B2 BATTERY CHARGER	16	Permission to open lower compartments. Opened 2 of 2 lower doors.
4Y05	STATIC INVERTER 4C 125 VDC/120 VAC 7.5 KVA (CABINET)	16	Not accessible due to plant operation/safety hazard.
4Y07	STATIC INVERTER 4D 125 VDC/120 VAC 7.5 KVA (CABINET)	16	Same as above.
4D02	4B1 BATTERY CHARGER	16	Same as above.
4D25	4A1 BATTERY CHARGER	16	Permission to open lower compartments. Opened 2 of 2 lower doors.

**F**

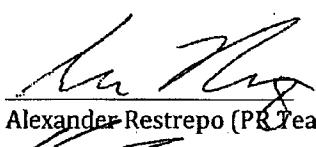
## Peer Review Report

**Peer Review Report for the  
Seismic Walkdown Inspection of Turkey Point Nuclear  
Station (NRC Near Term Task Force Recommendation  
2.3)**

Turkey Point Nuclear Station

October 2012

Prepared by

 Alexander Restrepo (PR Team Lead)

10/26/12

Date

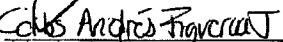
Reviewed by

 George Tullidge (PRA Group)

10/26/12

Date

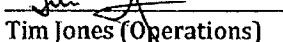
Reviewed by

 Carlos Figueroa (Engineering)

10/11/12

Date

Reviewed by

 Tim Jones (Operations)

10/11/12

Date

## **1. INTRODUCTION**

This report documents the peer review of the seismic walkdowns performed for Turkey Point Nuclear Station in September 2012, in support of the NRC Near Term Task Force (NTTF) Recommendation 2.3. This document describes the peer review team and process (Section 3), the peer review of the SWEL selection (Section 4), and the peer review of the seismic walkdown (Section 5).

The peer review was performed consistent with Section 6 of the EPRI-TR-1025286<sup>(REF 1)</sup> guidance document and addresses the following specific activities:

- Review of the selection of components for the Seismic Walkdown Equipment List (Section 4)
- Review of a sample of the checklists prepared for the Seismic Walkdowns & Walk-Bys (Section 5.1)
- Review of any licensing basis evaluations (Section 5.2)
- Review of the decisions for entering the potentially adverse conditions into the plant's Corrective Action Program (Section 5.2)
- Review of the final submittal report (Section 6).

## **2. BACKGROUND**

This peer review covers three portions of the seismic walkdown: (a) the preparation of the SWEL, (b) the actual walkdown, and (c) the final submittal report.

The Seismic Walkdown Equipment List (SWEL) was prepared in July and August and finalized in September, based on revisions that occurred during the walkdowns. Section 3 describes the process of peer reviewing the SWEL.

The vast majority of the seismic walkdowns occurred September 11 through September 20. The peer review of the walkdowns occurred in the afternoons of those same dates. This portion of the peer review is documented in Section 4.

Two entire areas – the containments – were deferred for each unit for completion during each following respective outage. This allowed the walkdown to occur with less radiation exposure to the walkdown team.

Four components could not be examined entirely with the bus powered: Essential 4KV switchgear Buses 3AB and 4AB, and the protected sequencers during walkdowns which were 3C23B and 4C23B. Consequently, the walkdowns for these components were postponed until the next scheduled outage when they can be scheduled to be removed from service for maintenance. These inspection deferrals are being tracked under the Corrective Action Program (CAP) by two separate Actions Requests, one for each unit.

### **3. PEER REVIEW TEAM & PROCESS**

The Turkey Point (PTN) Peer Review Team consisted of individuals from PTN operations, civil engineering, licensing, and PRA as well as structural/seismic engineers from Stevenson & Associates. These individuals participated in phases of preparation, performance, and peer review of the seismic walkdowns. This section documents the peer review process and how the Peer Review Team interacted with the Seismic Walkdown Engineering Teams.

#### **3.1 Peer Review Team**

The affiliation, role, and qualifications for each Peer Review Team member are summarized in the following table.

Name	Group	Role *	Qualifications **
Tim Jones	PTN Operations	PR – SWEL	(e), (f)
Tirumani Satyan Sharma	PTN Licensing	SWE Team #1 PR – SWE Team A	(a), (b), (c), (d)
Carlos Figueroa	PTN Civil Engineering	SWE Team #2 PR – SWE Team B	(a), (b), (c), (e)
John O'Sullivan	Stevenson & Assoc. (consultant eng.)	SWE Team #1 PR – SWE Team A	(a), (b), (c)
Seth Baker	Stevenson & Assoc. (consultant eng.)	SWE Team #2 PR – SWE Team B	(a), (b), (c)
Alexander Restrepo	PTN PRA Group	PR Team Lead PTN – SWEL	(a), (e)
George Tullidge	PSL PRA Group	SWEL Review	(e)

Notes:

\* Role: PR (peer review), SWEL (seismic walkdown equipment list), SWE (seismic walkdown engineer)

\*\* Qualifications:

- (a) Completed EPRI NTTF 2.3 Seismic Walkdown Training
- (b) Seismic engineering experience
- (c) Degree in mechanical engineering or civil/structural engineering
- (d) Seismic PRA / IPEEE experience
- (e) Knowledge of plant operations, documentation
- (f) Plant Operations member

#### **3.2 Peer Review Process**

##### **PR Team Lead**

A. Restrepo served as the Peer Review Team Lead. In that role, he was responsible for coordinating the peer review and assembling this report. As described below, he also performed some additional roles as part of the walkdown team PR. He also had the lead in the SWEL preparation, so he was not part of that PR process. As such, the SWEL was independently reviewed by a PRA Engineer from PSL, a Senior License Operator from PTN and one of the Peer Reviewers from PTN. Finally, he did not participate as an active team member during the seismic walkdown process and did not perform any other work besides the one described above. Therefore, his roll as the lead peer reviewer is considered acceptable

### **SWEL Preparation**

The SWEL was prepared by A. Restrepo, who is a PTN PRA engineer, with PTN Operations experience and familiarity with the PTN IPEEE Report and the PTN PRA model.

The SWEL was reviewed by a team that included a PRA engineer (G. Tullidge), a licensing engineer (T. Satyan Sharma), a civil engineer (A. Figueroa), and an Operations representative (T. Jones). All of these individuals are familiar with the design and layout of the plant and plant documentation.

### **Seismic Walkdown**

The primary seismic walkdown was conducted with two teams, each with two qualified structural/seismic engineers. The Peer Review of the walkdowns consisted of a Peer Review Team Lead with Operations and PRA knowledge, and structural/seismic engineers. The structural/seismic engineers made up the SWE teams, but also served to peer review each other's work. The Peer Review Team Lead also participated in many of the walkdowns for logistical support as well as peer review. The ultimate judgments regarding licensing basis were made by qualified PTN structural engineers.

- Seismic Walkdown Engineers (SWE):
  - SWE Team #1 - J. O'Sullivan (team lead), T. Satyan Sharma
  - SWE Team #2 - S. Baker (team lead), C. Figueroa
- PR Team Lead – A. Restrepo
- PR SWE Team A –S. Baker (team lead), C. Figueroa
- PR SWE Team B – J. O'Sullivan (team lead), T. Satyan Sharma
- Licensing Basis Reviewers – T. Satyan Sharma, C. Figueroa
- IPEEE Reviewers – A. Restrepo

### **Final Report**

The final seismic walkdown report was prepared by the Stevenson & Assoc. consultants, with review by Turkey Point representatives from Operations, design structural engineering, and PRA.

- Preparers–J. O'Sullivan, S. Baker
- Reviewers - T. Satyan Sharma, C. Figueroa

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#### **4. PEER REVIEW – SELECTION OF COMPONENTS FOR SWEL**

The purpose of this section is to describe the process to perform the peer review of the selected components that were included in the Seismic Walkdown Equipment List (SWEL). This peer review was based on review of the SWEL Selection Report<sup>(REF 2)</sup>.

The guidance in Section 3: *Selection of SSCs* of the EPRI Technical Report<sup>(REF 1)</sup> was used as the basis for this review. Specifically, this peer review utilized the checklist in Appendix F: *Checklist for Peer Review of SSC Selection of the EPRI Technical Report* in Reference 1. Attachment 1 of this peer review report documents the completed checklist.

This peer review determined that the SSCs selected for the SWEL 1 seismic walkdowns represent a diverse sample of equipment required to perform the five safety functions and to meet the sample selection attributes, including:

- Various types of systems
- Major new and replacement equipment
- Various types of equipment
- Various environments
- Equipment enhanced based on the findings of the IPEEE
- Risk insight consideration

For SWEL 2 development, the peer review determined that spent fuel related items were adequately considered and were appropriately included or excluded.

This peer review resulted in no additional findings. All peer review comments requiring resolution were incorporated prior to completion of the SWEL Selection Report.

This peer review concludes that the process for selecting SSCs to be included on the Seismic Walkdown Equipment List appropriately followed the process outlined in Reference 1. It is further concluded that the SWEL sufficiently represents a broad population of plant Seismic Category 1 equipment and systems to meet the objectives of the NRC 50.54(f) Letter.

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## **5. PEER REVIEW – SEISMIC WALKDOWN**

The peer review of the seismic walkdown was performed by the PR Teams on September 11-20, following the walkdowns for those days. Additional peer reviews occurred following the walkdowns as documented in this report.

### ***5.1 Review of Sample Checklists & Area Walk-bys***

The peer review meetings consisted of each SWE Team (#1 and #2) presenting samples from their Seismic Walkdown Checklist (SWC) and Area Walk-by Checklist (AWC) that they had completed earlier that day. This peer review meeting following the day's walkdown activities allowed for immediate feedback between each walkdown team as well as common agreement on how some issues would be addressed.

Table 5-1 lists the sample of 14 components from each unit from the Seismic Walkdown Checklist (SWC) that were discussed in the peer review meetings. These samples represent about 14% of each unit's SWEL population of 100 components. The sample includes a variety of types of components (heat exchanger, valve, pump, tank, instrument rack, unit sub, transformer, fan, MCC, compressor, power panel, and control panel) and component locations (RHR pits, intake, RCA, DG Bldg, and Essential Switchgear room).

Table 5-1 also lists the sample of 6 areas per unit from the Area Walk-by Checklist (AWC) that were discussed in the peer review. These samples represent about 20% of the total AWC population of 30 areas.

When reviewing the components and areas during the afternoon peer review sessions, the following topics were addressed:

- Concrete cracks – For each team, concrete cracks were observed in the concrete floors where components were anchored. Since the guidance does not give discretion for the significance of the crack, the peer review team agreed that the concrete cracks near anchorage should be recorded as "U" (unresolved). Then, following further review, these findings could be changed to "YES" for minor surface cracks or "NO" for concrete crack near anchorage that may need further review.
- Physical interaction – Several of the samples were examples of close spacing between the SWEL component and a hard object (such as a hand rail), with the potential for interaction. In each case, the spacing was judged adequate, but this did reinforce the importance of careful field examination of each component.
- Seismic housekeeping – Seismic housekeeping was assessed in each area and found to be acceptable. Storage boxes were tied off or separated from equipment in designated areas. The presence of stanchions to rope off the protected train equipment was noted. It was agreed that these do not represent significant seismic risk due to the weight distribution (heavy base) and the light-weight nature of these stanchions.

- Seismic scaffolding – A number of areas had scaffolding. In each case, the scaffolding was carefully braced to provide seismic strength and documented on the scaffolding. This was observed by both walkdown teams.
- Non-safety piping in SR buildings – NS piping in all walk-by areas was observed to be well supported.

### ***5.2 Review of Licensing Basis Evaluations & Corrective Action Process***

The final report provides a list of the anomalies encountered during the Turkey Point seismic walkdown inspections and how they were addressed. The review of those anomalies demonstrates a thorough and reasonable process for the review of open issues. There were no added comments offered by the peer review team.

## **6. REVIEW FINAL SUBMITTAL REPORT & SIGN-OFF**

The final submittal report has been reviewed by Turkey Point representatives from structural engineering, Operations, and the PRA Group, and found to meet the requirements of the EPRI 1025286 – Seismic Walkdown Guidance <sup>(REF. 1)</sup>.

## **7. REFERENCES**

1. EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, June 2012.
2. Turkey Point Report, *Selection of the Turkey Point Nuclear Station Seismic Walkdown Equipment List (SWEL) for the Requirement 2.3 Walkdown*, Rev 01, September 2012.

**Table 5-1: Table of Sample Components from Seismic Walkdown Checklist (SWC)**

Walkdown Team (PR Team)	Equipment Identification	Walkby Area Identification
Unit 3 - SWE Team #1 (PR Team A)	LT-3-651 HCV-3-121 3B08 3P212A EMERG SPF CLG PMP 3-797 3E207B	
		209 220
Unit 3 - SWE Team #2 (PR Team B)	3P9B 3T36 3C23A 3B05 3K4B 3D03 3S77	370 409 234
Unit 4 - SWE Team #1 (PR Team A)	4B07 T205C 4E208A 4P212A 4E206B 4T1 4P214B	
		223 210 217
Unit 4 - SWE Team #2 (PR Team B)	4C23A 4k4A 4T8 4T259A 4X05 4C12A 4QR35	368 432 310

## **ATTACHMENT 1: PEER REVIEW CHECKLIST**

### **Peer Review Checklist for SWEL**

#### **Instructions for Completing Checklist**

This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (SWEL) in accordance with Section 6: Peer Review. The space below each question in this checklist should be used to describe any findings identified during the peer review process and how the SWEL may have changed to address those findings. Additional space is provided at the end of this checklist for documenting other comments.

- 
1. Were the five safety functions adequately represented in the SWEL 1 selection?      Y N

*[Requirement met.]*

*[Remarks:]*

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2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:

- a. Various types of systems?      Y N

*[Requirement met.]*

*[Remarks:]*

- b. Major new and replacement equipment?      Y N

*[Requirement met.]*

*[Remarks:]*

- c. Various types of equipment?      Y N

*[Requirement met.]*

*[Remarks:]*

- d. Various environments?      Y N

*[Requirement met.]*

*[Remarks:]*

- e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program?      Y N

*[Requirement met.]*

*[Remarks:]*

### Peer Review Checklist for SWEL

- f. Were risk insights considered in the development of SWEL 1?

Y  N

Requirement met.

Remarks:

3. For SWEL 2:

- a. Were spent fuel pool related items considered, and if applicable included in SWEL 2?

Y  N

Requirement met.

Remarks:

- b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2?

Y  N

Requirement met.

Remarks:

4. Provide any other comments related to the peer review of the SWELs.

5. Have all peer review comments been adequately addressed in the final SWEL?

Y  N

Peer Reviewer  
#1:

Carlos A. Figueroa

Date: 11/15/12

*Carlos Figueroa*

Peer Reviewer  
#2:

T-Satyan Sharma

Date: 11/15/12

*T-Satyan Sharma*