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Prairie Island Nuclear Generating Plant
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NOV 26 2012

L-PI-12-109
10 CFR 50.54(f)

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

Prairie Island Nuclear Generating Plant
Docket No. 50-306
Renewed Facility Operating License No. DPR-60

PINGP Unit 2 - Final 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

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, ADAMS Accession No. ML12053A340.

2. NRC Letter, "Endorsement of Electric Power Research Institute (EPRI) Draft Report 1025286, 'Seismic Walkdown Guidance,'" dated May 31, 2012, ADAMS Accession No. ML12145A529.

3. NSPM Letter to NRC, "Prairie Island Nuclear Generating Plant's 120-Day Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Seismic Aspects of Recommendations 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated July 9, 2012, ADAMS Accession No. ML12192A207.

On March 12, 2012, the Nuclear Regulatory Commission (NRC) Staff issued a request for information regarding Near-Term Task Force (NTTF) insights from the Fukushima Dai-ichi accident, to all NRC power reactor licensees and holders of construction permits in active or deferred status (Reference 1). Enclosure 3 of the March 12, 2012 letter contains specific Requested Actions, Requested Information, and Required

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Responses associated with NTTF Recommendation 2.3, Seismic. This letter provides the required final response to the Requested Information for NTTF Recommendation 2.3, Seismic, from the Northern States Power Company, a Minnesota corporation (NSPM), d/b/a Xcel Energy, for Prairie Island Nuclear Generating Plant (PINGP), Unit 1.

In a letter to the NRC dated July 9, 2012 (Reference 3), NSPM confirmed that it would use EPRI Report 1025286, "Seismic Walkdown Guidance For Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic," endorsed by the NRC in Reference 2, as the basis for seismic walkdowns at the PINGP. These walkdowns were performed to verify current plant configuration with the current licensing basis; verify the adequacy of current strategies and maintenance plans; and identify degraded, nonconforming, or unanalyzed conditions.

The enclosure to this letter provides the Requested Information in response to NTTF Recommendation 2.3, Seismic, and includes the results of the seismic walkdowns for PINGP Unit 1. This enclosure contains Sensitive Unclassified Non-Safeguards Information (SUNSI) of which the loss, issue, modification, or unauthorized access can reasonably be foreseen to harm the public interest, or the commercial or financial interests of NSPM. NSPM requests that this proprietary information be withheld under 10 CFR 2.390(d)(1). A redacted version of the information enclosed in this letter will be provided in a separate letter for public disclosure.

If there are any questions, or if additional information is needed, please contact Ms. Jennie Eckholt, Licensing Engineer, at 612-330-5788.

Summary of Commitments

This letter makes the following new commitments and makes no revisions to existing commitments.

Regulatory Commitments	Due Date
NSPM will complete the Seismic Walkdowns of the inaccessible components listed in Appendix D, "Plan for Future Seismic Walkdown of Inaccessible Equipment," of the enclosure.	Refueling Outage (RFO) 2R29
NSPM will provide an updated seismic walkdown report with the results of the walkdowns of the inaccessible components.	60 days following the end of RFO 2R29

I declare under penalty of perjury that the foregoing is true and correct.

Executed on NOV 26 2012

James E. Lynch
Site Vice President, Prairie Island Nuclear Generating Plant
Northern States Power Company - Minnesota

Enclosure

cc: Administrator, Region III, USNRC
Director of Nuclear Reactor Regulation (NRR), USNRC
NRR Project Manager, PINGP, USNRC
Senior Resident Inspector, PINGP, USNRC

ENCLOSURE

PRAIRIE ISLAND NUCLEAR GENERATING PLANT – UNIT 2

NTTF RECOMMENDATION 2.3 –

REDACTED SEISMIC WALKDOWN REPORT

(316 Pages Follow)

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Executive Summary

Following the accident at the Fukushima Dai-ichi nuclear power plant resulting from the March 11, 2011, Great Tohoku Earthquake and subsequent tsunami, the NRC established the Near-Term Task Force (NTTF) in response to Commission direction. The NTTF Charter, dated March 30, 2011, tasked the NTTF with conducting a systematic and methodical review of NRC processes and regulations and determining if the agency should make additional improvements to its regulatory system. Ultimately, a comprehensive set of recommendations contained in a report to the Commission (dated July 12, 2011, SECY-11-0093 (Agency wide Documents Access and Management System (ADAMS) Accession No. ML111861807)) was developed.

On August 19, 2011, following issuance of the NTTF report, the Commission directed the NRC staff in a staff requirements memorandum (SRM) for SECY-11-0093 (ADAMS Accession No. ML 112310021), in part, to determine which of the recommendations could and should be implemented without unnecessary delay. On September 9, 2011, the NRC staff provided a document to the Commission (ADAMS Accession No. ML 11245A158) which identified those actions from the NTTF report that should be taken without unnecessary delay.

On March 12, 2012, the NRC issued a 10 CFR 50.54(f) letter that requested information to assure that these recommendations are addressed by all U.S. nuclear power plants (Reference 6). Every U.S. nuclear power plant is required to perform seismic walkdowns to identify and address degraded, non-conforming or unanalyzed conditions as well as to verify the current plant configuration with the current seismic licensing basis. This report documents the seismic walkdowns performed at the Prairie Island Nuclear Generating Plant (PINGP) as required to address, in part, the 10 CFR 50.54(f) information request issued by the NRC.

The Nuclear Energy Institute (NEI) cooperated with the NRC to prepare guidance for conducting seismic walkdowns as requested in Enclosure 3 of Reference 6, titled, Recommendation 2.3: Seismic. 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 (Reference 1). The Northern States Power Company, a Minnesota corporation (NSPM), d/b/a Xcel Energy, confirmed that the EPRI seismic walkdown guidance would be used as the basis for conducting the seismic walkdowns and developing the needed information at PINGP in a letter dated July 9, 2012 (Reference 10).

The EPRI Seismic Walkdown Guidance was used for the engineering walkdowns and evaluations described in this report. In accordance with the EPRI Seismic Walkdown Guidance, 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
- Licensing Basis Evaluations
- IPEEE Vulnerabilities Resolution Report
- Peer Reviews

This report documents any discrepancies or potential seismic issues identified as a result of the seismic walkdowns completed at PINGP. No adverse seismic conditions were identified at PINGP. Corrective Action Program Action Requests (CAPs) were entered into the site's 10 CFR 50 Appendix B qualified corrective action program. The disposition of all potentially adverse observations noted during the seismic walkdowns is documented in Appendix F of this report.

The Seismic Walkdowns identified several minor issues predominantly pertaining to seismic housekeeping and potential seismic interactions associated with overhead lighting fixtures. The Seismic Walkdowns identified no degraded, nonconforming, or unanalyzed conditions that required either immediate or follow-on action(s). No planned or newly identified protection or mitigation features have resulted from the efforts to address the NRC 10 CFR 50.54(f) letter.

Follow-up activities required to complete the efforts to address Enclosure 3 of the NRC 10 CFR 50.54(f) letter include inspection of 30 items deferred due to inaccessibility or electrical cabinet internal inspections. Area Walk-Bys will be completed, as required, during these follow-up activities.

1 Introduction

1.1 Background

In response to Near-Term Task Force (NTTF) Recommendation 2.3, the Nuclear Regulatory Commission (NRC) issued a 10 CFR 50.54(f) letter on March 12, 2012 requesting that all licensees perform seismic walkdowns to identify and address plant-specific degraded, nonconforming, or unanalyzed conditions (through the corrective action program), verify the adequacy of monitoring and maintenance for protective features, and inform the NRC staff of the results of the walkdowns and corrective actions taken or planned. The Nuclear Energy Institute (NEI), with 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 (Reference 8). NSPM confirmed that the EPRI seismic walkdown guidance would be used as the basis for conducting the seismic walkdowns and gathering the requested information at PINGP in a letter dated July 9, 2012 (Reference 10).

1.2 Plant Overview

PINGP, Units 1 and 2, are both 2-loop pressurized water reactors owned by NSPM. Westinghouse Electric Corporation designed and supplied the nuclear steam supply systems, initial reactor fuel, and the turbine-generator units. Pioneer Service and Engineering Company (PS&E) was the plant's architect-engineer. Northern States Power was the constructor.

The containment for each unit was designed by PS&E and consists of two systems:

- A primary containment consisting of a free-standing low-leakage steel vessel, including its penetrations, isolation systems and heat removal systems.

- A secondary medium leakage concrete shield building surrounding the primary containment, including special ventilation systems for its annulus and adjacent auxiliary building.

1.3 APPROACH

The EPRI Seismic Walkdown Guidance (Reference 1) is used for PINGP Unit 2 engineering 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 (Section 2)
- Personnel Qualifications (Section 3)
- Selection of SSCs (Section 4)
- Seismic Walkdowns and Area Walk-Bys (Section 5)
- Licensing Basis Evaluations (Section 6)
- IPEEE Vulnerabilities Resolution Report (Section 7)
- Peer Review (Section 8)

2 Seismic Licensing Basis

2.1 OVERVIEW

This section of the report summarizes the seismic licensing basis for PINGP Unit 1 and Unit 2. The safe shutdown earthquake and a summary of the codes, standards, and methods used in the design of Seismic Category I structures, systems, and components (SSCs) are presented. This section does not establish or change the seismic licensing basis of the facility but is intended to provide a fundamental understanding of the seismic licensing basis of the facility.

2.2 DESIGN BASIS EARTHQUAKE (DBE)

The design basis earthquake (DBE) is based upon a maximum horizontal ground acceleration of 0.12g; the associated response spectra are given in Plate 4.6, Appendix E of Reference 2. The DBE is synonymous with the Safe Shutdown Earthquake (SSE) (Reference 2, Section 12.2.1.3.5).

2.3 DESIGN OF SEISMIC CATEGORY I SSCS

Full descriptions of the SSE along with the codes, standards, and methods used in the design of the Seismic Category I SSCs for meeting the seismic licensing basis requirements are provided in the following PINGP Updated Safety Analysis Report (USAR) (Reference 2) sections:

- USAR Section 12.2.1.1, *Classification of Structures and Components*
- USAR Section 12.2.1.3.5, *Seismic Loads*
- USAR Section 12.2.1.4, *General Design Criteria for Structures*
- USAR Section 12.2.1.4.3, *Structural Design Basis*
- USAR Section 12.2.1.5, *Seismic Analysis of Mechanical and Electrical Equipment*

These USAR sections should be referred to for a detailed understanding of the seismic licensing basis.

2.3.1 Summary of Seismic Design

The site Operating Basis Earthquake (OBE) and DBE ground response spectra are shown in Plates 4.5 and 4.6, respectively, in Appendix E of the PINGP USAR (Reference 2). The equivalent multi-mass mathematical model was constructed to approximate the structural system. The effect of the foundation soils is included in the model by means of equivalent springs. The spectral method was used to determine the maximum response of each mass point for each mode, using the OBE (Reference 2, Plate 4.5 in Appendix E) and damping values given in USAR Table 12.2-8 of Reference 2 as input. The total response for each point was determined by the root-mean-square (RMS) method. From this, a set of curves were developed showing the maximum translational accelerations, displacements, shears, and moments as varying with height.

The maximum horizontal and vertical ground accelerations at the ground level are 0.12g for the DBE (SSE) and 0.06g for OBE (Plates 4.5 & 4.6, Appendix E – Reference 2). These OBE and DBE ground response spectra were plotted at 0.5%, 2% and 5% damping (Reference 2, Plates 4.5 and 4.6 of Appendix E). The vertical ground acceleration is equal to two-thirds of the horizontal ground acceleration (Reference 2, Section 12.2.1.4.3.1.1).

2.3.2 Methods for Qualifying Electrical and Mechanical Equipment and Instrumentation

Equipment and instrumentation are qualified using one or more of the following methods:

1. Qualification by analysis,
2. Qualification by test, or
3. Qualification by combination of analysis and test.

Equipment is qualified by analysis if the equipment is not too complex and can be represented in a mathematical model for performing static analysis and/or dynamic analysis.

1. Qualification by Analysis

Static Analysis

Static analysis is performed for an equipment item determined to be rigid. The seismic forces on each component of the equipment are obtained by concentrating the total mass at the equipment's center of gravity and multiplying the values of the mass and the appropriate floor acceleration from the seismic response spectra. The resulting forces are converted to stresses and are added to the other equipment stresses, as per the design criteria, to determine if the equipment is adequate to withstand the required load.

Dynamic Analysis

Dynamic analysis is performed for flexible equipment items. The equipment is analyzed using a response spectrum or time-history analysis. Both of these methods have been used to qualify equipment for PINGP.

2. Qualification by Test

If the equipment is flexible and too complex to be represented properly by an analytical model, then the equipment is qualified by test. Testing is also performed where the equipment is required to operate during or after a seismic event for which this cannot be established analytically. Seismic tests are performed by subjecting the equipment to vibratory motion which conservatively simulates the motion at the equipment mounting location during an (or several) OBE(s), followed by the vibratory motion associated with an SSE.

3. Qualification by Combination of Test and Analysis

Some electrical equipment and instrumentation are qualified by a combination of test and analysis. This qualification can be achieved through various methods such as extrapolation from similar equipment or similar seismic conditions.

2.3.3 Summary of Codes and Standards

This section summarizes the codes, specifications, standards of practice, and other accepted industry guidelines to the extent applicable in the design and construction of the following:

- Containment - the applicable codes, standards, and specifications for the containment are 1 through 23 in Table 2-1 below.
- Containment Internal Structures – all of the items listed in Table 2-1 below are applicable for the containment internal structures.
- Safety-Related Structures Outside of Containment - all of the items listed in Table 2-1 below are applicable, with the exception of Items 17 and 18.
- Foundations for Seismic Category I Structures - the applicable codes, standards, and specifications are 1 through 14 and 19 through 23 in Table 2-1 below.

Table 2-1: List of Codes, Standards, and Specifications		
Specification Reference Number	**Specification or Standard Designation**	**Title**
1	American Concrete Institute (ACI) 318-71, 77, 83	Building Code Requirements for Reinforced Concrete (Reference 14)
2	ACI 301	Specifications for Structural Concrete for Buildings (Reference 15)
3	ACI 347	Recommended Practice for ANSI A145.1 Concrete Formwork (Reference 16)
4	ACI 305	Recommended Practice for Hot ANSI A170.1 Weather Concreting (Reference 17)
5	ACI 211.1	Recommended Practice for Selecting Proportions for Normal Weight Concrete (Reference 18)
6	ACI 304	Recommended Practice for Measuring, Mixing, Transporting, and placing concrete (Reference 19)
7	ACI 315	Manual of Standard Practice for Detailing Reinforced Concrete Structures (Reference 20)
8	ACI 306	Recommended Practice for Cold Weather Concreting (Reference 21)
9	ACI 309	Recommended Practice for Consolidation of Concrete (Reference 22)
10	ACI 308	Recommended Practice for Curing Concrete (Reference 23)
11	ACI 214	Recommended Practice for ANSI A146.1 Evaluation of Compression Test Results of Field (Reference 24)
12	ACI 311	Recommended Practice for Concrete Inspection (Reference 25)
13	ACI 304	Preplaced Aggregate Concrete for Structural and Mass Concrete (Reference 26)
14	Report by ACI Committee 304	Placing Concrete by Pumping Method (Reference 27)
15	AISC-69,78	Specification for the Design, Fabrication, and Erection of Structural Steel for Building (Reference 28)
16	AWS D1.1	Structural Welding Code (Reference 29)

Table 2-1: List of Codes, Standards, and Specifications		
Specification Reference Number	**Specification or Standard Designation**	**Title**
17	ASME	Boiler & Pressure Vessel Code, Section III (Reference 30)
	ASME-1971, S73	Division 1, Subsection NE
	ASME-1974, S75	Division 1, Subsection NF
	ASME-1973	Division 2, Proposed Standard Code for Concrete Reactor Vessels and Containments Issued for Trial Use and Comments
	ASME-1980	Division 2, CC 6000
	ASME-1992	1992 Addenda, Division 1, Section XI, Subsection IWL, IWE
18	American Public Health Assoc. (APHA)	Test Methods Sulphides in Water, Standard Methods for the Examination of Water and Waste Water (Reference 31)
19	ASTM	Annual Books of ASTM Standards (Reference 32)
20	CRSI MSP-1	Manual of Standard Practice (Reference 33)
21	ANSI N45.2.5	Proposed Supplementary Q.A. Requirements for Installation, Inspection and Testing of Structural Concrete and Structural Steel During Construction Phase of Nuclear Power Plants (Reference 34)
22	CRD	Chief of Research and Development Standards, Department of the Army, Handbook for Concrete and Cement Volume I and II, Corps of Engineers U.S. Army (Reference 35)
23	ACI-349-76, 85	Code Requirements for Nuclear Safety Related Concrete Structures (Reference 36)
24	AISI	Specification for design of cold-formed steel structural members (Reference 37)

3 Personnel Qualifications

3.1 Overview

This section of the report identifies the personnel that participated in the NTTF Recommendation 2.3 Seismic Walkdown efforts. This section also describes the qualifications of these personnel. A description of the responsibilities and minimum qualifications of each Seismic Walkdown participant's role(s) is provided in Section 2 of the EPRI Report 1025286 (Reference 1).

3.2 Walkdown Personnel

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

Table 3-1: Personnel Roles

Name	Equipment Selection Engineer	Plant Operations	Seismic Walkdown Engineer (SWE)	Licensing Basis Reviewer	IPEEE Reviewer	Peer Reviewer
B. Lory (S&A)	X		X			
W. Djordjevic (S&A)			X			
D. Zercher (NSPM)			X			
D. Cherlopalle (NSPM)			X			X(1)
K. Kriesel (NSPM)			X	X(3)		
S. Seilhymer (NSPM)		X				X(1)
P. Valtakis (NSPM)	X	X				
T. Bacon (S&A)						X(2)
M. Etre (S&A)						X
D. Moore					X	

Notes:
1. Peer Review Team member for SWEL review only.
2. Peer Review Team Leader.
3. No licensing basis evaluations were performed.

3.3 PERSONNEL QUALIFICATIONS

Summarized below are the qualifications for the personnel who participated in the NTTF Recommendation 2.3 Seismic Walkdown efforts. The personnel qualifications include applicable seismic training, education, and professional experience.

Bruce M. Lory

- Activities Performed: Equipment Selection, SWE
- Seismic Training Completed: Instructor for the Fundamentals of Equipment Seismic Qualification Training and EPRI NTTF Recommendation 2.3 - Plant Seismic Walkdowns Training
- Education: Bachelor of Science in Mechanical Engineering from the State University of New York at Buffalo
- Professional Experience: 30+ years of experience in the commercial nuclear industry. Worked 18+ years in Seismic Qualification of equipment and components, and 15+ years of Environmental Qualification experience, in consulting services and in utility positions. Currently works as a senior consultant for Stevenson and Associates with specialization in Seismic and Environmental Qualification, as well as Single Failure-Proof crane design verification.

Walter (Wally) Djordjevic

- Activities Performed: SWE
- Seismic Training Completed: EPRI SQUG training and EPRI NTTF Recommendation 2.3 - Plant Seismic Walkdowns Training
- Education: Master of Science in Structural Engineering from the Massachusetts Institute of Technology
- Professional Experience: 37+ years of seismic experience serving the nuclear industry. Managed and led seismic walkdowns and fragility analyses of structures and components for use in probabilistic risk assessments. Performed more than twenty USI A-46 and IPEEE projects in response to the requirements of Generic Letters 87-02 and 88-20. Currently works as a senior Consultant and serves as President of Stevenson and Associates with specialization in the dynamic analysis and design of structures and equipment for seismic, blast, fluid, and wind loads.

Dennis Zercher

- Activities Performed: SWE
- Seismic Training Completed: EPRI SQUG Training

- Education: BSCE, Michigan Technological University

- Professional Experience: 28+ years of structural and seismic engineering in commercial nuclear industry. Performed the USI A-46 and IPEEE seismic walkdowns for Monticello Nuclear Generating Plant. A registered Professional Engineer in Minnesota and Wisconsin. He works at the Monticello Nuclear Generating Plant as a Design Engineer. He was a Structural Engineer at FluiDyne Engineering and PaR Systems.

Dileep Cherlopalle

- Activities Performed: Equipment Selection Peer Review, SWE

- Seismic Training Completed: EPRI NTTF Recommendation 2.3 - Plant Seismic Walkdowns Training

- Education: Master of Science in Structural Engineering – University of Alaska - Fairbanks

- Professional Experience: 3+ years of experience in commercial nuclear industry. Currently a Design Civil/Structural Engineer at PINGP.

Kyle Kriesel

- Activities Performed: Licensing Basis Reviewer, SWE

- Seismic Training Completed: EPRI SQUG Training

- Education: Bachelor of Science in Civil Engineering from North Dakota State University

- Professional Experience: 11+ years of experience in the commercial nuclear industry. A registered Professional Engineer in Minnesota. Worked as a Plant Design Civil/Structural Engineer at Cooper Nuclear Station and PINGP including structures monitoring implementation and structures monitoring program owner.

Stephen Seilhymer

- Activities Performed: Equipment Selection Peer Reviewer

- Seismic Training Completed: N/A

- Education: Bachelor of Science in Physics – Applied Nuclear Science from Winona State University

- Professional Experience: Reached rank of Electronics Technician First Class and performed as Reactor Operator and Engineering Watch Supervisor on a nuclear powered submarine in the United States Navy. Obtained Senior Reactor Operator License and has completed roles as Equipment Operator, Control Room Supervisor, Shift Manager, Assistant Operations Manager, Licensed Operator Requalification Training Supervisor, and Operations Simulator and

Classroom Instructor positions at PINGP. Has a total of 30 years of nuclear experience, with 18 years of experience as a Senior Reactor Operator.

Pete Valtakis

- Activities Performed: Equipment Selection
- Seismic Training Completed: N/A
- Education: Bachelor of Science in Physics, Winona State University
- Professional Experience: Acted as a Reactor Operator on a nuclear powered submarine in the United States Navy, and was also assigned as a Leading Petty Officer of the Reactor Controls Division, an Engineering Officer of the Watch, and a Training Coordinator for the Naval Prototype Training Unit. Obtained Senior Reactor Operator License at PINGP and has completed roles as Reactor Operator, Lead Operator, Control Room Supervisor, and Shift Manager at PINGP. Participated in all phases of pre-operational testing and initial criticality of both PINGP units. Has a total of 39+ years of commercial nuclear experience, with 28+ years of experience as a Senior Reactor Operator.

Todd Bacon

- Activities Performed: Peer Review Team Leader
- Seismic Training Completed: Near Term Task Force Recommendation 2.3 – Plant Seismic Walkdowns
- Education: Bachelor of Science in Civil Engineering from the University of Illinois - Champaign
- Professional Experience: Mr. Bacon has thirty years of experience in the design and modification of mechanical and structural systems. His responsibilities have included serving as an Engineering Manager involving work from the conceptual design through to the installation support phases of multiple projects. Mr. Bacon has served as Project Engineer and Project Manager for numerous work scope efforts, including coordination of personnel in multiple locations. His efforts have also included significant client and/or regulatory interface, as required. These activities have also included responsibility for budgets, schedules and the technical accuracy of work performed. In addition, he has extensive experience in proposal and report development, as well as personnel training activities. Mr. Bacon's work has involved extensive use of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, including involvement with various piping system related committees.

Mark Etre

- Activities Performed: Peer Reviewer
- Seismic Training Completed: EPRI SQUG training and Near Term Task Force Recommendation 2.3 – Plant Seismic Walkdowns,
- Education: Master of Science in Mechanical Engineering from the Worcester Polytechnic Institute
- Professional Experience: Mr. Etre is a Project Manager in the S&A Boston office. He has managed and led seismic walkdowns and analyses of structures and components. Mr. Etre has more than 20 years of seismic experience serving the nuclear industry. Mr. Etre has participated in numerous USI A-46 and IPEEE projects in response to the requirements of Generic Letters 87-02 and 88-20.

David L. Moore

- Activities Performed: IPEEE Reviewer
- Seismic Training Completed: EPRI SQUG Systems and Relay Evaluation Training Course
- Education: Bachelor of Science in Physics from University of Texas; Masters of Science in Civil/Structural Engineering from University of Washington
- Professional Experience: 30+ years of seismic PRA and SMA experience for the nuclear industry and NRC. Manager, Systems Task Leader, or Peer Reviewer for over 30 seismic PRAs, SMAs, or USI A-46 assessments. Tasks included development of seismic success paths and seismic equipment lists, performance of seismic walkdowns, quantification of seismic CDF and LERF, and performance of uncertainty and sensitivity analyses. Currently works as a Consultant for several seismic PRA projects, including NRC sponsored research project on treatment of seismic correlation.

4 Selection of SSCs

4.1 OVERVIEW

This section of the report describes the process used to select SSCs that were included in the Seismic Walkdown Equipment List (SWEL). The actual equipment lists that were developed in this process are found in Appendix A and are as follows:

- Table A-1 is a list of the equipment coming out of Screen #2 and entering Screen #3 for the equipment selection of SWEL 1. This list of equipment is titled Base List 1.

- Table A-2 is the PINGP Unit 2 list of equipment which has gone through the screening process defined in Reference 1 and then selected by the Equipment Selection Team to be seismically inspected in accordance with Reference 1, excluding SFP equipment which is in SWEL 2. This list of equipment is termed SWEL 1.

4.2 SWEL DEVELOPMENT

The selection of SSCs process described in 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 utilized to develop the SWEL for PINGP Unit 2.

The SWEL is comprised of two groups of items:

- SWEL 1 is a sample of items required to safely shut down the reactor and maintain containment integrity.
- SWEL 2 is a list of spent fuel pool related items.

4.2.1 SWEL 1 – Sample of Required Items for the Five Safety Functions

The process for selecting a sample of SSCs required for safe shutdown and maintaining containment integrity began with the composite Seismic Qualification Utility Group (SQUG) Safe Shutdown Equipment List (SSEL) (Reference 3). The SQUG SSEL was then subjected to the following four screens to identify the items to be included on the Seismic Walkdown Equipment List 1 (SWEL 1):

1. Screen #1 – Seismic Category 1

As described in Section 3 of Reference 1, only items that have a defined seismic licensing basis (Seismic Category I) are to be included in SWEL 1. Each item on the SSEL was reviewed to determine if it had a defined seismic licensing basis. All items identified as Seismic Category I, as defined in Section 12 of the PINGP USAR (Reference 2), were identified as having a defined seismic licensing basis. Electrical enclosures containing Class 1E devices were identified as Seismic Category I. Seismic Category I and Class 1E determination was made through a review of current design and licensing basis documentation.

2. Screen #2 – Equipment or Systems

This screen narrowed the scope of items to include only those that do not regularly undergo inspections to confirm that their configuration is consistent with the plant licensing basis. This screen further reduced the SWEL 1 by screening out any Safety Related SC I structures, containment penetrations, SC I piping systems, cable/conduit raceways and HVAC ductwork.

3. Screen #3 – Sample Considerations

This screen is intended to result in a SWEL 1 that sufficiently represents a broad population of plant Seismic Category 1 equipment and systems to meet the objectives of the NRC 10 CFR 50.54(f) Letter (Reference 6). In Section 3 of Reference 1, the screen for sample considerations is Screen #4. NSPM performed Screen #4 of Reference 1 as Screen #3. The screen for determining supports of the five safety functions (Screen #3 in Reference 1) was performed as Screen #4 for the PINGP. As a result of this change in order, the Base List 1 in Table A-1 of Appendix A of this report is a list of the equipment coming out of Screen #2. Also, this report defines Screen #3 of Reference 1 as Screen #4, and vice versa for Screen #4 of Reference 1.

The following attributes were considered in the selection process for items included on SWEL 1:

A. A variety of types of systems

The system is identified for each item on SWEL 1. The equipment included on SWEL 1 is a representative sample of several systems that perform one or multiple safety functions. Further, the systems represented include both frontline and support systems from those listed in Appendix E, *Systems to Support Safety Function(s),* of Reference 1.

B. Major new and replacement equipment

The equipment included on SWEL 1 includes several items that have been modified or replaced over the past several years. Each item on SWEL 1 that is new or replaced is identified.

C. A variety of types of equipment

The equipment class is identified for each item on SWEL 1. The equipment included on SWEL 1 is a representative sample from each of the classes of equipment listed in Reference 1 Appendix B: Classes of Equipment. Where appropriate, at least one piece of equipment from each class is included on SWEL 1.

Screens #1, #2, and #3 resulted in no equipment in equipment classes (12) Air Compressors or (13) Motor Generators.

D. A variety of environments

The location for each item is identified on SWEL 1. The equipment included on SWEL 1 is a representative sample from a variety of environments (locations) in the site.

E. Equipment enhanced due to vulnerabilities identified during the IPEEE program

The equipment included on SWEL 1 includes several items that were enhanced as a result of the IPEEE program. Each item on SWEL 1 that was enhanced to correct an outlier from IPEEE is identified.

F. Contribution to risk

To determine the relative risk significance, the Risk Achievement Worth (RAW) and Fussell-Vesely importance from the internal plant PRA were used. Initiating events, maintenance events and human error events were not considered in the generation of this list. The thresholds for risk significance that were used (Fussell-Vesely risk > 5.0E-3, RAW > 2) are derived from the ANS/AMSE PRA Standard. This PRA Standard was endorsed by the NRC via Regulatory Guide 1.200.

In selecting equipment for SWEL 1 that met the above attributes, the equipment in the draft SWEL 1 had to first pass through Screens 1 through 4 before being assessed for being risk significant. Then risk significant equipment was identified based on the above criteria, and a subset of the more risk-significant equipment was selected to be on the final SWEL 1. Additionally, the list of risk-significant equipment from internal plant PRA was compared with the draft SWEL 1 to confirm that a reasonable sample of risk-significant equipment (relevant for a seismic event) was included on SWEL 1.

4. Screen #4 – Support for the 5 Safety Functions

This screen ensured that the scope of items included on the SWEL 1 are associated with maintaining the following five safety functions:

A. Reactor Reactivity Control

B. Reactor Coolant Pressure Control

C. Reactor Coolant Inventory Control

D. Decay Heat Removal

E. Containment Function

These five safety functions were defined in Section 3 of Reference 1. The first four functions are associated with bringing the reactor to a safe shutdown condition. The fifth function is associated with maintaining containment integrity.

It is noted that items on SWEL 1 with a specific safety function(s) are considered frontline systems. Items with a safety-function designation of 'Support System HVAC', 'Support System AC Power', 'Support System DC Power', Engineered Safety Features Actuation System ('ESFAS') or 'Cooling Water' may be categorized as a frontline or support system. Items with a safety function designation of 'Support System HVAC', 'Support System AC Power', 'Support System DC Power', Engineered Safety Features Actuation System ('ESFAS') or 'Cooling Water' support at least one of the five safety functions however, the specific safety function(s) are depicted as numbers 1-5 in SWEL 1, corresponding to the 5 safety functions mentioned in the EPRI guidance (Reference 1). SWEL 1 in Table A-2 of Appendix A of this report contains a legend to correlate this number to a specific safety function.

4.2.2 SWEL 2 – Spent Fuel Pool Related Items

The PINGP Unit 1 seismic walkdown submittal report discusses and identifies the equipment selected for SWEL 2. Therefore, this PINGP Unit 2 seismic walkdown submittal report does not contain a discussion of the SWEL 2 walkdowns or equipment selection process.

5 Seismic Walkdowns and Area Walk-Bys

5.1 Overview

Seismic Walkdowns and Area Walk-Bys were conducted by two 2-person teams of trained Seismic Walkdown Engineers (SWE) in accordance with Reference 1. The Seismic Walkdowns and Area Walk-Bys are discussed in more detail in the following sections.

Consistent with Section 4, *Seismic Walkdowns and Area Walk-Bys*, of Reference 1 the SWEs used their engineering judgment, based on their experience and training, to identify potentially adverse seismic conditions. Where needed, the engineers were provided the latitude to rely upon new or existing analyses to inform their judgment.

The SWEs conducted the Seismic Walkdowns and Area Walk-Bys together as a team, in accordance with Reference 1. During these evaluations, the SWEs actively discussed their observations and judgments with each other. The results of the Seismic Walkdowns and Area Walk-Bys reported herein are based on the comprehensive and consensus agreement of the SWEs.

5.2 Seismic Walkdowns

The Seismic Walkdowns focused on the seismic adequacy of the items on the SWEL 1 and SWEL 2 as provided in Appendix A of this report. The Seismic Walkdowns also evaluated the potential for nearby SSCs to cause adverse seismic interactions with the SWEL items. The seismic walkdown teams 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 Checklists (SWCs) and Area Walk-by Checklists (AWCs) provided in Appendix C of Reference 1. Seismic Walkdowns were performed and a SWC completed for 64 of the 94 components identified on the PINGP Unit 2 SWEL 1. The completed SWCs are provided in Appendix B 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. 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 site's document management system.

Seismic Walkdowns are deferred for the remaining 30 items to a unit outage or appropriate time when the equipment is accessible. These items could not be walked down during the 180 day period following the NRC's endorsement of the EPRI Report (Reference 1) due to being inaccessible. Inaccessibility of this equipment was either based on the location of the equipment, current plant conditions, or due to the electrical safety hazards posed while the equipment is operating. Appendix D 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 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 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.

5.2.2 Configuration Verification

In addition to the visual inspections of the anchorage as described above, for at least 50% of applicable equipment items, the configuration of the installed anchorage was verified to be consistent with existing plant documentation.

Line-mounted equipment (e.g., valves mounted on pipelines without separate anchorage) were not be evaluated for anchorage adequacy and were not counted in establishing the 50% sample size.

Examples of documentation that is 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
- IPEEE or USI A-46 program documentation, as applicable

See Table 5-1 below for the accounting of the 50% anchorage configuration verifications, and the individual SWC forms in Appendix B for the specific drawings used for each anchorage configuration verification.

Table 5-1: Anchorage Configuration Confirmation

SWEL	No. of SWEL Items (A)	Line-Mounted Items (B)	Required to Verify? (A-B)/2	Items Verified
1	94	25	35	23 (14 anchorage verifications have been deferred and will be completed as outlined in Appendix D)

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 as follows:

- Proximity
- Failure and falling of SSCs
- Flexibility of attached lines and cables

Detailed guidance for evaluating each of these types of seismic spatial interactions is described in Appendix D, *Seismic Spatial Interaction*, of Reference 1.

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 could have been present. Examples of the types of conditions that could pose potentially adverse seismic conditions include the following:

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

In September 2012, a revised position from the NRC Staff in regards to Seismic Walkdowns of electrical cabinets and panels was sent to all licensees through the Nuclear Energy Institute (NEI). In this document, it was communicated that it is expected that all electrical cabinets on the SWEL that can be reasonably opened without undue safety or operational hazard will be opened during the walkdown, whether or not it is necessary to look inside to check its anchorage. The NRC Staff described the visual inspection that should be made while viewing the interior of the cabinet through the door opening as including the following checks:

- Visually check for evidence that internal components are or are not adequately secured to the cabinet,
- Check whether fasteners that secure adjacent cabinets together are in place, if such fasteners are needed to prevent potentially adverse seismic interaction between the cabinets, and
- Look for "Other Adverse Seismic Conditions," as described on page 4-4 of Reference 1.

Due to the timing of this communication, PINGP did not perform all of the internal inspections of electrical cabinets and panels. The remaining inspections were deferred to a future refueling outage or another appropriate time when the equipment is accessible. The electrical cabinets and panels which still need to be internally inspected are identified in Table D-1 of Appendix D of this report. The SWCs for the equipment identified in Table D-1 that cannot be opened for internal inspections will be revised at the time of the supplemental walkdowns to indicate the results of these internal inspections.

Any other adverse seismic conditions that were identified during the Seismic Walkdowns are documented on the items' SWCs in Appendix B and Table 5-2, as applicable.

This internal inspection of electrical cabinets and panels was performed at PINGP to the extent allowed by the plant. Any situations that posed a danger to personnel or the proper operation of the plant were deferred to a future outage and are identified in Table D-1 of Appendix D in this report. The Seismic Walkdown Checklists (SWC) for the equipment identified in Table D-1 that cannot be opened for internal inspections will be revised at the time of the supplemental walkdown to indicate the results of these internal inspections.

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

5.2.5 Issues Identified during Seismic Walkdowns

Table 5-2 provides a summary of issues identified during the equipment Seismic Walkdowns. The equipment Seismic Walkdowns resulted with a total of 13 concerns identified and each of these was entered into the site's Corrective Action Program (CAP). There was one observation identified during the seismic walkdowns which is in the work management process for resolution, and is conservatively reported in this report for tracking purposes. All of the identified concerns were assessed and it was concluded that the anomaly or issue would not prevent the associated equipment from performing its safety-related function(s). None of the concerns identified by the SWEs during the equipment Seismic Walkdowns were judged to be potentially adverse seismic conditions that could affect the safety-related functions of equipment.

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), provided in Appendix C of this report. A total of 29 Area Walk-bys were performed for PINGP Unit 2.

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

- Anchorage conditions (if visible without opening equipment)
- Significantly degraded equipment in the area
- A visual assessment (from the floor) of cable/conduit raceways and HVAC ducting (e.g., condition of supports or fill conditions of cable trays)
- Potentially adverse seismic interactions including those that could cause flooding, spray, and fires in the area
- Other housekeeping items that could cause adverse seismic interaction (including temporary installations and equipment storage)
- Scaffold construction was inspected to verify compliance with site pprocedures (Reference 38).

- General plant conditions were inspected to verify compliance with site procedures (Reference 39).

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 C 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.

5.3.1 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. Any seismically-induced flooding/ spray interactions that were identified during the Area Walk-bys are documented on the AWCs in Appendix C and Table 5-3 below, as applicable.

5.3.2 Seismically-Induced Fire Interactions

Seismically-induced fire interactions can occur when equipment or systems containing hazardous/flammable material fail or rupture. This type of seismic interaction was

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

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

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

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

The Seismic Walkdown Engineers exercised their judgment to identify only those seismically-induced interactions that could lead to fires. Any seismically-induced fire interactions that were identified during the Area Walk-bys are documented on the AWCs in Appendix C and Table 5-3 below, as applicable.

5.3.3 Issues Identified during Area Walk-bys

During the Area Walk-Bys, the SWEs identified several instances where the seismic housekeeping was not in accordance with site procedures. These instances were noted on the AWCs and the issues were entered into the site CAP. Table 5-3 at the end of this section provides a summary of the issues identified during the Area Walk-Bys. The issues are associated with Area Walk-By designations, which are provided in Appendix C.

In total, 24 issues were identified during the Area Walk-Bys and entered into the site's CAP. One observation identified during the Area Walk-Bys is being resolved in the work management process, and is conservatively reported in this table for tracking purposes. No potentially adverse seismic conditions were identified that resulted in a seismic licensing basis evaluation.

Table 5-2: Prairie Island Unit 2 SWC CAP Status

Equipment ID	Description of Issue	CAP#	Status
245-392	The light bar is being held by two "S" hooks. One of the "S" hooks is open. If the light bar were to swing, it might hit the pump. Although this potential seismic interaction might be credible, it is not significant since the pump would still be able to perform its intended safety function.	1351884	Closed to CAP 1352001 and WR 83533.
245-122	Both of the "S" hooks holding the light fixture above the 22CC pumps are open. The power cord is taped and seems to be able to support the light fixture. The light fixture is in contract with the "L" column and it is possible the light may break during seismic motion.	1351916	Closed to WR 83541.
245-122	The CC Pump collection barrel is tied with rope to the Unistrut. The barrel has a note attached that references CAP 1317022 and WO 74792.	1351901	Closed to WR 83539, which is complete.
245-122	There is duct tape on the bottom of the rigging beam above the CC pump. It is a housekeeping issue, and not a seismic concern.	1351913	Closed.
Multiple	Multiple open "S" hooks for lighting fixtures were identified during the Seismic Walkdowns. An action request was initiated to track all of these occurrences and perform an extent of condition. See Appendix F for all open "S" hook observations.	1352001	Open – Work Request (WR) 84434, 83556, and 83533 are associated with this observation.
55320	There are missing cap nuts on the south side of the cabinet. This is a maintenance issue and not a seismic issue.	1356613	Closed to WR 84674 and WO 467408.
2LT-921	The cabinet labeled "clean chemical handling equipment" (36" x 24" x 75" high) is stored about 4" from the level transmitter.	1351219	Closed.
B-2	Duct tape was identified behind Panel E-2 at about 8' high between the CVCS letdown and RHR labels.	1352954	Closed to WR 83785, which is complete.
B-2	There is a bent back cover plate for the CVCS letdown monitor. It is located at about 10' high near the CVCS letdown label. The cover plate is non-structural and is not an adverse seismic condition.	N/A	WR 84959 initiated.

Table 5-2: Prairie Island Unit 2 SWC CAP Status			
Equipment ID	**Description of Issue**	**CAP#**	**Status**
E-2	In addition to the foreign material, the pig tail of a cable with a multipin connector was found stored on top of the box. It is not a seismic concern, but it is recommended that the site evaluate the condition.	1357129	Closed to WR 84837 and WO 467495.
EM-B2	A mounting screw was discovered missing inside the back of this panel in one of the electronic modules.	1353340	Open – WR 83890 and WO 465970 are associated with this observation.
MV-32384	The conduit rod stirrup below the valve is missing one bolt. This is not a seismic issue for the valve, but requires evaluation.	1356520	Closed to WR 84626 and WO 467183.
PNL 22	The counterweight of the door pulley system may strike panel PNL 22.	1352343	Closed to WRs 83645, 83646, and WOs 465563, 465564.
PNL 261	Plant engineering investigated this observation and determined that the fourth bolt is visible behind the spring-loaded nut holding the panel enclosure to the Unistrut. Panel 261 therefore has four mounting bolts connecting it to the concrete wall, and no concern is present. CAP 1352221 was initiated to document this observation. WR 83615 was also initiated to perform any field work required by CAP 1352221.	1352221	Closed to WR 83615 and WO 465451.

Table 5-3: Prairie Island Unit 2 Area Walk-by CAP Status

Area Walk-by Designation	Description of Issue	CAP#	Status
1	It appears that CS-19543 is not anchored to the wall. There are four external holes in the bracket for fasteners but no fasteners are present.	1353280	Closed to WR 83853, which is complete.
1	Two drums are present under the component cooling heat exchanger to collect leak off. The drums are poorly tied off by rope to a small copper drain line for the 11 component cooling pump unit cooler.	1353327	Closed to WR 83865 and WO 465979.
2	A top cover plate wing nut is missing from the 2RE-39 radiation monitor. There is also a loose screw on the side door cover. The monitor is resting on the floor near the wall, and is located between the 22 component cooling pump and the stairs to the upper level.	1352076	Closed to WR 83571.
3	Next to the pressure gauge PI-18249, there is a portable cord reel supported on the wall by a pin. Since the cord is free to rotate, the reel could swing in a seismic event and potentially impact the valve and tubing of the pressure gauge. Work request has been initiated to either secure the portable cord reel from movement or re-locate.	1352923	Closed to WR 83779 and WO 465931.
3	Radiation monitor DRM-2 is attached magnetically to electrical panel 2R1A54. The magnetic base may not be strong enough to prevent the monitor from falling and impacting the pressure gauge PI-18249 or associated tubing. 2 CAP were issued - one to evaluate long term out of service time for the radiation monitor and the second one to evaluate any potential procedures deficiencies in the deficiencies in the installation of portable radiation monitors.	1352769 & 1352792	1352769 is open, but CAP 1352792 is closed. The monitor was relocated and secured.

Table 5-3: Prairie Island Unit 2 Area Walk-by CAP Status			
Area Walk-by Designation	**Description of Issue**	**CAP#**	**Status**
4	The guard cover on 22 safety injection (SI) pump coupling has two loose nuts for the bracket attached to the foundation of the SI pump. The bolts are effective to withstand seismic loads. The coupling guard will remain in place during a seismic event. It is seismically acceptable, but the loose bolts should be tightened.	1352699	Closed to WR 83742, which is complete.
4	An oil can is sitting on the pipe support for MV-32185. There was no holder found for storing the can, which is against the site's seismic housekeeping procedure.	1352727	Closed to WR 83746 and WO 346607.
4	A steam heating line was found tie wrapped to the line that includes the 2-RCCH-538 support. The tie wrap is a poor housekeeping practice, and should be removed.	1352959	Closed to WR 83786. This is complete.
9	The wrench hanging from 2MS-27-2 is a potential hazard to SOV-33266 and SV-33264. The recommendation is to re-locate the wrench to a height lower than the SOV elevation, so that is no longer a potential hazard.	1352195	Closed to WR 83607.
9	The chain fall located near LFT-495 should be restrained so that it doesn't have the potential to impact the transmitter.	1352586	Closed to WR 83723.
Multiple	Multiple open "S" hooks for lighting fixtures were identified during the Seismic Walkdowns. An action request was initiated to track all of these occurrences and perform an extent of condition. See Appendix F for all open "S" hook observations.	1352001	Open - WR 84434, 83556, and 83533 are associated with this observation.
20	After further evaluation by plant engineering, it was determined that the safety classification of this indicator may not meet the requirements of the plant's equipment classification procedure. PI-11979 is currently classified as non-safety related but it may need to be classified as safety related. CAP 1352398 has been initiated to evaluate the safety classification of the starting air indicator.	1352398	Open.

Table 5-3: Prairie Island Unit 2 Area Walk-by CAP Status

Area Walk-by Designation	Description of Issue	CAP#	Status
20	The starting air indicator (PI-11979) for the 22 diesel driven cooling water pump has a bracket with provisions for four screws. However, only two bolts are attaching the indicator to the concrete wall. CAP 1351936 has been initiated to evaluate this observation and WR 8354 was initiated off of this action request to correct the condition.	1351936	Closed to WR 83545 and WO 466341.
23	The guard to belt drive on 121 instrument air (013-011) is missing two anchor bolts.	1352975	Closed to WR 83793.
23	Chain fall for 2AF-13-1 is within eight inches of interacting with MCC 1A Bus 1. The chain fall needs to be restrained.	1352961	Closed to WR 83796.
26	The counterweight "S" hook is also open and the counterweight could fall to the floor or against PNL 22	1352343	Closed to WR 83645 and WR 83646.
24	The clamp of the conduit going into Panel 227 is loose. The clamp bolt is loosely attached to the Unistrut location of the clamp, which is 6ft above the floor.	1353370	Closed to WR 83887, which is complete.
25	The 123 instrument air compressor guard is missing a few anchors.	1352154	Closed to WR 83594 and WO 465439.
25	The fire extinguisher (301) is on a short bent bracket. It is recommended that the bracket gets bent back to normal (horizontal) position or is replaced.	1352094	Closed to WR 83577.
27	Duct tape is preventing a chain for a fluorescent light fixture from making contact with a conduit. This type of restraint is not necessary and should be removed. It is a housekeeping issue and not a seismic concern.	1352191	Open. WR 83605 is also associated with this issue.

Table 5-3: Prairie Island Unit 2 Area Walk-by CAP Status			
Area Walk-by Designation	**Description of Issue**	**CAP#**	**Status**
29	There are lighting diffusers tied off to the support grid. Unit 1 and Unit 2 "C" panels have a fluorescent light fixture on chains too close (within 1"-2") to the panel.	1352209	Open.
29	Unit 1 and Unit 2 "E" panels have side panels that have slid out of position. This is a housekeeping issue and not a seismic concern.	1352102	Closed to WR 83579, which is complete.
29	Fire extinguisher bracket 224 has a rotated bracket (into the insulation) and should be repaired.	N/A	WR 83584 initiated.
29	The filing cabinets adjacent to the main control board in both Unit 1 and Unit 2 are close to the main control board.	1357683	Open.
29	The cart adjacent to the Protection Systems III and the cart adjacent to cabinets RPI-1, -2, and -3 in Unit 1 are close to the equipment. The chain is not used to restrain the carts.	1357686	Open.

6 Licensing Basis Evaluations

Section 5, *Seismic Licensing Basis Evaluation*, of Reference 1 provides a detailed process to perform and document seismic licensing basis evaluations of SSCs identified when potentially adverse seismic conditions are identified during the equipment Seismic Walkdowns or Area Walk-Bys. The process provides a means to identify, evaluate and document how the identified potentially adverse seismic condition meets the site's seismic licensing basis without entering the condition into the site's Corrective Action Program (CAP). Further, the process directs that if a condition cannot be readily shown to meet the seismic licensing basis, then the identified condition should be entered into the plant's CAP where it will be determined whether the condition does or does not meet the seismic licensing basis.

All potentially adverse seismic conditions that were identified during the equipment Seismic Walkdowns or Area Walk-Bys were entered into the plant's CAP. Therefore, no seismic licensing basis evaluations were completed in accordance with the process documented in Section 5 of Reference 1. Tables 5-2 and 5-3 at the end of Section 5 of this report provide a summary of the issues identified in both the Seismic Walkdowns and Area Walk-Bys.

7

IPEEE Vulnerabilities Resolution Report

In the NRC 10 CFR 50.54(f) letter (Reference 6), the NRC requested that licensees provide a list of plant-specific vulnerabilities (including any seismic anomalies, outliers, or other findings) identified by the Individual Plant Examination of External Events (IPEEE) as well as a description of the actions taken to eliminate or reduce them (including their completion dates), as part of NTTF Recommendation 2.3 – Seismic.

Section 7, IPEEE Vulnerabilities, of Reference 1 provides guidance for addressing and reporting the evaluations related to the Individual Plant Examination of External Events (IPEEE) program and the actions taken in response to the vulnerabilities that were identified during that program. According to the guidance in Reference 1, the submittal report should describe the actions that were taken to eliminate or reduce the IPEEE seismic vulnerabilities, and the date the actions were documented as complete. Table 7-1 and the following paragraphs provide this information.

On October 23, 2008, the NRC Staff transmitted a Request for Additional Information (RAI) to NSPM as part of their review of PINGP plant license renewal application (Reference 5). The NRC's RAI "SAMA 3.c" requested the following information:

"As stated in the IPEEE seismic analysis, several potential seismic outliers were dispositioned through an analysis process which determined that the impacted function was not required or could be recovered, or that an alternate means for performing the associated function was available...For those outliers stated as being resolved through the closure of USI A-46 (IPEEE Section A.2.4.1.1), confirm that all corrective actions have been completed, and that their use is supported by procedures and training, as appropriate." (Reference 5)

NSPM provided a response to this RAI in a letter dated November 21, 2008 (Reference 40). In its response, NSPM stated that components listed in Section A.2.4.1.1 of PINGP IPEEE provide a summary of the SQUG outliers that pertain to the IPEEE scope. The NSPM RAI response also noted that in a letter from the NRC to Northern States Power dated August 5, 1998, *Resolution of Unresolved Safety Issue (USI) A-46 for PINGP, Units 1 and 2 (TAC NOS. M69474 and M69475)*, the NRC issued a Safety Evaluation stating that the NRC had received notification that all outliers had been resolved, except for four equipment outliers. NSPM had notified the NRC of equipment outliers, resolution descriptions, and resolution timeline, if not already completed, in Attachment 2 of an RAI response letter sent to the NRC from NSPM dated November 17, 1997 (Reference 41). In this 1997 letter, NSPM committed to resolve the four remaining equipment outliers during PINGP Unit 2 outage in December 1998 and PINGP Unit 1 outage in May 1999.

Of those four remaining equipment outliers, three (3) were related to components listed in section A.2.4.1.1 of the PINGP IPEEE. The equipment included control valves CV-39409, CV-39401, and Motor Control Center MCC-2LA2. The actions taken to resolve the three outliers are described below in Table 7-1. Per the work completed as described below, all outliers identified in Section A.2.4.1.1 of PINGP IPEEE have been

resolved. Aside from this completed work, no additional procedure changes or training is required to close the identified outliers.

Table 7-1: Prairie Island IPEEE Seismic Vulnerabilities

Equipment Description	Potential Failure Mode	Resolution	Date Completed
CV-39409	Control valve CV-39409 was identified as an outlier because contact with surrounding conduits could break the solenoid tap connection.	The airline to valve CV-39409 was relocated such that the airline is greater than two (2) inches from other electrical conduits in the area.	1R20 refueling outage in May of 1999
CV-39401	Control valve CV-39401 was identified as an outlier because contact with surrounding conduits could break the solenoid tap connection.	The airline and associated solenoid valve for CV-39401 were rerouted so that the airline and solenoid valve are a minimum of two inches away from existing conduits. Also, the electrical junction box associated with the solenoid valve for CV-39401 was relocated such that the box is greater than two inches from other electrical conduits in the area.	1R20 refueling outage in May of 1999
MCC-2LA2	Motor Control Center MCC-2LA2 was identified as an outlier because it was observed that the MCC rocked about its weak axis when bumped, making the welding at the base suspect.	New angle support braces were installed at the base of MCC-2LA2 to increase the structural stability of the MCC.	2R19 refueling outage in November of 1998

8 Peer Review

A peer review team consisting of four individuals was assembled and peer reviews were performed in accordance with Section 6, *Peer Reviews*, of Reference 1. The Peer Review process included the following activities:

- Review of the selection of SSCs included on the SWEL
- Review of a sample of the checklists prepared for the Seismic Walkdowns and Area Walk-Bys
- Review of Licensing basis evaluations, as applicable
- Review of the decisions for entering the potentially adverse conditions into the CAP process
- Review of the submittal report
- Provide a summary report of the peer review process in the submittal report

The peer reviews were performed independently from this report and the summary Peer Review Report is provided in Appendix E of this report.

9 References

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

1. EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012.

2. Prairie Island Nuclear Generating Plant Updated Final Safety Analysis Report (USAR), Revision 31.

3. NSP (M.D. Wadley) Letter to NRC, "Response to Generic Letter 87-02, Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Issue (USI) A-46," dated November 20, 1995 (not used).

4. Pioneer Service & Engineering Co. Report JAB-PS-02; "Prairie Island Nuclear Generating Plant Earthquake Analysis of the Reactor-Auxiliary-Turbine Building", dated November 29, 1968 (not used).

5. NRC Letter to NSPM, "Request for Additional Information Regarding the Analysis of Severe Accident Mitigation Alternatives for Prairie Island Nuclear Generating Plant, Units 1 and 2," dated October 23, 2008, ADAMs Accession No. ML082950604.

6. 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*," dated March 12, 2012, ADAMS Accession No. ML12056A046.

7. John A. Blume & Associates, Engineers, "Prairie Island Nuclear Generating Plant Earthquake Analysis: Reactor-Auxiliary-Turbine Building Response Acceleration Spectra", JAB-PS-04, February 16, 1971.

8 NRC Letter, "Endorsement of Electric Power Research Institute (EPRI) Draft Report 1025286, 'Seismic Walkdown Guidance,'" dated May 31, 2012, ADAMS Accession No. ML12145A529.

9. Not used.

10. NSPM Letter to NRC, "Prairie Island Nuclear Generating Plant's 120-Day Response to NRC Request for Information Pursuant to 10 CFR 50.54(f) Regarding the Seismic Aspects of Recommendations 2.3 of the Near-Term Task Force Review of Insights from the Fukushima Dai-ichi Accident," dated July 9, 2012.

11. Not used.

12. Not used.

13. Not used.

14. ACI 318-71, 77, 83, *Building Code Requirements for Reinforced Concrete*
15. ACI 301, *Specifications for Structural Concrete for Buildings*
16. ACI 347, *Recommended Practice for ANSI A145.1 Concrete Formwork*
17. ACI 305, *Recommended Practice for Hot ANSI A170.1 Weather Concreting*
18. ACI 211.1, *Recommended Practice for Selecting Proportions for Normal Weight Concrete*
19. ACI 304, *Recommended Practice for Measuring, Mixing, Transporting, and placing concrete*
20. ACI 315, *Manual of Standard Practice for Detailing Reinforced Concrete Structures*
21. ACI 306, *Recommended Practice for Cold Weather Concreting*
22. ACI 309, *Recommended Practice for Consolidation of Concrete*
23. ACI 308, *Recommended Practice for Curing Concrete*
24. ACI 214, *Recommended Practice for ANSI A146.1 Evaluation of Compression Test Results of Field*
25. ACI 311, *Recommended Practice for Concrete Inspection*
26. ACI 304, *Preplaced Aggregate Concrete for Structural and Mass Concrete*
27. Report by ACI Committee 304, *Placing Concrete by Pumping Method*
28. AISC-69,78, *Specification for the Design, Fabrication, and Erection of Structural Steel for Building*
29. AWS D1.1, *Structural Welding Code*
30. ASME Boiler & Pressure Vessel Code, Section III -

    ASME-1971, S73 Division 1, Subsection NE

    ASME-1974, S75 Division 1, Subsection NF

    ASME-1973 Division 2, *Proposed Standard Code for Concrete Reactor Vessels and Containments Issued for Trial Use and Comments*

    ASME-1980 Division 2, CC 6000

ASME-1992 1992 Addenda, Division 1, Section XI, Subsection IWL, IWE

31. American Public Health Assoc. (APHA) *Test Methods Sulphides in Water, Standard Methods for the Examination of Water and Waste Water*
32. ASTM Annual Books of ASTM Standards
33. CRSI, MSP-1, *Manual of Standard Practice*
34. ANSI N45.2.5, *Proposed Supplementary Q.A. Requirements for Installation, Inspection and Testing of Structural Concrete and Structural Steel During Construction Phase of Nuclear Power Plants*
35. CRD, *Chief of Research and Development Standards, Department of the Army, Handbook for Concrete and Cement Volume I and II, Corps of Engineers U.S. Army*
36. ACI-349-76, 85, *Code Requirements for Nuclear Safety Related Concrete Structures*
37. AISI, *Specification for design of cold-formed steel structural members*
38. Prairie Island Nuclear Generating Plant Maintenance Procedure D80, Rev. 26, "Scaffolding, Ladders and Cable Tray Platforms."
39. Prairie Island Nuclear Generating Plant Seismic Housekeeping Procedure H41, Rev. 12, "Control of Temporary Structures and Equipment."
40. NSPM (M.D. Wadley) Letter to NRC, "Responses to NRC Requests for Additional Information Dated October 23, 2008 Regarding Application for Renewed Operating Licenses," dated November 21, 2008, ADAMS Accession No. ML083370505.
41. NSPM (J.P. Sorensen) Letter to NRC, "Response to Request for Additional Information on the Prairie Island Nuclear Generating Plant, Units 1 and 2, Resolution of Unresolved Safety Issue A-46 (TAC Nos. M69474 and M69475)," dated November 17, 1997.

A
Equipment Lists

Appendix A contains the equipment lists that were developed as part of the equipment selection for the SWEL. Note that the Base List 2 and SWEL 2 associated with the spent fuel pool equipment are not included in this report, since they are included as part of the PINGP Unit 1 seismic walkdown submittal report.

The following contents are found in Appendix A:

A.1 Equipment Selection – Base List 1

Table A-1 is a list of the equipment coming out of Screen #2 and entering Screen #3. The screens utilized for selecting equipment for the SWEL is described in Section 4 of this report. This list of initial equipment is called "Base List 1."

Table A-1: Prairie Island Unit 2 – Base List 1

Equipment Tag	Description
17705	22 AFP LO SUCT PRESS TRIP PS
17778	21 AFP LO DISCH PRESS TRIP PS
17779	21 AFP LO SUCT PRESS TRIP PS
31060	22 AFWP MN STM THTL CV
31230	2 REAC CLNT LOOP PRZR LTDN LN ISOL CV A
31234	2 REAC CLNT LOOP PRZR PWR OPRTD RLF CV A
31279	2 REAC CLNT LOOP PRZR LTDN LN ISOL CV B
32019	LOOP A MN STM TO 22 TD AFWP MV
32020	LOOP B MN STM TO 22 TD AFWP MV
32046	21 SGB ISOL MV
32147	21 FC CLG WTR RTRN ISOL MV A
32148	21 FC CLG WTR RTRN ISOL MV B
32153	23 FC CLG WTR RTRN ISOL MV A
32154	23 FC CLG WTR RTRN ISOL MV B
32194	2 REAC EXCS LTDN LINE ISOL MV A
32210	2 REAC EXCS LTDN LINE ISOL MV B
32247	22 TD AUX FW TO 22 STM GEN MV
32248	21/22 AUX FW TO 21 STM GEN ISOL MV
32249	21/22 AUX FW TO 22 STM GEN ISOL MV
32334	21 AUX BLDG CLG WTR RTRN HDR ISOL MV
32383	21 AFWP DSCH TO 21 STM GEN MV
32384	21 AFWP DSCH TO 22 STM GEN MV
32386	21 FC CLG WTR INLT ISOL MV
33251	21 REGEN HT EXGR CHG LN OUTL SV
33258	21 LOOP A MN STM HDR SV A
33259	21 LOOP A MN STM HDR SV B
33260	21 LOOP A MN STM HDR AIR EXHT SV A
33261	21 LOOP A MN STM HDR AIR EXHT SV B
33263	22 LOOP B MN STM HDR SV A
33264	22 LOOP B MN STM HDR SV B
33265	22 LOOP B MN STM HDR AIR EXHT SV A
33266	22 LOOP B MN STM HDR AIR EXHT SV B
33490	2 REAC CLNT LOOP PRZR LTDN LN ISOL SV
33491	2 REAC CLNT LOOP PRZR LTDN LN ISOL SV 2

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
33492	21 MD AUX FW PMP RCRC/LUBE OIL CLG SV
33493	22 TD AUX FW PMP RCRC/LUBE OIL CLG SV
33498	2 DSL GEN RM OUTS AIR B TRN DMPR SV
33695	21 CLASS I ROOF EXHT FAN DMPR SV
33696	21 SCVNG & COMTN AIR DMPR SV A
33764	2 REAC CLNT LOOP PRZR PWR OPRTD RLF VLV A SV
33829	21 SCVNG & COMBTN AIR DMPR SV B
37415	21; 23 FCU CLG WTR SUPPLY SV
37423	21; 23 FCU CLG WTR RETURN SV
50000	D5 DSL GEN BENCHBOARD
50200	D5 DSL GEN VERTICAL PANEL
55320	D5 DSL GEN ENG 1 AUX DESK
55420	D5 DSL GEN ENG 2 AUX DESK
55820	D6 DSL GEN ENG 1 AUX DESK
55920	D6 DSL GEN ENG 2 AUX DESK
60000	D6 DSL GEN BENCHBOARD
60200	D6 DSL GEN VERTICAL PANEL
70350	22 DD CLWP LCL PNL
053-322	22 COOLING WATER PUMP DIESEL OIL DAY TANK
2 CRDM/REG	5KVA SOLA REGULATOR
2 CRDM/XFMR	CRDM MAIN CONTROL TRANSFORMER
201/XFMR	201 TRANSFORMER
202/XFMR	202 TRANSFORMER
21 AUX FW PUMP	21 AUXILIARY FEEDWATER PUMP MOTOR DRIVEN
21 BATT	21 BATTERY
21 BATT CHG	21 BATTERY CHARGER
21 BATT CHG/XFM	21 BATTERY CHARGER TRANSFORMER
21 BCM/XFMR	BORON CONC MEAS TRANSFORMER
21 FUSE BOX	21 FUSE BOX
21 IBA/XFMR	INTERRUPTABLE BUS AUX TRANSFORMER
21 INV	21 INVERTER
211M/XFMR	211M TRANSFORMER
211M/XFMR	211M TRANSFORMER
212M/XFMR	212M TRANSFORMER
212M/XFMR	212M TRANSFORMER
21-3/CT1	21 FW PUMP CURRENT TRANSFORMER
21-3/CT2	21 FW PUMP CURRENT TRANSFORMER
21-3/PT1	21 FW PUMP POTENTIAL TRANSFORMER
213-011	22 CL PUMP DIESEL START-UP AIR COMPRESSOR
217-111	21 AUXILIARY FEEDWATER PUMP LUBE OIL COOLER
217-112	22 AUXILIARY FEEDWATER PUMP LUBE OIL COOLER

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
217-121	22 CL PUMP GEAR OIL COOLER
217-201	D5 1A L/O COOLER
217-202	D5 1B L/O COOLER
217-203	D5 2A L/O COOLER
217-204	D5 2B L/O COOLER
217-205	D6 1A L/O COOLER
217-206	D6 1B L/O COOLER
217-207	D6 2A L/O COOLER
217-208	D6 2B L/O COOLER
217-211	D5 ENG 1 GOV OIL COOLER
217-212	D5 ENG 2 GOV OIL COOLER
217-213	D6 ENG 1 GOV OIL COOLER
217-214	D6 ENG 2 GOV OIL COOLER
21MR	21 MISCELLANEOUS RELAY RACK
21MSAR	21 MISC SYSTEMS AUXILIARY RACK
21RM	RADIATION MONITORING RACK 21RM
22 BATT	22 BATTERY
22 BATT	22 BATTERY (& BATTERY RACK)
22 BATT CHG	22 BATTERY CHARGER
22 BATT CHG/XFM	22 BATTERY CHARGER TRANSFORMER
22 FUSE BOX	22 FUSE BOX
22 INV	22 INVERTER
221M/XFMR	221M TRANSFORMER
222M/XFMR	222M TRANSFORMER
22-3/CT1	22 FW PUMP CURRENT TRANSFORMER
22-3/CT2	22 FW PUMP CURRENT TRANSFORMER
22-3/PT1	22 FW PUMP POTENTIAL TRANSFORMER
22MR	22 MISCELLANEOUS RELAY RACK
23 INV	23 INVERTER
23-1/CT1	121 SCREENWASH PUMP CURRENT TRANSFORMER
23-1/CT2	121 SCREENWASH PUMP CURRENT TRANSFORMER
232-281	21 SCREENHOUSE ROOF EXHAUST FAN
232-291	21 SCREENHOUSE DIESEL COOLING SUPPLY FAN
232-421	21 D5 DSL RM COOLING FAN
232-422	22 D6 DSL RM COOLING FAN
232-441	21 D5 DSL GEN BLDG SPLY FAN
232-442	22 D6 DSL GEN BLDG SPLY FAN
232-443	23 D5 DSL GEN BLDG SPLY FAN
232-444	24 D6 DSL GEN BLDG SPLY FAN
232-451	21 D5 DSL GEN BLDG RETURN FAN
232-452	22 D6 DSL GEN BLDG RETURN FAN

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
232-453	23 D5 DSL GEN BLDG RETURN FAN
232-454	24 D6 DSL GEN BLDG RETURN FAN
232-461	D5 ENG 1 HT/LT RADIATOR FAN 1
232-462	D5 ENG 1 HT/LT RADIATOR FAN 2
232-463	D5 ENG 2 HT/LT RADIATOR FAN 1
232-464	D5 ENG 2 HT/LT RADIATOR FAN 2
232-465	D6 ENG 1 HT/LT RADIATOR FAN 1
232-466	D6 ENG 1 HT/LT RADIATOR FAN 2
232-467	D6 ENG 2 HT/LT RADIATOR FAN 1
232-468	D6 ENG 2 HT/LT RADIATOR FAN 2
23-3/CT1	21 CW PUMP CURRENT TRANSFORMER
23-3/CT2	21 CW PUMP CURRENT TRANSFORMER
23-3/PT1	21 CW PUMP POTENTIAL TRANSFORMER
23-4/CT1	21 CL PUMP CURRENT TRANSFORMER
23-4/CT2	21 CL PUMP CURRENT TRANSFORMER
234-031	D5 DIESEL GENERATOR
234-032	D6 DIESEL GENERATOR
234BT/PT1	234BT POTENTIAL TRANSFORMER
234BT/PT2	234BT POTENTIAL TRANSFORMER
235-081	22 CL PUMP DIESEL JACKET CLG HX
235-111	21 REGENERATIVE HEAT EXCHANGER
235-131	21 SEAL WATER HEAT EXCHANGER
235-201	D5 ENG 1 L/O PREHEATING HEAT EXCHANGER
235-202	D5 ENG 2 L/O PREHEATING HEAT EXCHANGER
235-203	D6 ENG 1 L/O PREHEATING HEAT EXCHANGER
235-204	D6 ENG 2 L/O PREHEATING HEAT EXCHANGER
23-6/CT1	21 HD PUMP CURRENT TRANSFORMER
23-6/CT2	21 HD PUMP CURRENT TRANSFORMER
23-7/CT1	23 HD PUMP CURRENT TRANSFORMER
23-7/CT2	23 HD PUMP CURRENT TRANSFORMER
23-8/CT1	203-205-207 STA AUX XFMR CURRENT TRANSFORMER
23-8/CT2	203-205-207 STA AUX XFMR CURRENT TRANSFORMER
23A INV/XFMR	23 INVERTER ALT SOURCE TRANSFORMER
23M INV/XFMR	23 INVERTER MAIN TRANSFORMER
23M/CT	23M CURRENT TRANSFORMER
23M/PT	23M POTENTIAL TRANSFORMER
23MR	23 MISCELLANEOUS RELAY RACK
24 INV	24 INVERTER
24-2/CT1	22 CW PUMP CURRENT TRANSFORMER
24-2/CT2	22 CW PUMP CURRENT TRANSFORMER
24-2/PT1	22 CW PUMP POTENTIAL TRANSFORMER

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
24-5/CT1	22 HD PUMP CURRENT TRANSFORMER
24-5/CT2	22 HD PUMP CURRENT TRANSFORMER
245-041	21 CHARGING PUMP
245-042	22 CHARGING PUMP
245-071	21 SI PMP
245-122	22 CC PMP
245-201	22 AUXILIARY FEEDWATER PUMP TURBINE DRIVEN
245-331	21 AUXILIARY FEEDWATER PUMP MOTOR DRIVEN
245-392	22 DD CLP
245-821	22 CL PUMP CNSTNT LUBE OIL PUMP
245-881	21 D5 FO STG TK XFER PUMP
245-882	22 D6 FO STG TK XFER PUMP
245-883	23 D5 FO STG TK XFER PUMP
245-884	24 D6 FO STG TK XFER PUMP
245-891	21 D5/D6 FO RCVG TK RECIRC PUMP
245-901	D5 ENG 1 ENG DRVN FO PUMP
245-902	D5 ENG 2 ENG DRVN FO PUMP
245-903	D6 ENG 1 ENG DRVN FO PUMP
245-904	D6 ENG 2 ENG DRVN FO PUMP
245-911	D5 ENG 1 FO BACKUP PUMP
245-912	D5 ENG 2 FO BACKUP PUMP
245-913	D6 ENG 1 FO BACKUP PUMP
245-914	D6 ENG 2 FO BACKUP PUMP
245-921	D5 1A ENG DRVN L/O PUMP
245-922	D5 1B ENG DRVN L/O PUMP
245-923	D5 2A ENG DRVN L/O PUMP
245-924	D5 2B ENG DRVN L/O PUMP
245-925	D6 1B ENG DRVN L/O PUMP
245-926	D6 1B ENG DRVN L/O PUMP
245-927	D6 2A ENG DRVN L/O PUMP
245-928	D6 2B ENG DRVN L/O PUMP
245-931	D5 ENG 1 AC PRELUBE PUMP
245-932	D5 ENG 2 AC PRELUBE PUMP
245-933	D6 ENG 1 AC PRELUBE PUMP
245-934	D6 ENG 2 AC PRELUBE PUMP
245-941	D5 ENG 1 DC BU PRELUBE PUMP
245-942	D5 ENG 2 DC BU PRELUBE PUMP
245-943	D6 ENG 1 DC BU PRELUBE PUMP
245-944	D6 ENG 2 DC BU PRELUBE PUMP
245-971	D5 ENG 1 ENG DRVN HT CLNT PUMP
245-972	D5 ENG 2 ENG DRVN HT CLNT PUMP

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
245-973	D6 ENG 1 ENG DRVN HT CLNT PUMP
245-974	D6 ENG 2 ENG DRVN HT CLNT PUMP
245-981	D5 ENG 1 ENG DRVN LT CLNT PUMP
245-982	D5 ENG 2 ENG DRVN LT CLNT PUMP
245-983	D6 ENG 1 ENG DRVN LT CLNT PUMP
245-984	D6 ENG 2 ENG DRVN LT CLNT PUMP
245-991	D5 ENG 1 HT CLNT PREHTR CIRC PUMP
245-992	D5 ENG 2 HT CLNT PREHTR CIRC PUMP
245-993	D6 ENG 1 HT CLNT PREHTR CIRC PUMP
245-994	D6 ENG 2 HT CLNT PREHTR CIRC PUMP
24-6/CT1	204-206-209 STA AUX XFMR CURRENT TRANSFORMER
24-6/CT2	204-206-209 STA AUX XFMR CURRENT TRANSFORMER
246-011	22 CL PUMP DIESEL START-UP AIR RECEIVERS
246-031	D5 1A START AIR RECEIVER
246-032	D5 1B START AIR RECEIVER
246-033	D5 2A START AIR RECEIVER
246-034	D5 2B START AIR RECEIVER
246-035	D6 1A START AIR RECEIVER
246-036	D6 1B START AIR RECEIVER
246-037	D6 2A START AIR RECEIVER
246-038	D6 2B START AIR RECEIVER
24-7/CT A	21 CHILLER PH A CURRENT TRRANSFORMER
24-7/CT C	21 CHILLER PH C CURRENT TRANSFORMER
24-7/CT1	21 CHILLER CURRENT TRANSFORMER
24-7/CT2	21 CHILLER CURRENT TRANSFORMER
24-7/GND CT	21 CHILLER GND DET CURRENT TRANSFORMER
247-021	D5 ENG 1 HT CLNT PREHEATER
247-022	D5 ENG 2 HT CLNT PREHEATER
247-023	D6 ENG 1 HT CLNT PREHEATER
247-024	D6 ENG 2 HT CLNT PREHEATER
24A INV/XFMR	24 INVERTER ALT SOURCE TRANSFORMER
24M INV/XFMR	24 INVERTER MAIN TRANSFORMER
24M/CT	24M CURRENT TRANSFORMER
24M/PT	24M POTENTIAL TRANSFORMER
24MR	24 MISCELLANEOUS RELAY RACK
25 INV	25 INVERTER
25-2/CT1	202 STA AUX XFMR CURRENT TRANSFORMER
25-2/CT2	202 STA AUX XFMR CURRENT TRANSFORMER
25-3/CT1	22 CC PUMP CURRENT TRANSFORMER
25-3/CT2	22 CC PUMP CURRENT TRANSFORMER
253-011	21 PRESSURIZER RELIEF TANK

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
253-021	21 VOLUME CONTROL TANK
253-081	21 REFUELING WATER STORAGE TANK
253-331	21 D5 FO STORAGE TANK
253-332	22 D6 FO STORAGE TANK
253-333	23 D5 FO STORAGE TANK
253-334	24 D6 FO STORAGE TANK
253-361	21 D5 FO DAY TANK
253-362	22 D6 FO DAY TANK
253-371	D5 ENG 1 FO LEAKAGE TANK
253-372	D5 ENG 2 FO LEAKAGE TANK
253-373	D6 ENG 1 FO LEAKAGE TANK
253-374	D6 ENG 2 LEAKAGE TANK
253-401	D5 ENG 1 HT EXPANSION TANK
253-402	D5 ENG 2 HT EXPANSION TANK
253-403	D6 ENG 1 HT EXPANSION TANK
253-404	D6 ENG 2 HT EXPANSION TANK
253-411	D5 ENG 1 LT EXPANSION TANK
253-412	D5 ENG 2 LT EXPANSION TANK
253-413	D6 ENG 1 LT EXPANSION TANK
253-414	D6 ENG 2 LT EXPANSION TANK
25-6/CT1	D2 EMERG GEN CURRENT TRANSFORMER
258-011	21 CLG WTR STRNR
26-0/CT1	21 AFW PUMP CURRENT TRANSFORMER
26-0/CT2	21 AFW PUMP CURRENT TRANSFORMER
26-2/CT1	D1 EMERG GEN CURRENT TRANSFORMER
262-441	D5 ENG 1 HT/LT RADIATOR
262-442	D5 ENG 2 HT/LT RADIATOR
262-443	D6 ENG 1 HT/LT RADIATOR
262-444	D6 ENG 2 HT/LT RADIATOR
26-5/CT1	21 CC PUMP CURRENT TRANSFORMER
26-6/CT1	201 STA AUX XFMR CURRENT TRANSFORMER
26-6/CT2	201 STA AUX XFMR CURRENT TRANSFORMER
266-011	D5 1A INBOARD AIR AFTERCOOLER
266-012	D5 1B INBOARD AIR AFTERCOOLER
266-013	D5 2A INBOARD AIR AFTERCOOLER
266-014	D5 2B INBOARD AIR AFTERCOOLER
266-015	D6 1A INBOARD AIR AFTERCOOLER
266-016	D6 1B INBOARD AIR AFTERCOOLER
266-017	D6 2A INBOARD AIR AFTERCOOLER
266-018	D6 2B INBOARD AIR AFTERCOOLER
266-021	D5 1A OBRD AIR AFTERCOOLER

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
266-022	D5 1B OBRD AIR AFTERCOOLER
266-023	D5 2A OBRD AIR AFTERCOOLER
266-024	D5 2B OBRD AIR AFTERCOOLER
266-025	D6 1A OBRD AIR AFTERCOOLER
266-026	D6 1B OBRD AIR AFTERCOOLER
266-027	D6 2A OBRD AIR AFTERCOOLER
266-028	D6 2B OBRD AIR AFTERCOOLER
269-031	21 SEAL WATER INJECTION FILTER
269-032	22 SEAL WATER INJECTION FILTER
269-061	21 SEAL WATER FILTER
269-062	22 SEAL WATER FILTER
269-301	D5 ENG 1 COMBUSTION AIR FILTER
269-302	D5 ENG 2 COMBUSTION AIR FILTER
269-303	D6 ENG 1 COMBUSTION AIR FILTER
269-304	D6 ENG 2 COMBUSTION AIR FILTER
27 INV	27 INVERTER
274-011	21 CONTAINMENT FAN-COIL UNIT
274-012	22 CONTAINMENT FAN-COIL UNIT
274-013	23 CONTAINMENT FAN-COIL UNIT
274-014	24 CONTAINMENT FAN-COIL UNIT
274-031	25 SAFEGUARD SWITCHGEAR FAN-COIL UNIT
274-032	26 SAFEGUARD SWITCHGEAR FAN-COIL UNIT
274-051	21 AUXILIARY FEEDWATER PUMP MOTOR FAN-COIL UNIT
274-061	21 COMPONENT COOLING PUMP MOTOR FAN-COIL UNIT
274-062	22 COMPONENT COOLING PUMP MOTOR FAN-COIL UNIT
278-011	D5 ENG 1 EXHAUST SILENCER
278-012	D5 ENG 2 EXHAUST SILENCER
278-013	D6 ENG 1 EXHAUST SILENCER
278-014	D6 ENG 2 EXHAUST SILENCER
27A INV/XFMR	27 INVERTER ALT SOURCE TRANSFORMER
27M INV/XFMR	27 INVERTER MAIN TRANSFORMER
27M/CT	27M CURRENT TRANSFORMER
27M/PT	27M POTENTIAL TRANSFORMER
28 INV	28 INVERTER
2AF-29-1	21 AUX FW PUMP SUCT RELIEF
2AF-29-2	22 AUX FW PUMP SUCT RELIEF
2AMR1	MISCELLANEOUS RELAY RACK 2AMR1
2ARP1	REACTOR PROTECTION RELAY RACK 2ARP1
2ARP2	REACTOR PROTECTION RELAY RACK 2ARP2
2ARP3	REACTOR PROTECTION RELAY RACK 2ARP3
2ARP4	REACTOR PROTECTION RELAY RACK 2ARP4

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
2ARP5	REACTOR PROTECTION RELAY RACK 2ARP5
2ASG1	SAFEGUARD RELAY RACK 2ASG1
2ASG2	SAFEGUARD RELAY RACK 2ASG2
2B1	PROCESS PROTECTION RACK 2B1
2B2	PROCESS PROTECTION RACK 2B2
2BMR1	MISCELLANEOUS RELAY RACK 2BMR1
2BRP1	REACTOR PROTECTION RELAY RACK 2BRP1
2BRP2	REACTOR PROTECTION RELAY RACK 2BRP2
2BRP3	REACTOR PROTECTION RELAY RACK 2BRP3
2BRP4	REACTOR PROTECTION RELAY RACK 2BRP4
2BRP5	REACTOR PROTECTION RELAY RACK 2BRP5
2BSG1	SAFEGUARD RELAY RACK 2BSG1
2BSG2	SAFEGUARD RELAY RACK 2BSG2
2CL-25-1	22 DDCLP JACKET HX RELIEF
2CL-57-3	21 CONTAINMENT FAN COIL UNITS - RELIEF VLV
2CL-57-4	22 CONTAINMENT FAN COIL UNITS - RELIEF VLV
2CL-57-5	23 CONTAINMENT FAN COIL UNITS - RELIEF VLV
2CL-57-6	24 CONTAINMENT FAN COIL UNITS - RELIEF VLV
2CVC1	PROCESS CONTROL RACK 2CVC1
2CVC2	PROCESS CONTROL RACK 2CVC2
2CVCS1	PROCESS CONTROL RACK 2CVCS1
2CVCS2	PROCESS CONTROL RACK 2CVCS2
2DG-3	D2 JACKET CLNT HTR RELIEF
2EG-15-2	D5 1B START AIR RCVR RELIEF
2EMA	DISTRIBUTION PANEL 2EMA
2EMB	DISTRIBUTION PANEL 2EMB
2FE-115	21 REAC CLNT PMP SL WTR INJ F ORIF
2FE-116	22 REAC CLNT PMP SL WTR INJ F ORIF
2FT-115	21 REAC CLNT PMP SL WTR INJ F XMTR
2FT-116	22 REAC CLNT PMP SL WTR INJ F XMTR
2FT-464	MN STM FR 21 STM GEN CHNNL I RED F XMTR
2FW	PROCESS CONTROL RACK 2FW
2HC-142	21 CHG LINE FLOW CONT STA
2HC-428A	21 CHARGING PUMP SPEED CONT STA
2HC-428B	22 CHARGING PUMP SPEED CONT STA
2HC-468	21 MN STM SAF RLF TO ATM LOOP A CONT STA
2HC-478	21 MN STM SAF RLF TO ATM LOOP B CONT STA
2HSC-428D	21 CHG PMP SPD CONT STA
2HSC-428E	22 CHG PMP SPD CONT STA
2LI-112	21 VOL CONT TNK LI
2LI-141B	21 VOL CONT TNK LI

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
2LQ-112	21 VOL CONT TNK LVL PWR SPLY
2LQ-141	21 VOL CONT TNK LVL PWR SPLY
2LQ-426	PRESSURIZER LVL TRANS PWR SPLY
2LQ-427	PRESSURIZER LVL TRANS PWR SUPPLY
2LQ-428	PRESSURIZER LVL TRANS PWR SPLY
2LT-112	21 VOL CONT TNK LVL XMTR
2LT-141	21 VOL CONT TNK LVL XMTR
2LT-426	2 REAC CLNT LOOP PRZR (CHNNL I-RED) LVL XMTR
2LT-427	2 REAC CLNT LOOP PRZR (CHNNL II-WHI) LVL XMTR
2LT-428	2 REAC CLNT LOOP PRZR (CHNNL III-BLU)LVL XMTR
2LT-461	21 STM GEN LOOP A CHNNL I-RED LVL XMTR
2LT-487	21 STM GEN LOOP A WR LVL XMTR
2LT-488	22 STM GEN LOOP B WR LVL XMTR
2LT-751	21 RX VSL HEAD UPPER RNG TRN A D/P XMTR
2LT-753	21 RX VSL HEAD DYNAMIC RNG TRN A D/P XMTR
2LT-761	22 RX VSL HEAD UPPER RNG TRN B D/P XMTR
2LT-762	U2 RVLIS HEAD FULL RANGE TRN B D/P XMTR
2LT-763	22 RX VSL HEAD DYNAMIC RNG TRN B D/P XMTR
2LT-920	21 RWST LVL XMTR
2LT-921	21 RWST LVL XMTR
2NE-51	EXCORE DETECTION TRN A DETECTOR ASSY
2NE-52	EXCORE DETECTION TRN B DETECTOR ASSY
2NI-51A	EXCORE DETECTION TRN A SHUTDOWN MONITOR
2NI-52A	EXCORE DETECTION TRN B SHUTDOWN MONITOR
2NM-51	EXCORE DETECTION TRN A AMPLIFIER
2NM-51A	EXCORE DETECTION TRN A OPTICAL ISOLATOR
2NM-52	EXCORE DETECTION TRN B AMPLIFIER
2NR1	NUCLEAR INSTRUMENTATION RACK 2NR1
2NR2	NUCLEAR INSTRUMENTATION RACK 2NR2
2NR3	NUCLEAR INSTRUMENTATION RACK 2NR3
2NR4	NUCLEAR INSTRUMENTATION RACK 2NR4
2PQ-429	2 REAC CLNT LOOP PRZR (CHNNL 1-RED) P PWR SPLY
2PQ-430	2 REAC CLNT LOOP PRZR (CHNNL II-WHI) P PWR SPLY
2PQ-431	2 REAC CLNT LOOP PRZR (CHNNL III-BLU) P PWR SPLY
2PQ-468	STM GEN PRESS XMTR PWR SPLY
2PQ-478	STM GEN PRESS XMTR PWR SPLY
2PQ-482	STM GEN PRESS XMTR PWR SPLY
2PQ-483	STM GEN PRESS XMTR PWR SPLY
2PT-429	2 REAC CLNT LOOP PRZR (CHNNL I-RED) P XMTR
2PT-430	2 REAC CLNT LOOP PRZR (CHNNL II-WHI) P XMTR
2PT-431	2 REAC CLNT LOOP PRZR (CHNNL III-BLU) P XMTR

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
2PT-468	21 STM GEN MN STM HDR (CHNNL I-RED) P XMTR
2PT-469	21 STM GEN MN STM HDR (CHNL II-WHI) P XMTR
2PT-478	22 STM GEN MN STM HDR (CHNNL III-BLU) P XMTR
2PT-479	22 STM GEN MN STM HDR (CHNL IV-YEL) P XMTR
2PT-482	21 STM GEN MN STM HDR (CHNNL III-BLU) P XMTR
2PT-483	22 STM GEN MN STM HDR (CHNNL I-RED) P XMTR
2PZRHTRA/CT A	2 PRZR HTR GRP A CURRENT XFMR A
2PZRHTRA/CT C	2 PRZR HTR GRP A CURRENT XFMR C
2PZRHTRA/PT A	2 PRZR HTR GRP A POTENTIAL XFMR A
2PZRHTRA/PT C	2 PRZR HTR GRP A POTENTIAL XFMR C
2PZRHTRA/XFMR	2 PRZR HTR GRP A TRANSFORMER
2PZRHTRB/CT A	2 PRZR HTR GRP B CURRENT XFMR A
2PZRHTRB/CT C	2 PRZR HTR GRP B CURRENT XFMR C
2PZRHTRB/PT A	2 PRZR HTR GRP B POTENTIAL XFMR A
2PZRHTRB/PT C	2 PRZR HTR GRP B POTENTIAL XFMR C
2PZRHTRB/XFMR	2 PRZR HTR GRP B TRANSFORMER
2R1	PROCESS PROTECTION RACK 2R1
2R2	PROCESS PROTECTION RACK 2R2
2RC-10-1	PRESSURIZER RELIEF VALVE
2RC-10-2	PRESSURIZER RELIEF VALVE
2RCS1	PROCESS CONTROL RACK 2RCS1
2RCS2	PROCESS CONTROL RACK 2RCS2
2RH-8-1	RHR HOT LEG SUCTION RELIEF
2RM	RADIATION MONITORING RACK 2RM
2RM3	U2 AREA RADIATION MONITORING RACK
2RP1	ROD POSITION INDICATOR RACK 2RP1
2RP2	ROD POSITION INDICATOR RACK 2RP2
2RP3	ROD POSITION INDICATOR RACK 2RP3
2SA	PROCESS CONTROL RACK 2SA
2SC-428A	21 CHG PMP SPEED CONTR
2SC-428B	22 CHG PMP SPEED CONTR
2SD	PROCESS CONTROL RACK 2SD
2SI-26-1	RHR HX TO 2 RX VESSEL LOOP B RELIEF VALVE TO PRT
2SPT-428A	21 CHG PMP SPEED CONT RNG EXPANDING XMTR
2SRR-428A	21 CHG PMP SPEED CONT PRESS REG
2SRR-428B	22 CHG PMP SPEED CONT PRESS REG
2ST-428A	21 CHG PMP SPEED CONT SPEED XMTR
2ST-428B	22 CHG PMP SPEED CONT SPEED XMTR
2T3/24407	21 CHILLER LOAD LIMIT XFMR
2VC-24-1	21 VOLUME CONTROL TANK RELIEF
2VC-25-1	RCP SEAL RETURN/EXCESS LETDOWN RELIEF TO PRT

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
2VC-25-2	LETDOWN LINE TO VCT INLET
2VC-26-1	2 REGEN HX LETDOWN LINE OUTLET RELIEF TO PRT
2VC-28-1	21 CHARGING PUMP DISCHARGE RELIEF
2VC-28-2	22 CHARGING PUMP DISCHARGE RELIEF
2W1	PROCESS PROTECTION RACK 2W1
2W2	PROCESS PROTECTION RACK 2W2
2Y1	PROCESS PROTECTION RACK 2Y1
2Y2	PROCESS PROTECTION RACK 2Y2
A	CONTROL PANEL A
AC21	BOP ANNUNCIATOR CABINET AC21
AC22	BOP ANNUNCIATOR CABINET AC22
AC23	BOP ANNUNCIATOR CABINET AC23
AC24	BOP ANNUNCIATOR CABINET AC24
AF-29-1	11 AUX FW PUMP SUCT RELIEF
AF-29-2	12 AUX FW PUMP SUCT RELIEF
AUX RELAY CAB 1203	AUX RELAY CAB 1203
B-2	CONTROL PANEL B-2
B21/SWGR	BUS 21 4.16KV SWITCHGEAR
B21/XFR SW	4.16 KV BUS 21 TRANSFER SWITCH
B22/SWGR	BUS 22 4.16KV SWITCHGEAR
B22/XFR SW	4.16 KV BUS 22 TRANSFER SWITCH
B23/SWGR	BUS 23 4.16KV SWITCHGEAR
B24/SWGR	BUS 24 4.16KV SWITCHGEAR
B25 LOGIC-1	BUS 25 LOGIC CAB 1
B25 LOGIC-2	BUS 25 LOGIC CAB 2
B25/AUX RELAY CAB	BUS 25 AUXILIARY RELAY CABINET
B25/LOAD SEQ CAB	BUS 25 SAFEGUARDS LOAD SEQUENCER CABINET
B25/SWGR	BUS 25 4.16KV SWITCHGEAR
B25/XFR SW	4.16KV SWGR BUS 25 TRANSFER SWITCH
B26 LOGIC-1	BUS 26 LOGIC CAB 1
B26 LOGIC-2	BUS 26 LOGIC CAB 2
B26/AUX RELAY CAB	BUS 26 AUXILIARY RELAY CABINET
B26/LOAD SEQ CAB	BUS 26 SAFEGUARDS LOAD SEQUENCER CABINET
B26/SWGR	BUS 26 4.16KV SWITCHGEAR
B26/XFR SW	4.16KV SWGR BUS 26 TRANSFER SWITCH
BENCH BOARD D5	BENCH BOARD D5
BENCH BOARD D6	BENCH BOARD D6
BUS 211	BUS 211
BUS 212	BUS 212 480V SWITCHGEAR
BUS 221	BUS 221
BUS 222	BUS 222 480V SWITCHGEAR

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
BUS 25	BUS 25
BUS 26	BUS 26
C-2	CONTROL PANEL C-2
CD-34080	21 FCU DISCH TO CNTMT DOME CD
CD-34081	21 FCU NORM DISCH TO GAP & STRUCT CD
CD-34082	22 FCU DISCH TO CNTMT DOME CD
CD-34083	22 FCU NORM DISCH TO GAP & STRUCT CD
CD-34084	23 FCU DISCH TO CNTMT DOME CD
CD-34085	23 FCU NORM DISCH TO GAP & STRUCT CD
CD-34086	24 FCU DISCH TO CNTMT DOME CD
CD-34087	24 FCU NORM DISCH TO GAP & STRUCT CD
CD-34138	21 CLASS I ROOF EXHT FAN DSCH CD
CD-34139	21 SCVNG & COMBTM AIR CD
CV-31060	22 TD AFW PUMP TRIP THROTTLE CV
CV-31102	21 STM GEN POWER OPERATED RELIEF CV
CV-31107	22 STM GEN POWER OPERATED RELIEF CV
CV-31116	21 LOOP A MN STM HDR ISOL CV
CV-31117	22 LOOP B MN STM HDR ISOL CV
CV-31230	2 REAC CLNT LOOP PRZR LTDN LN ISOL CV A
CV-31279	2 REAC CLNT LOOP PRZR LTDN LN ISOL CV B
CV-31418	21 MD AUX FW PMP RCRC/LUBE OIL CLG CV
CV-31419	22 TD AUX FW PMP RCRC/LUBE OIL CLG CV
CV-31425	21/22 RCP SEAL BYPASS RETURN CV
CV-31457	22 DDCLP JCKT CLR OUTL CV
CV-31654	21 CLG WTR STRAINER BACKWASH CV
CV-31655	22 CLG WTR STRNR BCKWSH CV
CV-31999	22 TD AFW PMP STM BLOCK CV
CV-39200	21 & 23 FCU CLG WTR RTN ORIF B-P CV
CV-39202	22 & 24 FCU CLG WTR RTN ORIF B-P CV
CV-39413	22/24 FCU CLG WTR SUPPLY CV
CV-39414	22/24 FCU CHILLED WTR SUPPLY CV
CV-39415	21/23 FCU CLG WTR SUPPLY CV
CV-39416	21/23 FCU CHILLED WTR SUPPLY CV
CV-39417	22 SHROUD CLG COILS TR A CHILLED WTR SUPPLY CV
CV-39419	21 SHROUD CLG COILS TR B CHILLED WTR SUPPLY CV
CV-39421	22/24 FCU CLG WTR RETURN CV
CV-39423	21/23 FCU CLG WTR RETURN CV
D-2	CONTROL PANEL D-2
D2 CFRP/XFMR	D2 CLEAN FUEL RTRN PMP TRANSFORMER
D2/CT	CURRENT TRANSFORMER
D2/GEN RLY PNL	D2 EMERG GEN RELAY PNL

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
D2/GND RES	NEUTRAL GROUNDING RESISTOR
D2/GND XFMR	NEUTRAL GROUNDING TRANSFORMER
D2-3	GENERATOR RELAY BOX D2-3
D5/EXC PNL	D5 DSL GEN EXCITATION PANEL-SEVR
D5/GND CAB	D5 DSL GEN GROUND CABINET
D5/RTU	D5 DSL GEN REMOTE TERMINAL UNIT CABINET
D5/RTV	D5 DSL GEN REMOTE TRANSMITTER & VIBRATION CABINET
D6/EXC PNL	D6 DSL GEN EXCITATION PANEL-SEVR
D6/GND CAB	D6 DSL GEN GROUND CABINET
D6/RTU	D6 DSL GEN REMOTE TERMINAL UNIT CABINET
D6/RTV	D6 DSL GEN REMOTE TRANSMITTER & VIBRATION CABINET
DG AUX DESK D5	DG AUX DESK D5
DG AUX DESK D6	DG AUX DESK D6
E-2	CONTROL PANEL E-2
EM-A2	EVENT MONITORING RACK EM-A2
EM-B2	EVENT MONITORING RACK EM-B2
ET-507/XFMR	U2 CNTMT AIR SMPL LN HT TRACE XFMR
F-2	CONTROL PANEL F-2
G-2	CONTROL PANEL G-2
GRD/D5	D5 DSL GEN NEUT GROUNDING TRANSFORMER
GRD/D6	D6 DSL GEN NEUT GROUNDING TRANSFORMER
LOOP 2H-428A	21 CHARGING PUMP SPEED CONTROL
LOOP 2H-428B	22 CHARGING PUMP SPEED CONTROL
LOOP 2L-112	21 VC TK LVL
LOOP 2L-141	22 VC TK LVL
LOOP 2L-426-RP	PRZR LVL RED CHANNEL
LOOP 2L-428-RP	PRZR LVL BLUE CHANNEL
LOOP 2P-429-RP	PRZR PRESS RED CHANNEL
LOOP 2P-431-RP	PRZR PRESS BLUE CHANNEL
LOOP 2P-482-RP	21 STM GEN PRESS BLUE CHANNEL
LOOP 2P-483-RP	22 STM GEN PRESS RED CHANNEL
MCC 2A1	MOTOR CONTROL CENTER 2A BUS 1
MCC 2A2	MOTOR CONTROL CENTER 2A BUS 2
MCC 2AA2	MOTOR CONTROL CENTER 2AA BUS 2
MCC 2AC1	MOTOR CONTROL CENTER 2AC BUS 1
MCC 2AC2	MOTOR CONTROL CENTER 2AC BUS 2
MCC 2B1	MOTOR CONTROL CENTER 2B BUS 1
MCC 2BA1	MOTOR CONTROL CENTER 2BA BUS 1
MCC 2D1	MOTOR CONTROL CENTER 2D BUS 1
MCC 2D2	MOTOR CONTROL CENTER 2D BUS 2
MCC 2DA1	MOTOR CONTROL CENTER 2DA BUS 1

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
MCC 2DA2	MOTOR CONTROL CENTER 2DA BUS 2
MCC 2E1	MOTOR CONTROL CENTER 2E BUS 1
MCC 2E2	MOTOR CONTROL CENTER 2E BUS 2
MCC 2EGB	MOTOR CONTROL CENTER 2EGB
MCC 2J1	MOTOR CONTROL CENTER 2J BUS 1
MCC 2J2	MOTOR CONTROL CENTER 2J BUS 2
MCC 2K1	MOTOR CONTROL CENTER 2K BUS 1
MCC 2K2	MOTOR CONTROL CENTER 2K BUS 2
MCC 2KA2	MOTOR CONTROL CENTER 2KA BUS 2
MCC 2L1	MOTOR CONTROL CENTER 2L BUS 1
MCC 2L2	MOTOR CONTROL CENTER 2L BUS 2
MCC 2LA1	MOTOR CONTROL CENTER 2LA BUS 1
MCC 2LA2	MOTOR CONTROL CENTER 2LA BUS 2
MCC 2M1	MOTOR CONTROL CENTER 2M BUS 1
MCC 2M2	MOTOR CONTROL CENTER 2M BUS 2
MCC 2P1	MOTOR CONTROL CENTER 2P BUS 1 & 2
MCC 2R1	MOTOR CONTROL CENTER 2R BUS 1 & 2
MCC 2S1	MOTOR CONTROL CENTER 2S BUS 1
MCC 2TA1	MOTOR CONTROL CENTER 2TA BUS 1
MCC 2TA2	MOTOR CONTROL CENTER 2TA BUS 2
MCC 2X1	MOTOR CONTROL CENTER 2X BUS 1
MCC 2X2	MOTOR CONTROL CENTER 2X BUS 2
MTR 121C-22	22 COOLING WATER STRAINER
MTR 211K-12	21 D5 DSL GEN BLDG SPLY FAN
MTR 211K-13	21 D5 DSL GEN BLDG RETURN FAN
MV-32020	22 SG MS SPLY TO 22 TD AFW PMP MV
MV-32026	21 MD AFW PUMP SUCT CLG WTR SUPPLY MV
MV-32030	22 TD AFW PUMP SUCT CLG WTR SUPPLY MV
MV-32033	2 TURB BLDG CLG WTR HDR MV
MV-32048	21 MSIV BYPASS MV
MV-32050	22 MSIV BYPASS MV
MV-32060	RFLG WTR EMERG MK-UP TO CHG PMPS MV
MV-32062	RFLG WTR EMERG MK-UP TO CHG PMPS MV
MV-32063	21 VOL CONT TNK TO CHG PMPS ISOL MV
MV-32144	LOOP A/B CLG WTR HDR XOVR MV A
MV-32148	21 FCU CLG WTR OUTL ISOL MV B
MV-32156	24 FCU CLG WTR OUTL ISOL MV A
MV-32159	LOOP A/B CLG WTR HDR XOVR MV B
MV-32160	21 CC HX CLG WTR INLET MV
MV-32161	22 CC HX CLG WTR INLET MV
MV-32180	SUMP B TO 21 RHR PMP TRN A (OUTSIDE) MV

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
MV-32194	2 REAC EXCS LTDN LINE ISOL MV A
MV-32210	2 RCP SEAL RETURN/EXCESS LETDOWN ISOL TRN B MV
MV-32246	22 TD AUX FW TO 21 STM GEN MV
MV-32248	21/22 AFW TO 21 SG ISOL MV
MV-32383	21 MD AFW PMP DISCH TO 21 SG MV
MV-32384	21 AFWP DSCH TO 22 STM GEN MV
MV-32389	24 FCU CLG WTR INLT ISOL MV
PNL 21	DISTRIBUTION PANEL 21
PNL 211	INSTRUMENT BUS II PANEL (WHI) 211
PNL 2111	AC DISTRIBUTION PANEL (WHI) 2111
PNL 2112	AC DISTRIBUTION PANEL (RED) 2112
PNL 2113	AC DISTRIBUTION PANEL (BLU) 2113
PNL 2114	AC DISTRIBUTION PANEL (YEL) 3114
PNL 2116	AC DISTRIBUTION PANEL 2116
PNL 21-16	125 VDC PANEL 25
PNL 212	INSTRUMENT BUS I PANEL (RED) 212
PNL 212-3	PROCESS RACK 2R1
PNL 212-4	PROCESS RACK 2R2
PNL 213	INSTRUMENT BUS III PANEL (BLU) 213
PNL 213-3	PROCESS RACK 2B1
PNL 213-4	PROCESS RACK 2B2
PNL 214	INSTRUMENT BUS IV PANEL (YEL) 214
PNL 215	ROD POSITION PANEL 215
PNL 216	NON-INTERRUPTABLE PANEL 216
PNL 217	INTERRUPTABLE PANEL 217
PNL 218	AC DISTRIBUTION PANEL 218
PNL 218/REG	PNL 218 SOLATRON VOLTAGE REGULATORN
PNL 22	DC DISTRIBUTION PANEL 22
PNL 22-18	125 VDC PANEL 26
PNL 227/DISC SW	DISTRIBUTION PANEL 227 DISCONNECT SWITCH
PNL 228/DISC SW	DISTRIBUTION PANEL 228 DISCONNECT SWITCH
PNL 230	AC DISTRIBUTION PANEL 230
PNL 231	DC DISTRIBUTION PANEL 231
PNL 232	AC DISTRIBUTION PANEL 232
PNL 234	AC DISTRIBUTION PANEL 234
PNL 234/XFMR	PANEL 234 TRANSFORMER
PNL 235	AC DISTRIBUTION PANEL 235
PNL 235/XFMR	PANEL 235 TRANSFORMER
PNL 246	AC DISTRIBUTION PANEL 246
PNL 246/XFMR	PANEL 246 TRANSFORMER
PNL 247/XFMR	PANEL 247 TRANSFORMER

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
PNL 248/XFMR	PANEL 248 TRANSFORMER
PNL 25	NUCLEAR DISTRIBUTION PANEL 25
PNL 251	DC DISTRIBUTION PANEL 251
PNL 251-10	U2 TRN A RCS VENT SYS SV37091;37093;37095
PNL 25-15	125 VDC PANEL 253
PNL 25-16	125 VDC PANEL 251
PNL 25-18	125 VDC PANEL 252
PNL 251-9	21 & 22 MN STM HDR ISOL CV-31116 & CV-31117
PNL 252	DC DISTRIBUTION PANEL 252
PNL 252-14	CV 39200 21 & 23 FCU CLG WTR RTRN ORIF BYPS
PNL 253	DC DISTRIBUTION PANEL 253
PNL 253-34	CD 34080 21 FCU DISCH TO CNTMT DOME CD
PNL 253-35	CD 34081 21 FCU DISCH TO CNTMT BSTR FAN CD
PNL 26	NUCLEAR DISTRIBUTION PANEL 26
PNL 261	DC DISTRIBUTION PANEL 261
PNL 261-12	CV 31999 22 TD AUX FW PMP MN STM SUPPLY CV
PNL 261-15	CV31419 22 TD AUX FW PMP RECIRC
PNL 26-15	125 VDC PANEL 263
PNL 26-16	125 VDC PANEL 261
PNL 26-17	125 VDC PANEL 262
PNL 261-8	21 & 22 MN STM HDR ISOL CV-31116 & CV-31117
PNL 262	DC DISTRIBUTION PANEL 262
PNL 262-1	U2 TRN B RCS VENT SYS SV37092;37094;37096
PNL 262-6	CV 39202 22 & 24 FCU CLG WTR RTRN ORIF BYPS
PNL 263	DC DISTRIBUTION PANEL 263
PNL 263-16	CD 34082 22 FCU DISCH TO CNTMT DOME CD
PNL 263-18	CD 34083 22 FCU DISCH TO BOOSTER FANS CD
PNL 27	DISTRIBUTION PANEL 27
PNL 28	DISTRIBUTION PANEL 28
PNL 2EM	DISTRIBUTION PANEL 2EM
PNL 2EMA	EVENT MONITORING RACK EM-A2
PNL 2EMA/DISC	DISTRIBUTION PANEL 2EMA DISCONNECT SWITCH
PNL 2EM-A1	PNL 2EM-A1
PNL 2EMA-11	ICCM UNIT 2 TRAIN A MICROPROCESSOR 2LM-750
PNL 2EMA-3	EXCORE DET AMPLIFIER 2NM-51
PNL 2EMA-8	TB A1688 ICCM UNIT 2 TRAIN A PLASMA DISPLAY
PNL 2EMB	EVENT MONITORING RACK EM-A2
PNL 2EMB/DISC	DISTRIBUTION PANEL 2EMB DISCONNECT SWITCH
PNL 2EM-B1	PNL 2EM-B1
PNL 2EMB-11	ICCM UNIT 2 TRAIN B MICROPROCESSOR 2LM-760
PNL 2EMB-3	EXCORE DET AMPLIFIER 2NM-52

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
PNL 2EMB-8	TB 2889 ICCM UNIT 2 TRAIN B PLASMA DISPLAY
PNL 31	DC DISTRIBUTION PANEL 31
PT/TT1/D5	D5 DSL GEN PH A-B POT XFMR 4.16KV-120X120V
PT/TT1/D6	D6 DSL GEN PH A-B POT XFMR 4.16KV-120X120V
PT/TT2/D5	D5 DSL GEN PH B-C POT XFMR 4.16KV-120X120V
PT/TT2/D6	D6 DSL GEN PH B-C POT XFMR 4.16KV-120X120V
PT/TT3/D5	D5 DSL GEN PH A-B POT XFMR 4.16KV-120X120V
PT/TT3/D6	D6 DSL GEN PH A-B POT XFMR 4.16KV-120X120V
PT/TT4/D5	D5 DSL GEN PH B-C POT XFMR 4.16KV-120X120V
PT/TT4/D6	D6 DSL GEN PH B-C POT XFMR 4.16KV-120X120V
PT-1/D5	D5 AUTO VOTAGE REG MOTOR ORERATED POT
PT-1/D6	D6 AUTO VOTAGE REG MOTOR ORERATED POT
PT-2/D5	D5 MANUAL VOLTAGE REG MOTOR OOPERATED POT
PT-2/D6	D6 MANUAL VOLTAGE REG MOTOR OOPERATED POT
PWRS/24407	U2 CHILLED WTR SYS 28V PWR SPLY
RS-21-11	SAFETY VALVE HEADER STM GENERATOR 21
RS-21-12	SAFETY VALVE HEADER STM GENERATOR 21
RS-21-13	SAFETY VALVE HEADER STM GENERATOR 21
RS-21-14	SAFETY VALVE HEADER STM GENERATOR 21
RS-21-15	SAFETY VALVE HEADER STM GENERATOR 21
RS-21-16	SAFETY VALVE HEADER STM GENERATOR 22
RS-21-17	SAFETY VALVE HEADER STM GENERATOR 22
RS-21-18	SAFETY VALVE HEADER STM GENERATOR 22
RS-21-19	SAFETY VALVE HEADER STM GENERATOR 22
RS-21-20	SAFETY VALVE HEADER STM GENERATOR 22
SA-56-3	22 CLG WTR PUMP - DIESEL STARTING AIR
SV-33258	21 LOOP A MN STM HDR SV A
SV-33259	21 LOOP A MN STM HDR SV B
SV-33260	21 LOOP A MN STM HDR AIR EXHT SV A
SV-33261	21 LOOP A MN STM HDR AIR EXHT SV B
SV-33263	22 LOOP B MN STM HDR SV A
SV-33264	22 LOOP B MN STM HDR SV B
SV-33265	22 LOOP B MN STM HDR AIR EXHT SV A
SV-33266	22 LOOP B MN STM HDR AIR EXHT SV B
SV-33300	22 TD AFW PMP STM BLOCK SV
SV-33346	22 CLG WTR STRNR BCKWSH SV
SV-33389	21 FAN COIL UNIT DSCH TO CONTM DOME DMPR TRN A S
SV-33390	21 FAN COIL UNIT NORM DSCH TO GAP & STRUC DMPR S
SV-33391	22 FAN COIL UNIT DSCH TO CONTM DOME DMPR TRN B S
SV-33392	22 FAN COIL UNIT NORM DSCH TO GAP & STRUC DMPR S
SV-33393	23 FAN COIL UNIT DSCH TO CONTM DOME TRN A SV

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
SV-33394	23 FAN COIL UNIT NORM DSCH TO GAP & STRUC DMPR S
SV-33395	24 FAN COIL UNIT DSCH TO CONTM DOME TRN B SV
SV-33396	24 FAN COIL UNIT NORM DSCH TO GAP & STRUC DMPR S
SV-33466	22 DD CLWP AIR MTR RS SV A
SV-33467	22 DD CLWP AIR MTR SV B
SV-33490	2 REAC CLNT LOOP PRZR LTDN LN ISOL SV
SV-33491	2 REAC CLNT LOOP PRZR LTDN LN ISOL SV 2
SV-33492	21 MD AUX FW PMP RCRC/LUBE OIL CLG SV
SV-33493	22 TD AUX FW PMP RCRC/LUBE OIL CLG SV
SV-33498	2 DSL GEN RM OUTS AIR B TRN DMPR SV
SV-33565	21 AUX FW PMP MTR UNIT CLR SV
SV-33695	21 CLASS I ROOF EXHT FAN DMPR SV
SV-33696	21 SCVNG & COMTN AIR DMPR SV A
SV-33777	22 DD CLWP DSL JCKT CLR OUTL SV
SV-33829	21 SCVNG & COMBTN AIR DMPR SV B
SV-37091	RCS VENT SYS PRZR VENT SV
SV-37092	RCS VENT SYS PRZR VENT SV
SV-37093	RCS VENT SYS REACTOR HEAD VENT SV
SV-37094	RCS VENT SYS REACTOR HEAD VENT SV
SV-37095	RCS VENT SYS TO PRT SV
SV-37096	RCS VENT SYS TO CNTMT ATMOS SV
SV-37200	21 & 23 FCU CLG WTR RTN ORIFICE B-P SV
SV-37202	22 & 24 FCU CLG WTR RTN ORIF B-P SV
SV-37413	22; 24 FCU CLG WTR SUPPLY SV
SV-37415	21; 23 FCU CLG WTR SUPPLY SV
SV-37421	22; 24 FCU CLG WTR RETURN SV
SV-37423	21; 23 FCU CLG WTR RETURN SV
SV-37464	UNIT 2 TRAIN A CHILL WTR/CLG WTR ISOL SV
SV-37465	UNIT 2 TRAIN B CHILL WTR/CLG WTR ISOL SV
SV-37466	UNIT 2 TRAIN A CHILL WTR/CLG WTR ISOL SV
SV-37467	UNIT 2 TRAIN B CHILL WTR/CLG WTR ISOL SV
SV-37904	D5 ENG 1 AUX DESK 1B START AIR SV
TB 2209	RELAY ROOM AUX RELAY CABINET
TB 2222	RELAY ROOM TERMINAL BOX
TB 2229	RELAY ROOM TERMINAL BOX
TB 2480	TB FOR 21 CHARGING PUMP
TB 2481	TB FOR 22 CHARGING PUMP
TERM CAB 2222	TERM CAB 2222
TERM CAB 2229	TERM CAB 2229
VC-25-2	LETDOWN LINE TO VOLUME CONTROL TANK INLET - RLF
VERT CONT PNL D5	VERT CONT PNL D5

Table A-1: Prairie Island Unit 2 – Base List 1	
Equipment Tag	**Description**
VERT CONT PNL D6	VERT CONT PNL D6

A.2 Final SWEL 1

This section provides a list of the final equipment selected for PINGP's SWEL 1 in Table A-2 below. This table identifies which items were selected for anchorage configuration verification, as well as which items are being deferred due to inaccessibility. The comments column of this table identifies the following selection criteria which were utilized in Screen #4:

- "IPEEE Enhanced" identifies that this equipment was enhanced due to outliers identified during the IPEEE program.
- "New or replaced" identifies this equipment as major new or replacement equipment.
- "Risk Significant" identifies this equipment as risk significant.

Table A-2: Prairie Island Unit 2 – SWEL 1							
Equipment Tag	**Description**	**Class[1]**	**Safety Function[2]**	**System[3]**	**Verify Anchorage?**	**Deferred?**	**Comments**
50000	D5 DSL GEN BENCHBOARD	20	1, 2, 3, 4, 5	D5		Yes	
50200	D5 DSL GEN VERTICAL PANEL	20	1, 2, 3, 4, 5	D5	Yes		
55320	D5 DSL GEN ENG 1 AUX DESK	20	1, 2, 3, 4, 5	D5	Yes		
70350	22 DD CLWP LCL PNL	20	1, 2, 3, 4, 5	CL	Yes		
053-322	22 DD CLG WTR PMP DSL OIL DAY TNK	21	1, 2, 3, 4, 5	CL	Yes		
21 BATT	21 BATTERY (& BATTERY RACK)	15	1, 2, 3, 4, 5	DC	Yes		New or replaced, IPEEE Enhanced
21 BATT CHG	21 BATTERY CHARGER	16	1, 2, 3, 4, 5	DC	Yes	Yes	
21 INV	21 INVERTER	16	1, 2, 3, 4, 5	IP	Yes	Yes	
211M/XFMR	211M TRANSFORMER	4	1, 2, 3, 4, 5	EB			Risk significant
212M/XFMR	212M TRANSFORMER	4	1, 2, 3, 4, 5	EB			
217-111	21 MD AFW PMP L/O CLR	21	4	AF			
22 BATT	22 BATTERY (& BATTERY RACK)	15	1, 2, 3, 4, 5	DC	Yes		New or replaced

Table A-2: Prairie Island Unit 2 – SWEL 1

Equipment Tag	Description	Class[1]	Safety Function[2]	System[3]	Verify Anchorage?	Deferred?	Comments
22 BATT CHG	22 BATTERY CHARGER	16	1, 2, 3, 4, 5	DC	Yes		
221M/XFMR	221M TRANSFORMER	4	1, 2, 3, 4, 5	EB			Risk significant
23 INV	23 INVERTER	16	1, 2, 3, 4, 5	IP	Yes	Yes	Risk significant
232-281	21 SFGDS SCRNHSE ROOF EXHT FAN	9	1, 2, 3, 4, 5	ZR	Yes	Yes	IPEEE Enhanced
234-031	D5 DSL GEN	17	1, 2, 3, 4, 5	D5			
234-032	D6 DSL GEN	17	1, 2, 3, 4, 5	D6			
235-081	22 CLG WTR PMP DSL JCKT CLG HX	21	1, 2, 3, 4, 5	CL			IPEEE Enhanced
245-042	22 CHG PMP	5	1, 2, 3	VC	Yes		
245-071	21 SI PMP	5	3	SI	Yes		
245-122	22 CC PMP	5	2, 3	CC	Yes		
245-201	22 TD AFW PMP	5	4	AF	Yes		
245-392	22 DD CLG WTR PMP	6	1, 2, 3, 4, 5	CL	Yes		IPEEE Enhanced
246-031	D5 1A START AIR RCVR	21	1, 2, 3, 4, 5	D5			

Table A-2: Prairie Island Unit 2 – SWEL 1							
Equipment Tag	**Description**	**Class[1]**	**Safety Function[2]**	**System[3]**	**Verify Anchorage?**	**Deferred?**	**Comments**
253-361	21 D5 FO DAY TANK	21	1, 2, 3, 4, 5	FO	Yes		
253-401	D5 ENG 1 HT EXPANSION TANK	21	1, 2, 3, 4, 5	D5			
258-011	21 CLG WTR STRNR	0	1, 2, 3, 4, 5	CL		Yes	
274-013	23 CNTMT FCU	10	5	ZC	Yes	Yes	New or replaced
274-031	121 SWGR RM UNIT CLR	10	1, 2, 3, 4, 5	ZH			
274-162	TRN B EVENT MON RM UNIT CLR	10	1, 2, 3, 4, 5	ZH			
2ASG1	SAFEGUARD RELAY RACK 2ASG1	20	1, 2, 3, 4, 5	RP	Yes		
2EG-15-2	D5 1B START AIR RCVR RELIEF	7	1, 2, 3, 4, 5	D5			
2FT-464	MN STM FR 21 STM GEN CHNNL I RED F XMTR	18	4	RP		Yes	
2LT-428	2 PRZR (CHNL III-BLU)LVL XMTR	18	3	RP	Yes	Yes	
2LT-461	21 STM GEN LOOP A CHNNL I-RED LVL XMTR	18	4	RP	Yes	Yes	
2LT-762	U2 RVLIS HEAD FULL RANGE TRN B D/P XMTR	18	3	EM			
2LT-763	22 RX VSL HEAD DYNAMIC RNG TRN B D/P XMTR	18	3	EM	Yes		

Table A-2: Prairie Island Unit 2 – SWEL 1							
Equipment Tag	**Description**	**Class[1]**	**Safety Function[2]**	**System[3]**	**Verify Anchorage?**	**Deferred?**	**Comments**
2LT-920	21 RWST LVL XMTR	18	1, 2, 3	EM	Yes		
2LT-921	21 RWST LVL XMTR	18	1, 2, 3	EM	Yes		
2NR3	NIS RACK III (BLU) 2NR3	20	1	NI	Yes		IPEEE Enhanced
2PT-469	21 STM GEN MN STM HDR (CHNL II-WHI) P XMTR	18	4	MS			
2PT-479	22 STM GEN MN STM HDR (CHNL IV-YEL) P XMTR	18	4	RP			
2VC-28-2	22 CHG PMP DISCH RELIEF	7	1, 2, 3	VC			
B-2	CONTROL PANEL B-2	20	1, 2, 3, 5	BM			IPEEE Enhanced
B25/LOAD SEQ CAB	BUS 25 SFGDS LOAD SEQUENCER CABINET	20	1, 2, 3, 4, 5	EA		Yes	
BUS 211	BUS 211 480V SWITCHGEAR	2	1, 2, 3, 4, 5	EB		Yes	Risk significant
BUS 221	BUS 221 480V SWITCHGEAR	2	1, 2, 3, 4, 5	EB		Yes	Risk significant
BUS 222	BUS 222 480V SWITCHGEAR	2	1, 2, 4, 5	EB		Yes	
BUS 26	BUS 26 4.16KV SWITCHGEAR	3	1, 2, 3, 4, 5	EA		Yes	Risk significant
CV-31060	22 TD AFW PMP TRIP THROTTLE CV	7	4	AF			

Table A-2: Prairie Island Unit 2 – SWEL 1							
Equipment Tag	**Description**	**Class[1]**	**Safety Function[2]**	**System[3]**	**Verify Anchorage?**	**Deferred?**	**Comments**
CV-31419	22 TD AFW PMP RECIRC/L-O CLG CV	7	4	AF			
CV-31457	22 DD CLG WTR PMP JCKT CLR OUTL CV	7	1, 2, 3, 4, 5	CL			
CV-39413	22/24 FCU CLG WTR SUPPLY CV	7	5	ZX			
CV-39417	22 CRDM SHRD CLG COIL SPLY CV	7	5	ZX		Yes	IPEEE Enhanced
CV-39419	21 CRDM SHRD CLG COIL SPLY CV	7	5	ZX		Yes	IPEEE Enhanced
D-2	CONTROL PANEL D-2	20	4	BM			IPEEE Enhanced
E-2	CONTROL PANEL E-2	20	4	BM			IPEEE Enhanced
EM-B2	EVENT MONITORING RACK EM-B2	20	2, 4, 5	EM	Yes		
MCC 2A1	MOTOR CONTROL CENTER 2A BUS 1	1	4	EB	Yes	Yes	
MCC 2K1	MOTOR CONTROL CENTER 2K BUS 1	1	1, 2, 3, 4, 5	EB	Yes	Yes	Risk significant
MCC 2K2	MOTOR CONTROL CENTER 2K BUS 2	1	1, 2, 3, 4	EB	Yes	Yes	Risk significant, IPEEE Enhanced
MCC 2L2	MOTOR CONTROL CENTER 2L BUS 2	1	1, 3, 5	EB	Yes	Yes	
MTR 211K-12	21 D5 DSL GEN BLDG SPLY FAN	9	1, 2, 3, 4, 5	EB			

Table A-2: Prairie Island Unit 2 – SWEL 1							
Equipment Tag	**Description**	**Class[1]**	**Safety Function[2]**	**System[3]**	**Verify Anchorage?**	**Deferred?**	**Comments**
MTR 211K-13	21 D5 DSL GEN BLDG RETURN FAN	9	1, 2, 3, 4, 5	EB			
MV-32020	22 SG MS SPLY TO 22 TD AFW PMP MV	8	4	MS			
MV-32030	22 TD AFW PMP SUCT CL SPLY MV	8	4	CL			
MV-32148	21 FCU CLG WTR OUTL ISOL MV B	8	5	CL			
MV-32156	24 FCU CLG WTR OUTL ISOL MV A	8	5	CL		Yes	
MV-32160	21 CC HX CLG WTR INLET MV	8	3	CL			
MV-32180	SUMP B TO 21 RHR PMP TRN A (OUTSIDE) MV	8	3, 4	SI			
MV-32246	22 AFW TO 21 SG MV	8	4	AF			
MV-32248	21/22 AFW TO 21 SG ISOL MV	8	4	AF			
MV-32383	21 MD AFW PMP DISCH TO 21 SG MV	8	4	AF			
MV-32384	21 MD AFW PMP DISCH TO 22 SG MV	8	4	AF			
MV-32389	24 FCU CLG WTR INLT ISOL MV	8	5	CL			
PNL 21	DISTRIBUTION PANEL 21	14	1, 2, 3, 4, 5	DC	Yes	Yes	Risk significant, IPEEE Enhanced

Table A-2: Prairie Island Unit 2 – SWEL 1							
Equipment Tag	**Description**	**Class[1]**	**Safety Function[2]**	**System[3]**	**Verify Anchorage?**	**Deferred?**	**Comments**
PNL 211	INSTRUMENT BUS II PANEL (WHI) 211	14	1, 2, 3, 4, 5	IP	Yes		Risk significant
PNL 213	INSTRUMENT BUS III PANEL (BLU) 213	14	1, 2, 3, 4, 5	IP		Yes	Risk significant
PNL 22	DC DISTRIBUTION PANEL 22	14	1, 2, 3, 4, 5	DC			IPEEE Enhanced
PNL 234	AC DISTRIBUTION PANEL 234	14	3	EX	Yes		
PNL 234/XFMR	PANEL 234 TRANSFORMER	4	3	EX			
PNL 235	AC DISTRIBUTION PANEL 235	14	3	EX		Yes	
PNL 235/XFMR	PANEL 235 TRANSFORMER	4	3	EX			
PNL 253	DC DISTRIBUTION PANEL 253	14	2, 3, 5	DC	Yes	Yes	
PNL 261	DC DISTRIBUTION PANEL 261	14	4, 5	DC	Yes		
PNL 262	DC DISTRIBUTION PANEL 262	14	3, 5	DC	Yes		
PNL 2EM	DISTRIBUTION PANEL 2EM	14	1, 2, 3, 4, 5	EM	Yes	Yes	
RS-21-11	21 SG MS HDR RELIEF	7	4	MS			
SV-33389	21 FCU DISCH TO CNTMT DOME CD-34080 SV	8	5	ZC		Yes	

Table A-2: Prairie Island Unit 2 – SWEL 1							
Equipment Tag	**Description**	**Class[1]**	**Safety Function[2]**	**System[3]**	**Verify Anchorage?**	**Deferred?**	**Comments**
SV-33777	22 DD CLWP DSL JCKT CLR OUTL SV	8	1, 2, 3, 4, 5	CL			
SV-37464	U2 TRN A CHLD WTR/CLG WTR ISOL SV	8	5	ZX		Yes	
SV-37466	UNIT 2 TRAIN A CHILL WTR/CLG WTR ISOL SV	8	5	ZX		Yes	
SV-37904	D5 ENG 1 AUX DESK 1B START AIR SV	8	1, 2, 3, 4, 5	D5			

Notes:

1) Class – Class as defined in Appendix B of Reference 1.

2) Safety function – Defined as follows:

1 = Reactor Reactivity Control

2 = Reactor Coolant Pressure Control

3 = Reactor Coolant inventory Control

4 = Decay Heat Removal

5 = Containment Function

3) System – Identifies the system associated with the equipment.

The abbreviations for these systems are listed below.

Code	System	Code	System
AF	AUXILIARY FEEDWATER	IP	INSTRUMENT POWER SOURCES
AT	AUX START-UP/STDBY XFMRS	MP	MISC PLANT INSTRUMENTS
BM	SITE MISCELLANEOUS MAINTENANCE	MS	MAIN STEAM
CC	COMPONENT COOLING	NI	NUCLEAR INSTRUMENTATION
CL	COOLING WATER	PI	ROD POSITION INDICATION
D1	D1 EMERGENCY DIESEL	RC	REACTOR COOLANT
D2	D2 EMERGENCY DIESEL	RP	REACTOR PROTECTION
D5	D5 EMERGENCY DIESEL	SA	STATION & INSTRUMENT AIR
D6	D6 EMERGENCY DIESEL	SE	STEAM EXCLUSION
DC	DC AUXILIARIES	SF	SPENT FUEL POOL COOLING
EA	4.16KV ELECTRICAL	SI	SAFETY INJECTION
EB	480V ELECTRICAL	VC	CHEMICAL & VOLUME CONTROL
EH	ELECTRO-HYDRAULIC SYSTEM	ZC	CONTAINMENT VENT
EL	SITE LIGHTING	ZG	DIESEL ROOMS VENT
EM	EVENT MONITORING	ZH	SAFEGUARDS CHILLED WATER
EX	240/120V MISC AUXILIARIES	ZR	SCREENHOUSE VENT
FO	FUEL OIL	ZX	CNTMT & AUX BLDG COOLING
FW	FEEDWATER		

B

Seismic Walkdown Checklists (SWCs)

This appendix provides the Seismic Walkdown Checklists (SWC) completed as of November 9, 2012 for PINGP. Table B-1 provides a description of each item, anchorage configuration verification, and the checklist status for each SWC. The seismic walkdown checklists are provided after this table, and are in the same chronological order as listed in the table.

Table B-1: Prairie Island Unit 2 Completed SWCs

Equipment Tag	Equipment Description	Anchorage Confirmed?	Checklist Status (Y/N)
50200	D5 DSL GEN VERTICAL PANEL	Yes	Y
55320	D5 DSL GEN ENG 1 AUX DESK	Yes	Y
70350	22 DD CLWP LCL PNL	Yes	Y
053-322	22 DD CLG WTR PMP DSL OIL DAY TNK	Yes	Y
21 BATT	21 BATTERY (& BATTERY RACK)	Yes	Y
211M/XFMR	211M TRANSFORMER	No	Y
212M/XFMR	212M TRANSFORMER	No	Y
217-111	21 MD AFW PMP L/O CLR	No	Y
22 BATT	22 BATTERY (& BATTERY RACK)	Yes	Y
22 BATT CHG	22 BATTERY CHARGER	Yes	N
221M/XFMR	221M TRANSFORMER	No	Y
234-031	D5 DSL GEN	No	Y
234-032	D6 DSL GEN	No	Y
235-081	22 CLG WTR PMP DSL JCKT CLG HX	No	Y

Table B-1: Prairie Island Unit 2 Completed SWCs			
Equipment Tag	**Equipment Description**	**Anchorage Confirmed?**	**Checklist Status (Y/N)**
245-042	22 CHG PMP	Yes	Y
245-071	21 SI PMP	Yes	Y
245-122	22 CC PMP	Yes	N
245-201	22 TD AFW PMP	Yes	Y
245-392	22 DD CLG WTR PMP	Yes	Y
246-031	D5 1A START AIR RCVR	No	Y
253-361	21 D5 FO DAY TANK	Yes	Y
253-401	D5 ENG 1 HT EXPANSION TANK	No	Y
274-031	121 SWGR RM UNIT CLR	No	N
274-162	TRN B EVENT MON RM UNIT CLR	No	Y
2ASG1	SAFEGUARD RELAY RACK 2ASG1	Yes	Y
2EG-15-2	D5 1B START AIR RCVR RELIEF	No	Y
2LT-762	U2 RVLIS HEAD FULL RANGE TRN B D/P XMTR	No	Y
2LT-763	22 RX VSL HEAD DYNAMIC RNG TRN B D/P XMTR	Yes	Y
2LT-920	21 RWST LVL XMTR	Yes	Y
2LT-921	21 RWST LVL XMTR	Yes	Y
2NR3	NIS RACK III (BLU) 2NR3	Yes	Y
2PT-469	21 STM GEN MN STM HDR (CHNL II-WHI) P XMTR	No	Y
2PT-479	22 STM GEN MN STM HDR (CHNL IV-YEL) P XMTR	No	Y
2VC-28-2	22 CHG PMP DISCH RELIEF	No	Y

Table B-1: Prairie Island Unit 2 Completed SWCs			
Equipment Tag	**Equipment Description**	**Anchorage Confirmed?**	**Checklist Status (Y/N)**
B-2	CONTROL PANEL B-2	No	Y
CV-31060	22 TD AFW PMP TRIP THROTTLE CV	No	Y
CV-31419	22 TD AFW PMP RECIRC/L-O CLG CV	No	Y
CV-31457	22 DD CLG WTR PMP JCKT CLR OUTL CV	No	Y
CV-39413	22/24 FCU CLG WTR SUPPLY CV	No	Y
D-2	CONTROL PANEL D-2	No	Y
E-2	CONTROL PANEL E-2	No	Y
EM-B2	EVENT MONITORING RACK EM-B2	Yes	N
MTR 211K-12	21 D5 DSL GEN BLDG SPLY FAN	No	Y
MTR 211K-13	21 D5 DSL GEN BLDG RETURN FAN	No	Y
MV-32020	22 SG MS SPLY TO 22 TD AFW PMP MV	No	Y
MV-32030	22 TD AFW PMP SUCT CL SPLY MV	No	Y
MV-32148	21 FCU CLG WTR OUTL ISOL MV B	No	Y
MV-32160	21 CC HX CLG WTR INLET MV	No	Y
MV-32180	SUMP B TO 21 RHR PMP TRN A (OUTSIDE) MV	No	Y
MV-32246	22 AFW TO 21 SG MV	No	Y
MV-32248	21/22 AFW TO 21 SG ISOL MV	No	Y
MV-32383	21 MD AFW PMP DISCH TO 21 SG MV	No	Y
MV-32384	21 MD AFW PMP DISCH TO 22 SG MV	No	Y
MV-32389	24 FCU CLG WTR INLT ISOL MV	No	Y

Table B-1: Prairie Island Unit 2 Completed SWCs			
Equipment Tag	**Equipment Description**	**Anchorage Confirmed?**	**Checklist Status (Y/N)**
PNL 211	INSTRUMENT BUS II PANEL (WHI) 211	Yes	Y
PNL 22	DC DISTRIBUTION PANEL 22	No	N
PNL 234	AC DISTRIBUTION PANEL 234	Yes	Y
PNL 234/XFMR	PANEL 234 TRANSFORMER	No	Y
PNL 235/XFMR	PANEL 235 TRANSFORMER	No	Y
PNL 261	DC DISTRIBUTION PANEL 261	Yes	Y
PNL 262	DC DISTRIBUTION PANEL 262	Yes	Y
RS-21-11	21 SG MS HDR RELIEF	No	Y
SV-33777	22 DD CLWP DSL JCKT CLR OUTL SV	No	Y
SV-37904	D5 ENG 1 AUX DESK 1B START AIR SV	No	Y

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *50200* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *D5 DSL GEN VERTICAL PANEL*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *D5 CNTRL*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

   The actual number of welds per side exceeds the minimum requirements of the drawing, so it is acceptable. They are both on the inside and the outside.

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

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

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

   There are approximately six small cracks, but they do not challenge the embedded plate capacity.

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

   The SWEs referenced drawing X-HIAW-2610-16-4, revision H, for anchorage verification.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *50200* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *D5 DSL GEN VERTICAL PANEL*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

All five panel doors were opened. The five panels are one contiguous cabinet. Some light terminal strip (foreign material) was found inside panel 5. The foreign material is a plastic cable cover used in the cabinet and is not a seismic concern. The SWEs also noted a test jack in panel 3, which is by design.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 11/20/2012

Kyle Kriesel 10.30.12

~~SUNSI - WITHHOLD FROM PUBLIC DISCLOSURE~~

The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *55320* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *D5 DSL GEN ENG 1 AUX DESK*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *D5 ENGINE*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

   The SWEs verified the anchorage of the steel skid to the frame. There were ten 1/2" anchors, five on the front and five on the back, as well as, eight anchors, four each on either side.

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *55320* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *D5 DSL GEN ENG 1 AUX DESK*

Interaction Effects

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

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

   There are no block walls and everything in the vicinity is seismically braced.

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

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

Other Adverse Conditions

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

    There are missing cap nuts on the south side of the cabinet. This is a maintenance issue and not a seismic issue.

    CAP 1356613 has been initiated to evaluate this observation. In addition, WR 84624 was initiated to address this observation.

Comments (Additional pages may be added as necessary)

The front doors were opened and no anomalies were found.

Evaluated by: *Walter Diordjevic* Date: 11/14/2012

Kyle Kriesel Date: 10.30.12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *70350* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *22 DD CLWP LCL PNL*

Location: Bldg. *SSCN* Floor El. [redacted] Room, Area *22 DD CLWP*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) *Outline Drawing PD-24258 was used for verification.* Y☒ N☐ U☐ N/A☐

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *70350* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *22 DD CLWP LCL PNL*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The pendant light adjacent to the conduits supplying power to the cabinet will not strike the conduit in a seismic event. It is approximately 10" away.

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

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

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

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
    Opened rear door of the panel and no anomalies were observed.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Bruce M. Lory Bruce M. Lory 10-22-12

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Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *053-322* Equip. Class[1] *(21) Tanks and Heat Exchangers*

Equipment Description *22 DD CLG WTR PMP DSL OIL DAY TNK*

Location: Bldg. *SSCN* Floor El. [redacted] Room, Area *22 DD CLWP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The bottom anchors were inspected as well. No cracks were observed.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   Anchorage configuration matches Drawing X-HIAW-48-12.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *053-322* Equip. Class[1] *(21) Tanks and Heat Exchangers*

Equipment Description *22 DD CLG WTR PMP DSL OIL DAY TNK*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce Lory* Bruce M. Lory Date: *10-23-12*

Dileep Cheropalle C. V. Dileep Kumar Reddy *10-24-12*

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Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *21 BATT* Equip. Class[1] *(15) Batteries on Racks*

Equipment Description *21 BATTERY (& BATTERY RACK)*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *21 BATT*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

   Referenced SQUG SEWs to verify anchorage.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *21 BATT* Equip. Class[1] *(15) Batteries on Racks*

Equipment Description *21 BATTERY (& BATTERY RACK)*

Interaction Effects

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

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

   There is a single light fixture above the Battery Racks. It is not a seismic concern.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Dileep Cherlopalle* C.V. DileepKumarReddy Date: 11-1-12

Bruce Lory Bruce M. Lory Date: 11-01-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *211M/XFMR* Equip. Class[1] *(04) Transformers*

Equipment Description *211M TRANSFORMER*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *211/212 BUS*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

   It is welded to embedded plates.

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *211M/XFMR* Equip. Class[1] *(04) Transformers*

Equipment Description *211M TRANSFORMER*

Interaction Effects

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

   The "S" hooks on the light fixtures are closed, so they are not a seismic concern.

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 11/15/12

Kyle Kriesel Date: 11.15.12

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Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *212M/XFMR* Equip. Class[1] *(04) Transformers*

Equipment Description *212M TRANSFORMER*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *211/212 BUS*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

   It is welded to embedded plates.

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *212M/XFMR* Equip. Class[1] *(04) Transformers*

Equipment Description *212M TRANSFORMER*

Interaction Effects

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

   The "S" hooks for lighting fixtures are closed, so there is no seismic concern.

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Kyle Kriesel Date: 10.24.12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *217-111* Equip. Class[1] *(21)Tanks and Heat Exchangers*

Equipment Description *21 MD AFW PMP L/O CLR*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *21 AFWP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *217-111* Equip. Class[1] *(21)Tanks and Heat Exchangers*

Equipment Description *21 MD AFW PMP L/O CLR*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 11/14/2012

Kyle Kriesel Date: 11.2.12

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Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *22 BATT* Equip. Class[1] *(15) Batteries on Racks*

Equipment Description *22 BATTERY (& BATTERY RACK)*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *22BATT*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *22 BATT* Equip. Class[1] *(15) Batteries on Racks*

Equipment Description *22 BATTERY (& BATTERY RACK)*

Interaction Effects

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

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

   SWEs observed safety related block walls numbers 6 and 7. There is no seismic concern.

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

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

    The "S" hooks for lighting fixtures throughout the room are mostly closed, but not all of the way. The chain links are thin enough to possibly slip through. SWEs recommend that the "S" hooks be fully closed, even though none of them are over the batteries themselves.

    CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.

Other Adverse Conditions

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

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Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *22 BATT* Equip. Class[1] *(15) Batteries on Racks*

Equipment Description *22 BATTERY (& BATTERY RACK)*

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

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Status: Y☐ N☒ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *22 BATT CHG* Equip. Class[1] *(16) Battery Chargers and Inverters*

Equipment Description *22 BATTERY CHARGER*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *22BATT*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

   The anchors are 3/4" Hiltis. Amtek Drawing NX-236971-1 was used for verification.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☐ N☒ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *22 BATT CHG* Equip. Class[1] *(16) Battery Chargers and Inverters*

Equipment Description *22 BATTERY CHARGER*

Interaction Effects

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

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

   There are open "S" hooks for lighting fixtures above the battery charger.

   CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.

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

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

Other Adverse Conditions

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

    The SWEs opened both doors and found nothing of concern.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *221M/XFMR* Equip. Class[1] *(04) Transformers*

Equipment Description *221M TRANSFORMER*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *221/222 BUS*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There is one crack near the interior weld, but it is judged to not adversely affect the capacity of the embedded plate. It is not a seismic concern.

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *221M/XFMR* Equip. Class[1] *(04) Transformers*

Equipment Description *221M TRANSFORMER*

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   There are open "S" hooks for some of the lighting fixtures, but this will not pose an interaction hazard to the transformer.

   It is not a seismic concern, but CAP 1352001 has been initiated to evaluate the "S" hook observations noted during these walkdowns. Off of CAP 1352001, WR 83556 has been initiated.

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

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

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
    The transformer does not need to be opened as it has no doors.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

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Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *234-031* Equip. Class[1] *(17) Engine-Generators*

Equipment Description *D5 DSL GEN*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *D5 ENGINE*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

   The engine blocks are anchored with ten anchors each, five per side. The generator is anchored with eight anchors each, four per side. See comment in checklist for D6 diesel generator regarding shroud anchorage.

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *234-031* Equip. Class[1] *(17) Engine-Generators*

Equipment Description *D5 DSL GEN*

Interaction Effects

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

   The overhead electric heaters are rod hung and ductile.

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

   With the exception of the electric heaters, everything is seismically braced.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 11/20/2012

Kyle Kriesel Date: 10.30.12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *234-032* Equip. Class[1] *(17) Engine-Generators*

Equipment Description *D6 DSL GEN*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *D6 ENGINE*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

   The leveling screws were missing, but they are not a part of the positive anchorage screen.

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

~~PROPRIETARY INFORMATION — WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *234-032* Equip. Class[1] *(17) Engine-Generators*

Equipment Description *D6 DSL GEN*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

1. The guard between the engine and the generator is not anchored to the floor.

Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

2. The tie wraps managing the cable harnesses appear acceptable. It is not a seismic concern.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Diordievic* Date: 10/25/12

Dennis Zercher 10-22-2012

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *235-081* Equip. Class[1] *(21) Tanks and Heat Exchangers*

Equipment Description *22 CLG WTR PMP DSL JCKT CLG HX*

Location: Bldg. *SSCN* Floor El. [redacted] Room, Area *22 DD CLWP*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *235-081* Equip. Class[1] *(21) Tanks and Heat Exchangers*

Equipment Description *22 CLG WTR PMP DSL JCKT CLG HX*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce Lory* Bruce M. Lory Date: 10-23-12

Dileep Cheropalle C.V. Dileep Kumar Reddy 10-24-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *245-042* Equip. Class[1] *(05) Horizontal Pumps*

Equipment Description *22 CHG PMP*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *22 CHRG PUMP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

   The SWEs referenced SQUG SEWs for anchorage verification. They were able to see three bolts per side and the 4th bolt is in a contaminated area.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *245-042* Equip. Class[1] *(05) Horizontal Pumps*

Equipment Description *22 CHG PMP*

Interaction Effects

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

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

   There are two open "S" hooks on the light fixture. It will not impact the pump because the pump is not in the zone of influence.

   CAP 1352001 has been initiated to evaluate all of the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address these observations.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

The SWEs noticed tools on the angle iron bracket on the wall. This bracket is not supporting any equipment. Plant personnel removed the foreign material.

Evaluated by: *Dileep Cherlopalle* C-V. DileepKumarReddy Date: 10-26-12

Bruce M. Lory Bruce M. Lory 10-24-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *245-071* Equip. Class[1] *(05) Horizontal Pumps*

Equipment Description *21 SI PMP*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *21/22 SI PUMP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

   Referenced drawing XH-1001-155. SWE's verified ten 1" anchor bolts.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *245-071* Equip. Class[1] *(05) Horizontal Pumps*

Equipment Description *21 SI PMP*

Interaction Effects

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

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

   The light fixture above 21 safety injection pump has two open "S" hooks. SWEs judged that it is credible, but is not significant and the safety injection pump is not adversely affected.

   CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.

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

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

    The room heater is in contact with the unistrut which is supporting the tubing from the 21 SI pump. It is credible but not significant. SWEs judge this potential seismic interaction as acceptable since interaction is ductile and seismic displacements are small.

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Dileep Cherlopalle* C.V.DileepKumarReddy Date: 10-26-12

Bruce M. Lory Bruce M. Lory Date: 10-22-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *245-122* Equip. Class[1] *(05) Horizontal Pumps*

Equipment Description *22 CC PMP*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *12/22 CC PUMPS*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

   Referenced drawing XH-105-3 for anchorage verification.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☐ N☒ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *245-122* Equip. Class[1] *(05) Horizontal Pumps*

Equipment Description *22 CC PMP*

Interaction Effects

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

   The glass oilers are soft targets but the SWEs judged light fixture cannot fall and impact the glass oilers. There is no seismic concern.

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

   1. Both of the "S" hooks holding the light fixture above the 22 CC pumps are open. The power cord is taped and seems to be able to support the light fixture. The light fixture is in contact with the "L" column and it is possible that the light may break during seismic motion.

   CAP 1351916 has been initiated to evaluate this observation. In addition to writing this action request, WR 83541 has been initiated to address this observation.

   2. The CC Pump collection barrel is tied with rope to the unistrut. The barrel has a note attached that references CAP 1317022 and WO 74792.

   CAP 1351901 has been initiated to evaluate this observation. WR 83539 has been initiated to address this observation.

   3. There is duct tape on the bottom of the rigging beam above the CC pump. It is a housekeeping issue, and not a seismic concern.

   CAP 1351913 has been initiated to evaluate this observation.

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

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

Other Adverse Conditions

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

Status: Y☐ N☒ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *245-122* Equip. Class[1] *(05) Horizontal Pumps*

Equipment Description *22 CC PMP*

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 10-21-12

Dileep Cheropalle C.V. Dileep Kumar Reddy 10-22-12

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The remaining pages are withheld from public disclosure.

~~PROPRIETARY INFORMATION - WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *245-201* Equip. Class[1] *(05) Horizontal Pumps*

Equipment Description *22 TD AFW PMP*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *22 AFWP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

   Anchorage is in accordance with SEWS (A-46) documentation.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

~~PROPRIETARY INFORMATION — WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *245-201* Equip. Class[1] *(05) Horizontal Pumps*

Equipment Description *22 TD AFW PMP*

Interaction Effects

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

   Fluorescent light located west of TD AFW pump has open "S" hook on one chain but the other chain will prevent light from falling on the pump.

   CAP 1352001 has been initiated to evaluate this observation. In addition to the action request, WR 83556 has been initiated to address this observation.

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: *10/25/12*

Dennis Zercher *10-22-2012*

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *245-392* Equip. Class[1] *(06) Vertical Pumps*

Equipment Description *22 DD CLG WTR PMP*

Location: Bldg. *SSCN* Floor El. [redacted] Room, Area *22 DD CLWP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *245-392* Equip. Class[1] *(06) Vertical Pumps*

Equipment Description *22 DD CLG WTR PMP*

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The light bar is being held by two "S" hooks. One of the "S" hooks is open. If the light bar were to swing, it might hit the pump. Although this potential seismic interaction might be credible, it is not significant since the pump would still be able to perform its intended safety function.

   CAP 1351884 has been initiated to evaluate this observation. In addition to writing this action request, WR 83533 has been initiated to address this observation.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 10-22-12

Dileep Cheropalle C.V.DileepKumarReddy 10-26-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *246-031* Equip. Class[1] *(21) Tanks and Heat Exchangers*

Equipment Description *D5 1A START AIR RCVR*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *D5 ENGINE*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

   There are six anchors to the floor and they are braced to an embedded plate in the wall.

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *246-031* Equip. Class[1] *(21) Tanks and Heat Exchangers*

Equipment Description *D5 1A START AIR RCVR*

Interaction Effects

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

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

   A rod hung heater is ductile and will not interact with the air system.

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

   The air line is seismically supported.

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Kyle Kriesel Date: 10,24,12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *253-361* Equip. Class[1] *(21) Tanks and Heat Exchangers*

Equipment Description *21 D5 FO DAY TANK*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *D5 FUEL OIL*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

   There are two saddles and each of them has eight 1" diameter anchors.

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

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

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

   There is one crack to the grout pad surrounding the anchorage, but not through the grout pad. It is acceptable.

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

   SWEs referenced drawing NF-118015 ("plan F") for anchorage verification.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *253-361* Equip. Class[1] *(21) Tanks and Heat Exchangers*

Equipment Description *21 D5 FO DAY TANK*

Interaction Effects

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

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

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

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

Unit heater, UH-211, is well secured to the R/C wall.

Other Adverse Conditions

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

The fire protection piping is is well supported.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 11-5-12

Kyle Kriesel 10.26.12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *253-401* Equip. Class[1] *(21) Tanks and Heat Exchangers*

Equipment Description *D5 ENG 1 HT EXPANSION TANK*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *D5 MECH*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *253-401* Equip. Class[1] *(21) Tanks and Heat Exchangers*

Equipment Description *D5 ENG 1 HT EXPANSION TANK*

Interaction Effects

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

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

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

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

The fire protection piping with mechanical couplings is seismically braced, so it is acceptable.

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Kyle Kriesel Date: 10.24.12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *274-031* Equip. Class[1] *(10) Air Handlers*

Equipment Description *121 SWGR RM UNIT CLR*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *BUS 121*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☐ N☒ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *274-031* Equip. Class* *(10) Air Handlers*

Equipment Description *121 SWGR RM UNIT CLR*

Interaction Effects

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

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

   The adjacent fluorescent light is not a credible hazard.

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

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

    It is adjacent to block wall number 26, which is safety related and not a seismic concern.

Other Adverse Conditions

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

    The supply and return line are laterally unsupported, and could potentially over stress the nozzle (particularly the copper portion in the cooling radiator).

    Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: *11/14/2012*

Dennis Zercher Date: *11-15-2012*

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *274-162* Equip. Class[1] *(10) Air Handlers*

Equipment Description *TRN B EVENT MON RM UNIT CLR*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *TRN B EVENT MON*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *274-162* Equip. Class[1] *(10) Air Handlers*

Equipment Description *TRN B EVENT MON RM UNIT CLR*

Interaction Effects

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

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

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

   Supply and return lines are laterally unrestrained and may subject cooler nozzle to large movement.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Dileep Cherlopalle* C.V. Dileep Kumar Reddy Date: 10-26-12

Bruce Lory Bruce M. Lory Date: 10-21-12

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2ASG1* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *SAFEGUARD RELAY RACK 2ASG1*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *RELAY*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

   There are two 1/2" diameter anchors in this panel, which is acceptable.

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

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

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

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

   SQUG SEWs were used for anchorage verification. Anchorage described as having 24 1/2" diameter shell anchors (12 each side) for entire lineup of 2ASG2, 2ASG1, 2ARP1 thru 5, 2AMR1 and 2EH1 thru 2EH3. The anchorage is verified.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2ASG1* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *SAFEGUARD RELAY RACK 2ASG1*

Interaction Effects

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

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

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

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

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
SWEs inspected internal components and did not find any loose or missing mounting hardware.

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 10-19-12

Dileep Cherlopalle C.V.Dileep Kumar Reddy 10-19-12

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The remaining pages are withheld from public disclosure.

~~PROPRIETARY INFORMATION — WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2EG-15-2* Equip. Class[1] *(07) Fluid-Operated Valves*

Equipment Description *D5 1B START AIR RCVR RELIEF*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *D5 ENGINE*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2EG-15-2* Equip. Class[1] *(07) Fluid-Operated Valves*

Equipment Description *D5 1B START AIR RCVR RELIEF*

Interaction Effects

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

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

   The electric heater on rods is ductile, so it is acceptable.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 11-7-2012

Kyle Kriesel Date: 11-2-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2LT-762* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *U2 RVLIS HEAD FULL RANGE TRN B D/P XMTR*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

   There are no cracks through the anchor. It is acceptable.

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

~~PROPRIETARY INFORMATION — WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2LT-762* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *U2 RVLIS HEAD FULL RANGE TRN B D/P XMTR*

Interaction Effects

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

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

   The piping located above equipment is seismically designed

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

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

    The fire extinguishers that are adjacent to the instrument rack are properly hung on serviceable brackets. Therefore, it is acceptable.

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Wally Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2LT-763* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *22 RX VSL HEAD DYNAMIC RNG TRN B D/P XMTR*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

   There are no visible cracks through the anchor, therefore, they are not a seismic concern.

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

~~PROPRIETARY INFORMATION — WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2LT-763* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *22 RX VSL HEAD DYNAMIC RNG TRN B D/P XMTR*

Interaction Effects

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

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

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

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

    The flourescent light above has closed "S" hooks and fire extinguishers are properly hung on serviceable hooks. There are no seismic concerns.

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Wally Diordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2LT-920* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *21 RWST LVL XMTR*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *21/22 SI PUMP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

   Referenced SQUG SEWs for anchorage verification. SWEs verified that there were four anchors and deemed them acceptable.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2LT-920* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *21 RWST LVL XMTR*

Interaction Effects

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

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

   A light fixture has three open "S" hooks. The SWE's judged that the light fixture will not impact the transmitter, so there is no seismic interaction concern.

   CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Dileep Cherlopalle* C.V. Dileep Kumar Reddy Date: 10-26-12

Bruce M. Lory Bruce M. Lory Date: 10-24-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2LT-921* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *21 RWST LVL XMTR*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *21/22 SI PUMP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

   The transmitter is bolted to the plate using the factory mounting hardware. The plate is welded to two 2" x 2"x 1/4" angles. The angles are bolted to the wall using four 1/2" diameter shell anchors that are in a 9" x 17.5" bolt pattern per the SQUQ SEWS. There are no seismic or configuration concerns.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2LT-921* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *21 RWST LVL XMTR*

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

Interaction Effects

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

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

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

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

    The cabinet labeled "clean chemical handling equipment" (36" x 24" x 75" high) is stored about 40" from the level transmitter on the other side of the walkway. Its aspect ratio would cause it to fall over into the transmitter if it is not anchored to the wall.

    CAP 1351219 has been initiated to evaluate this observation.
    Site Engineering discovered later that the cabinet is anchored to the wall with two small anchors, which can only be found by opening the cabinet and moving internal contents to see them. Therefore this observation is resolved and there is no adverse seismic condition.

Other Adverse Conditions

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

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2LT-921* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *21 RWST LVL XMTR*

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce Lory* Bruce M. Lory Date: 10-22-12

Dileep Cheropalle C.V.DileepKumarReddy 10-26-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2NR3* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *NIS RACK III (BLU) 2NR3*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *CONTROL ROOM*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

   The SWEs referenced the SQUG SEWs for anchorage verification. They verified four anchor bolts. There is one 1/2" bolt on each corner anchoring the cabinet base frame to the floor.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2NR3* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *NIS RACK III (BLU) 2NR3*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce Lory* Bruce M. Lory Date: 11-01-12

Dileep Cherlopalle C.V. DileepKumarReddy Date: 11-1-12

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The remaining pages are withheld from public disclosure.

~~PROPRIETARY INFORMATION - WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2PT-469* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *21 STM GEN MN STM HDR (CHNL II-WHI) P XMTR*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *SOUTH WEST*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2PT-469* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *21 STM GEN MN STM HDR (CHNL II-WHI) P XMTR*

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead light has one slightly open single loop hook support on one side. The chain connected does not have enough slack to cause the light to unhook at this end. The SWE's cannot see the other light hook, but judge that the fixture cannot detatch and fall onto the transmitter.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce Lory* Bruce M. Lory Date: 11-01-12

Dileep Cherlopalle C.V. Dileep Kumar Reddy 10-30-12.

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The remaining pages are withheld from public disclosure.

~~PROPRIETARY INFORMATION — WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2PT-479* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *22 STM GEN MN STM HDR (CHNL IV-YEL) P XMTR*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The transmitter is mounted to steel, so there is no concrete to inspect.

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2PT-479* Equip. Class[1] *(18) Instruments on Racks*

Equipment Description *22 STM GEN MN STM HDR (CHNL IV-YEL) P XMTR*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Dileep Cherlopalle* C.V.DileepKumarReddy Date: 10-18-12

Bruce Lory Bruce M. Lory 10-17-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2VC-28-2* Equip. Class[1] *(07) Fluid-Operated Valves*

Equipment Description *22 CHG PMP DISCH RELIEF*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *22 CHRG PUMP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *2VC-28-2* Equip. Class[1] *(07) Fluid-Operated Valves*

Equipment Description *22 CHG PMP DISCH RELIEF*

Interaction Effects

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

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

   There are no overhead lighting fixtures in the vicinity.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce Lory* Bruce M. Lory Date: 10-18-12

Dileep Cherlopalle C.V. Dileep Kumar Reddy 10-19-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *B-2* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *CONTROL PANEL B-2*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *CONTROL ROOM*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *B-2* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *CONTROL PANEL B-2*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

1. Duct tape was identified behind Panel E-2 at about 8' high between the CVCS letdown and RHR labels.

CAP 1352954 has been initiated to document this observation. Additionally, WR 83785 has been initiated to remove the foreign material.

2. There is a bent back cover plate for the CVCS letdown monitor. It is located at about 10' high near the CVCS letdown label. The cover plate is non-structural and is not an adverse seismic condition.

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 10-26-12

Dileep Cherlopalle C.V. Dileep Kumar Reddy Date: 10-26-12

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The remaining pages are withheld from public disclosure.

~~PROPRIETARY INFORMATION - WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *CV-31060* Equip. Class[1] *(7) Fluid-Operated Valves*

Equipment Description *22 TD AFW PMP TRIP THROTTLE CV*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *22AFWP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *CV-31060* Equip. Class[1] *(7) Fluid-Operated Valves*

Equipment Description *22 TD AFW PMP TRIP THROTTLE CV*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   There are no soft targets.

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   All the lines are rigid and the limit switches are flexible. Therefore, they are acceptable.

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Wally Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

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The remaining pages are withheld from public disclosure.

~~PROPRIETARY INFORMATION — WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *CV-31419* Equip. Class[1] *(7) Fluid-Operated Valves*

Equipment Description *22 TD AFW PMP RECIRC/L-O CLG CV*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *22 AFWP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *CV-31419* Equip. Class[1] *(7) Fluid-Operated Valves*

Equipment Description *22 TD AFW PMP RECIRC/L-O CLG CV*

Interaction Effects

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

   The adjacent fluorescent light supported by strut and conduit will not displace to the extent of the available clearance. The sprinkler line is not deemed a seismic hazard.

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

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

   The copper air line has a long span but not adjudged to be an inertial displacement concern.

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Dennis Zercher 10-23-2012

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *CV-31457* Equip. Class[1] *(7) Fluid-Operated Valves*

Equipment Description *22 DD CLG WTR PMP JCKT CLR OUTL CV*

Location: Bldg. *SSCN* Floor El. [redacted] Room, Area *22 DD CLWP*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *CV-31457* Equip. Class[1] *(7) Fluid-Operated Valves*

Equipment Description *22 DD CLG WTR PMP JCKT CLR OUTL CV*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce Lory* Bruce M. Lory Date: 11-01-12

Dileep Cheropalle C.V. Dileep Kumar Reddy Date: 11-1-12

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The remaining pages are withheld from public disclosure.

~~PROPRIETARY INFORMATION — WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *CV-39413* Equip. Class[1] *(07) Fluid-Operated Valves*

Equipment Description *22/24 FCU CLG WTR SUPPLY CV*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *CV-39413* Equip. Class[1] *(07) Fluid-Operated Valves*

Equipment Description *22/24 FCU CLG WTR SUPPLY CV*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *D-2* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *CONTROL PANEL D-2*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *CNTRL RM*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   D-2 Panel is bolted to support frame and frame is stitch welded to structural steel embeds.

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *D-2* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *CONTROL PANEL D-2*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Panel is bolted to adjacent panels.

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

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    The dust cover (fiberglass type) side boards on some of the switches in "E" panel have slid out of position. It is not a seismic concern. The SWEs did not see the same issue with the "D" panel.

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Wally Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *E-2* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *CONTROL PANEL E-2*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *CONTROL ROOM*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

Interaction Effects

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *E-2* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *CONTROL PANEL E-2*

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

   The light fixture near E-2 in the middle section has one open "S" hook out of four hooks. E-2 is not in the zone of influence, therefore it is not a seismic concern. This light fixture was noted during the area walkbys.
   CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

The SWEs identified the following foreign materials:
1. Duct tape was found on the side of the first monitor, about 8' high on the generator controls.
2. A broken tie wrap is inside E-2 and pinned to a diagonal support.
3. A tie wrap was found on the edge of a HVAC duct exhaust above E-2.
CAP 1352954 has been initiated to evaluate this observation. Additonally, WR 83785 has been initiated to remove the foreign material.

In addition to the foreign material, the pig tail of a cable with a multipin connector was found stored on top of the box. It is not a seismic concern, but it is recommended that the site evaluate the condition.
CAP 1357129 has been initiated to evaluate this observation. Additionally, WR 83785 has been initiated to remove the foreign material. See Appendix F of report for site engineering resolution to comment.

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 11-23-12

Dileep Cherlopalle C.V. Dileep Kumar Reddy Date: 11-23-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *EM-B2* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *EVENT MONITORING RACK EM-B2*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *TRN B EVENT MON*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

   SWEs referenced the SQUG SEWs for anchorage verification.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☐ N☒ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *EM-B2* Equip. Class[1] *(20) Instrumentation and Control Panels and Cabinets*

Equipment Description *EVENT MONITORING RACK EM-B2*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

A mounting screw was discovered missing inside the back of this panel in one of the electronic modules.

CAP 1353340 was initiated to evaluate this observation. WR 83890 was also initiated to address this observation.

Comments (Additional pages may be added as necessary)

1. The pig tail of the cable lies at bottom of the "EM-B2" event monitoring rack. SWEs judge pig tail cannot affect the function of the panel because it is at the bottom of the panel.

2. The train B event monitoring unit cooler, CS-19144, for PNL 219-1 has four bolt holes in the base plate but only two screws are installed.

Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

Evaluated by: *Dileep Cherlopalle* C.V.DileepKumarReddy Date: 10-29-12

Bruce M. Lory Bruce M. Lory Date: 11-01-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MTR 211K-12* Equip. Class[1] *(09) Fans*

Equipment Description *21 D5 DSL GEN BLDG SPLY FAN*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *D5 MECH*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

   It is bolted, using six 1/2" diameter steel bolts, to structural skid beams which are continuously welded to embedded plates in the floor.

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MTR 211K-12* Equip. Class[1] *(09) Fans*

Equipment Description *21 D5 DSL GEN BLDG SPLY FAN*

Interaction Effects

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

   The fire protection piping with mechanical couples are seismically braced.

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Kyle Kriesel Date: 10.24.12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MTR 211K-13* Equip. Class[1] *(09) Fans*

Equipment Description *21 D5 DSL GEN BLDG RETURN FAN*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *D5 MECH*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

   There are six 1/2" steel bolts bolted to a steel frame which is welded to structural steel.

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MTR 211K-13* Equip. Class[1] *(09) Fans*

Equipment Description *21 D5 DSL GEN BLDG RETURN FAN*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Kyle Kriesel Date: 10,24,12

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The remaining pages are withheld from public disclosure.

~~PROPRIETARY INFORMATION — WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32020* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *22 SG MS SPLY TO 22 TD AFW PMP MV*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32020* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *22 SG MS SPLY TO 22 TD AFW PMP MV*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Wally Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32030* Equip. Class[1] *(8) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *22 TD AFW PMP SUCT CL SPLY MV*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *22AFWP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32030* Equip. Class[1] *(8) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *22 TD AFW PMP SUCT CL SPLY MV*

Interaction Effects

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

   The pipe support trapeze for the rod support of the turbine driven auxilliary feedwater pump discharge line may displace (out of the plane of the trapeze) and potentially strike MV-32030.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

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

   The overhead light will not reach motor operated valve and is therefore acceptable.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32030* Equip. Class[1] *(8) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *22 TD AFW PMP SUCT CL SPLY MV*

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Dennis Zercher Date: 10-23-2012

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32148* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *21 FCU CLG WTR OUTL ISOL MV B*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32148* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *21 FCU CLG WTR OUTL ISOL MV B*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Dileep Cherlopalle* C.V. Dileep Kumar Reddy Date: 10-26-12

Bruce Lory Bruce K. Lory 10-24-12

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The remaining pages are withheld from public disclosure.

~~PROPRIETARY INFORMATION - WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32160* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *21 CC HX CLG WTR INLET MV*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *11/21 CC PUMPS*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32160* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *21 CC HX CLG WTR INLET MV*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Dileep Cherlopalle* C.V.DileepKumarReddy Date: 11-9-12

Bruce M. Lory Bruce M. Lory 11-13-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32180* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *SUMP B TO 21 RHR PMP TRN A (OUTSIDE) MV*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *21/22 CNTM SPRAY*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32180* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *SUMP B TO 21 RHR PMP TRN A (OUTSIDE) MV*

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   There is an open "S" hook on the light fixture above MV-32180. It is credible, but will not impact MV-32180.

   CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Dileep Cherlopalle* C.V. Dileep Kumar Reddy Date: 10-26-12

Bruce Lory Bruce K. Lory Date: 10-22-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32246* Equip. Class[1] *(8) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *22 AFW TO 21 SG MV*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *22 AFWP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32246* Equip. Class[1] *(8) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *22 AFW TO 21 SG MV*

Interaction Effects

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

   All of the supports and other equipment are at least 3" away. The soft targets are free from impact.

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

   The cable trays and conduits are ductile. They were evaluated per USI A-46. The piping is well supported.

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

   The conduits have adequate flexibility.

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

Other Adverse Conditions

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

    None were observed.

Comments (Additional pages may be added as necessary)

Evaluated by: *Wally Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32248* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *21/22 AFW TO 21 SG ISOL MV*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *SOUTH WEST*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32248* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *21/22 AFW TO 21 SG ISOL MV*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Dileep Cherlopalle* C.V. Dileep Kumar Reddy Date: 11-9-12

Bruce M. Lory Bruce M. Lory 11-13-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32383* Equip. Class[1] *(8) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *21 MD AFW PMP DISCH TO 21 SG MV*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *22AFWP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32383* Equip. Class[1] *(8) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *21 MD AFW PMP DISCH TO 21 SG MV*

Interaction Effects

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

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

   The fire protection header will not strike the valve.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Wlater Djordjevic* Date: 11-5-12

Kyle Kriesel Date: 10.25.12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32384* Equip. Class[1] *(8) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *21 MD AFW PMP DISCH TO 22 SG MV*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *22AFWP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32384* Equip. Class[1] *(8) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *21 MD AFW PMP DISCH TO 22 SG MV*

Interaction Effects

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

   The cantilevered conduit routed above is not deemed a seismic hazard because it will not hit the valve.

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

The conduit rod stirrup below the valve is missing one bolt. This is not a seismic issue for the valve, but requires evaluation.

CAP 1356520 has been initiated to evaluate this observation. In addition, WR 84626 was initiated to address this observation.

Evaluated by: *Walter Djordjevic* Date: 11/14/12

Kyle Kriesel Date: 10.30.12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32389* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *24 FCU CLG WTR INLT ISOL MV*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *MV-32389* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *24 FCU CLG WTR INLT ISOL MV*

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The "S" hooks for the fluorescent lighting fixtures are closed, and do not pose a concern.

   The containment purge line is well supported and is not a seismic concern.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Wally Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 211* Equip. Class[1] *(14) Distribution Panels*

Equipment Description *INSTRUMENT BUS II PANEL (WHI) 211*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *RELAY*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The SWEs could not verify the size of the anchors. It is only possible to see them partially. However, all of the 4 anchors are present.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The SWEs could not detect cracks in the concrete because the wall is covered with a fire protection coating.

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 211* Equip. Class[1] *(14) Distribution Panels*

Equipment Description *INSTRUMENT BUS II PANEL (WHI) 211*

Interaction Effects

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

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   Panel 211 and all conduits connecting to it are ridgid. There is no seismic concern.

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

The SWEs inspected the internals of the panel and found no missing or loose hardware. It has 2 screws.

Evaluated by: *Dileep Chrelopalle* C.V. Dileep Kumar Reddy Date: 10-26-12

Bruce Lory Bruce M. Lory 10-26-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 22* Equip. Class[1] *(14)Distribution Panels*

Equipment Description *DC DISTRIBUTION PANEL 22*

Location: Bldg. *TURB* Floor El. [redacted] Room, Area *22 BATT*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

The A-46 SEWs declared this panel as an outlier and required a grout pad so that the bolts would not be subject to bending. The recommended resolution does not appear to have been performed.

Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☐ N☒ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 22* Equip. Class[1] *(14)Distribution Panels*

Equipment Description *DC DISTRIBUTION PANEL 22*

Interaction Effects

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

   The counterweight of the door pulley system may strike panel PNL 22.

   CAP 1352343 has been initiated to evaluate this observation. WR 83645 and 83646 have also been initiated to address this observation.

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

   Block wall #7 is safety related.

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

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

    The rope with a latch at the end is not a credible hazard.

Other Adverse Conditions

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

    SWEs opened all of the doors and found nothing anomalous.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Diordievic* Date: 11/14/2012

Dennis Zercher 11-15-2012

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 234* Equip. Class[1] *(14) Distribution Panels*

Equipment Description *AC DISTRIBUTION PANEL 234*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

   Referenced drawing XH-529-3 for anchorage verification.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 234* Equip. Class[1] *(14) Distribution Panels*

Equipment Description *AC DISTRIBUTION PANEL 234*

Interaction Effects

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

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

   Both of the "S" hooks for the light fixture in front of panel 234 are open. The light fixture will not impact the panel as it is 4' away from the panel. It is not a seismic concern.

   CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.

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

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

Other Adverse Conditions

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

    Internal components were inspected and no loose or missing mounting hardware was found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 10-24-12

Dileep Cherlopalle C-V. Dileep Kumar Reddy Date: 10-26-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 234/XFMR* Equip. Class[1] *(04) Transformers*

Equipment Description *PANEL 234 TRANSFORMER*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

Interaction Effects

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 234/XFMR* Equip. Class[1] *(04) Transformers*

Equipment Description *PANEL 234 TRANSFORMER*

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

   The "S hooks" at both ends of a light fixture near PNL-234/XFMR are open. If light fixture unhooks at both ends, its power cord will hold the fixture at one end, and the other end will swing down. Panel 234 and the transformers are not in zone of influences, so SWEs judge light fixture falling is not an adverse seismic condition.

   CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 11-01-12

Dileep Cherlopalle C.V.Dileep Kumar Reddy 10-29-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 235/XFMR* Equip. Class[1] *(04) Transformers*

Equipment Description *PANEL 235 TRANSFORMER*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 235/XFMR* Equip. Class[1] *(04) Transformers*

Equipment Description *PANEL 235 TRANSFORMER*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce Lory* Bruce M. Lory Date: 10-22-12

Dileep Cheropalle C.V. Dileep Kumar Reddy 10-23-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 261* Equip. Class[1] *(14) Distribution Panels*

Equipment Description *DC DISTRIBUTION PANEL 261*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The upper left 3/8" diameter shell expansion anchor has sheared off.

   Plant engineering investigated this observation and determined that the fourth bolt is visible behind the spring-loaded nut holding the panel enclosure to the Unistrut. Panel 261 therefore has four mounting bolts connecting it to the concrete wall, and no concern is present. CAP 1352221 was initiated to document this observation. WR 83615 was also initiated to perform any field work required by CAP 1352221.

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

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

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   SWEs used SQUG SEWs to verify anchorage. The anchorage consists of four 3/8" diameter shell expansion anchors. See question 2.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 261* Equip. Class[1] *(14) Distribution Panels*

Equipment Description *DC DISTRIBUTION PANEL 261*

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

Interaction Effects

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

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   A combination of rigid and flexible conduits are connected to the panel. There are no seismic concerns.

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

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
    The internals of the panel were inspected and the SWEs did not find any loose or missing component mounting hardware.

Comments (Additional pages may be added as necessary)

The internal cabinet has been inspected and was found to have no loose or missing hardware.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 261* Equip. Class[1] *(14) Distribution Panels*

Equipment Description *DC DISTRIBUTION PANEL 261*

Evaluated by: *Dileep Cherlopalle* C.V.DileepKumarReddy Date: 10-29-12

Bruce Lory Bruce M. Lory 10-22-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 262* Equip. Class[1] *(14) Distribution Panels*

Equipment Description *DC DISTRIBUTION PANEL 262*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *NORTH WEST*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The SQUG SEWs were referenced for anchorage verification. Only three out of four of the anchors were visible. The 4th anchor is blocked from view by an angle iron.

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *PNL 262* Equip. Class[1] *(14) Distribution Panels*

Equipment Description *DC DISTRIBUTION PANEL 262*

Interaction Effects

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

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The conduits connected to PNL 262 are rigid.

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

The internals of the panel were inspected. There is no loose or missing hardware.

Evaluated by: *Dileep Cherlopalle* C.V. Dileep Kumar Reddy Date: 10-23-12

Bruce Lory Bruce M. Lory 10-22-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *RS-21-11* Equip. Class[1] *(07) Fluid-Operated Valves*

Equipment Description *21 SG MS HDR RELIEF*

Location: Bldg. *AUX* Floor El. [redacted] Room, Area *SOUTH WEST*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *RS-21-11* Equip. Class[1] *(07) Fluid-Operated Valves*

Equipment Description *21 SG MS HDR RELIEF*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce Lory* Bruce M. Lory Date: 11-13-12

Dileep Cherlopalle C.V. Dileep Kumar Reddy Date: 11-9-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *SV-33777* Equip. Class[1] *(8) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *22 DD CLWP DSL JCKT CLR OUTL SV*

Location: Bldg. *SSCN* Floor El. [redacted] Room, Area *22 DD CLWP*

Manufacturer, Model, Etc. (optional but recommended) _____

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *SV-33777* Equip. Class[1] *(8) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *22 DD CLWP DSL JCKT CLR OUTL SV*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce Lory* Bruce M. Lory Date: 10-21-12

Dileep Charopalle C-U. Dileepkumar Reddy Date: 10-26-12

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *SV-37904* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *D5 ENG 1 AUX DESK 1B START AIR SV*

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area *D5 ENGINE*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC)

Equipment ID No. *SV-37904* Equip. Class[1] *(08) Motor-Operated and Solenoid-Operated Valves*

Equipment Description *D5 ENG 1 AUX DESK 1B START AIR SV*

Interaction Effects

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

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

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 11/15/2012

Kyle Kriesel 11.15.12

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C

Area Walk-By Checklists (AWCs)

This appendix provides the Area Walk-By Checklists (AWC) completed as of November 9, 2012 for PINGP. Table C-1 provides the building, elevation, and location of each area as well as a list of SWEL items associated with each area, and whether or not the checklist was marked as "Y" or "N" (the checklist status).

The AWCs are provided after this table, and are in the same chronological order as listed in the table below.

This table and the following AWCs include information on the location of SWEL components, which is considered Sensitive Unclassified Non-Safeguards Information (SUNSI), of which the loss, issue, modification, or unauthorized access can reasonably be foreseen to harm the safe operation of the nuclear plant. Pages which contain proprietary information have been marked, and the sensitive information has been redacted.

Pages which contain proprietary SUNSI information have been marked.

Table C-1: Prairie Island Unit 2 Completed AWCs

Area Walk-By Designation	Description	Equipment Tag(s)	Checklist Status (Y/N)
1	AUX 11/21 CC PUMP	MV-32160	N
2	AUX 12/22 CC PUMPS	245-122	N
3	AUX 21/22 CNTM SPRY	MV-32180	N
4	AUX 21/22 SI PUMP	245-071	N
		2LT-920	
		2LT-921	
5	AUX 22 CHRG PUMP	245-042	Y
		2VC-28-2	

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Table C-1: Prairie Island Unit 2 Completed AWCs

Area Walk-By Designation	Description	Equipment Tag(s)	Checklist Status (Y/N)
6	AUX NW	CV-39413	N
		PNL 234	
		PNL 234/XFMR	
		PNL 235/XFMR	
7	AUX NW	2PT-479	N
		MV-32148	
		PNL 261	
		PNL 262	
8	AUX B E-MON	EM-B2	N
9	AUX NW	2LT-762	N
		2LT-763	
		MV-32020	
		MV-32389	
10	AUX SW	2PT-469	Y
		MV-32248	
		RS-21-11	
11	D5/D6 D5 CNTRL	50200	N
12	D5/D6 D5 ENGN	55320	Y
		234-031	

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Table C-1: Prairie Island Unit 2 Completed AWCs

Area Walk-By Designation	Description	Equipment Tag(s)	Checklist Status (Y/N)
		246-031	
		2EG-15-2	
		SV-37904	
13	D5/D6 D6 ENGN	234-032	Y
14	D5/D6 26 BUS	BUS 26	N
15	D5/D6 D5 FO	253-361	Y
16	D5/D6 211/212 BUS	211M/XFMR	Y
		212M/XFMR	
17	D5/D6 221/222 BUS	221M/XFMR	Y
18	D5/D6 D5 MECH	MTR 211K-12	Y
		MTR 211K-13	
19	D5/D6 D5 RADIATOR	253-401	Y
20	SSCN 22 DD CLWP	70350	N
		053-322	
		235-081	
		245-392	
		CV-31457	
		SV-33777	
21	SSCN SOUTH	232-281	Y
22	TURB B E-MON	274-162	Y

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Table C-1: Prairie Island Unit 2 Completed AWCs			
Area Walk-By Designation	**Description**	**Equipment Tag(s)**	**Checklist Status (Y/N)**
23	TURB 21 AFWP	217-111	N
24	TURB 21 BATT	21 BATT	N
25	TURB 22 AFWP	245-201	N
		CV-31060	
		CV-31419	
		MV-32030	
		MV-32246	
		MV-32383	
		MV-32384	
26	TURB 22 BATT	22 BATT	N
		22 BATT CHG	
		PNL 22	
27	TURB BUS 121	274-031	Y
28	TURB RELAY	2ASG1	Y
		PNL 211	
29	AUX CNTRL RM	2NR3	N
		B-2	
		D-2	
		E-2	

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *11/21 CC PUMP*

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)? Y☒ N☐ U☐ N/A☐

   It appears that CS-19543 is not anchored to the wall. There are four external holes in the bracket for fasteners but no fasteners are present.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *11/21 CC PUMP*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

   Two drums are present under the component cooling heat exchanger to collect leak off. The drums are poorly tied off by rope to a small copper drain line for the 11 component cooling pump unit cooler.

   CAP 01353280 has been initiated to evaluate this observation. In addition to writing the action request, WR 83853 has been initiated to address the observation.

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

   One of the two floor brackets for the unistrut that supports the component cooling motor power cables appears to be bent and the anchor is loose. There is a tygon tube wedged under the corner.

   CAP 1353327 has been initiated to evaluate this observation. In addition to writing the action request, WR 83865 has been initiated to address the observation.

Comments (Additional pages may be added as necessary)

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *11/21 CC PUMP*

Evaluated by: *Bruce Lory* Bruce M. Lory Date: 11-01-12

Dileep Cherlopalle C.V. DileepKumarReddy 10-29-12

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Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *12/22 CC PUMP*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

   The 22 component cooling pump motor unit cooler is supported by rod hangers from the ceiling. This is located near the 22 component cooling pump, six feet above the 695' floor. This unit cooler is close to the rigging I-beam on the one side and the 4" component cooling line on the other side. Seismic movement may cause the unit cooler to bump into the I-Beam and the component cooling line. The drain line from the unit cooler may break as well.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *12/22 CC PUMP*

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   A ladder is stored underneath the 22 component cooling heat exchanger in an unapproved storage location. It is not a seismic interaction issue, but may be a housekeeping concern. The ladder has a note which states "Staged for Ops to access mez. deck, do not remove."

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

Comments (Additional pages may be added as necessary)

A top cover plate wingnut is missing from the 2RE-39 radiation monitor. There is also a loose screw on the side door cover. The monitor is resting on the floor near the wall, and is located between the 22 component cooling pump and the stairs to the upper level.

Site engineering evaluated this observation and concluded that the radiation monitor is not safety related. WR 83571 was initiated to replace the wingnut and tighten the loose screw. CAP 01352076 was initiated to document the observation.

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 11-01-12

Dileep Cherlopalle C.V. DileepKumarReddy Date: 10-29-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *21/22 CNTM SPRAY*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

    1. *See comment in the MV-32180 seismic walkdown checklist regarding the light fixture seismic interaction over MV-32180.*

    2. *Next to the pressure gauge PI-18249, there is a portable cord reel supported on the wall by a pin. Since the cord is free to rotate, the reel could swing in a seismic event and potentially impact the valve and tubing of the pressure gauge.*

       CAP 1352923 has been initiated to document the observation, and WR 83779 has been initiated to either secure the portable cord reel from movement or re-locate the portable cord reel to a more suitable location.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *21/22 CNTM SPRAY*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

   1. Radiation monitor DRM-2 is attached magnetically to electrical panel 2RIA54. The magnetic base may not be strong enough to prevent the monitor from falling and impacting the pressure gauge PI-18249 or associated tubing.

   CAP 1352796 has been initiated to evaluate long term out of service time for the radiation monitor. CAP 1352792 has also been initiated to evaluate any potential procedure deficiencies in the installation of portable radiation monitors.

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

Comments (Additional pages may be added as necessary)

Foreign material, such as a pen and tie wraps, was identified. Plant personnel removed this material.

Evaluated by: *Dileep Cherlopalle* C.V. DileepKumarReddy Date: 10-19-12.

Bruce M. Lory Bruce M. Lory 10-18-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *21/22 SI PUMP*

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)? Y☒ N☐ U☐ N/A☐

   The guard cover on 22 safety injection (SI) pump coupling has two loose nuts for the bracket attached to the foundation of the SI pump. The bolts are effective to withstand seismic loads. The coupling guard will remain in place during a seismic event. It is seismically acceptable, but the loose bolts should be tightened.

   CAP 1352699 had been initiated to evaluate this observation. In addition to writing this action request, WR 83742 has been initiated to re-tighten the bolts.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   The cable trays are lightly loaded and the rigid conduit is all suspended using a double unistrut frame overhead. It is an acceptable design for seismic loads.

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)? Y☒ N☐ U☐ N/A☐

   An ultrasonic flow meter is chained to a pipe near 2SI-20-68. The pipe may not be capable of supporting this seismic load.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *21/22 SI PUMP*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

   An oil can was stored on the pipe support for MV-32185. There was no holder found for storing the can, which is against the site's seismic housekeeping procedure.

   CAP 1352727 has been initiated to evaluate this observation. Off of this action request, WR 83746 was initiated to address 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? Y☐ N☒ U☐

   A steam heating line was found tie wrapped to the line that includes the 2-RCCH-538 support. The tie wrap is a poor housekeeping practice, and should be removed.

   CAP 1352959 has been initiated to evaluate this observation. In addition, WR 83786 has been initiated to address the condition.

Comments (Additional pages may be added as necessary)

A large wrench and an oil can were found underneath the electric panel 2541 wall bracket in the SI pump room. These items were removed by plant personnel.

Evaluated by: *Dileep Cherlopalle* C.V. DileepKumarReddy Date: 10-26-12

Bruce Lory Bruce M. Lory 10-26-12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *22 CHRG PUMP*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   The light fixture to the side of the 22 charging pump has an open "S" hook. The light fixture will not fall in a seismic event, and will not impact any equipment even if it did fall. The 22 charging pump is not in the zone of influence of the light fixture.

   CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address this observation.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *22 CHRG PUMP*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area?	Y☒ N☐ U☐ N/A☐
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?	Y☒ N☐ U☐ N/A☐
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)?	Y☒ N☐ U☐ N/A☐
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?	Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

SWEs identified the following foreign materials in the 22 charging pump room:

1. *There is a tubing connector under panel 70820 on the wall bracket.*
2. *There is foreign material on a pipe near the fan coil unit.*
3. *There is a metal wire on a pipe on the ceiling bracket next to the charging pump.*

The foreign material was removed by plant personnel.

Evaluated by: *Dileep Cherlopalle* C.V. Dileep Kumar Reddy Date: 10-18-12

Bruce Lory Bruce M. Lory 10-18-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *NORTH WEST*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   All cable trays, fire protection piping and HVAC are well supported.

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☐ N☒ U☐ N/A☐

   There are open "S" hooks for lighting fixtures throughout the area. Light fixture near charging pump 71117 and 71119 is an interaction hazard if cabinet contains sensitive devices. Another open "S" hook on light fixture is above MCC 2K Bus 1 and above Miscellaneous Systems 21 Relay Rack.

   CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *NORTH WEST*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   Fire protection piping is seismically restrained and constructed of welded steel.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   Hydrogen piping above 121 Hot Machine Shop Exchange Fan is laterally supported. Fluorescent light fixture above hydrogen piping has open "S" hooks but does not pose a credible hazard to the welded steel piping. It is not an adverse seismic interaction that could cause a fire.

   See question 4 for disposition of open "S" hooks identified during these seismic walkdowns.

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)? Y☒ N☐ U☐ N/A☐

   Temporary equipment meets housekeeping procedure.

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Bruce M. Lory Bruce M. Lory 10-22-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *NORTH WEST*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

   There are open "S" hooks at both ends at the top of the light fixture above MCC 2L BUS 1.

   CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. WR 83556 has also been initiated to address this observation.

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *NORTH WEST*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   There is a black barrel collecting leak off from drain line 2ZX-1-19 located under the staircase and next to MCC 2L BUS 1. The barrel is loosely tied off with rope to the unistrut supporting panel 2R1A57.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 10-26-12

Dileep Charlopalle C.V.Dileep Kumar Reddy 10-26-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *B E-MON*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   The light fixture hanging from the ceiling is about 3" to 6" from an electrical box that is connected to panel 219. During a seismic event the fixture may hit the electrical box.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *B E-MON*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☐ N☒ U☐ N/A☐

   If the unit cooler supply and return lines break during a seismic event, it may result in flooding the room. There is no floor drain in the train B event monitoring room. Reference hangers 2-RHRH-453, 2-RHRH-448, 2-RHRH-449, and 2-RHRH-454.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Dileep Cherlopalle* C.V. Dileep Kumar Reddy Date: 10-30-12

Bruce M. Lory Bruce M. Lory Date: 11-01-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *NORTH WEST*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   There are open "S" hooks on the fluorescent lights in numerous locations. However, none of the fixtures are above safety related equipment. There is no seismic concern.

   CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address this observation.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *NORTH WEST*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   The steam unit heater is suspended on 12' long rods which could break the steam line attached to the heater. The equipment in the area is designed to be environmentally qualified for a steam line break, therefore there is no concern.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

   1. The wrench hanging from 2MS-27-2 is a potential hazard to SOV-33266 and SV-33264. The recommendation is to re-locate the wrench to a height lower than the SOV elevation, so that it is no longer a potential hazard.

   CAP 1352195 has been initiated to evaluate this observation. In addition to writing the action request, WR 83607 has also been initiated to address this condition.

   2. The chain fall located near LFT-495 should be restrained so that it doesn't have the potential to impact the transmitter.

   CAP 1352586 has been initiated to evaluate this observation. WR 83723 has also been initiated to address this 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? Y☒ N☐ U☐

   The tube lines near LFT-495 could potentially impact the transmitter. It is recommended that these lines be restrained.

   Site engineering has reviewed this observation and concluded there is no seismic concern, because the transmitter and tube lines are non-safety related. Please refer to the table contained in Appendix F for the disposition of this observation.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *NORTH WEST*

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 11-15-12

Dennis Zercher 10-22-2012

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. AUX Floor El. [redacted] Room, Area[1] SOUTH WEST

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *SOUTH WEST*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 11-13-12

Dileep Cherlopalle C.V.Dileepkumar Reddy 11-9-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *D5 CNTRL*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   The light fixtures are secured to a light metal strut.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *D5 CNTRL*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   The fire protection piping in the adjacent room with mechanical couplings is seismically supported. There is no seismic flooding concern.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

   There is a trash receptacle between cabinets D5-RTV- cabinet and remote terminal unit D5.

   Site engineering has reviewed and dispositioned this observation. Please refer to the table contained in Appendix F for the disposition of this observation.

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

   There is a desk and monitor next to remote terminal unit D5, and they are secured properly to the wall and with straps. The paper boxes stored on the bottom shelf are not deemed a seismic hazard.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Kyle Kriesel 10.24.12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *D5 ENGINE*

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)? Y☒ N☐ U☐ N/A☐

   There is one anchor nut for air receiver 246-034 that does not have a full thread. The air dryer 296-033 conduit support has an anchor bolt with a large projection. There is no impact on seismic capacity.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   The fire protection piping is seismically braced, so there are no issues with the mechanical couples.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *D5 ENGINE*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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

Comments (Additional pages may be added as necessary)

There were no seismic housekeeping issues.
There are cable tags on the floor near air receiver 246-032, and duct tape was found on a rigging beam. Neither of these observations are a seismic concern.

Evaluated by: *Walter Djordjevic* Date: *11/14/2012*

Kyle Kriesel Date: *10,30,12*

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *D6 ENGN*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   All equipment has modern seismic design features.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *D6 ENGN*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   The fire protection piping rod hung sprinkler system has threaded connections and could pose a flooding hazard if this piping failed during a seismic event.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation..

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐
   There were no sources noted.

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)? Y☒ N☐ U☐ N/A☐

   The ladder storage hooks and fire extingusher brackets are adequate.

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

   The electric heater rods are ductile, so they are seismically acceptable.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 11/20/2012

Dennis Zercher 10-22-2012

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The remaining pages are withheld from public disclosure.

~~PROPRIETARY INFORMATION -- WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *26 BUS*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

   There are open "S" hooks on light fixtures above and adjacent to breaker 26.

   CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83666 has been initiated to address this observation.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *26 BUS*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   There is no fire protection piping in the room, therefore there is no seismic interaction concerns.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   There are two ladders stored on one hook while another hook nearby is unused. It is recommended that only one ladder be placed on one hook.

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Diordievic* Date: 11/14/2012

Dennis Zercher 11-15-2012

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The remaining pages are withheld from public disclosure.

~~PROPRIETARY INFORMATION — WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. D5/D6 Floor El. [redacted] Room, Area[1] D5 FUEL OIL

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *D5 FUEL OIL*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   The sprinkler piping is well supported.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   There is no leaking oil.

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)? Y☒ N☐ U☐ N/A☐

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Kyle Kriesel 10.24.12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *211/212 BUS*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   There is minor surface corrosion on the support angle for 273-031 air handler. The condtion is noted but it is not significant.

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *211/212 BUS*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   The fire protection piping in the area is seismically braced, so it is acceptable.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djodjevic* Date: 11/20/2012

Kyle Kriesel 10.30.12

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *221/222 BUS*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   There are open "S" hooks for lighting fixtures throughout the room. They are not a seismic concern.

   CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address this observation.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *221/222 BUS*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐
   There is no fire protection piping in the room.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐
   The housekeeping throughout the room is exceptional.

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐
   Tie wraps are used to secure and guide the grounding straps. These tie wraps do not pose a seismic concern.

Comments (Additional pages may be added as necessary)

Evaluated by: *Dennis Zercher* Date: *10-22-2012*

Walter Djordjevic *10/25/12*

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *D5 MECH*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   The electric heater is rod hung and ductile.

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)? Y☒ N☐ U☐ N/A☐

   The light fixture "S" hooks are closed.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *D5 MECH*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   The fire protection piping is seismically designed.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 11-5-12

Kyle Kriesel 10.26.12

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The remaining pages are withheld from public disclosure.

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Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *D5 RADIATOR ROOM*

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *D5/D6* Floor El. [redacted] Room, Area[1] *D5 RADIATOR ROOM*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   The fire protection piping with mechanical couplings is seismically braced and is therefore adequate.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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

   The drip funnel is acceptable.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Kyle Kriesel 10,24,12

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *SSCN* Floor El. [redacted] Room, Area[1] *22 DD CLWP*

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)? Y☐ N☒ U☐ N/A☐

   The starting air indicator (PI-11979) for the 22 diesel driven cooling water pump has a bracket with provisions for four screws. However, only two screws are attaching the indicator to the concrete wall.

   CAP 1351936 has been initiated to evaluate this observation, and WR 83545 was initiated off of this action request to correct the condition.

   After further evaluation by plant engineering, it was determined that the safety classification of this indicator may not meet the requirements of the plant's equipment classification procedure. PI-11979 is currently classified as non-safety related but it may need to be classified as safety related. CAP 1352398 has been initiated to evaluate the safety classification of the starting air indicator.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *SSCN* Floor El. [redacted] Room, Area[1] *22 DD CLWP*

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)? Y☒ N☐ U☐ N/A☐
   The 21 Diesel Cooling Water Pump area heater EH-8 has a support in the back that is not clearly visible. However, the room heater appears to be rod hung and will exhibit ductile behavior in a seismic event. Based on this, the SWEs judge that the support for the room heater has adequate seismic capacity.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 10-23-12

Dileep Cheropalle C.V. Dileep Kumar Reddy 10-24-12

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Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *SSCN* Floor El. [redacted] Room, Area[1] *SOUTH*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *SSCN* Floor El. [redacted] Room, Area[1] *SOUTH*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   The fire protection piping is on short rods, so the bending moments will be such that it will not fail the mechanical couplings.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   The gas bottles are well restrained.

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *TRN B EVENT MON*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   There is no corrosion.

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)? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *TRN B EVENT MON*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   Supply and return lines are laterally unrestrained and may subject cooler nozzle to large movement.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   All of the block walls in the area are safety related.

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)? Y☒ N☐ U☐ N/A☐

   All of the "S" hooks for lighting fixtures appear to be closed.

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

Comments (Additional pages may be added as necessary)

Evaluated by: Bruce M. Jones Date: 10-24-12

C.V. Dileepkumar Reddy 10-26-12

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *21 AFWP*

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)? Y☐ N☒ U☐ N/A☐

   The guard to belt drive on 121 instrument air (013-011) is missing two anchor bolts.

   CAP 1352975 has been initiated to evaluate this observation. Additionally, WR 83793 has been initiated to address the condition.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

   Chain fall for 2AF-13-1 is within eight inches of interacting with MCC 1A Bus 1. The chain fall needs to be restrained.

   CAP 1352961 has been initiated to address this observation. In addition to writing an action request, WR 83796 has been initiated to address this condition.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *21 AFWP*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 10-21-12

Dennis Zercher Dennis Zercher 10-22-2012

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~~PROPRIETARY INFORMATION -- WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *21 BATT*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

   The clamp of the conduit above Panel 227 is loose. The clamp bolt is loosely attached to the Unistrut which is about 6 ft above the floor.

   CAP 1353370 has been initiated to evaluate this observation. Additonally, WR 83887 has been initiated to address this observation.

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *21 BATT*

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   The portable eye wash station is chained to the wall next to the 21 Battery Rack. This is acceptable as configured.

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Bruce M. Lory* Bruce M. Lory Date: 10-21-12

Dileep Cherlopalle C.V. Dileep Kumar Reddy 10-29-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *22 AFWP*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☐ N☒ U☐ N/A☐

   The 123 instrument air compressor guard is missing a few anchors.

   CAP 1352154 has been initiated to document this observation. WR 83594 has also been initiated to address this condition.

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *22 AFWP*

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)? Y☐ N☒ U☐ N/A☐

   1. The fire extinguisher (301) is on a short bent bracket. It is recommended that the bracket gets bent back to normal (horizontal) position or is replaced.

   CAP 1352094 has been initiated to document this observation. From this action request, WR 83577 has been initiated to address the bracket.

   2. Open "S" hooks were identified on the following fluorescent lighting fixtures:
   - *a. west of the turbine driven auxiliary feedwater pump*
   - *b. above door 42*
   - *c. above the 12 motor driven auxiliary feedwater pump (only 1 chain)*
   - *d. above 124 AC*

   CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address this observation.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   The 1-1/2" fire protection sprinkler lines are flexible and threaded so they could be a potential spray hazard if they are filled with water. The lines are over the motor driven and turbine drive auxiliary feedwater pumps.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *22 AFWP*

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)? Y☐ N☒ U☐ N/A☐

   1. The chain fall near TB2395 could potentially impact tubing on concrete wall. It is recommended that this chain be restrained.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

   2. A fire protection break glass hammer is adjacent to the 123 air compressor control panel 70557. The hammer could potentially impact the nearby air tubing.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Dennis Zercher* Date: *10-26-2012*

Wally Djordjevic Date: *11/15/2012*

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~~PROPRIETARY INFORMATION - WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *22 BATT*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *22 BATT*

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)? Y☐ N☒ U☐ N/A☐

1. Some of the "S" hooks for lighting fixtures in the area are not completely closed. None of the lighting fixtures with open "S" hooks are over the batteries.

CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address this observation.

2. The counterweight "S" hook is also open and the counterweight could fall to the floor or against PNL 22.

CAP 1352343 has been initiated to evaluate this observation. In addition to writing this action request, WR 83645 has been initiated to address the condition.

3. Eyewash station is securely stationed to the wall. However, the water supply canister on the cart is secured by a bungee cord which may not be an adequate restraint.

Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

~~PROPRIETARY INFORMATION — WITHHOLD FROM PUBLIC DISCLOSURE~~

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *22 BATT*

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)? Y☒ N☐ U☐ N/A☐

   See question 4 regarding the eyewash station.

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

   The portable battery charger 11 is not energized. There are no seismic issues.

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 10/25/12

Dennis Zercher 10-22-2012

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *BUS 121*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *BUS 121*

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)? Y☒ N☐ U☐ N/A☐

   1. The fluorescent light chains are in contact with the cable trays as well as the flex conduit. This is adjudged not to be a seismic concern.

   2. Duct tape is preventing a chain for a fluorescent light fixture from making contact with a conduit. This type of restraint is not necessary and should be removed. It is a housekeeping issue and not a seismic concern.

   CAP 1352191 has been initiated to evaluate this observation. Additionally, WR 83605 has been initiated to correct the condition.

   3. The ladder adjacent to the G9 column is adjusted so that the center of gravity is beneath the ladder storage hooks. It is acceptable.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   Supply and return lines for the 121 switchgear room unit cooler are unsupported laterally across the room, and may not be adequately restrained to prevent excessive nozzle loads on the unit cooler.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation..

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *BUS 121*

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Walter Djordjevic* Date: 11/14/2012

Dennis Zercher 10-22-2012

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The remaining pages are withheld from public disclosure.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *RELAY*

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)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

   The cables going into relay racks 2AMR1,2ARP1, 2ARP2, 2ARP3, 2ARP4, and 2ASG2 are each two feet long. They are tied to a single unistrut with tie wraps. The unistrut may not be adequate to support the load from the cables, on top of the cable tray load it is already supporting.

   Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation..

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)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☐ N☐ U☐ N/A☒

   There is no fire protection system in the room. The room has a Cardox system.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *TURB* Floor El. [redacted] Room, Area[1] *RELAY*

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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

Comments (Additional pages may be added as necessary)

There are several large rolls of abandoned cable that are tied together with cable ties to unistrut. These abandoned cables are near MCC 2BMRI and TB-2228.

Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

Evaluated by: *Dileep Charlopalle* C.V. Dileep Kumar Reddy Date: 10-24-12.

Bruce M. Lory Bruce M. Lory 10-23-12

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The remaining pages are withheld from public disclosure.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. AUX Floor El. [redacted] Room, Area[1] CNTRL RM

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

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)? Y☒ N☐ U☐ N/A☐

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)? Y☐ N☒ U☐ N/A☐

   There are lighting diffusers tied off to the support grid. Unit 1 and Unit 2 "C" panels have a fluorescent light fixture on chains too close (within 1"-2") to the panel.

   CAP 01352209 has been initiated to evaluate this observation.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area: *CNTRL RM*

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☐ N☒ U☐ N/A☐

1. The trash can next to the racks R23, R24, R13, and R14 are immediately adjacent to the racks, which violates the seismic housekeeping procedure.

Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

2. Step ladder adjacent to racks R23, R24, R13 and R14 is also too close to the racks. The wheels should be chocked.

WR 83584 has been initiated to address this observation.

3. There were several open S-hooks on light fixtures (nearest the panel in most cases).

CAP 01352001 was initiated to evaluate this observation. Off of CAP 01352001, WR 83556 was initiated to address this observation.

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

Unit 1 and Unit 2 "E" panels have side panels that have slid out of position. This is a housekeeping issue and not a seismic concern.

CAP 01352102 has been initiated to evaluate this observation. In addition to writing an action request, WR 83579 has been initiated to address this observation.

Status: Y☐ N☒ U☐

Area Walk-By Checklist (AWC)

Location: Bldg. *AUX* Floor El. [redacted] Room, Area[1] *CNTRL RM*

Comments (Additional pages may be added as necessary)

Some desks are secured to the wall. Not a seismic concern.

1. *The filing cabinets adjacent to the main control board in both Unit 1 and Unit 2 are close to the main control board.*

CAP 1357683 has been initiated to evaluate this observation.

2. *A set of drawers next to the In-core logic selection switch panel are close to the panel.*

Site engineering has reviewed this observation and concluded there is no seismic concern. Please refer to the table contained in Appendix F for the disposition of this observation.

3. *The cart adjacent to the Protection Systems III and the cart adjacent to cabinets RPI-1, -2, and -3 in Unit 1 are close to the equipment. The chain is not used to restrain the carts.*

CAP 1357686 has been initiated to evaluate this observation..

4. *Fire extinguisher bracket 224 has a rotated bracket (into the insulation) and should be repaired.*

WR 83584 has been initiated to address this observation.

Evaluated by: *Walter Diordievic* Date: *11/14/2012*

Dennis Zercher Date: *11-15-2012*

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The remaining pages are withheld from public disclosure.

D

Plan for Future Seismic Walkdown of Inaccessible Equipment

This section discusses the plan for future seismic walkdowns to complete the inaccessible items from SWEL 1 which were deferred either for containment entry or cabinet internal inspection. Table D-1 summarizes the reasons each item is inaccessible during normal plant operation.

As shown in the table below, 30 items have been deferred until a refueling outage or an appropriate time when the equipment is accessible. Inaccessibility of this equipment was either based on the location of the equipment (environment that posed personnel safety concerns while the unit is operating), or due to the electrical safety hazards posed while the equipment is energized.

All items will be walked down by the end of refueling outage (RFO) 2R29 in 2015. An updated submittal report will be provided 60 days following the end of RFO 2R29.

Table D-1: Summary of Inaccessible Equipment

Equipment ID	Unit	Description	Reason for Inaccessibility
50000	2	D5 DSL GEN BENCHBOARD	Internal inspection requires equipment to be out of service
21 BATT CHG	2	21 BATTERY CHARGER	Protected equipment – no access
21 INV	2	21 INVERTER	Protected equipment – no access
232-281	2	21 SFGDS SCRNHSE ROOF EXHT FAN	Need scaffold to verify knee brace as part of anchorage verification
258-011	2	21 CLG WTR STRNR	Protected equipment – no access
274-013	2	23 CNTMT FCU	In containment - requires outage
2FT-464	2	MN STM FR 21 STM GEN CHNNL I RED F XMTR	In containment - requires outage

Table D-1: Summary of Inaccessible Equipment			
Equipment ID	**Unit**	**Description**	**Reason for Inaccessibility**
2LT-428	2	2 PRZR (CHNL III-BLU)LVL XMTR	In containment - requires outage
2LT-461	2	21 STM GEN LOOP A CHNNL I-RED LVL XMTR	In containment - requires outage
32 INV	2	23 INVERTER	Protected equipment – no access
B25/LOAD SEQ CAB	2	BUS 25 SFGDS LOAD SEQUENCER CABINET	Protected equipment – no access
BUS 211	2	BUS 211 480V SWITCHGEAR	Internal inspection requires equipment to be out of service
BUS 221	2	BUS 221 480V SWITCHGEAR	Internal inspection requires equipment to be out of service
BUS 222	2	BUS 222 480V SWITCHGEAR	Internal inspection requires equipment to be out of service
BUS 26	2	BUS 26 4.16KV SWITCHGEAR	Internal inspection requires equipment to be out of service
CV-39417	2	22 CRDM SHRD CLG COIL SPLY CV	Protected equipment – no access
CV-39419	2	21 CRDM SHRD CLG COIL SPLY CV	Protected equipment – no access
MCC 2A1	2	MOTOR CONTROL CENTER 2A BUS 1	Internal inspection requires equipment to be out of service
MCC 2K1	2	MOTOR CONTROL CENTER 2K BUS 1	Internal inspection requires equipment to be out of service
MCC 2K2	2	MOTOR CONTROL CENTER 2K BUS 2	Internal inspection requires equipment to be out of service
MCC 2L2	2	MOTOR CONTROL CENTER 2L BUS 2	Internal inspection requires equipment to be out of service

Table D-1: Summary of Inaccessible Equipment			
Equipment ID	**Unit**	**Description**	**Reason for Inaccessibility**
MV-32156	2	24 FCU CLG WTR OUTL ISOL MV A	In containment - requires outage
PNL 21	2	DISTRIBUTION PANEL 21	Internal inspection requires equipment to be out of service
PNL 213	2	INSTRUMENT BUS III PANEL (BLU) 213	Internal inspection requires equipment to be out of service
PNL 235	2	AC DISTRIBUTION PANEL 235	Internal inspection requires equipment to be out of service
PNL 253	2	DC DISTRIBUTION PANEL 253	Protected equipment – no access
PNL 2EM	2	DISTRIBUTION PANEL 2EM	Internal inspection requires equipment to be out of service
SV-33389	2	21 FCU DISCH TO CNTMT DOME CD-34080 SV	In containment - requires outage
SV-37464	2	U2 TRN A CHLD WTR/CLG WTR ISOL SV	Protected equipment – no access
SV-37466	2	UNIT 2 TRAIN A CHILL WTR/CLG WTR ISOL SV	In containment - requires outage

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E
Peer Review Report

This appendix includes the Peer Review Team's report, including the signed Peer Review Checklist for the SWEL from Appendix F, *Checklist for Peer Review of SSC Selection*, of Reference 1.

Table E-1 of this appendix includes information on the location of SWEL components, which is considered SUNSI, of which the loss, issue, modification, or unauthorized access can reasonably be foreseen to harm the safe operation of the nuclear plant. Pages which contain proprietary SUNSI information have been marked, and the sensitive information has been redacted.

Peer Review Report
for
Near Term Task Force (NTTF) Recommendation 2.3
Seismic Walkdown Inspection
of
Prairie Island Nuclear Generating Station Unit 2

November 15, 2012

Prepared by Peer Reviewers

Todd A. Bacon, PE (Team Leader)
Mark S. Etre
Dileep Cherlopalle
S. Seilhymer

Todd Bacon 	
Peer Review Team Leader Certification Signature	Date: November 15, 2012

Introduction

Overview

This report documents the independent peer review for the Near Term Task Force (NTTF) Recommendation 2.3 Seismic Walkdowns performed by Stevenson & Associates (S&A) for Unit 2 of the Prairie Island Nuclear Generating Plant (PINGP). The peer review addresses the following activities:

- Review of the selection of the structures, systems, and components (SSCs) that are included in the Seismic Walkdown Equipment List (SWEL).
- Review of a sample of the checklists prepared for the Seismic Walkdowns & Area Walk-bys.
- Review of any licensing basis evaluations.
- Review of the decisions for entering the potentially adverse conditions into the plant's Corrective Action Plan (CAP).
- Review of the final submittal report.

The peer reviewers for PINGP Unit 2 are Messrs. Todd A. Bacon and Mark S. Etre of S&A, and Dileep Cherlopalle and S. Seilhymer of NSPM. Mr. Bacon is designated the Peer Review Team Leader. Messrs. Etre and Bacon are not involved in the seismic walkdown inspection process so that they can maintain their independence from that portion of the project. Mr. Bacon is a civil-structural engineer with over thirty years of nuclear engineering experience and has received the Seismic Walkdown Engineer (SWE) training. Mr. Etre is an advanced degree mechanical engineer with an undergraduate civil-structural engineering degree and over twenty-two years of nuclear power plant experience. Mr. Etre has also been trained as a Seismic Capability Engineer (5-day EPRI-SQUG Training) and a Seismic Walkdown Engineer (SWE EPRI 2-day training). Mr. Cherlopalle and Mr. S. Seilhymer from the Operations department have participated in the peer review of the SWEL, while Mr. Bacon and Mr. Etre have participated in all other phases of the peer review process for PINGP Unit 2.

The SWEL development was performed by Messrs. P. Valtakis of NSPM and Bruce Lory of S&A. The peer review resulted in no additional findings beyond the comments shown on the checklist dated October 22, 2012. The SWEL Peer Review checklist is found in Attachment 1. The discussion for the SWEL development peer review is contained in this peer review report.

Interviews were conducted by Messrs. Bacon and Etre with the SWE inspection team after review of a sample of the Unit 2 Seismic Walkdown Checklists (SWCs) and the

Area Walk-by Checklists (AWCs) to ascertain procedural compliance with the Seismic Walkdown Guidance (SWG) (Reference 1). The interviews were conducted by Mr. Bacon with Messrs. Dennis Zercher, Kyle Kriesel, Walter Djordjevic and Bruce Lory of the SWE inspection team on October 23, 2012. Messrs. Etre and Bacon conducted interviews with all of the above including Dileep Cherlopalle of NSPM, but without Mr. Dennis Zercher on October 30, 2012. Mr. Cherlopalle was a member of the SWE inspection team as well as the peer reviewer for the SWEL development. In addition, Messrs. Etre and Bacon conducted an interview on November 5, 2012 with Mr. Zercher to ensure both peer reviewers interviewed all members of the SWE team. The discussion of the sample SWCs and AWCs is provided in this peer review report.

No issues were identified which challenged the current licensing basis.

Peer Review - Selection of SSCs

Purpose

The purpose of this section is to describe the process to perform the peer review of the selected structures, systems, and components, (SSCs) that were included in the Seismic Walkdown Equipment List (SWEL).

This section documents the Peer Review – Selection of SSCs performed for PINGP – Unit 2.

Peer Review Activity – Selection of SSCs

The guidance in EPRI Technical Report 1025286, *Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic*, dated June 2012, Section 3: Selection of SSCs was used as the basis for this review.

This peer review was based on interviews with the following individuals who were directly responsible for development of the SWEL:

Mr. P. Valtakis, Prairie Island Plant Engineer

Mr. Bruce Lory, Senior Mechanical Engineer

This peer review utilized the checklist shown in the SWG, Appendix F: Checklist for Peer Review of SSC Selection.

For SWEL 1 development, the following actions were completed in the peer review process:

- Verification that the SSCs selected represented a diverse sample of the equipment required to perform the following five safety functions:
    - Reactor Reactivity Control (RRC)
    - Reactor Coolant Pressure Control (RCPC)
    - Reactor Coolant Inventory Control (RCIC)
    - Decay Heat Removal (DHR)
    - Containment Function (CF)

  This peer review determined that the SSCs selected for the seismic walkdowns represent a diverse sample of equipment required to perform the five safety functions.
- Verification that the SSCs selected include an appropriate representation of items having the following sample selection attributes:
    - 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

The SWEL peer review commented that no Safety Injection (SI) or Component Cooling (CC) equipment items were on the SWEL reviewed. SWEL 1 was revised to expand the selection of equipment beyond the scope of the equipment submitted to the NRC as the IPEEE equipment list. Specifically the following equipment was added to SWEL 1 to be walked down:

- Equipment ID 245-122, the 22 CC Pump

This final peer review determined that the SSCs selected for the seismic walkdowns include a sample of items that represent each attribute/consideration identified above.

Peer Review Findings – Selection of SSCs

This peer review found that the process for selecting SSCs that were added to the SWEL was consistent with the process outlined in the SWG Section 3: Selection of SSCs.

The peer review checklist dated October 22, 2012 is attached to this document. There were no additional findings from the Peer Review other than those noted on the checklist.

Resolution of Peer Review Comments – Selection of SSCs

All comments requiring resolution were incorporated prior to completion of this peer review.

Conclusion of Peer Review – Selection of SSCs

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 the SWG, Section 3: Selection of SSCs. It is further concluded that the final SWEL sufficiently represents a broad population of plant Design Class I equipment and systems to meet the objectives of the NRC 50.54(f) letter.

Review of Sample Seismic Walkdown & Area Walk-Bys Checklists

Overview

A peer review of the SWCs and AWCs was performed after which an interview was conducted by Messrs. Bacon and Etre with the SWE inspection team in accordance with the SWG requirements. Interviews were conducted with the SWEs on October 23 and 30, 2012, as well as on November 5, 2012. The SWE trained walkdown engineers were Messrs. Dennis Zercher, Kyle Kriesel, Dileep Cherlopalle, Walter Djordjevic and Bruce Lory.

Sample Checklists

Table E-1 lists the SWC and AWC samples which represent approximately 18% of the SWCs and 22% of the AWCs.

Table E-1: SWC and AWC Samples from Seismic Walkdown Inspection for Unit 2

Equipment Identification	Equipment Class	Walkdown Item	Observations
2LT-762	18 – Instruments on Racks	U2 RVLIS Head Full Range Train B D/P Transmitter	No concern
2PT-469	18 – Instruments on Racks	21 Steam Generator Main Steam Header (CHNL II-WHI) P Transmitter	No concern
21 BATT	15 – Batteries on Racks	21 Battery (& Battery Rack)	No concern
217-111	21 – Tanks and Heat Exchangers	21 MD AFW Pump L/O CLR	No concern
245-201	5 – Horizontal Pumps	22 TD AFW Pump	Fluorescent light west of TD AFW pump has open S-hook on one chain; other chain will prevent light from falling on the pump; CAP 1352001 initiated to evaluate this observation and WR 83556 initiated to address observation.
253-401	21 – Tanks and Heat Exchangers	D5 ENG 1 HT Expansion Tank	No concern

Table E-1: SWC and AWC Samples from Seismic Walkdown Inspection for Unit 2			
Equipment Identification	**Equipment Class**	**Walkdown Item**	**Observations**
50200	20 – Instrumentation and Control Panels and Cabinets	D5 Diesel Generator Vertical Panel	No concern
CV-31419	7 – Fluid Operated Valves	22 TD AFW Pump RECIRC/L-O CLG CV	No concern
CV-39413	7 – Fluid Operated Valves	22/24 FCU Cooling Water Supply CV	No concern
D-2	20 – Instrumentation and Control Panels and Cabinets	Control Panel D-2	No concern
MTR 211K-13	9 - Fans	21 D5 Diesel Generator Building Return Fan	No concern
MV-32148	8 – Motor Operated and Solenoid Operated Valves	21 FCU Cooling Water Outlet Isol. MV B	No concern
MV-32248	8 – Motor Operated and Solenoid Operated Valves	21/22 AFW To 21 SG Isolation MV	No concern
PNL 21	14 – Distribution Panels	Distribution Panel 21	Internals to be inspected during outage.
PNL 234/XFMR	4 - Transformers	Panel 234 Transformer	No concern

Table E-1: SWC and AWC Samples from Seismic Walkdown Inspection for Unit 2			
Equipment Identification	**Equipment Class**	**Walkdown Item**	**Observations**
PNL 261	14 – Distribution Panels	DC Distribution Panel 261	Status "N" - Upper left 3/8" diameter shell expansion anchor has sheared off; Plant engineering investigated this observation and determined that the fourth bolt is visible behind the spring-loaded nut holding the panel enclosure to the Unistrut; Panel 261 therefore has four mounting bolts connecting it to the concrete wall - no concern is present; CAP 1352221 initiated to document observation and WR 83615 initiated to perform field work required by CAP 1352221.
RS-21-11	7 – Fluid Operated Valves	21 SG Main Steam Header Relief	No concern

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Table E-1: SWC and AWC Samples from Seismic Walkdown Inspection for Unit 2	
Area Walkdown Description	**Observations**
Aux. Bldg. 22 CHRG Pump	Light fixture to the side of the 22 charging pump has open S-hook; the light fixture will not fall in a seismic event, and will not impact any equipment even if it did fall; CAP 1352001 initiated to evaluate open S-hooks, and WR 83556 initiated to address observation.
Aux. Bldg. Northwest	Status "N" - Open S-hooks are on lighting fixtures throughout the area; light fixture near charging pump 71117 and 71119 is an interaction hazard if cabinet contains sensitive devices; another open S-hook on light fixture is above MCC 2K Bus 1 and above Miscellaneous Systems 21 Relay Rack; CAP 1352001 initiated to evaluate open "S" hooks on light fixtures, and WR 83556 initiated to address these observations.
D5/D6 D5 Engine	No concern
D5/D6 221/222 Bus	Open "S" hooks are on lighting fixtures throughout the room; they are not a seismic concern; CAP 1352001 initiated to evaluate the open "S" hooks and WR 83556 initiated to address this observation.
D5/D6 D5 MECH	No concern
SSCN 22 DD CLWP	Status "N" - Starting air indicator PI-11979 for 22 diesel driven cooling water pump has a bracket with provisions for four screws; only two bolts attach the indicator to the concrete wall; CAP 1351936 initiated to evaluate this observation, and WR 83545 initiated to correct the condition. CAP 1352398 has been initiated to evaluate the safety classification of the starting air indicator since it may not meet the requirements of the plant's equipment classification procedure; PI-11979 is currently classified as non-safety related but it may need to be classified as safety related.
Turb. 21 BATT	Status "N" - Clamp of the conduit going into Panel 227 is loose; clamp bolt is loosely attached to the Unistrut location of the clamp, which is 6ft above the floor; CAP 1353370 initiated to evaluate observation and WR 83887 initiated to address observation.

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Table E-1: SWC and AWC Samples from Seismic Walkdown Inspection for Unit 2	
Area Walkdown Description	**Observations**
Turb. 22 AFWP	Status "N" - 123 instrument air compressor guard is missing a few anchors; CAP 1352154 has been initiated to document this observation and WR 83594 has also been initiated to address condition. Fire extinguisher 301 is on a short bent bracket. It is recommended that the bracket gets bent back to normal (horizontal) position or is replaced. CAP 1352094 has been initiated to document this observation and WR 83577 has been initiated to address the bracket. Open S-hooks were identified on the following fluorescent lighting fixtures: a) west of the turbine driven auxiliary feedwater pump, b) above door 42, c) above the 12 motor driven auxiliary feedwater pump (only 1 chain), and d) above 124 AC; CAP 1352001 has been initiated to evaluate the open S-hooks and WR 83556 initiated to address observation. The 1-1/2" fire protection sprinkler lines are flexible and threaded so they could be a potential spray hazard if they are filled with water. The lines are over the motor driven and turbine drive auxiliary feedwater pumps. Site engineering has reviewed this observation and concluded there is no seismic concern. Site engineering has concluded there is no seismic concern for the following observations: 1) The chain fall near TB2395 could potentially impact tubing on concrete wall; it is recommended that this chain be restrained, and 2) a fire protection break glass hammer is adjacent to the 123 air compressor control panel 70557; the hammer could potentially impact the nearby air tubing. ITEM 8 CHECKED "N" – to be revised per he Interview call on 10/23.

Evaluation of Findings

There were no findings that challenged the licensing basis. Tables 5-2 and 5-3 of the Seismic Walkdown Report (final submittal report) provide the lists of the issues encountered for the equipment seismic walkdowns and area walk-bys.

The scaffolding and seismic housekeeping procedures were reviewed by the SWEs in order to gain a full understanding of the plant practices in regard to those procedures. There were no seismic concerns noted in Unit 2 with regard to scaffold erection. The scaffolds were properly tied off and braced, and properly tagged with respect to the procedure.

There were several seismic housekeeping issues identified during the walkdowns which are not in accordance with plant procedures. However, these did not result in any potentially adverse seismic conditions being identified. The peer review team recommends training to the housekeeping procedures for the entire plant to refresh these practices in everyone's mind.

A number of lighting fixtures with open S-hooks were found in the plant; however, none of them resulted in any seismic issues as evidenced by reviewing the CAPs written (see Tables 5-2 and 5-3) during these walkdowns.

The peer reviewers consider the judgments made by the SWEs to be appropriate and in accordance with the SWG.

Review of Licensing Basis Assessments

Tables 5-2 and 5-3 of the Seismic Walkdown Report provide a list of the issues encountered during the Unit 2 seismic walkdown inspections for the SWEL components and how they were addressed. If a PINGP CAP request was generated it is shown in the Tables. Interviews were conducted by Messrs. Bacon and Etre with the SWE inspection team on October 23 and 30, 2012, as well as November 5, 2012 to discuss the issues identified. No potentially adverse seismic conditions were identified that resulted in a seismic licensing basis evaluation. The peer reviewers concur with this outcome.

Review Final Submittal Report & Sign-off

The entire final submittal report has been reviewed by Messrs. T. Bacon and M. Etre and found to meet the requirements of the EPRI 1025286 – Seismic Walkdown Guidance. The Peer Review determined that the objectives and requirements of the 50.54(f) letter[1] are met. Further, the efforts completed and documented within the final submittal report are in accordance with the EPRI guidance document.

[1] NRC 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 3, "Recommendation 2.3: Seismic," dated March 12, 2012

Attachment 1: Peer Review Checklist for SWEL

Peer Review Checklist for SWEL #1 –Prairie Island Units 1 and 2

Instructions for Completing Checklist

This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (S WEL) 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☐

   The Peer Review Team reviewed the list of selected equipment to validate the assignment of the correct safety functions to the components. The Peer Review Team agrees that the four safety functions specified in the EPRI guidance as well as the containment function are represented. No comments.

2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:

   a. Various types of systems? Y☒ N☐

   The Peer Review Team reviewed the list of selected equipment to validate that a sufficient sampling of plant systems related to the safety functions was represented. The list below shows the count of components in each of Prairie Island's systems, per unit. The Peer Review Team concluded that there is a sufficient sampling of the various plant systems was represented.

   The following is a summary of the sampling of equipment classified on the current list.

System	Title	Unit 1 - # Equip in Walkdown	Unit 2 - # Equip in Walkdown
AF	AUXILIARY FEEDWATER	7	8
AT	AUX START-UP/STDBY XFMRS	0	0
BM	SITE MISCELLANEOUS MAINTENANCE	3	3
CC	COMPONENT COOLING	1	1
CL	COOLING WATER	16	12
D1	D1 EMERGENCY DIESEL	10	Not Applicable
D2	D2 EMERGENCY DIESEL	0	Not Applicable
D5	D5 EMERGENCY DIESEL	Not Applicable	8
D6	D6 EMERGENCY DIESEL	Not Applicable	1
DC	DC AUXILIARIES	8	9
EA	4.16KV ELECTRICAL	2	2
EB	480V ELECTRICAL	10	12
EM	EVENT MONITORING	6	6
EX	240/120V MISC AUXILIARIES	4	4

Peer Review Checklist for SWEL #1 –Prairie Island Units 1 and 2

System	Title	Unit 1 - # Equip in Walkdown	Unit 2 - # Equip in Walkdown
FO	FUEL OIL	0	1
FW	FEEDWATER	0	0
IP	INSTRUMENT POWER SOURCES	4	4
MP	MISC PLANT INSTRUMENTS	1	0
MS	MAIN STEAM	2	3
NI	NUCLEAR INSTRUMENTATION	1	1
PI	ROD POSITION INDICATION	0	0
RC	REACTOR COOLANT	0	0
RE	REACTOR CONTROL	0	0
RH	RESIDUAL HEAT REMOVAL	0	0
RP	REACTOR PROTECTION	6	5
SA	STATION & INSTRUMENT AIR	1	0
SF	SPENT FUEL POOL COOLING	0	0
SI	SAFETY INJECTION	2	2
VC	CHEMICAL & VOLUME CONTROL	2	2
ZC	CONTAINMENT VENT	2	2
ZG	DIESEL ROOMS VENT	2	0
ZH	SAFEGUARDS CHILLED WATER	6	2
ZN	CONT/RELAY/CMPTR RM VENT	4	0
ZR	SCREENHOUSE VENT	3	1
ZX	CNTMT & AUX BLDG COOLING	4	5
	Totals:	107	94

b. Major new and replacement equipment? Y☒ N☐

The Peer Review Team validated that the list of selected equipment contained a sufficient sampling of plant equipment that has been replaced in recent years. This included large components such as the 11 and 12 Battery Chargers.

Peer Review Checklist for SWEL #1 –Prairie Island Units 1 and 2

The Peer Review Team noted the following issues that require follow up:

1) 21 and 22 Batt Charger were not listed as new or replace.

   Response: Latest version of SWEL has now identified these as "Yes" in the "New/Replace" column.

c. Various types of equipment? Y☒ N☐

The Peer Review Team reviewed the list of selected equipment against Appendix B of the EPRI Seismic Walkdown Guidance (1025286).

The Peer Review Team noted the following issues that required follow up:

1) It appears that there are no "Air Compressors" selected in SWEL 1. Appendix B lists Air Compressors as a class of equipment. Verify if "Air Compressors" need to be included .

   Response: Equipment selected for walkdown in SWEL1 must be classified as Seismic Category 1 before being considered. The air compressors are not Seismic Category 1, therefore there are no air compressors (Equipment Class 12) included on SWEL1.

2) Will the Battery Room (11, 12, 21 & 22 BATT) walkdown include "Battery Racks" also? If not, consider including "Battery Racks" as recommended in Appendix B.

   Response: The SWELs have been revised to clarify that the equipment description includes the battery racks as well as the batteries.

3) No equipment is selected from Safety Injection (SI) and RHR system?

   Response: It was decided that the SWELs for both units will now include equipment from the SI system, although the original IPEEE submittal did not include this system as required in order to get to safe shutdown condition.

4) No components for the CC systems are selected for the walkdown. CC system provides support for RCP seal cooling (along with charging)

   Response: The CC Pumps and a small number of relief valves are classified Seismic Category 1. We have added the 12 CC pump (145-122) and 22 CC pump (245-122) to the SWEL1 lists.

5) SF – RWST Purification pumps are Seismic Cat 1 but are not listed. (These could affect RWST supply to charging needed for loss of offsite power)

   Response: These pumps [11 Refueling purification pump (195-091) and the 22 Refueling Water Purification Pump (295-091)] are classified as Non-Safety Related, Seismic Category 1. Operations Representative (P. Valtakis) confirmed the pump classification to be correct per Q-List rebaseline project. Since these pumps do not provide one of the 5 safety functions identified in EPRI 1025286

Peer Review Checklist for SWEL #1 –Prairie Island Units 1 and 2

guidance, these pumps do not meet the criteria to be considered for seismic walkdown. Therefore these pumps will not be added to SWEL1.

d. Various environments? Y☒ N☐

The Peer Review Team reviewed the list of selected equipment against criteria for selection listed in the EPRI Seismic Walkdown Guidance (EPRI report 1025286). The team determined that a reasonable effort was made to select equipment in different locations throughout the plant, and it meets the requirements from the EPRI guidance with respect to the various environments considered.

e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program? Y☒ N☐

The Peer Review Team noted that some equipment selected for walkdown on SWEL1 were also identified as equipment enhanced as a result of the IPEEE effort. This meets the requirement from the EPRI guidance to select a sample of IPEEE enhancements.

f. Were risk insights considered in the development of SWEL 1? Y☒ N☐

The Peer Review Team reviewed the list of the top 50 risk significant equipment items from the SWELs. Roughly 18 of the 200+ equipment listed on the Prairie Island SWELs have ties to the top 50 risk significant systems. The team concluded this was a strong sample and was well documented.

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3. For SWEL 2:

a. Were spent fuel pool related items considered, and if applicable included in SWEL 2? Y☒ N☐

No comments

b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2? Y☒ N☐

There are SFP related equipment included in SWEL 2, therefore no justification is required.

Peer Review Checklist for SWEL #1 –Prairie Island Units 1 and 2

4. Provide any other comments related to the peer review of the SWELs.

None

5. Have all peer review comments been adequately addressed in the final SWEL? Y☒ N☐

Peer Reviewer #1: *Steve Seilhymer (Ops)* Date: 10-26-12

Peer Reviewer #2: *Dileep Cherlopalle (Design Eng.)* Date: 10-22-12

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F

Disposition of Seismic Walkdown Observations

This appendix includes a discussion of how observations noted in the Seismic Walkdown Checklists (SWC) and Area Walk-By Checklists (AWC) were dispositioned. All observations noted in the SWCs or AWCs were reviewed by site engineering to determine whether or not the issues could be readily shown to meet the seismic licensing basis. If it was clear that the observations noted by the SWEs were not seismic concerns, then the observation was dispositioned as needing no further actions. However, if site engineering could not readily determine if the condition met the seismic licensing basis, then the observations were entered into the CAP. Table F-1 and Table F-2, below, lists the observations identified in the SWCs and AWCs, and how each observation was dispositioned. Only those observations which required additional review by site engineering are included in these tables. Comments or recommended enhancements are not included.

The SWCs in this appendix include information on the location of SWEL components, which is considered Sensitive Unclassified Non-Safeguards Information (SUNSI), of which the loss, issue, modification, or unauthorized access can reasonably be foreseen to harm the safe operation of the nuclear plant. Pages which contain proprietary information have been marked, and the sensitive information has been redacted.

Table F-1: Disposition of Seismic Walkdown Observations

Walkdown Checklist	Question No.	Observation	Disposition
55320	11	There are missing cap nuts on the south side of the cabinet. This is a maintenance issue and not a seismic issue.	The side panel is attached with a sufficient amount of fasteners to prevent it from coming loose, so it is not a seismic concern. However, CAP 1356613 has been initiated to evaluate this observation. In addition, WR 84674 was initiated to address this observation.
22 BATT	10	The "S" hooks for lighting fixtures throughout the room are mostly closed, but not all of the way. The chain links are thin enough to possibly slip through. SWEs recommend that the "S" hooks be fully closed, even though none of them are over the batteries themselves.	CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.
22 BATT CHG	8	There are open "S" hooks for lighting fixtures above the battery charger.	CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.
221M/XFMR	8	There are open "S" hooks for some of the lighting fixtures, but this will not pose an interaction hazard to the transformer.	It is not a seismic concern, but CAP 1352001 has been initiated to evaluate the "S" hook observations noted during these walkdowns. Off of CAP 1352001, WR 83556 has been initiated.

Table F-1: Disposition of Seismic Walkdown Observations

Walkdown Checklist	Question No.	Observation	Disposition
234-032	11	The guard between the engine and the generator is not anchored to the floor.	The guard between the engine and generator is bolted to the engine. No additional fasteners are required. It would not be advisable to have the guard secured at both the engine and the pad as the vibration from the engine when running would put undue stress on the guard fasteners. It is not a seismic concern.
245-042	8	There are two open "S" hooks on the light fixture. It will not impact the pump because the pump is not in the zone of influence.	CAP 1352001 has been initiated to evaluate all of the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address these observations.
245-071	8	The light fixture above 21 safety injection pump has two open "S" hooks. SWEs judged that it is credible, but is not significant and the safety injection pump is not adversely affected.	CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.
245-122	8	Both of the "S" hooks holding the light fixture above the 22 CC pumps are open. The power cord is taped and seems to be able to support the light fixture. The light fixture is in contact with the column 2 and it is possible the light may break during seismic motion.	CAP 1351916 has been initiated to evaluate this observation. In addition to writing this action request, WR 83541 has been initiated to address this observation.

Table F-1: Disposition of Seismic Walkdown Observations

Walkdown Checklist	Question No.	Observation	Disposition
245-122	8	The CC Pump collection barrel is tied with rope to the Unistrut. The barrel has a note attached that references CAP 1317022 and WO 74792.	Due to the fact that the CC pumps and heat exchangers are mounted on raised concrete pedestals, the proximity of a barrel to the pump has no adverse impact seismically. However, such poorly secured barrels are in conflict with the requirements of the seismic housekeeping procedure and the engineering change for the CC pump leakoff collection barrels structural system. CAP 1351901 has been initiated to evaluate this observation, and WR 83539 has been generated to address this observation.
245-122	8	There is duct tape on the bottom of the rigging beam above the CC pump. It is a housekeeping issue, and not a seismic concern.	CAP 1351913 has been initiated to evaluate this observation.
245-201	7	Fluorescent light located west of TD AFW pump has open "S" hook on one chain but the other chain will prevent light from falling on the pump.	CAP 1352001 has been initiated to evaluate this observation. In addition to the action request, WR 83556 has been initiated to address this observation.
245-392	8	The light bar is being held by two "S" hooks. One of the "S" hooks is open. If the light bar were to swing, it might hit the pump. Although this potential seismic interaction might be credible, it is not significant since the pump would still be able to perform its intended safety function.	CAP 1351884 has been initiated to evaluate this observation. In addition to writing this action request, WR 83533 has been initiated to address this observation.

Table F-1: Disposition of Seismic Walkdown Observations

Walkdown Checklist	Question No.	Observation	Disposition
274-031	11	The supply and return line are laterally unsupported, and could potentially over stress the nozzle (particularly the copper portion in the cooling radiator).	The piping configuration is seismically installed. The subject piping is analyzed in a plant calculation, and is shown to be acceptable. There is no seismic concern.
274-162	9	Supply and return lines are laterally unrestrained and may subject cooler nozzle to large movement.	A calculation was found which previously performed a determination of seismic adequacy of ZH system pressure boundary in the 122 Bus Room and other locations within the plant. No additional review is required based on the identified plant documentation. There is no seismic concern.
2LT-920	8	A light fixture has three open "S" hooks. The SWE's judged that the light fixture will not impact the transmitter, so there is no seismic interaction concern.	CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.
2LT-921	10	The cabinet labeled "clean chemical handling equipment" (36" x 24" x 75" high) is stored about 4" from the level transmitter.	CAP 1351219 has been initiated to evaluate this observation. Site Engineering discovered later that the cabinet is anchored to the wall with two small anchors, which can only be found by opening the cabinet and moving internal contents to see them. Therefore this observation is resolved and there is no adverse seismic condition.
B-2	Comments	Duct tape was identified behind Panel E-2 at about 8' high between the CVCS letdown and RHR labels.	CAP 1352954 has been initiated to document this observation. Additionally, WR 83785 has been initiated to remove the foreign material.

Table F-1: Disposition of Seismic Walkdown Observations

Walkdown Checklist	Question No.	Observation	Disposition
B-2	Comments	There is a bent back cover plate for the CVCS letdown monitor. It is located at about 10' high near the CVCS letdown label. The cover plate is non-structural and is not an adverse seismic condition.	It is not a seismic concern, however, WR 84959 was initiated to correct the bent dust cover on the enunciators.
E-2	8	The light fixture near E-2 in the middle section has one open "S" hook out of four hooks. E-2 is not in the zone of influence, therefore it is not a seismic concern. This light fixture was noted during the area walkbys.	CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.
E-2	Comments	The SWEs identified the following foreign materials: 1. Duct tape was found on the side of the first monitor, about 8' high on the generator controls. 2. A broken tie wrap is inside E-2 and pinned to a diagonal support. 3. A tie wrap was found on the edge of a HVAC duct exhaust above E-2.	CAP 1352954 has been initiated to evaluate this observation. Additionally, WR 83785 has been initiated to remove the foreign material.
E-2	Comments	In addition to the foreign material, the pig tail of a cable with a multipin connector was found stored on top of the box. It is not a seismic concern, but it is recommended that the site evaluate the condition.	The abandoned cable was not configured per the guidance for abandoned cables. Therefore, CAP 1357129 has been initiated to document this observation. In addition, WR 84837 was initiated to address this observation. There is no impact to equipment, and it is not a seismic concern.

Table F-1: Disposition of Seismic Walkdown Observations

Walkdown Checklist	Question No.	Observation	Disposition
EM-B2	11	A mounting screw was discovered missing inside the back of this panel in one of the electronic modules.	The unit remains functional with only one screw holding the card in. The one screw will ensure it does not impact other equipment as well. The card does not support any safety functions, therefore it is not a seismic concern. However, CAP 1353340 was initiated to document this observation, and WR 83890 was generated to correct the condition.
EM-B2	Comments	The train B event monitoring unit cooler CS-19144 PNL 219-1 has four bolt holes in the base plate but only two screws are installed.	Based on engineering judgment the small mass on the control switch box is adequately supported by the two anchor configuration. It is also obvious from the multiple installations that this is the as designed configuration and there has been no degradation. It is not a seismic concern.
MV-32030	7	The pipe support trapeze for the rod support of the turbine driven auxiliary feedwater pump discharge line may displace (out of the plane of the trapeze) *and potentially strike* MV-32030.	A rigid seismic restraint prevents the rod hanger and connected steel trapeze support from moving and impacting the motor valve. It is not a seismic concern.
MV-32180	8	There is an open "S" hook on the light fixture above MV-32180. It is credible, but will not impact MV-32180.	CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.
MV-32384	Comments	The conduit rod stirrup below the valve is missing one bolt. This is not a seismic issue for the valve, but requires evaluation.	CAP 1356520 has been initiated to evaluate this observation. In addition, WR 84626 was initiated to address this observation.

Table F-1: Disposition of Seismic Walkdown Observations

Walkdown Checklist	Question No.	Observation	Disposition
PNL 22	6	The A-46 SEWs declared this panel as an outlier and required a grout pad so that the bolts would not be subject to bending. The recommended resolution does not appear to have been performed.	This was identified as an outlier for resolution during the SQUG walkdowns and was evaluated. The condition was determined to be acceptable. It is not a seismic concern.
PNL 22	7	The counterweight of the door pulley system may strike panel PNL 22.	CAP 1352343 has been initiated to evaluate this observation. WR 83645 and 83646 have also been initiated to address this observation.
PNL 234	8	Both of the "S" hooks for the light fixture in front of panel 234 are open. The light fixture will not impact the panel as it is 4' away from the panel. It is not a seismic concern.	CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.
PNL 234/XFMR	8	The "S hooks" at both ends of a light fixture near PNL-234/XFMR are open. If light fixture unhooks at both ends, its power cord will hold the fixture at one end, and the other end will swing down. Panel 234 and the transformers are not in zone of influences so SWEs judge light fixture falling is not an adverse seismic condition.	CAP 1352001 has been initiated to evaluate the open "S" hooks on light fixtures which have been identified during these walkdowns. In addition to this action request, WR 83556 has been initiated to address these observations.
PNL 261	2	The upper left 3/8" diameter shell expansion anchor has sheared off.	Plant engineering investigated this observation and determined that the fourth bolt is visible behind the spring-loaded nut holding the panel enclosure to the Unistrut. Panel 261 therefore has four mounting bolts connecting it to the concrete wall, and no concern is present. CAP 1352221 was initiated to document this observation. WR 83615 was also initiated to perform any field work required by CAP 1352221.

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Table F-2: Disposition of Area Walk-by Observations

Area Walk by Checklist	Question No.	Observation	Disposition
AUX 11/21 CC PUMP	1	It appears that CS-19543 is not anchored to the wall. There are four external holes in the bracket for fasteners but no fasteners are present.	The switch is connected to rigid conduit. CS-19543 is part of an active engineering change. As a result, the switch has not been classified, and the system is not yet turned over to Operations. Additionally, the SWEs judge that the length of rigid conduit currently holding CS-19543 in place is an acceptable seismic restraint with respect to seismic interaction of the switch with other pieces of equipment in its vicinity. It is not a seismic concern.
AUX 11/21 CC PUMP	7	Two drums are present under the component cooling heat exchanger to collect leak off. The drums are poorly tied off by rope to a small copper drain line for the 11 component cooling pump unit cooler.	CAP 01353280 has been initiated to evaluate this observation. In addition to writing the action request, WR 83853 has been initiated to address the observation.
AUX 11/21 CC PUMP	8	One of the two floor brackets for the Unistrut that supports the component cooling motor power cables appears to be bent and the anchor is loose. There is a tygon tube wedged under the corner.	CAP 1353327 has been initiated to evaluate this observation. In addition to writing the action request, WR 83865 has been initiated to address the observation.
AUX 12/22 CC PUMP	4	The 22 component cooling pump motor unit cooler is supported by rod hangers from the ceiling. This is located near the 22 component cooling pump, 6 feet above the 695' floor. This unit cooler is close to the rigging I-beam on one side of 4" component cooling lines on the other side. The hanger number is 2-RHRA-443 and it supports the component cooling line and the valve 2ZE-3-4. Seismic movement may cause the unit cooler to bump into the I-Beam and the component cooling lines. The drain line from the unit cooler may break as well.	The unit cooler is not safety related, so there is no seismic concern.

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Table F-2: Disposition of Area Walk-by Observations

Area Walk by Checklist	Question No.	Observation	Disposition
AUX 12/22 CC PUMP	Comments	A top cover plate wing nut is missing from the 2RE-39 radiation monitor. There is also a loose screw on the side door cover. The monitor is resting on the floor near the wall, and is located between the 22 component cooling pump and the stairs to the upper level.	The radiation monitor is not safety related. WR 83571 was initiated to replace the wing nut and tighten the loose screw. CAP 01352076 was initiated to document the observation.
AUX 21/22 CNTM SPRAY	4	Next to the pressure gauge PI-18249, there is a portable cord reel supported on the wall by a pin. Since the cord is free to rotate, the reel could swing in a seismic event and potentially impact the valve and tubing of the pressure gauge.	CAP 1352923 has been initiated to document the observation, and WR 83779 has been initiated to either secure the portable cord reel from movement or re-locate the portable cord reel to a more suitable location.
AUX 21/22 CNTM SPRAY	7	Radiation monitor DRM-2 is attached magnetically to electrical panel 2RIA54. The magnetic base may not be strong enough to prevent the monitor from falling and impacting the pressure gauge PI-18249 or associated tubing.	CAP 1352769 has been initiated to evaluate long term out of service time for the radiation monitor. CAP 1352792 has also been initiated to evaluate any potential procedure deficiencies in the installation of portable radiation monitors.
AUX 21/22 SI PUMP	1	*The guard cover on 22 safety injection (SI) pump coupling* has two loose nuts for the bracket attached to the foundation of the SI pump. The bolts are effective to withstand seismic loads. The coupling guard will remain in place during a seismic event. It is seismically acceptable, but the loose bolts should be tightened.	CAP 1352699 had been initiated to evaluate this observation. In addition to writing this action request, WR 83742 has been initiated to re-tighten the bolts.

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Table F-2: Disposition of Area Walk-by Observations			
Area Walk by Checklist	**Question No.**	***Observation***	***Disposition***
AUX 21/22 SI PUMP	4	An ultrasonic flow meter is chained to a pipe near 2SI-20-68. The pipe may not be capable of supporting this seismic load.	*There is no requirement for the attachment of flow meters. The flow* meter uses the metal chain to keep it affixed to the pipe. The chain is robust and is sufficient for supporting the weight of the meter. In a seismic event the meter would move with the pipe and no extra load would be exerted on the chain. The seismic loads for the piping were evaluated within a plant evaluation. The configuration is acceptable, and is not a seismic concern.
AUX 21/22 SI PUMP	7	An oil can is sitting on the pipe support for MV-32185. There was no holder found for storing the can, which is against the site's seismic housekeeping procedure.	CAP 1352727 has been initiated to evaluate this observation. Off of *this action request, WR 83746 was initiated to address the condition.*
AUX 21/22 SI PUMP	8	A steam heating line was found tie wrapped to the line that includes the 2-RCCH-538 support. The tie wrap is a poor housekeeping practice, and should be removed.	CAP 1352959 has been initiated to evaluate this observation. In addition, WR 83786 has been initiated to address the condition.
AUX 22 CHRG PMP	4	The light fixture to the side of the 22 charging pump has an open "S" hook. The light fixture will not fall in a seismic event, and will not impact any equipment even if it did fall. The 22 charging pump is not in the zone of influence of the light fixture.	CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address this observation.
AUX NW	4	There are open "S" hooks for lighting fixtures throughout the area. Light fixture near charging pump 71117 and 71119 *is an interaction hazard if cabinet contains sensitive* devices. Another open "S" hook on light fixture is above MCC 2K Bus 1 and above Miscellaneous Systems 21 Relay Rack.	CAP 1352001 has been initiated to evaluate the open "S" hooks on *light fixtures which have been identified during these walkdowns. In* addition to this action request, WR 83556 has been initiated to address these observations.

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Table F-2: Disposition of Area Walk-by Observations

Area Walk by Checklist	Question No.	*Observation*	*Disposition*
AUX Northwest	3	There are open "S" hooks at both ends at the top of the light fixture above MCC 2L BUS 1.	CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. WR 83556 has also been initiated to address this observation.
AUX Northwest	7	There is a black barrel collecting leak off from drain line 2ZX-1-19 located under the staircase and next to MCC 2L BUS 1. The barrel is loosely tied off with rope to the Unistrut supporting panel 2R1A57.	The barrel meets the requirements of the seismic housekeeping procedure for temporary storage of barrels. The barrel is greater than 1.25 times its height from the MCC, and it is tied off to preclude movement during a seismic event. No seismic concern exists.
AUX B E-MON	4	The light fixture hanging from the ceiling is about 3" to 6" from an electrical box that is connected to panel 219. During a seismic event the fixture may hit the electrical box.	Molded case circuit breakers are generically considered to be non-vulnerable to contact chatter because of the significant seismic forces required to spuriously operate these devices. Any force imparted by the light fixture falling on the panel would be less significant than the seismic motion of the panel itself. As the panel and breakers are designed to withstand the design basis seismic event, the small impact due to the failure of a light fixture would not affect breaker operation. It is not a seismic concern.
AUX B E-MON	5	If the unit cooler supply and return lines break during a seismic event, it may result in flooding the room. There is no floor drain in the train B event monitoring room. Reference hangers 2-RHRH-453, 2-RHRH-448, 2-RHRH-449, and 2-RHRH-454.	This condition was previously evaluated in a plant calculation which performed a determination of seismic adequacy of ZH system pressure boundary in the Event Monitoring Rooms and other locations within the plant. No additional review is required based on the identified plant documentation. There is no seismic concern.
AUX NORTH WEST	4	There are open "S" hooks on the fluorescent lights in numerous locations. However, none of the fixtures are above safety related equipment. There is no seismic concern.	CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address this observation.
AUX NORTH WEST	7	The wrench hanging from 2MS-27-2 is a potential hazard to SOV-33266 and SV-33264. The recommendation is to re-locate the wrench to a height lower than the SOV elevation, so that it is no longer a potential hazard.	CAP 1352195 has been initiated to evaluate this observation. In addition to writing the action request, WR 83607 has also been initiated to address this condition.

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Table F-2: Disposition of Area Walk-by Observations			
Area Walk by Checklist	**Question No.**	**Observation**	**Disposition**
AUX NORTH WEST	7	The chain fall located near LFT-495 should be restrained so that it doesn't have the potential to impact the transmitter.	CAP 1352586 has been initiated to evaluate this observation. WR 83723 has also been initiated to address this condition.
AUX NORTH WEST	8	The tube lines near LFT-495 could potentially impact the transmitter. It is recommended that these lines be restrained.	These flow transmitters are not safety related and are not required to be seismically designed per the plant licensing basis. Therefore, there is no impact to plant safety as a result of a seismic interaction with the transmitter.
D5/D6 221/222 BUS	4	There are open "S" hooks for lighting fixtures throughout the room. They are not a seismic concern.	CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address this observation.
D5/D6 D5 CONTROL	7	There is a trash receptacle between cabinets D5-RTV-cabinet and remote terminal unit D5.	The cabinets are non-safety related. The cabinets are considered seismically mounted, because they are in the area of other safety related equipment. The condition described is acceptable, as there is no impact to equipment.
D5/D6 D6 ENGINE	5	The fire protection piping rod hung sprinkler system has threaded connections and could pose a flooding hazard if this piping failed during a seismic event.	This system is a pre-action system. The piping is filled with compressed air and it requires a "preceding" fire detection event (heat or flame) in order to introduce water into the piping. This piping is not a seismic concern.
D5/D6 26 BUS	4	There are open "S" hooks on light fixtures above and adjacent to breaker 26.	CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address this observation.

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Table F-2: Disposition of Area Walk-by Observations

Area Walk by Checklist	Question No.	Observation	Disposition
SSCN 22 DD CLWP	1	The starting air indicator (PI-11979) for the 22 diesel driven cooling water pump has a bracket with provisions for four screws. However, only two screws are attaching the indicator to the concrete wall.	CAP 1351936 has been initiated to evaluate this observation, and WR 83545 was initiated off of this action request to correct the condition. After further evaluation by plant engineering, it was determined that the safety classification of this indicator may not meet the requirements of the plant's equipment classification procedure. PI-11979 is currently classified as non-safety related but it may need to be classified as safety related. CAP 1352398 has been initiated to evaluate the safety classification of the starting air indicator.
TURB 21 AFWP	1	The guard to bolt drive on 121 instrument air (013-011) is missing two anchor bolts.	CAP 1352975 has been initiated to evaluate this observation. Additionally, WR 83793 has been initiated to address the condition.
TURB 21 AFWP	4	Chain fall for 2AF-13-1 is within eight inches of interacting with MCC 1A Bus 1. The chain fall needs to be restrained.	CAP 1352961 has been initiated to address this observation. In addition to writing an action request, WR 83796 has been initiated to address this condition.
TURB 21 BATT	3	The clamp of the conduit going into Panel 227 is loose. The clamp bolt is loosely attached to the Unistrut location of the clamp, which is 6ft above the floor.	CAP 1353370 has been initiated to evaluate this observation. Additionally, WR 83887 has been initiated to address this observation.
TURB 22 AFWP	2	The 123 instrument air compressor guard is missing a few anchors.	CAP 1352154 has been initiated to document this observation. WR 83594 has also been initiated to address this condition.
TURB 22 AFWP	4	The fire extinguisher (301) is on a short bent bracket. It is recommended that the bracket gets bent back to normal (horizontal) position or is replaced.	CAP 1352094 has been initiated to document this observation. From this action request, WR 83577 has been initiated to address the bracket.

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Table F-2: Disposition of Area Walk-by Observations

Area Walk by Checklist	Question No.	Observation	Disposition
TURB 22 AFWP	4	Open "S" hooks were identified on the following fluorescent lighting fixtures: a. west of the turbine driven auxiliary feedwater pump b. above door 42 c. above the 12 motor driven auxiliary feedwater pump (only 1 chain) d. above 124 AC	CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address this observation.
TURB 22 AFWP	5	The 1-1/2" fire protection sprinkler lines are flexible and threaded so they could be a potential spray hazard if they are filled with water. The lines are over the motor driven and turbine driven auxiliary feedwater pumps.	The horizontal sprinkler head piping is supported with clips to a Unistrut or other large-diameter piping. The vertical supply lines to the sprinklers are of the pendant style (hang down from above), and are considered seismically robust. They are not a seismic concern.
TURB 22 AFWP	7	The chain fall near TB2395 could potentially impact tubing on concrete wall. It is recommended that this chain be restrained.	An earthquake significantly beyond the plant's design basis earthquake would be required to swing the chain into the stainless steel tubing. If a beyond design basis earthquake did occur, the loss of this tubing would not negatively affect plant safety. Therefore, it is not a seismic concern.
TURB 22 AFWP	7	A fire protection break glass hammer is adjacent to the 123 air compressor control panel 70557. The hammer could potentially impact the nearby air tubing.	The gravitational force from the hammer would not be large enough to damage the tubing to the point where it could no longer feed CV-31191, the 123 Station Air Compressor Unloader. Additionally, both of these valves are non-safety related. The loss of these valves in a design basis earthquake would not negatively affect plant safety. It is not a seismic concern.
TURB 22 BATT	4	Some of the "S" hooks for lighting fixtures in the area are not completely closed. None of the lighting fixtures with open "S" hooks are over the batteries.	CAP 1352001 has been initiated to evaluate the open "S" hooks identified during these walkdowns. In addition to writing this action request, WR 83556 has been initiated to address this observation.

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Table F-2: Disposition of Area Walk-by Observations

Area Walk by Checklist	Question No.	*Observation*	*Disposition*
TURB 22 BATT	4	The counterweight "S" hook is also open and the counterweight could fall to the floor or against PNL 22.	Door 228 counterweight is next to Panel 22. Because of the low peak vertical acceleration at the site, there is no reason to suspect that the "S" hooks could become unloaded to allow the weight to disengage. However, CAP 1352343 was initiated to address the open "S" hook. In addition to writing this action request, WR 83645 and WR 83646 were initiated to upgrade the remaining doors so that they are connected to a pull cable with a threaded carabineer.
TURB 22 BATT	4	Eyewash station is securely stationed to the wall. However, the water supply canister on the cart is secured by a bungee cord which may not be an adequate restraint.	Plant engineering reviewed the restraint for the water supply to the eyewash station and concluded that the bungee cord was an acceptable means of restraining the canister.
TURB BUS 121	4	Duct tape is preventing a chain for a fluorescent light fixture from making contact with a conduit. This type of restraint is not necessary and should be removed. It is a housekeeping issue and not a seismic concern.	CAP 1352191 has been initiated to evaluate this observation. Additionally, WR 83605 has been initiated to correct the condition.
TURB BUS 121	5	Supply and return lines for the 121 switchgear room unit cooler are unsupported laterally across the room, and may not be adequately restrained to prevent excessive nozzle loads on the unit cooler.	Plant engineering has evaluated this observation and concluded that the piping is seismically installed. The subject piping is analyzed in a plant calculation, and is shown to be acceptable.
TURB RELAY	3	The cables going into relay racks 2AMR1,2ARP1, 2ARP2, 2ARP3, 2ARP4, and 2ASG2 are each two feet long. They are tied to a single Unistrut with tie wraps. The Unistrut may not be adequate to support the load from the cables, on top of the cable tray load it is already supporting.	Plant engineering has evaluated this observation and noted that as the cables exit the rack, they are bundled and secured to the cable tray supports prior to entering the tray. Cables of this type are allowed to have significantly longer unsupported vertical runs, according to site procedure. The grouping and securing of these cables to the supports with tie wraps is a cosmetic function only. The installation is in accordance with site procedures and is acceptable.

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Table F-2: Disposition of Area Walk-by Observations			
Area Walk by Checklist	**Question No.**	**Observation**	**Disposition**
TURB RELAY	Comments	There are several large rolls of abandoned cable that are tied together with cable ties to Unistrut. These abandoned cables are near MCC 2BMRI and TB-2228.	Plant engineering evaluated the installation of these abandoned cables and determined that the cables are marked and coiled in accordance with site guidance for abandoned cables and conduits. It is not a seismic or housekeeping concern.
TURB TRN B EVENT MON	5	Supply and return lines are laterally unrestrained and may subject cooler nozzle to large movement.	A calculation was found which previously performed a determination of seismic adequacy of ZH system pressure boundary in the 122 Bus Room and other locations within the plant. No additional review is required based on the identified plant documentation. There is no seismic concern.
AUX CONTROL ROOM	4	There are lighting diffusers tied off to the support grid. Unit 1 and Unit 2 "C" panels have a fluorescent light fixture on chains too close (within 1"-2") to the panel.	CAP 01352209 has been initiated to evaluate this observation.
AUX CONTROL ROOM	7	The trash can next to the racks R23, R24, R13, and R14 are immediately adjacent to the racks, which violates the seismic housekeeping procedure.	The trash cans are located next to non-safety related miscellaneous racks. This condition is acceptable per site procedure guidance. There is no seismic concern.
AUX CONTROL ROOM	7	There were several open S-hooks on light fixtures (nearest the panel in most cases).	CAP 01352001 was initiated to evaluate this observation. Off of CAP 01352001, WR 83556 was initiated to address this observation.
AUX CONTROL ROOM	7	Step ladder adjacent to racks R23, R24, R13 and R14 is also too close to the racks. The wheels should be chocked.	The trash cans are located next to non-safety related miscellaneous racks. There is no impact to the equipment. However, all wheeled carts should be chocked. The FIN team has been notified to chock the wheels.

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Table F-2: Disposition of Area Walk-by Observations			
Area Walk by Checklist	**Question No.**	**Observation**	**Disposition**
AUX CONTROL ROOM	8	Unit 1 and Unit 2 "E" panels have side panels that have slid out of position. This is a housekeeping issue and not a seismic concern.	CAP 01352102 has been initiated to evaluate this observation. In addition to writing an action request, WR 83579 has been initiated to address this observation.
AUX CONTROL ROOM	Comments	Fire extinguisher bracket 224 has a rotated bracket (into the insulation) and should be repaired.	The fire extinguisher is not located near equipment that could be impacted if the fire extinguisher came free from its mounting bracket. WR 83584 was written to replace the mounting bracket.
AUX CONTROL ROOM	Comments	The filing cabinets adjacent to the main control board in both Unit 1 and Unit 2 are close to the main control board.	This condition does not meet the seismic housekeeping procedures; therefore CAP 1357683 has been initiated to evaluate this observation. There is no adverse seismic concerns.
AUX CONTROL ROOM	Comments	A set of drawers next to the in-core logic selection switch panel are close to the panel.	The drawers have a small mass and are located on the floor of the control room. The aspect ratio was determined to be greater than two and it will not slide across the carpeted floor. If the drawers did slide out in a seismic event, they would not impact any equipment. Therefore, there is no seismic concern.
AUX CONTROL ROOM	Comments	The cart adjacent to the Protection Systems III and the cart adjacent to cabinets RPI-1, -2, and -3 in Unit 1 are close to the equipment. The chain is not used to restrain the carts.	The cart adjacent to the Protection System III supports a computer and monitor. The computer and monitor are securely fastened to the cart and the cart has been secured per procedures, so there is no seismic concern. However, the top of the monitor slightly exceeds the aspect ratio defined per the seismic housekeeping procedure. CAP 1357686 was initiated to address the observation. The cart will not affect equipment in the area. As for the cart adjacent to RPI-1, -2, and -3, plant engineering noted that one restraint is not currently being used. The cart for this restraint is secured in three other locations and by a wheel chock. The cart is sufficiently restrained and will not affect equipment in the area. It is not a seismic concern.