Engineering Repo	ort No. RBS-CS-12-00001 Rev 000					
	Page <u>1</u> of <u>35</u>					
Entergy ENTERGY NUCLEAR Engineering Report Cover Shee	t					
Engineering Report Title:						
River Bend Station Seismic Walkdo for Resolution of Fukushima Near-Term Task Force R	wn Report Recommendation 2.3: Seismic					
Engineering Report Type:						
New 🖾 Revision 🗌 Cancelled 🔲	Superseded  Superseded by:					
Applicable Site(s)						
IP1 IP2 IP3 JAF PNPS ANO1 ANO2 ECH GGNS RBS	□ VY □ WPO □ ◎ WF3 □ PLP □					
EC No. 40568						
Report Origin: Entergy Vendor Vendor Document No.: N/A						
Quality-Related: 🗌 Yes	No No					
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# **River Bend Station Seismic Walkdown Report**

for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic

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# 1.0 SCOPE AND OBJECTIVE

The Great Tohoku Earthquake of March 11, 2011 and the resulting tsunami caused an accident at the Fukushima Dai-ichi nuclear power plant in Japan. In response to this accident, the Nuclear Regulatory Commission (NRC) established the Near-Term Task Force (NTTF). The NTTF was tasked 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. On March 12, 2012 the NRC issued a 10CFR50.54(f) Letter [Ref. 1] requesting information from all licensees to support the NRC staff's evaluation of several of the NTTF recommendations. To support NTTF 2.3 Recommendation, Enclosure 3 to the 50.54(f) Letter requested that all licensees perform seismic walkdowns to gather and report information from the plant related to degraded, non-conforming, or unanalyzed conditions with respect to its current seismic licensing basis.

The Electric Power Research Institute (EPRI), with support and direction from the Nuclear Energy Institute (NEI), published industry guidance for conducting and documenting the seismic walkdowns which represented the results of extensive interaction between NRC, NEI, and other stakeholders. This industry guidance document, EPRI Report 1025286 [Ref. 2], hereafter referred to as "the Guidance," was formally endorsed by the NRC on May 31, 2012. Entergy River Bend Station (RBS) has committed to using this NRC-endorsed guidance as the basis for conducting and documenting seismic walkdowns for resolution of NTTF Recommendation 2.3: Seismic.

The objective of this report is to document the results of the seismic walkdown effort undertaken for resolution of NTTF Recommendation 2.3: Seismic in accordance with the Guidance, and provide the information necessary for responding to Enclosure 3 to the 50.54(f) Letter.

# 2.0 SEISMIC LICENSING BASIS SUMMARY

River Bend Station (RBS) is a boiling water reactor (BWR) located in St. Francisville, LA. The Nuclear Steam Supply System (NSSS) was originally designed by GE. RBS began commercial operation in June of 1986, and is currently rated at 996 MWe power [Ref. 3]. This section summarizes the seismic licensing basis of structures, systems and components (SSCs) at RBS which bound the context of the NTTF 2.3 Seismic Walkdown program.

# 2.1 SAFE SHUTDOWN EARTHQUAKE (SSE)

The safe shutdown earthquake for the RBS is described by a Newmark / RG 1.60 spectra anchored at 0.1g peak horizontal ground acceleration and 0.1g peak vertical ground acceleration [Ref. 3].

# 2.2 DESIGN CODES, STANDARDS AND METHODS

Seismic Category I Structures are designed to the requirements of ACI 318-1971 and AISC - 1971. The Containment was designed to ASME Section III, July 1, 1974 edition. Seismic piping was designed in accordance with ASME Section III, July 1, 1974 edition and seismic electrical equipment was designed in accordance with IEEE 323-1974.

The maximum horizontal and vertical ground motion for the safe shutdown earthquake (SSE) is assumed to be 0.1g for design purposes, which is the minimum value as established by the NRC (10CFR100).

The buildings and internal structures essential to the safe operation and shutdown of the plant are designed in accordance with industry codes and NRC regulations to provide protection as required from tornadoes, earthquakes, and the failure of equipment producing flooding, missiles, and pipe whip. The plant was designed based on the NRC Standard Review Plan (SRP) and associated Regulatory Guides (RG) published after 1973.

All Seismic Category I structures are founded on dense, compacted, granular fill overlying dense, buried channel sands and gravelly sand and hard tertiary clays.

The structural responses of the reactor building and other Seismic Category I structures to the application of horizontal and vertical earthquake ground motions are determined by the response spectra modal analysis method. Seismic responses for all Seismic Category I structures are determined from an application of two orthogonal horizontal and one vertical earthquake ground motions, assumed to be acting simultaneously.

The dynamic models of Seismic Category I structures consist of systems of generalized lumped masses, each with six degrees of freedom, connected by massless, linearly elastic springs. The system is connected to the subgrade by springs derived from the soil properties. The number and location of the lumped masses in the analytical model are chosen so as to obtain a satisfactory representation of the dynamic behavior of the actual structure. In general, the lumped masses consist of the masses of the floors, walls, columns, equipment, and piping concentrated in the vicinity of the lumped mass location. The locations of these lumped masses are generally at points where there is a concentration of mass or at points where there is a special interest in the response.

The seismic motion of all Seismic Category I structures is determined by applying the earthquake ground motions at the base of the appropriate dynamic model. In general, interaction between Seismic Category I and non-Seismic Category I structures is eliminated by providing separate foundations for the structures. Also, rattle space between abutting buildings is provided so that seismic motion between buildings is unimpeded.

Amplified response spectra (ARS) are generated for all Seismic Category I structures to define the seismic environment for the subsystem analyses. ARS are defined as plots of the maximum response of a family of idealized linear single-degree-of-freedom damped oscillators as a function of period (or natural frequency) at various locations in the structure subjected to a specified acceleration time history as their support. In the analysis of subsystems which meet the requirements for decoupling, the response of the structure is independent of the properties and dynamic behavior of the subsystems. The response of the structure due to the ground acceleration can be determined, then that response is applied as support accelerations to the subsystems.

Floor response spectra method and time history method of analysis are used for the design of Seismic Category I piping and equipment. Floor response spectra are peak spread in accordance with RG 1.122.

The principal methods of documenting adequacy for Seismic Category I components are static analysis, dynamic analysis, dynamic testing and static deflection testing. These methods are used singly or in combination to qualify the equipment.

Static analysis is used for equipment that can be modeled as relatively simple structures. The type of analysis involves the multiplication of the component weights by the specified seismic accelerations to produce forces that are applied at the centers of gravity in the horizontal and vertical directions. A stress analysis of critical components, such as feet holdown bolts and other structural members, is performed to determine their adequacy. The deflections of critical components are also calculated and compared with specified

tolerances. A detailed dynamic analysis is performed when component complexity or dynamic interaction precludes static analysis or when static analysis is very conservative. Equipment that is overly complex to analyze or whose operability cannot be adequately demonstrated by analysis is qualified by dynamic testing. Testing methods conform to IEEE 344-1975, as supplemented by RG1.100.

# 3.0 SEISMIC WALKDOWN PROGRAM IMPLEMENTATION APPROACH

Entergy RBS has committed to conduct and document seismic walkdowns for resolution of NTTF Recommendation 2.3: Seismic in accordance with the EPRI Seismic Walkdown Guidance [Ref. 2]. The approach provided in the Guidance for addressing the actions and information requested in Enclosure 3 to the 50.54(f) Letter includes the following activities, the results of which are presented in the sections shown in parenthesis:

- Assignment of appropriately qualified personnel (Section 4.0)
- Reporting of actions taken to reduce or eliminate the seismic vulnerabilities identified by the Individual Plant Examination of External Events (IPEEE) program (Section 5.0)
- Selection of structures, systems and components (SSCs) evaluated (Section 6.0)
- Performance of the seismic walkdowns and area walk-bys (Section 7.0)
- Evaluation and treatment of potentially adverse seismic conditions with respect to the seismic licensing basis of the plant (Section 8.0)
- Performance of peer reviews (Section 9.0)

The coordination and conduct of these activities was initiated and tracked by Entergy corporate leadership, which provided guidance to each Entergy site throughout the seismic walkdown program, including RBS. Entergy contracted with an outside nuclear services company to provide engineering and project management resources to supplement and assist each individual site. Each site had dedicated engineering contractors, supported by their own project management and technical oversight, who worked closely with plant personnel.

# 4.0 PERSONNEL QUALIFICATIONS

The NTTF 2.3 Seismic Walkdown program involved the participation of numerous personnel with various responsibilities. This section identifies the project team members and their project responsibilities and provides brief experience summaries for each. Training certificates of those qualified as Seismic Walkdown Engineers are included in Attachment H.

Table 4-1 summarizes the names and responsibilities of personnel used to conduct the seismic walkdowns. Experience summaries of each person follow.

Name	Equipment Selection Personnel	Seismic Walkdown Engineer	Licensing Basis Reviewer	IPEEE Reviewer
Jose Cardona <sup>3</sup>	Х	Х		
Brandon Nissing <sup>3</sup>	Х	Х		
Jeff Reynolds <sup>1</sup>	Х			
Paul Sicard <sup>4</sup>	Х			
John Dunkelberg (ENERCON)	Х	X <sup>2</sup>	Х	Х
David Bassi (ENERCON)	X	Х		Х
Matt Keeney (ENERCON)		Х		
Jason Halsey (Structural Integrity)		Х		
Amar Dalawari (ENERCON)		Х	Х	

Table 4-1 SWE Team

Notes:

- 1. RBS Plant operations representative
- 2. Designated lead SWE
- 3. RBS Engineer
- 4. RBS PRA Engineer

#### Jose Cardona

Mr. Jose Cardona has a Bachelor of Science degree in Civil Engineering from the University of Puerto Rico Mayagüez. He is a registered Engineer in Training, EIT, in the commonwealth of Puerto Rico and has 4 years at River Bend Station. He has performed and reviewed numerous evaluations associated with the replacement of seismically qualified equipment. He has successfully completed NTTF 2.3: Seismic training on the application of EPRI Report 1025286.

#### Brandon Nissing

Mr. Nissing has a Bachelor of Science degree in Civil Engineering from Louisiana State University. He is a registered Engineer in Training, EIT, in the state of Louisiana and has 4 years of experience in the Civil/Structural group at River Bend Station. He has performed and reviewed numerous evaluations associated with the replacement of seismically qualified equipment. He has successfully completed NTTF 2.3: Seismic training on the application of EPRI Report 1025286.

#### Paul Sicard

Mr. Sicard has Bachelor of Science degrees in Physics and Nuclear Engineering, a Master of Science degree in Nuclear Engineering, and a Master of Engineering degree in Mechanical Engineering, all from Rensselaer Polytechnic Institute. Mr. Sicard has 24 years of commercial nuclear industry experience with Entergy, including 18 years at River Bend Station, primarily in the areas of Safety Analysis and Probabilistic Risk Assessment. He previously served in the U.S.Navy on the design staff of the Naval Nuclear Propulsion Directorate. He has completed SRO Certification at River Bend. He has successfully completed the EPRI Seismic PRA Training course and has provided training on Seismic PRA and Risk Assessment for Entergy's PRA group. He had also served as lead safety analysis engineer for the Waterford-3 Extended Power Uprate project and Alternative Source Term project and as project manager for the River Bend 24-month cycle project. He is a past chair of the GOTHIC User's Group. He is a registered Professional Engineer in Louisiana in Mechanical Engineering.

## John Dunkelberg

Mr. Dunkelberg has Bachelor of Science degrees in Civil Engineering and Building Construction from Michigan State University. He is a Registered Civil Engineer in the state of Wisconsin. He has successfully completed NTTF 2.3: Seismic training on the application of EPRI Report 1025286. Mr. Dunkelberg has over 35 years of nuclear power plant experience. His direct work experience related to this project includes 10 years as a civil/structural design engineer at River Bend Station. During this time he performed and reviewed numerous seismic evaluations of components in support of plant modifications.

#### David Bassi

Mr. David Bassi received his Bachelor of Science degree from Mississippi State University in Civil Engineering. Mr. Bassi has experience with Entergy's Engineering Change and Work Management process. He has been a supporting engineer for various projects at River Bend Station (RBS) and Arkansas Nuclear One (ANO). He has successfully completed NTTF 2.3: Seismic training on the application of EPRI Report 1025286.

#### Matt Keeney

Mr. Keeney has Bachelor of Science degree in Civil Engineering from the University of Alabama at Birmingham. He is a Registered Civil Engineer in the states of Alabama, Georgia, Iowa, Wisconsin and Florida. He has successfully completed NTTF 2.3: Seismic training on the application of EPRI Report 1025286. Mr. Keeney has over 13 years of experience in civil and structural design. During this time he performed and reviewed several seismic evaluations of components in support of plant modifications at Plant Hatch (Southern Company). He has extensive design experience designing both commercial and industrial facilities.

## <u>Jason J. Halsey</u>

Mr. Halsey has a Bachelor of Science degree in Mechanical Engineering from the University of North Florida. He has successfully completed NTTF 2.3: Seismic training on the application of EPRI Report 1025286. He has more than 12 years of experience with the US Navy's Nuclear Power program (9 years) and commercial nuclear power (3 years) with Structural Integrity Associates, as a Senior Engineer. During his tenure with the US Navy, Mr. Halsey developed a vast working knowledge of power plant system design, maintenance and operations. This knowledge has carried over well to his current position in Structural Integrity Associates' Nuclear Plant Services Division. He has been heavily involved in the design and analysis of structural weld overlay repairs for critical nuclear plant components. This has involved extensive field engineering support during the implementation of the designed repair plans and has also included the engineering inspection of piping and mechanical structures affected during the repairs. Other related duties have included Seismic Equipment Evaluation, Pipe Stress Analysis and Pipe Flaw Evaluation.

## Amar Dalawari

Mr. Dalawari has a Master of Science in Engineering degree from Kansas State University and majored in Civil / Structural Engineering. He is a Registered Civil Engineer in Canada. He has successfully completed NTTF 2.3: Seismic training on the application of EPRI Report 1025286. Mr. Dalawari has over 35 years of nuclear power plant design experience. His direct work experience related to this project includes 18 years as a civil/structural design engineer at River Bend Station. During this time he performed numerous seismic evaluations of components in support of plant modifications.

## Jeffrey Reynolds

Mr. Reynolds has worked at RBS for 13 years. He is curretly a Senior Reactor Operator (SOP) and Operations Shift Manager (OSM).

## 4.1 EQUIPMENT SELECTION PERSONNEL

A total of six (6) individuals served as Equipment Selection Personnel – see Table 4-1.

#### 4.2 SESIMIC WALKDOWN ENGINEERS

A total of seven (7) individuals served as Seismic Walkdown Engineers – see Table 4-1.

#### 4.3 LICENSING BASIS REVIEWERS

A total of two (2) individuals served as Licensing Basis Reviewers – see Table 4-1.

#### 4.4 IPEEE REVIEWERS

A total of two (2) individuals served as IPEEE Reviewers – see Table 4-1.

#### 4.5 PEER REVIEW TEAM

Table 4-2 summarizes the names and responsibilities of personnel used to conduct peer reviews of the seismic walkdown program. Experience summaries of each person follow.

Table 4-2 Peer Reviewers

Name	SWEL Peer Reviewer	Walkdown Peer Reviewer	Licensing Basis Peer Reviewer	Submittal Report Peer Reviewer	IPEEE Peer Reviewer
Ben Kosbab (ENERCON)	X <sup>1,2</sup>		X <sup>1,2</sup>	X <sup>1,2</sup>	
Bivins Calhoun (ENERCON)]	Х				
Shawn McFarland (Structural Integrity)		х			
Winston Stewart (ENERCON)		X <sup>2</sup>	Х		
David Bassi (ENERCON)					Х
Pete Peterson (ENERCON)				Х	

Notes:

- 1. Peer Review Team Leader
- 2. Lead peer reviewer of particular activity

#### Benjamin Kosbab

Dr. Kosbab is a civil/structural engineer with ENERCON specializing in seismic engineering of nuclear power plant structures, systems, and components. He has earned Master of Science and Ph.D. degrees in civil/structural engineering from the Georgia Institute of Technology with a focus on probabilistic seismic response and fragility analysis of industrial structures. In the nuclear industry, Dr. Kosbab has been involved with seismic time-history and response spectra development, seismic equipment qualification, design of seismic supports, walkdowns, dynamic structural analysis, seismic instrumentation analysis, and soil-structure interaction analysis for plant modifications at numerous nuclear facilities. Dr. Kosbab maintains active involvement with the Nuclear Energy Institute (NEI) Seismic Task Force. He has successfully completed NTTF 2.3: Seismic training on the application of EPRI Report 1025286.

#### Bivins Calhoun

Mr. Bivins Calhoun worked as a member of the Peer Review Team. Mr. Calhoun is a Senior Mechanical Engineer with over 17 years of experience in the nuclear power industry. Mr. Calhoun has a Bachelor's degree in Mechanical Engineering from the Georgia Institute of Technology and Bachelor of Arts degree in Applied Science & Mathematics from King College. Mr. Calhoun has extensive experience in engineered safety features systems analysis, particularly in accident and station blackout scenarios.

#### Shawn McFarland

Mr. Shawn McFarland has a Bachelor of Science Degree in Civil Engineering from South Dakota School of Mines and Technology. He has successfully completed NTTF 2.3: Seismic training on the application of EPRI Report 1025286. In addition to NTTF related training, Mr. McFarland has also completed the Seismic Qualification Utilities Group (SQUG) Seismic Walkdown Screening and Seismic Evaluation training course. His work experience related to this project includes time spent as a civil/structural design engineer at Cooper Nuclear Station. During this time he performed and reviewed numerous seismic evaluations of components in support of plant modifications. His work also included performing operability evaluations of seismic capabilities of degraded SSCs. During his time at Cooper Nuclear Station, Mr. McFarland also acted as the site's SQUG representative. This responsibility included attending SQUG meetings and reviewing SQUG walkdown documentation as a part of plant modifications.

## Pete Peterson

Mr. Peterson is the ENERCON Program Manager for the Fukushima Near-Term Task Force Recommendation 2.3 Seismic Walkdown Assessments for Entergy South and Entergy North. Mr. Peterson is a Certified Project Manager with 20+ years of nuclear project experience. Mr. Peterson is accomplished in nuclear facilities and power design, engineering and R&D, construction, maintenance and renovation, quality, and corrective action. He is a Failure Analysis expert in root/apparent cause analysis.

#### Winston Stewart

Mr. Stewart has a Bachelor of Science Degree in Mechanical Engineering. He has successfully completed NTTF 2.3: Seismic training on the application of EPRI Report 1025286. In addition to NTTF related training, Mr. Stewart has also completed the Seismic Qualification Utilities Group (SQUG) Seismic Walkdown Screening and Seismic Evaluation training course. Mr. Stewart has over 13 years of seismic/structural engineering and design experience. His experience includes 8 years as senior and lead civil design engineer at the HB Robinson Nuclear Plant. Related duties and qualifications at the HB Robinson Nuclear Plant included seismic equipment qualification, pipe stress analysis, pipe support design, pipe flaw evaluation, modification engineer, system engineer, project manager, 10 CFR 50.59 evaluator, and apparent cause evaluator. He has significant experience in the qualification, design/evaluation, installation, and engineering inspection of mechanical and electrical components, including associated structures, piping and electrical raceways. Mr. Stewart was the technical lead for the seismic walkdowns at the Robinson site, and performed walkdowns, as an SWE, at the Hatch and Vogtle sites.

# 5.0 IPEEE VULNERABILITIES REPORTING

During the IPEEE program in response to NRC Generic Letter 88-20 [Ref. 4], plant-specific seismic vulnerabilities were identified at many plants. In this context, "vulnerabilities" refers to conditions found during the IPEEE program related to seismic anomalies, outliers, or other findings.

IPEEE Reviewers (see Section 4.4) reviewed the IPEEE final report [Ref. 5] and supporting documentation to identify items determined to present a seismic vulnerability by the IPEEE program. IPEEE Reviewers then reviewed additional plant documentation to identify the eventual resolutions to those seismic vulnerabilities not resolved via the completion of the IPEEE program.

The seismic vulnerabilities identified for RBS during the IPEEE program are reported in Attachment A, however no seismic vulnerabilities were identified by the RBS IPEEE program.

# 6.0 SEISMIC WALKDOWN EQUIPMENT LIST DEVELOPMENT

This section summarizes the process used to select the SSCs that were included in the Seismic Walkdown Equipment List (SWEL) in accordance with Section 3 of the Guidance. A team of equipment selection personnel with extensive knowledge of plant systems and components was selected to develop the SWEL. The SWEL is comprised of two groups of items:

- SWEL 1 consists of a sample of equipment required for safe shutdown of the reactor and to maintain containment integrity (i.e., supporting the five safety functions)
- SWEL 2 consists of items related to the spent fuel pool

The final SWEL is the combination of SWEL 1 and SWEL 2. The development of these two groups is described in the following sections.

# 6.1 SAMPLE OF REQUIRED ITEMS FOR THE FIVE SAFETY FUNCTIONS

Safe shutdown of the reactor involves four safety functions:

- Reactor reactivity control (RRC)
- Reactor coolant pressure control (RCPC)
- Reactor coolant inventory control (RCIC)
- Decay heat removal (DHR)

Maintaining containment integrity is the fifth safety function

• Containment function (CF)

The overall process for developing a sample of equipment to support these five safety functions is summarized in Figure 1-1 of the Guidance. Figure 1-1 of the Guidance provides a screening method for selecting SSCs, starting with all of the plant SSCs and reducing the number based on a series of screening criteria. The equipment coming out of Screen #3 and entering Screen #4 is defined as Base List 1. The equipment coming out of Screen #4 is the first Seismic Walkdown Equipment List, or SWEL 1. Development of these lists is described separately in the following sections.

6.1.1 Base List 1

Based on Figure 1-1 and Section 3 of the Guidance, Base List 1 should represent a set of Seismic Category (SC) I equipment or systems that support the five safety functions. The IPEEE program was intended to address the seismic margin of SSCs

associated with each of the five safety functions. At RBS, the EPRI Seismic Margin Assessment (EPRI SMA) method was used to complete the seismic IPEEE program, based on EPRI Report NP-6041 titled "A Methodology for assessment of Nuclear Power Plant Seismic Margin." As described in Section 4.0 of the RBS IPEEE report [Ref. 5], an equipment list was developed representing the SSCs necessary for one preferred and one alternate "success path" capable of achieving and maintaining a safe shutdown condition for at least 72 hours following a SSE event. This equipment list of SSCs on the success paths is consistent with the requirements of Screens #1 through #3 of the Guidance. Therefore, the IPEEE equipment list of SSCs on the success paths was used as a starting point for the NTTF 2.3 Seismic Walkdown Base List 1. Base List 1 is presented as Table B.1 in Attachment B, and has 305 total items.

#### 6.1.2 SWEL 1

Based on Figure 1-1 and Section 3 of the Guidance, SWEL 1 should represent a diverse population of items on Base List 1 including representative items from some of the variations within each of the five sample selection attributes. Additionally, the selection of SWEL 1 items includes consideration of the importance of the contribution to risk for the SSCs. Equipment Selection Personnel (see Section 4.1) developed SWEL 1 using an iterative process. The following paragraphs describe how the equipment selected for inclusion on the final SWEL 1 are representative with respect to each of the five sample selection attributes while also considering risk significance. In general, preference for inclusion on SWEL 1 was given to items that are accessible and have visible anchorage while still maintaining the sample selection attributes. SWEL 1 is presented as Table B.2 in Attachment B, and has 112 total items.

## Variety of Types of Systems

Items were selected from Base List 1 ensuring that each of the five safety functions was well represented. Additionally, components from a variety of frontline and support systems, as listed in Appendix E of the Guidance, were selected. The system type of each item on SWEL 1 is listed on Table B.2 of Attachment B.

#### Major New and Replacement Equipment

With assistance from plant operations and Design Engineering and PRA personnel, Equipment Selection Personnel identified items on Base List 1 which are either major new or replacement equipment installed within the past 15 years, or have been modified or upgraded recently. These items are designated as such on Base List 1 on Table B.1 of Attachment B. A robust sampling of these items is represented on SWEL 1.

## Variety of Equipment Types

According to Appendix B of the Guidance, there are 22 classes of mechanical and electrical equipment. The items on Base List 1 were classified accordingly and the total number from each class was determined. Items were then selected from Base List 1 ensuring that each of the equipment classes represented there was also represented on SWEL 1 in approximately the same ratios. The equipment class of each item on SWEL 1 is listed on Table B.2 of Attachment B. Note that SWEL 1 does not include class 13 components, because there are no safety related motor generators at RBS.

Note that SWEL 1 does not include Class 11 or 13 components, because these are not represented on Base List 1.

#### Variety of Environments

Items were selected from Base List 1 located in a variety of buildings, rooms, and elevations. These item locations included environments that were both inside and outside, as well as having high temperature and/or elevated humidity and within containment. The location and environment of each item on SWEL 1 is listed on Table B.2 of Attachment B.

#### **IPEEE Enhancements**

No seismic vulnerabilities were identified by the RBS IPEEE program (see Section 5.0). Therefore, no equipment enhanced as a result of the IPEEE program has been included on Base List 1 or SWEL 1.

#### Risk Significance

Information from the plant Probabilistic Risk Analysis (PRA) model was used to determine whether items were risk significant. Risk significance was assessed using Loss of Offsite Power as a surrogate for seismic risk. Risk significance was considered on a component level when choosing between similar components in different divisions. Where otherwise comparable items could be chosen relative to the sample selection attributes, the item with higher risk significance was generally chosen.

#### 6.2 SPENT FUEL POOL ITEMS

The overall process for developing a sample of SSCs associated with the spent fuel pool (SFP) is similar to that of the screening process for SWEL 1 and is summarized in Figure 1-2 of the Guidance. The equipment coming out of Screen #2 and entering Screen #3 is defined as Base List 2. The items coming out of Screen #4 are items that could potentially cause the SFP to drain rapidly. The items coming out of either

Screen #3 or Screen #4 are the second Seismic Walkdown Equipment List, or SWEL 2. Development of these lists is described separately in the following sections.

#### 6.2.1 Base List 2

Based on Figure 1-2 and Section 3 of the Guidance, Base List 2 should represent the Seismic Category I equipment or systems associated with the SFP. To develop Base List 2, Equipment Selection Personnel (see Section 4.1) reviewed plant design and licensing basis documentation and plant drawings for the SFP and its associated cooling and support systems. Base List 2 is presented as Table B.3 in Attachment B, and has 34 total items.

#### 6.2.2 Rapid Drain-Down

Rapid drain-down is defined as unintentionally lowering the water level to the top of the fuel assemblies within 72 hours after an earthquake. Consistent with the Guidance, the Equipment Selection Personnel (see Section 4.1) identified SSCs that could cause the SFP to drain rapidly by first reviewing the SFP documentation to identify penetrations below about 10 ft above the top of the fuel assemblies.

Because this review found no such SFP penetrations, there is no potential for rapid drain-down and no items were included on the rapid drain-down list to include on SWEL 2. All piping connected to the spent fuel pool have passive anti-siphon holes installed in piping elbows to prevent siphoning of the pool.

## 6.2.3 SWEL 2

Based on Figure 1-2 and Section 3 of the Guidance, SWEL 2 is a broad population of items on Base List 2 including representative items from some of the variations within each of four sample selection attributes (using sample process similar to SWEL 1). Due to the population of items on Base List 2 being much smaller than Base List 1, the sampling attributes are satisfied differently for SWEL 2 than for SWEL 1. The following paragraphs describe how the equipment selected from Base List 2 for inclusion on SWEL 2 are representative with respect to each of the four sample selection attributes (detailed below). SWEL 2 is presented as Table B.5 in Attachment B, and has 14 total items.

#### Variety of Types of Systems

There are several systems associated with SFP cooling. The systems in SWEL 2 that are represented are: CCP-Closed Cooling Water, EHS-Electrical Distribution, SFC-Fuel Pool Cooling, and SWP-Service Water.

## Major New and Replacement Equipment

There have been no major new or replacement equipment installations within the past 15 years associated with the SFP. Therefore, this sampling attribute is not applicable.

## Variety of Equipment Types

There are 8 different equipment classes (from the Guidance Appendix B) represented on Base List 2: 1, 3, 5, 7, 8, 19, 20, and 21. All but two of these equipment classes is represented on SWEL 2. The classes that are not represented are: 3 - Medium*Voltage, Metal-Clad Switchgear, and 21 - Tanks and Heat Exchangers.* The switchgear was not included because that specific piece of equipment was included on SWEL 1. The heat exchanger was not included because high radiation limited access to the equipment.

#### Variety of Environments

All SFP-related components were located in the Auxiliary, Fuel, or Control Buildings; each of the items were located in similar environments. Therefore, this sampling attribute is not applicable.

# 6.3 DEFERRED INACCESSIBLE ITEMS ON SWEL

Each item on the SWEL shall be walked down as part of the NTTF 2.3 Seismic Walkdown program. In order to perform the seismic walkdowns of these items, it is necessary to have access to them and to be able to view their anchorage. In some cases, it was not feasible to gain access to the equipment or view its anchorage because RBS was at power during the entire 180-day response period of Enclosure 3 to the 50.54(f) Letter. For these cases, walkdowns of these items have been deferred until the next refueling outage (RFO-17) in February of 2013. An updated submittal report incorporating these deferred walkdowns will be provided within 90 days after the end of RFO-17.

Deferred items are summarized in the table below. The reason for deferral is identified as either ACC (indicating that the item is in an inaccessible item while the plant is at power) or CAB (indicating that the item requires opening cabinet/panel doors which was not permitted by plant Operations personnel during the walkdown period, due to being energized or otherwise). A total of 11 items are deferred; of these, 9 are in inaccessible areas, and 2 are cabinets/panel required to be opened.

# Table 6-1 Deferred Items

SWEL#	Equipment ID	Description	Location	Reason
SWEL 1-001	B21-AOVF022B	MAIN STM LINE INBRD ISO VLV B	DRYWELL	ACC
SWEL 1-002	B21-AOVF028B	MAINSTM LINE OUTBRD ISOL VLV B	STEAM TUNNEL	ACC
SWEL 1-003	B21-RVF041D	MAIN STM LINE AUTO DEPRESSURIZATION SYS PRESSURE RELIEF VLV	DRYWELL	ACC
SWEL 1-004	B21-RVF047B	MAIN STM LINE B PRESS RAELIEF VLV	DRYWELL	ACC
SWEL 1-026	E22-PC001	HPCS MOTOR FEEDER	AUX BLDG	ACC
SWEL 1-060	ENB-PNL02A	N/A	CONTROL BLDG	CAB
SWEL 1-036	E51-PNLC002	RCIC TURB GOVERNOR PNL	CONTROL BLDG	CAB
SWEL 1-100	SWP-FN1B	STANDBY COOLING TWR 1 (fan 1B)	STANDBY COOLING TOWER	ACC
SWEL 1-101	SWP-FN1J	STANDBY COOLING TWR 1 (fan 1J)	STANDBY COOLING TOWER	ACC
SWEL 1-102	SWP-FN1N	STANDBY COOLING TWR 1 (fan 1N)	STANDBY COOLING TOWER	ACC
SWEL 1-103	SWP-FN1V	STANDBY COOLING TWR 1 (fan 1V)	STANDBY COOLING TOWER	ACC

## 7.0 SEISMIC WALKDOWNS AND AREA WALK-BYS

The NTTF 2.3 Seismic Walkdown program conducted in accordance with the Guidance involves two primary walkdown activities, Seismic Walkdowns and Area Walk-Bys. These activities were conducted at RBS by teams of at least two trained and qualified Seismic Walkdown Engineers (SWEs) (see Section 4.1). Each team included one engineer with at least several years of experience in seismic design and qualification of nuclear power plant SSCs. A total of six SWEs were used: two RBS design engineers and four contractor engineers. The teams periodically "shuffled" personnel to cross-check consistency between the SWEs and to insure that lessons learned were being shared. Members of RBS Design Engineering also participated on each team during the walkdowns. RBS Operations and Electrical Maintenance personnel accompanied the SWE teams during inspections of the interiors of electrical panels to open cubicle doors.

The seismic walkdowns and area walk-bys were conducted over the course of 2 weeks during October of 2012. Each morning, a pre-job brief with all personnel involved was conducted. This pre-job brief was used to outline the components and areas that would be walked down that day, to ensure consistency between the teams, to reinforce expectations, to identifying potentially personnel safety issues specific to that day, and to allow team members to ask questions and share lessons learned in the field. The SWE teams brought cameras and flashlights into the field to assist with the seismic walkdwons and area walk-bys.

#### 7.1 SEISMIC WALKDOWNS

Seismic walkdowns were performed in accordance with Section 4 of the Guidance for all items on the SWEL (SWEL 1 plus SWEL 2), except for those determined to be inaccessible and deferred (see Section 6.4). To document the results of the walkdown, a Seismic Walkdown Checklist (SWC) with the same content as that included in Appendix C of the Guidance was created for each item. Additionally, photographs were taken of each item and included on the corresponding SWC.

Prior to performance of the walkdowns, documentation packages were developed that contained the pre-filled SWC and other pertinent information including the location drawings, previous IPEEE seismic walkdown documentation, and anchorage drawings where applicable (response spectra information was available on site). These documentation packages were brought with the SWE teams into the plant during the seismic walkdowns.

Walkdown inspections focused on anchorages and seismic spatial interactions, but also included inspections for other potentially adverse seismic conditions. Anchorage, in all cases, was considered to specifically mean anchorage of the component to the structure. This included anchor bolts to concrete walls or floors, structural bolts to structural steel and welds to structural steel or embedded plates. For welds, the walkdown team looked for cracks and corrosion in the weld and base metal. Other bolts or connections, such as flange bolts on in-line components were not considered as equipment anchorage. These bolts and connections were evaluated by the SWEs and any potential adverse seismic concerns were documented under "other adverse seismic conditions" rather than under "anchorage". Thus, components with no attachments to the structure are considered as not having anchorage. Nevertheless, the attachment of these components to other equipment was evaluated and inspected for potentially adverse seismic conditions.

Cabinets/panels on the SWEL that could be reasonably opened without presenting safety or operational hazards were opened during the walkdown. This allowed visual observation of internal anchorage to the structure (where present), as well as inspection for "other adverse seismic conditions" related to internal components if it could be observed without breaking the plane of the equipment opening.

During walkdown discussions with Operations and Electrical Maintenance personnel, one MCC cabinet (ENB-MCC1) was identified to be a potential operational hazard to inspect the interior (opening doors of each MCC cubicle), due to the sensitive nature of the door opening mechanism. This MCC was therefore removed from the SWEL. This deletion did not adversely impact equipment diversity of the SWEL.

In addition to the general inspection requirements, at least 50% of the SWEL items having anchorage required confirmation that the anchorage configuration was consistent with plant documentation. Of the 126 SWEL items, 80 were considered to have anchorage (i.e., removing in-line/line-mounted components). Of these 80 anchored components, the walkdowns of 40 items included anchorage configuration verification, which is 50%. When anchorage configuration verification was conducted, the specific plant documentation used for comparison to the as-found conditions was referenced on the SWC.

The SWC for each SWEL item where a seismic walkdown has been initiated is included in Attachment C. A total of 116 SWCs are attached, 114 with completion status marked "Y" and 2 with completion status marked "N". SWCs considered and marked incomplete are those where a walkdown was initiated, but whose completion was ultimately deferred because the cabinet/panel could not be opened during the walkdown period. Therefore, the 114 completed SWCs represent the completed walkdowns of each SWEL items accessible during the walkdown period.

## 7.2 AREA WALK-BYS

Seismic area walk-bys were performed in accordance with Section 4 of the Guidance for all plant areas containing items on the SWEL (SWEL 1 plus SWEL 2), except for those SWEL items located in plant areas inaccessible during the walkdown period (see Section 6.4). Area walk-bys were not deferred where components were deferred simply to open cabinets/panels. A separate Area Walk-By Checklist (AWC) with the same content as that included in Appendix C of the Guidance was used to document the results of each area walk-by performed. Photographs were taken of many of the areas, and included on the corresponding SWC and AWC.

Area walk-bys were conducted once for plant areas containing more than one SWEL item. In cases where the room or area containing a component was very large, the extent of the area encompassed by the area walk-by was limited to a radius of approximately 35 ft around the subject equipment. The extent of the areas included in the area walk-bys is described on the AWC for that area. Because certain areas contained more than one SWEL item, there are fewer total area walk-bys conducted than seismic walkdowns. A total of 57 area walk-bys were performed to cover all plant areas containing at least one accessible SWEL item.

The AWC for each area walk-by completed is included in Attachment D. A total of 57 AWCs are attached, which represent all of the areas containing a SWEL item that were accessible during the walkdown period. An additional 10 area walk-bys of areas will be completed together with the deferred walkdowns for those inaccessible items (see Section 6.4).

# 8.0 LICENSING BASIS EVALUATIONS

During the course of the seismic walkdowns and area walk-bys, the objective of the SWE teams was to identify existing degraded, non-conforming, or unanalyzed plant conditions with respect to its current seismic licensing basis. This section summarizes the process used to handle conditions identified, what conditions were found, and how they were treated for eventual resolution.

#### CONDITON IDENTIFICATION

When an unusual condition was observed by a SWE team in the field, the condition was noted on the SWC or AWC form and briefly discussed between the two SWEs to agree upon whether it was a potentially adverse seismic condition. These initial conclusions were based on conservative engineering judgment and the training required for SWE qualification.

For conditions that were reasonably judged as insignificant to seismic response, the disposition was included on the SWC or AWC checklist and the appropriate question was marked "Y", indicating that no associated potentially adverse seismic condition was observed. Unusual or uncertain conditions were reported to site personnel for further resolution through the Corrective Action Program (CAP) (see Section 8.2). A total of 9 seismically insignificant conditions were related to housekeeping.

For conditions that were judged as potentially significant to seismic response, then the condition was photographed, and the appropriate question on the SWC or AWC was marked "N" indicating that a potentially adverse seismic condition was observed. The condition was then immediately reported to site personnel for further resolution and documented for reporting in Attachment E. A total of 20 potentially adverse seismic conditions were identified. These conditions were generally related to housekeeping (1), non-conforming anchorage (5), spatial interaction (5), or electrical cabinet internal attachment (9).

#### **CONDITION RESOLUTION**

Conditions observed during the seismic walkdowns and area walk-bys determined to be potentially adverse seismic conditions are summarized in Attachment E, including how each condition has been addressed and its current status. Each potentially adverse seismic condition is addressed with a Licensing Basis Evaluation (LBE) to determine whether it requires entry into the CAP, or by entering it into the CAP directly. The decision to conduct a LBE or enter the condition directly into the CAP was made on a case-by-case basis, based on the perceived efficiency of each process for eventual resolution of each specific condition.

Unusual conditions that were not seismically significant were entered into the CAP directly. Further resolution of these conditions is not tracked or reported as part of the NTTF 2.3 Seismic Walkdown program, except by noting the CR numbers generated on the applicable SWCs and AWCs.

# 8.1 LICENSING BASIS EVALUATIONS

Potentially adverse seismic conditions identified as part of the NTTF 2.3 Seismic Walkdown program may be evaluated by comparison to the current licensing basis of the plant as it relates to the seismic adequacy of the equipment in question, as is described in Section 5 of the Guidance. If the identified condition is consistent with existing seismic documentation associated with that item, then no further action is required. Each potentially adverse condition was documented in an LBE, and further investigation was performed or entered into the CAP.

Of the 20 identified potentially adverse seismic conditions, 20 LBEs were preformed. An. Each LBE performed is documented consistently, and included in Attachment F. The results of these LBEs with respect to the associated potentially adverse seismic conditions are summarized in Attachment E. A total of 4 potentially adverse seismic conditions evaluated using a LBE were dispositioned and required no further action, whereas 16 required CAP entry.

# 8.2 CORRECTIVE ACTION PROGRAM ENTRIES

Conditions identified during the seismic walkdowns and area walk-bys that required further resolution were entered into the plant's CAP. These were reviewed in accordance with the plant's existing processes and procedures for an eventual disposition. Conditions entered into the CAP included two types of unusual conditions identified:

- Seismically insignificant unusual conditions
- Potentially adverse seismic condition that does not pass a LBE

A total of 23 Condition Reports (CRs) were generated from the CAP as a result of the NTTF 2.3 Seismic Walkdown program. Of those, 7 were from seismically insignificant unusual conditions. A total of 16 CRs were written relative to potentially adverse seismic conditions identified. The CR numbers, current status, and resolution (where applicable and available) are summarized for these potentially adverse seismic conditions in Attachment E.

## 8.3 PLANT CHANGES

The CAP entries (CRs) generated by the NTTF 2.3 Seismic Walkdown program are being resolved in accordance with the plant CAP process. Initial evaluations indicate that no immediate plant changes are necessary. Final and complete resolutions of the CRs for seismically insignificant unusual conditions and potentially adverse seismic conditions will determine if future modifications to the plant are required. While no immediate plant modifications have been identified as a result of the seismic walkdowns and walk-bys, various cases were found where rework is required or housekeeping issues are being addressed. Current status and resolutions (where applicable and available) for CRs related to potentially adverse seismic conditions are provided in Attachment E.

## 9.0 PEER REVIEW

#### 9.1 PEER REVIEW PROCESS

The peer review for the NTTF Recommendation 2.3 Seismic Walkdowns was performed in accordance with Section 6 of the Guidance. The peer review included an evaluation of 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 and area walk-bys;
- review of licensing basis evaluations and decisions for entering the potentially adverse conditions in to the plant's Corrective Action Plan (CAP); and
- review of the final submittal report.

At least two members of the peer review team (see Section 4.5) were involved in the peer review of each activity, the team member with the most relevant knowledge and experience taking the lead for that particular activity. A designated overall Peer Review Team Leader provided oversight related to the process and technical aspects of the peer review, paying special attention to the interface between peer review activities involving different members of the peer review team.

#### 9.2 PEER REVIEW RESULTS SUMMARY

The following sections summarize the process and results of each peer review activity.

9.2.1 Seismic Walkdown Equipment List Development

Peer review of the selection of SSCs for SWEL development was conducted by two peer reviewers. The lead reviewer for this peer review activity has knowledge and experience related to nuclear power plant design, operations, documentation, and SSCs; the other review has extensive knowledge of the NTTF 2.3 Seismic Walkdown program, including the equipment selection process. The peer review was conducted prior to the seismic walkdowns began, and was performed as follows:

 The draft SWEL (SWEL 1 + SWEL 2) was provided to the peer reviewers, along with the corresponding basis lists (Base List 1, Base List 2, and SFP rapid drain-down list) and written explanation of the equipment selection process used (see Section 6.0).

- Each peer reviewer independently reviewed the equipment selection process and resulting SWEL in terms of the equipment selection process presented in Section 3 of the Guidance.
- The peer reviewers discussed their findings and generated consolidated comments. General comments on the overall list and how it represents adequate diversity were documented on a peer review checklist based on Appendix F of the Guidance. Specific comments on documentation of the various lists and individual item selection decisions were documented on formal comment forms following utility procedure.
- Comments were provided to the Equipment Selection Personnel (see Section 4.2) and discussed process clarifications, suggested revisions, and other potential comment resolutions.
- The final SWEL was provided to the peer reviewers to confirm acceptable resolution of all comments.

All of the peer review comments were addressed by the Equipment Selection Personnel. The resolutions were reviewed by the peer review team and it was determined that all comments were adequately addressed. The primary result of the peer review activities was that the Equipment Selection Personnel modified their documentation to provide further clarification of their rationale for selecting certain items and satisfying certain sample selection criteria. The peer review team felt these modifications would be of benefit to provide transparency and justification of the adequacy of the SWEL, and resolved their specific questions about potential deficiencies.

During the process of conducting the walkdowns, a small number of isolated components that were not accessible were removed from the SWEL. The peer review team reviewed all changes made to the SWEL and determined that these changes had no impact on the adequacy and integrity of the SWEL with respect to the Section 3 of the Guidance.

Based on completion of the SWEL peer review activities described, the peer review team concludes that the Equipment Selection Personnel developed a SWEL that adequately reflects the selection and screening process outlined in the Guidance. The peer reviewers confirmed that all SSCs in the SWEL are Seismic Category I components that do not undergo regular inspections, and represent a diverse blend of different component types from critical systems and safety-related functions. The list

contains major new and replacement items, risk significance was considered, and SFP items were appropriately addressed. Specific considerations for how the SWEL adequately represents the sample selection attributes described in Section 3 of the Guidance are provided on the peer review checklist included as Attachment G.

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

Review of Seismic Walkdowns and Area Walk-Bys was conducted by two members of the peer review team, each of whom is a qualified SWE and has broad knowledge of seismic engineering applied to nuclear power plants. One of the peer reviewers participated in the seismic walkdown program for a different utility (see Section 4.5). The peer reviews were conducted at the RBS site concurrent with the conduct of walkdowns.

The peer review team conducted interviews of SWE teams during field activities. Members of the peer review team accompanied SWE teams into the field to observe the inspection process. These observations were used as a means of gaining confidence in the SWE team members. During field observations SWEs were questioned to ensure all the necessary inspection were being completed.

Further interviews were conducted with SWE team members following walkdown activities. These were conducted informally on a daily basis to discuss challenges which arose during the day. Some of the major items discussed by the SWE team members and the Peer Reviewers included the differences between component mounting and anchorage, requirements for inspection of overhead lighting, inspection of electrical cabinets, inspection for flooding/spray issues, and documentation of the walkdowns.

In parallel to completion of walkdowns activities, members of the peer review team began reviewing Seismic Walkdown and Area Walk-By checklists. This review was intended to provide SWE teams with feedback during the process as a means of continuous improvement. A sample of Seismic Walkdown and Area Walk-By checklists were chosen for review such that items from each of the inspected equipment classes were chosen. In addition, items for review were selected from a variety of plant areas. The following list contains SWEL items which were reviewed by the peer review team. The SWC and AWC associated with each of these items were reviewed. These 24 items represent approximately 20% of the items on the SWEL-1 and SWEL-2.

SWEL Number	Equipment ID	Description		Location
SWEL 1-009	C11-AOVF011	SCRAM DISCH VOL VENT & DRAIN AZ-174, EL-119 CONTAINMENT		RB
SWEL 1-014	E12-EB001A	RHR HEAT EXCHGR A	21	AB
SWEL 1-018	E12-MOVF048A	RHR A HX SHELL SIDE BYPASS VALVE	8	AB
SWEL 1-023	E22-EGS001	HPCS DIESEL GENERATOR DIESEL ENG	17	DG
SWEL 1-028	E22-S001BAT	125V DC DIV III BATTERY	15	СВ
SWEL 1-029	E22-S003	HPCS TRANSFORMER FEEDER	4	СВ
SWEL 1-035	E51-PC001	RX CORE ISOL CLG PMP	5	AB
SWEL 1-036	E51-PNLC002	RCIC TURB GOVERNOR PNL	20	СВ
SWEL 1-047	EHS-MCC16A	STANDBY CLG TOWER 1 MTR CNTRL CENTER 16A	1	SCT
SWEL 1-051	EJS-LDC2A	REMOTE SHUTDOWN SYSTEM CONTROL POWER: 1HVR*UC11A,1HVR*UC1A	3	AB
SWEL 1-057	ENB-CHGR1A	STDBY BUS A 125 VOLTS DIRECT CURRENT SYS BATRY BANK 1A CHARGER 1A	16	СВ
SWEL 1-061	ENB-SWG01A	125V DC SWITCHGEAR 1A	2	СВ
SWEL 1-064	H22-P004	RX VSL LEVEL AND PRESS LOCAL PNL A	18	RB
SWEL 1-075	HVK-CHL1C	HVKC01 CONTROL BLDG CHILLED WATER COMPRESSOR CHL1C	11	СВ
SWEL 1-076	HVK-MOV20C	CNTRL BLDG CHILLED WTR PMP 1C DISCH MTR OPERATED ISOL VLV	8	СВ
SWEL 1-080	HVP-FLT2A	2-FLT2A DIESEL GENERATOR ROOM A SPLY FAN 6A INTAKE FLT		DG
SWEL 1-081	HVP-FN2A	DIESEL ROOM A EMER VENTILATING EXHAUST FAN	9	DG
SWEL 1-084	HVR-UC1A	CONTMT UNIT COOLER	10	RB
SWEL 1-087	LSV-C3B	PENETRATION VALVE LEAKAGE CONT SYSTEM AIR COMPRESSOR	12	AB
SWEL 1-089	RCP-TCF04	RX CNTMNT ELECT OUTBRD PENTR LVC21 & LVI20A TERMINATION CABINET	14	FB
SWEL 1-091	C11-AOV126	SCRAM INLET VALVE	7	RB
SWEL 1-115	CMS-RTD040C	CNTNMNT ATMOS AND LEAKAGE MONITORING SYS RESISTANCE TEMP DETECTOR	19	RB
SWEL 2-008	SFC-AOV31A	F POOL PRFCN FLT1A BYP FD-6-87'	7	FB
SWEL 2-016	SWP-MOV504B	RPCCW SYSTEM RETURN	8	AB

Table 9-1 Peer Reviewed SWCs

Area Walkdown Checklists were reviewed in addition to Seismic Walkdown Checklists. The following list contains Area Walkdown Checklists which were reviewed by members of the peer review team. These 24 areas represent approximately 50% of the different areas (buildings) containing at least one SWEL item.

AWC #	Plant Area	SWC#
AWC-009	RB	SWEL 1-009
AWC-014	AB	SWEL 1-014
AWC-018	AB	SWEL 1-018
AWC-023	DG	SWEL 1-023
AWC-028	CB	SWEL 1-028
AWC-029	CB	SWEL 1-029
AWC-035	AB	SWEL 1-035
AWC-036	CB	SWEL 1-036
AWC-047	SCT	SWEL 1-047
AWC-051	AB	SWEL 1-051
AWC-057	CB	SWEL 1-057
AWC-061	CB	SWEL 1-061
AWC-064	RB	SWEL 1-064
AWC-075	CB	SWEL 1-075
AWC-076	CB	SWEL 1-076
AWC-080	DG	SWEL 1-080
AWC-081	DG	SWEL 1-081
AWC-084	RB	SWEL 1-084
AWC-087	AB	SWEL 1-087
AWC-089	FB	SWEL 1-089
AWC-091	RB	SWEL 1-091
AWC-115	RB	SWEL 1-115
AWC-008	FB	SWEL 2-008
AWC-016	AB	SWEL 2-016

Table 9-2 Peer Reviewed AWCs

In general, peer review comments on the Seismic Walkdown and Area Walk-By checklists were related to providing justification for conclusions drawn during walkdown activities. Some of the items which were determined acceptable by the walkdown team required detailed inspection to reach such conclusions. In these situations, it was asked that SWE team members provide additional discussion in the appropriate checklist.

The peer reviewers confirmed that all specific comments provided had been incorporated into the checklists reviewed and the processes observed. Additionally, previously completed checklists that were not specifically reviewed were revised to reflect lessons learned from the peer review process. In some instances, this involved additional review of completed items / areas by the SWE teams.

Based on completion of the walkdown and walk-by peer review activities described, the peer review team concluded that the SWE teams are familiar with and followed the process for conducting seismic walkdowns and area walk-bys in accordance with the Guidance. The SWE teams adequately demonstrated their ability to identify potentially adverse seismic conditions such as adverse anchorage, adverse spatial interaction, and other adverse conditions related to anchorage, and perform anchorage configuration verifications, where applicable. The SWEs also demonstrated the ability to identify seismically-induced flooding interactions and seismically-induced fire interactions. The SWEs discussed their observations as questioning peers, and documented the results of the seismic walkdowns and area walk-bys on the appropriate checklists based on Appendix C of the Guidance.

#### 9.2.3 Licensing Basis Evaluations

Licensing Basis Evaluations (LBEs) were developed on site by the walkdown engineering team in the course of the walkdown efforts to determine which potentially adverse seismic conditions would be entered into the RBS Corrective Action Program (CAP). Each LBE was independently reviewed for technical content and CAP entry decisions by another member of the team that was not involved the LBE's direct preparation. A third person peer reviewed the set of all LBEs to ensure the process and decisions made were in compliance with Section 5 of the Guidance. Based on these reviews, the peer review team concludes that the LBEs properly evaluate the field conditions relative to the specific plant licensing basis documents and makes appropriate decisions for entering potentially adverse seismic conditions into the plant's CAP. High-level peer review comments are documented in Attachment H.

#### 9.2.4 Submittal Report

The peer review team was provided with an early draft of this submittal report for peer review. The peer review team verified that the submittal report met the objectives and requirements of Enclosure 3 to the 50.54(f) Letter, and documented the NTTF 2.3 Seismic Walkdown program performed in accordance with the Guidance. The peer review team provided the results of review activities to the SWE team for consideration. The SWE team satisfactorily addressed all peer review comments in the final version of the submittal report. The signature of the Peer Review Team Leader

provides documentation that all elements of the peer review as described in Section 6 of the Guidance were completed.

## 10.0 REFERENCES

- 1. 10CFR50.54(f) 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
- 2. EPRI 1025286, Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic, June 2012
- 3. River Bend Station Updated Final Safety Analysis Report (UFSAR), Revision 22
- 4. Generic Letter No. 88-20, Supplement 4, Individual Plant Examination of External Events (IPEEE) for Severe Accident Vulnerabilities
- 5. River Bend Station Seismic Individual Plant Examination of External Events (IPEEE) Submittal Report, (NE-RA-93-009-M) Dated 11-1-1993, Rev 0.

# 11.0 ATTACHMENTS

ATTACHMENT A – IPEEE VULNERABILITIES TABLE

ATTACHMENT B – SEISMIC WALKDOWN EQUIPMENT LISTS

ATTACHMENT C – SEISMIC WALKDOWN CHECKLISTS (SWCs)

ATTACHMENT D – AREA WALK-BY CHECKLISTS (AWCs)

ATTACHMENT E – POTENTIALLY ADVERSE SEISMIC CONDITIONS

ATTACHMENT F – LICENSING BASIS EVALUATION FORMS

ATTACHMENT G – PEER REVIEW CHECKLIST FOR SWEL

ATTACHMENT H – PEER REVIEW COMMENT FORM

ATTACHMENT I – SEISMIC WALKDOWN ENGINEER TRAINING CERTIFICATES

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# Attachment A

# **IPEEE Vulnerabilities**
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ATTACHMENT A IPEE VULNERABILITIES TABLE

# FUKUSHIMA NEAR – TERM TASK FORCE RECOMMENDATION 2.3 SEISMIC WALKDOWNS

RESOLVED	N/A	
CMP	N/A	
RESOLUTION	N/A	
COMMITMENT	A/N	
IPEEE VULNERABILITY	NO IPEEE vulnerabilities identified for RBS	
#	V-01	

Jertullers John Dunkelberg

Prepared by:

Date: 10-22-2012

David Bassi

Reviewed by:

Date: 10-22-2012

Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment B Page 1 of 13

### Attachment B

Seismic Walkdown Equipment Lists

List of Ta	bies	Page
Table B.1	Base List 1	2
Table B.2	SWEL 1	7
Table B.3	Base List 2	11
Table B.4	Rapid Drain Down	12
Table B.5	SWEL 2	13

### Seismic Walkdown Equipment List Approval

& Philan

Prepared by: John Dunkelberg

Date: <u>10/4/12</u>

**Equipment Selection Personnel** 

Reviewed by: Ben Kosbab

Date: <u>10/4/12</u>

Peer Reviewer

Concurrence by: Jeff Reynolds Operations Personnel

Date: 10/2/12

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			Screen 1	Screen 2	Screen 3			Screen 4			u.	ive Safety Fun	ctions"	
SQUG Equipment	Equipment ID	Equipment Discription	Saismic 12	Undergo Regular	flaintains at least 1 of	Panlarad	DEEE	Outside Uich	ironment	Dorntood	Reactivity Pressure	Inventory	Decay Heat	Containment
Class				Inspections	he 5 safety functions	Ivehiaren		VOIIside Inigir	(T/H)	System	Control Control	Control	Removal	
2	B21-AOVF022A	MAIN STMTINE INBRD ISOL VI V A	>	z	>	z	N/A	-	H/L	z				×
4	B21-AOVF022B		٨	z	٨	z	N/A	_	T/H	z				×
7	B21-AOVF022C	MAIN STM LINE INBRD ISOL VLV C	~	z	7	z	N/A	_	T/H	z				×
7	B21-AOV F022D	MAIN STM LINE INBRD ISOL VLV D	٨	z	٨	z	N/A		T/H	z				×
7	B21-AOVF028A	MAIN STMLINE OUTBRD ISOL VLV A	>	z	>	z	N/A	_	I	z				×
2	B21-AOVF028B		<b>&gt;</b> >	z	<b>&gt;</b>	z	N/A	_	I	z				×
-			- >	zz	->	zz	N/A		- 3	zz				×
-	B21-RV041A (B21-RVF041A)	MAIN STM LINE OF DRUD BOL VEV D MAIN STM LINE A PRESS RELIFE VLV	- >-	zz	- >-	zz	A/N		H/L	zz	×			<
4	B21-RV041B (B21-RVF041B)	MAIN STM LINE B PRESS RELIEF VLV	~ >-	z	~ >	z	N/A		T/H	z	: ×			
2	B21-RV041C (B21-RVF041C)	MAIN STM LINE C PRESS RELIEF VLV	~	z	7	z	N/A	_	T/H	z	×			
7	B21-RV041D (B21-RVF041D)	MAIN STM LINE D PRESS RELIEF VLV	٨	v	٢	N	N/A	_	T/H	z	×			
7	B21-RV041F (B21-RVF041F)	MAIN STM LINE F PRESS RELIEF VLV	٢	z	٢	z	N/A	_	T/H	z	×			
7	B21-RV041G (B21-RVF041G)	MAIN STM LINE G PRESS RELIEF VLV	~	z	7	z	N/A		T/H	z	×			
7	B21-RV041L (B21-RVF041L)	MAIN STM LINE L PRESS RELIEF VLV	~	z	~	z	N/A	_	T/H	z	×			
7	B21-RV047A (B21-RVF047A)	MAIN STM LINE A AUTO DEPRESSURIZATION SYS PRESS RELIEF VLV	~	z	7	z	N/A		T/H	z	×			
7	B21-RV047B (B21-RVF047B)	MAIN STM LINE B AUTO DEPRESSURIZATION SYS PRESS RELIEF VLV	۲	z	٢	z	N/A	_	T/H	z	×			
7	B21-RV047C (B21-RVF047C)	MAIN STM LINE C AUTO DEPRESSURIZATION SYS PRESS RELIEF VLV	~	z	7	z	N/A	_	T/H	z	×			
7	B21-RV047D (B21-RVF047D)	MAIN STM LINE D AUTO DEPRESSURIZATION SYS PRESS RELIEF VLV	>:	z	≻:	z	N/A	_	T/H	z	×			
7	B21-RV047F (B21-RVF047F)	MAIN STM LINE F AUTO DEPRESSURIZATION SYS PRESS RELIEF VLV	>:	z	>:	z	N/A		HI	z	×			
- r	B21-RV051B (B21-RVF051B)	MAIN STM LINE B PRESS RELIEF VLV	× >	z	~	z	N/A	_	H/H	z	×			
/	BZ1-RVU51C (BZ1-RVFU51C)	MAIN SIM LINE C PRESS RELEY VLV	× >	z	× >	z	N/A	_	1/H	z	×			
/	B21-KV051U (B21-KVF051U)	MAIN SIM LINE U PRESS RELIEF VLV	× >	z	×	z	N/A		1/H	z	×			
10			- >	2 4	- >	2 4	V/N		5	2 2	×			
17	C11-ACC123	SCPAM ACCUMULATOR - NVALEN SUL	- >	2 2	- >	2 2				2 2	×			
-	C11-AOVE010		- >	z	- >	zz			. 1	z	< ×			
4	C11-AOVE011	SCRAM DISCH VOL VENT & DRAIN AZ-174. EL-119 CONTAINMENT	>	z	<b>,</b>	z	N/A		. 1	z	( <b>x</b>			
4	C11-AOVF180	ISCRAM DISCH VOL VENT & DRAIN (AZ - 60? - 142') CONTANMENT BLDG	· >-	z	· >	z	N/A		. I	z	. ×			
4	C11-AOVF181	SCRAM DISCHARGE VOLUME DRAIN VALVE	• >-	z	• >	z	N/A		: I	z	. ×			
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	C11-SOVF009	ISCRAM DISCH VOL VENT & DRAIN/AZ - 1747 - 119')	>	z	~	. >	N/A		Ŧ	z	: ×			
œ	C11-SOVF110A	<u>ISCRAM PILOT VLVS INSTR AIR SPLY LINE 3-WAY SOLENOID VLV</u>	~	z	7	z	N/A	_	Ŧ	z	×			
8	C11-SOVF110B	SCRAM PLOT VLVS INSTRAIR SPLY LINE 3-WAY SOLENOID VLV	~	z	~	z	N/A		т	z	×			
80	C11-SOVF182	SCRAM AIR HDR(AZ - 176? - 119')	۲	z	٨	7	N/A	_	т	z	×			
21	E12-EB001.A	RHR HEAT EXCHGR A	>	z	>	z	N/A	-		z			×	
24	E12-EB001B		>	: 2	~ >	: z	N/A			: z			. >	
5	E12-ED01C		- >	2	- >	: 2	VIN			: 2			< >	
			- >	: 2	- >	: 2				: 2			• >	
4			- ,	2 3	- >	2 2		_		2 2			< :	
0	E12-MOVF004A	KHK PUMP A SUPPR POOL SUCTION VLV	• ;	z	•	z	N/A	_		z			×	
80	E12-MOVF004B	RHR Supp.Pool suction valve (EC37335)	~	z	× :	z	N/A	_		z			×	
8	E12-MOVF024A	RHR A TEST RETURN TO SUPP POOL	٨	z	٨	z	N/A	_		z			×	
8	E12-MOVF024B	RETURN VALVE TO SUPPRESSION POOL	~	z	Y	z	N/A	_		z			×	
8	E12-MOVF048A	RHR A HX SHELL SIDE BYPASS VALVE	٢	N	٢	N	N/A			N			×	
8	E12-MOVF048B	HEAT EXCHANGER BYPASS VALVE	~	z	٨	z	N/A	_		z			×	
8	E12-MOVF064A	RHR PUMP A MIN FLOW TO SUPPR POOL	۲	z	٢	z	N/A	_		z			×	
8	E12-MOVF064B	RHR min flow valve (EC37335)	~	z	Y	z	N/A	_		z			×	
œ	E12-MOVED68A	RHR A HX COOLING OLT FT MOV	>	z	~	z	N/A			z			×	
	E12-MOVED68R		. >	: z	~ >	: z	N/N	-		: z				
<b>b</b> u	E12 PC003A	DESIDIAL LEAT DEMOVAL DMD 24	- >	2 2	- >	2 2		_		2 2			< >	
•			- >	2 2	- >	2 2				2			< :	
0 0	E12-FU002B		- >	2 2	- >	2 2		_		2 2		;	~	
•	E21-MOVF005		- >	z :	- >	2 3	A/M	-		z :		×		
<b>o</b> a	EZI-MOVFUII	LFCS FUMP MIN FLOW TO SUFFR FOOL	- >	2 2	- >	2 2	A/A	_		2 2		×		
•	EZI-PC001		- >	z :	- 3	2 3	A/M			2		×		
/1	EZZ-EGSUU1	HPCS DIESEL GENERATOR DIESEL ENG	• >	z		z	N/A	_		z				
17	E22-ESU01		- >	z	- >	z	A/M			z 2		;		
07	EZZ-L I NU04-C		- >	z :	- >	2 3	A/M			2		×		
50 20	EZZ-LI NU54G	CONDS SI OK IK TCNS-IKTFG-5-/1 "F" LUNNEL	• >	z	•	z	N/A	_		z		×		
	E22-MOVF001	HPCS SUCTION FROM CS1 MOV		z	> >	z	N/A			z		×		
8	E22-MU VF 004	HPCS INJECTION MOV	<b>,</b>	z	× :	z	N/A	_		z		×		
8	E22-MOVF012	HPCS MINFLOW MOV	× :	z	*	z	N/A	_		z		×		
80	E22-MOVF015	SUPPRESSION POOL PUMP SUCTION VALVE	<b>,</b> ×	z	<b>≻</b> :	z	N/A	_	-	z		×		T
9	E22-PC001	HPCS MOTOR FEEDER	۲	z	٢	z	N/A	_		z		×		
2	E22-PNLS001	125V DC PANEL DIV III	۲	z	۲*	z	N/A	_		z				
15	E22-S001BAT (E22-S001 suffix BAT)	125V DC DN III BATTERY	٢	N	۲*	N	N/A	-		z				
16	E22-S001CGR (E22-S001 suffix CGR)	125V DC DN III BATTERY CHARGER	٢	N	*Y	N	N/A	-		z				
3	E22-S002	DIV III 480V AC SWITCHGEAR	٨	z	۰.*	z	N/A			z				
4	E22-S003	HPCS TRANSFORMER FEEDER	٢	z	۲*	z	N/A	_	-	z				
3 (HI)	E22-S004	DIV III 4160V AC SWITCHGEAR	٨	z	۲*	z	N/A	_		z				
21	E22-SKDS001-TK1A	DIESEL 1C AIR START RECEIVER TNK	٢	N	۲*	z	N/A	_		z				
21	E22-SKDS001-TK1B	DIESEL 1C AIR START RECEIVER TNK	٢	N	۰×	N	N/A	_		z				
21	E51-EC002	RX CORE ISOL CLG TURB LUBE OIL CLR	۲	z	۲	z	N/A			z		×		
8	E51-MOVF010	CST SUCTION MOV	~	z	~	z	N/A	_	_	z		×		
8	E51-MOVF013	RCIC INJECTION MOV	7	z	≻ :	z	N/A	_	_	z		×		
8	E51-MOVF019	RX CORE ISOL CLG PMP MIN FLOW TO SUPPRESSION POOL ISOL VLV	~	z	~	z	N/A	_	_	z		×		
8	E51-MOVF031	SUPPRESSION POOL SUCTION	>	z	~	z	N/A			z		×		

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			Screen 1	Screen Z	Screen 3			1100100	Fundamente A			1140.00			
SQUG Equipment	Equipment ID	Equipment Discription	Seismic 12	Undergo Regular Configuration	Maintains at least 1 o	Renlace	IPFFF	Incida/Outcida	Environment Hich Temp/Humidity	Borated	Reactivity Pr	ressure In	ventory Dec	iy Heat	tainment
Class				Inspections	the 5 safety functions		-	(I/O)	(H/L)	System	Control	Control	control Re	moval	
8	E51-MOVF045	RX CORE ISOL CLG TURB STM SPLY ISOL VLV	۲	N	٨	z	N/A	-		z			×		
8	E51-MOVF046	RCIC LUBE OIL COOLER VALVE	Y	z	٨	z	N/A	-		z			×		
20	E51-PC001		<b>&gt;</b> >	zz	×	z>	N/A			z			×		
7			- >	z 2	- >	- 1	AN AN	-		z 2			× >		
21	EGA-TK1A	SDG AR START SYS AIR RECEIVER TK 1A	• >	z	*>	z	A/N			z			~		
21	EGA-TK1B	SDG AIR START SYS AIR RECEIVER TK 1B	Y	N	**	z	N/A	-		z					
21	EGA-TK1C	SDG AIR START SYS AIR RECEIVER TK 1C	Y	z	۰	z	N/A	-		z					
21	EGA-TK1D	SDG AIR START SYS AIR RECENER TK 1D	> >	z	*	z	N/A	-		z					
12	EGA-I KZA EGA-TK2B	SDUG AIR START SYS AIR RECEIVER IN ZA Ieng aid stadt sve aid degemed trod	• >	zz	*^	zz	NIA	-		zz					
2	EGA-TK2D	SDG AIR START SYS AIR RECEIVER TK 2C	- >-	zz	*>	zz	A/N	-		zz					
21	EGA-TK2D	SDG AIR START SYS AIR RECEIVER TK 2D	~	z	*	z	N/A	_		z					
14	EGE-CAB01A	DIV I DG EXCITER CABINET	٢	N	*٨	N	N/A	-		v					
14	EGE-CAB01B	DIV II DG EXCITER CABINET	7	z	*	z	N/A	-		z					
9	EGF-P1A	FUEL OIL TRANSFER PUMP	≻ :	z	*	z	N/A	_		z					
9	EGF-P1B	FUEL OIL TRANSFER PUMP	> :	z	*/	z	N/A	-		z					
9	EGF-P1C EGE TK1A	FUEL OIL IRANSFER PUMP Diesei 14 eilei Stobage (7 dav)	≻ >	zz	*>	zz	N/A	-		zz					
21	EGE-TKIB	DIESEL A FUEL STURAGE (Z DAT) DIESEL 18 FUEL STORAGE (Z DAY)	- >-	zz	*>	zz	A/N	-		zz					
21	EGF-TK1C	DIESEL 1C FUEL STORAGE (7 DAY)	~	z	*	z	N/A			z					
21	EGF-TK2A	SDG FUEL OIL DAY TK A	٢	Ν	*٨	z	N/A	-		z		_		_	
21	EGF-TK2B	SDG FUEL OIL DAY TK B	~	z	*	z	N/A	_		z		_		_	
21	EGF-TK2C	SDG FUEL OIL DAY TK C	> :	z	*/	z	N/A			z					
17	EGS-EG1A	SDG A ENGINE	<b>&gt;</b> >	z	*	z	N/N	-		z					
3	EGS-EG1B EGT E1A	SUG BENG SDG CI O SVS IACKET MED CI D A	- >	z 2	*>	z 2	A/N	-		z <b>z</b>					
21	CG1-CIA CG1-CIA	SUG CLG STS JAUNET WIT CLTA	- >	2 2	*>	2 2	A N			zz					
-	EHS-MCC14A	STANDBY SWGR RM 14 480V MCC14A	- <b>&gt;</b>	z	**	zz	V/N			zz					
	EHS-MCC14B	STANDBY SWGR RM 18 480V MCC14B	• >-	z	· ^	z	N/A			z					
+	EHS-MCC15A	DIESEL GEN RM A MCC15A	۲	z	۰λ	z	NA	-		z		_		_	
1	EHS-MCC15B	DIESEL GEN RM B MCC15B	٨	N	*	z	N/A	_		N					
÷.,	EHS-MCC16A	STANDBY CLG TOWER 1 MTR CNTRL CENTER 16A	≻:	z	*X	z	N/A		I	z					
-		SLANDBY COULING TOWER FAN FNIR Januar ac mattad control control	≻ >	zz	~ ~	zz	N/A		r	zz	,			,	>
•	EHS-MCC2B	EHS-MCC2B AUX BLDG	~	z	~	z	N/A	-		z	× ×	×		. ×	. ×
-	EHS-MCC2D	480V AC MOTOR CONTROL CENTER	7	z	7	z	N/A	_		z		_	×	_	×
-	EHS-MCC2E	480V AC MOTOR CONTROL CENTER	7	z	7	z	N/A	-		z			×	×	×
-	EHS-MCC2F	480V AC MOTOR CONTROL CENTER	~	z	~	z	N/A	_		z			×	×	×
·	EHS-MCC2G	480V AC MOTOR CONTROL CENTER	> :	z	> :	z	N/A			z			×		×
	EHS-MCC2H	480V AC MOTOR CONTROL CENTER	> >	zz	≻ \$	zz	N/N	-		zz		×	×	×	×
	ETIS-MUCZJ EUS-MCC21	480V AU MULUK UUNIKUL UENIEK AITYI IADY BIII DING MCC2I	- >	zz	- *	z <b>z</b>	VIN	-		2 2					
	EHS-MOCRA	480V AC MOTOR CONTROL CENTER	- >-	z	- *-	z	A/N			z					
-	EHS-MCC8B	480V AC MOTOR CONTROL CENTER	~	z	*	z	N/A	_		z					I
3	EJS-LDC1A	REMOTE SHUTDOWN SYSTEM CONTROL POWER: 1HVP*FN2A, 1EJS*ACB	Y	N	*7	z	N/A	_		z		_		_	
3	EJS-LDC1B	LOAD CENTER 1B (EJS-SWG1B)	~	N	*	z	N/A	-		z					
e	EJS-LDC2A	REMOTE SHUTDOWN SYSTEM CONTROL POWER: 1HVR*UC11A,1HVR*UC1A	> :	z	**	z	A/N	-		z					
•	EUS-LUCZB EIS-SWG1A	LUAD CENTEK 28 (EJS-SWG28) STANDRY SWGED PM 1A 400V SWG1A	- >	z 2	*>	z 2	A/N	-		z <b>z</b>					
	E.IS.SWG1B	STANDBY SWGR RM 18 480V SWG1B	• >-	z	*>	z	A/N	-		z					
4	EJS-X1A	STANDBY SWGR ROOM 1A SWGR 1A PWR XFORMR 1A	٢	N	*٨	z	N/A	-		z		_		_	
4	EJS-X1B	4.16KV/480V XFMR	~	z	*7	z	N/A	-		z					
4	EJS-X2A	AUX BLDG STANDBY SWGR 2A PWR XFORMR	<b>&gt;</b> >	z	۰ <i>۰</i>	z	N/A	-		z					
4	EJS-X3A	4.16kv - 480 v transformer	~	zz	**	zz	A/N	-	Ŧ	zz					
4	EJS-X3B	4.16KV/480V XFMR	7	z	*	z	N/A	_	т	z					
15	ENB-BAT01A	STANDBY BUS A 125 VOLTS DIRECT CURRENT SYS BATTERY BANK 1A	≻:	z	*	z	N/N	-		z					
15 16	ENB-BAT01B END CUCP1A	STANDBY 125 V DC BATTERY B Istridevelies a 126 voi tse didect cuiddeait sys batdy danik 1a cuadged 1a	× >	zz	* *	zz	N/N			zz					
9	ENB-CHGR18 ENB-CHGR18	STANDRY BATTERY CHARGER R	- >	zz	*>	2 2	A/N			zz					
16	ENB-INV01A	ENB-INV01A VITAL BUS A INVERTER	. >	z	**	. >	N/A	_		z					
16	ENB-INV01B	ENB*INV01B VITAL BUS B INVERTER	~	z	*	~	N/A	-		z					
- ;	ENB-MCC1	MTR CNTRL CENTER 1	> :	z:	≻	z	N/A			z			×		
14	ENB-PNL02A	125V DC PANEL	<b>&gt;</b> >	z	*	z	N/A			z					
4	ENB-PNLUZB ENB-SWG01A	STANDBY BUS B 122 VOLTS DIRECT CURRENTS YS PWR DISTRUBTION PNL 02 1350 DC SMITCHGEAR 14	≻ >	zz	**	z >	N/N	-		zz		_			
5	ENB-SW G01B	STANDBY BUS B 125 VOLTS DIRECT CURRENT SYS SWGR 01B	• >	z	•*~	· >-	N/A			z					
3 (HI)	ENS-SWG1A	4160V STANDBY SWGR BUS 1A	٢	N	۰.	z	N/A	-		z					
3 (HI)	ENS-SWG1B	4160V STANDBY SWGR BUS 1B	> :	z	*	z	N/A			z				_	
20	H13-P691	RPS LOGIC DIV A	~	z	٨	z	N/A	-		z	×	_	_	_	٦

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			SCreen 1	Screen z	ocreen 3			100 000	Environment			2011		-	
SQUG Equipment Class	Equipment ID	Equipment Discription	Seismic 1?	Undergo Regular Configuration	Maintains at least 1 of the 5 safety functions	Replaced	IPEEE	Inside/Outside	High Temp/Humidity	Borated	Reactivity F Control	Pressure I	nventory D	scay Heat C	ontainment
				Inspections				(01)	(H/I)	system					
20	H13-P692	RPS LOGIC DIV B	×	z	¥	z	N/A	-		z	×				
20	H13-P693	RPS LOGIC DIV C	۲	Z	٢	z	N/A	_		z	×				
20	H13-P694		~ >	z	> >	z	N/A	_	=	z	×				
o ¢	H22-F 004	RX VSL LEVEL AND PRESS LOCAL FINE A	- >	zz	- >	zz		_	c 1	zz	× >				
8	H22-P026	RX VSL LEVEL AND PRESS LOCAL CNTRL PNL D	~	z	~	z	N/A		I	z	< ×				
18	H22-P027	RX VSL LEVEL AND PRESS LOCAL CNTRL PNL B	٢	z	Y	z	N/A	-	н	z	×				
10	HVC-ACU1A	CONTROL ROOM AIR HLDG UNIT ACU1A	٢	N	Y*	z	NA	-		z					
10	HVC-ACU1B	CONTROL ROOM AIR HLDG UNIT ACU1B	×	z	*Y	z	N/A	-		z				_	
10	HVC-ACU2A	CONTROL BLDG AIR HLDG UNIT ACU2A	٢	z	٠.	z	N/A	-		z					
10	HVC-ACU2B	CONTROL BLDG AIR HLDG UNIT ACU2B	> :	z	*	z	N/A			z					
10	HVC-ACU3A	CHILLER EQUIPMENT ROOM CHILLER	~ >	z		z	A/N	_		z					
<u>p</u>	HVC-ACU3B	CHILLER EQUIPMENT ROOM CHILLER	• :	z		z	N/A	_		z					
7	HVC-AOD12A	1HVC*ACU2A AIR OUTLET (CD-2-89')	> :	z	*	z	N/A			z					
7	HVC-AOD12B	AIR OPERATED DAMPER "B" AIR CONDITIONING	> :	z	*	z	N/A			z					
-	HVC-AOD38A	AIR OPERATED DAMPER "A" AIR CONDITIONING	× :	z		z	A/N	_		z					
\ r	HVC-AOD38B	AIR OPERATED DAMPER "B" AIR CONDITIONING	× ×	z		z	A/N	-		z					
	HVC-AOU5A	AIR OPERATED DAMPER "A" AIR CONDITIONING	× ×	z		z	N/A	-		z					
-	HVC-AOD5B	1HVC-FNZB AIR INLET (CA-2-80)	• :	z	· ·	z	A/N	_		z					
1	HVC-AOD6A	1HVC*ACU1A AIR OUTLET (CD-1-130)	<b>,</b>	z		z	A/N	_		z					
-	HVC-AOU8A	CNTRL BLDG AIR CONDITIONING UNIT 1A INTAKE ISOL AIR OPERATED DMPR	× >	z	**	z 2	AN A	-  -		z					
-	HVC-AOU6B		- >	z	*>	z	N/N	-  -		zz					
	HVC-AU8B		- >	2 2	*	2 2	A/N	-   -		zz					
	HVCCH1B	CONTROL ROOM AIR HI DG INNIT HEATER CH4R	• >	: z	. *	z	A/N			z			Ī		
0	HVC-CH3A			z	*	z	N/A	_		z					
0	HVC-CH3B	CUTRL BLDG BATTERY ROOM 1B COLL HTR	~ >	z	*>	z	N/A	_		z					
0	HVG-CH3C	CNTRL BLDG BATTERY ROOM 1C COIL HTR	~	z	*٨	z	N/A			z					
6	HVC-FN2A	STBY SWGR RETURN FAN	٢	z	۰.	z	N/A	-		z					
6	HVC-FN2B	STBY SWGR RETURN FAN	7	z	*7	z	N/A	_		z					
6	HVC-FN3A	BATTERY ROOM 1A EXHAUST FAN	Y	z	*Y	z	N/A	_		z					
6	HVC-FN3B	BATTERY ROOM 1B EXHAUST FAN	٨	N	*٨	N	N/A	-		z					
6	HVC-FN3C	BATTERY ROOM 1C EXHAUST FAN	٢	z	۰.	z	N/A	-		z					
6	HVC-FN3D	BATTERY ROOM 1A EXHAUST FAN	۲	z	۲*	z	N/A	-		z				_	
6	HVC-FN3E	BATTERY ROOM 1B EXHAUST FAN	> :	z	*	z	NA			z					
5	HVC-FN3F	BATTERY ROOM 1C EXHAUST FAN	×	z	· *	z	N/A	-		z					
= :		HVAAU CONTROL BLUG CHILLEU WATER COMPRESSOR CHLIA LUXZDA CONTROL DI DO CHILLED WATED COMPRESSOR CHLIA	- >	zZ	- *>	zz				zz					
ŧ	HVK-CHL1C	HVKC01 CONTROL BLDG CHILLED WATER COMPRESSOR CHILLE	. >	: z	**	z	N/N	-		z			Ī		
: :-	HVK-CHL1D	HVKD01 CONTROL BI DG CHILLED WATER COMPRESSOR CHI 1D	• >-	z	•	z	A/N			z					
8	HVK-MOV20A	CNTRL BLDG CHILLED WTR PMP 1A DISCH MTR OPERATED ISOL VLV	~	z	*	z	N/A	-		z					
8	HVK-MOV20B	CUTRL BLDG CHILLED WTR PMP 1B DISCH MTR OPERATED ISOL VLV	~ ~	z	*/	z	N/A	-		z					
8	HVK-MOV20C	CNTRL BLDG CHILLED WTR PMP 1C DISCH MTR OPERATED ISOL VLV	٢	z	۰.	z	N/A	-		z					
8	HVK-MOV20D	CNTRL BLDG CHILLED WTR PMP 1D DISCH MTR OPERATED ISOL VLV	×	z	**	z	N/A	-		z					
5	HVK-P1A	1HVK*P1A CONTROL BLDG CHILLED WATER PUMP	٢	z	۰.	z	N/A	-		z					
5	HVK-P1B	1HVK*P1B CONTROL BLDG CHILLED WATER PUMP	×	z	*/	z	N/A	_		z					
5	HVK-P1C	1HVK*P1C CONTROL BLDG BACK-UP CHILLED WATER PUMP	٢	N	۰.۸	N	N/A	-		N					
5	HVK-P1D	1HVK*P1D CONTROL BLDG BACK-UP CHILLED WATER PUMP	×	z	**	z	NA	-		z					
21	HVK-TK1A	CNTRL BLDG CHILLED WTR SURGE TK 1A	≻ :	z	*	z	N/A			z					
12	HVK-TK1B	CUTRL BLDG CHILLED WTR SURGE TK 1B	> >	z	**	z	N/A	-		z					
4	HVP-AOD11A	DOL GEN CONTEMENTSTET (DC-5-131) DOL GEN CONTEME ALP SDIV (DC-4-131)	- >	2 2	- *>	zz	ANN ANN	-		zz					
4	HVP-AOD11C	DOL GEN CONTRM DAINGTEL (DOFT-131) DSI GEN CONTRM CAIR SPI V (DC:2-131)	- >	zz	- >	z	A/N	-		zz					
0	HVP-FLT2A	DEESEL GENERATOR ROOM A SPLY FAN 6A INTAKE FLT	~ >	zz	*/	z	N/A			z					
0	HVP-FLT2B	DIESEL GENERATOR ROOM B SPLY FAN 6B INTAKE FLT	٢	N	۰	z	N/A	_		z					
0	HVP-FLT2C	DIESEL GENERATOR ROOM C SPLY FAN 6C INTAKE FLT	٢	z	۰.	z	N/A	_		z					
6	HVP-FN2A	DIESEL ROOM A EMER VENTILATING EXHAUST FAN	۲	z	۲*	z	N/A	-		z					
6	HVP-FN2B	DIESEL GENERATOR RM B STANDBY EXHST FAN 2B	> :	z	*	z	N/A			z					
ъ «	HVP-FN2C		> >	z	**	z	NA N	-		z					
6	HVP-FN6A	DSL GEN CONT RM A VENT SUPPLY FAN	× ×	z	** **	z	A/N	-		z					
ъσ	HVP-FN0B HVP-FN6C	USE GEN CONTIKME VENTSUPPEY FAN HPO'S DG VENTSUPPIY FAN	- >	zz	*>	zz	N/A			zz					
ŝ	HVP-PNL12A	DIESEL GENERATOR VENTILATION PNL 12A		z	**	z	N/A	_		z					
3	HVP-PNL12B	DIESEL GENERATOR VENTILATION PNL 12B	~	z	*>	z	N/A	-		z					
3	HVP-PNL12C	DIESEL GENERATOR VENTILATION PNL 12C	٢	z	*Y	z	N/A	_		z					
10	HVR-UC10	AB MOTOR CONTROL CENTER AREA COOLER	×	z	7	z	N/A	-		z			×	_	
<b>1</b>	HVR-UC1A		<b>&gt;</b> >	z	<b>~</b> >	z	N/A	_	x 3	z				×	
0.0	HVR-UCIB		+ >	zz	- >	zz	N/A	-	E	zz			,	×	
10	HVR-UC6	AUX BLDG UNIT COOLER	*	z	*	z	N/A	_		z			×	×	
10	HVR-UC7	AB MOTOR CONTROL CENTER AREA COOLER	7	z	7	z	N/A	-		z			×		
10	HVR-UC8	MAIN STEAM TUNNEL COOLER	Y	z	Y	z	N/A	-		z			×		

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			Screen 1	Screen 2	Screen 3			Screen 4				Five	Safety Func	ions**	
SQUG Equipment	Equipment ID	Equipment Discription	Seismic 12	Undergo Regular Configuration	Maintains at least 1 of	Replaced	IPEEE	Inside/Outside	Environment High Temp/Humidity	Borated	Reactivity	Pressure	Inventory	Decay Heat	Containment
Class				Inspections	the 5 safety functions			(O/)	(T/H)	System	Control	Control	Control	Removal	
10	HVR-UC9	RHR B ROOM COOLER	Y	z	٨	z	N/A	_		z				×	
12	LSV-C3A	PENETRATION VALVE LEAKAGE CONT SYSTEM AIR	۲	z	٢	z	N/A	-		z		×			
12	LSV-C3B	PENETRATION VALVE LEAKAGE CONT SYSTEM AIR COMPRESSOR	≻ :	z	≻ :	z	N/A	_		z		×			
4	RCP-TCA02 PCP-TCA03	RX CNTMNT ELECT OUTBRD PENTR LVIT5 & 15A TERMINATION CABINET DY CNTMNT ELECT OUTBRD DENTD NMS13 & 1 VI13A TERMINATION CABINET	× >	zz	× >	zz	N/A	-		zz	× ,				
1	RCP-TCA10	N/A FI FOT PENETRATION ALLY RING SO EVIDA LENNINALION CADINEL	- >	2 2	- >	2 2	A/N	-		z	< ×				
4	RCP-TCA12	RX CNTMNT ELECT OUTBRD PENTR LVI54 & LVC5 TERMINATION CABINET	~ ~	z	~ >	z	N/A	_		z	: ×				
14	RCP-TCA15	RX CNTMNT ELECT OUTBRD PENTR LVI6A & LVC6 TERMINATION CABINET	Y	z	Y	z	N/A	_		z	×				
14	RCP-TCF01	RX CNTMNT ELECT OUTBRD PENTR NMS19 & LVI19A TERMINATION CABINET	~	z	~	z	N/A	_	т	z	×				
4	RCP-ICF03	RX CNIMNI ELECI OUIBRU PENIR LVIZIAB & LVCZI I ERMINATION CABINEI BY CNIMNIT ELECT OUIBBD DENTELVC34 \$ 1 VI30A TEDMINATION CABINET	× >	zz	× >	zz	N/A	_	I J	zz	×;				
14	RCP-TCR01F	IX CUTMNT ELECT INBRD PENTR MS19 & LV119A TERMINATION CABINET	- <del>&gt;</del>	zz	- <del>,</del>	z	N/A	-	: <b>x</b>	z	××				
14	RCP-TCR03A	RX CNTMNT ELECT INBRD PENTR NMS13 & LVI13A TERMINATION CABINET	Y	z	٨	z	N/A	_	н	z	×				
14	RCP-TCR04F	RX CNTMNT ELECT INBRD PENTR NMS20 & LVI20A TERMINATION CABINET	×:	z	7	z	N/A		т	z	×				
4	RCP-TCR10A	N/A ELECT PENETRATION CNTNMNT SIDE	>>	z	~ >	z	A/A	_	I	z	×				
4	ROP-TURIZA RDS-AOV196 (C11-AOV196)	INA ON IMINI ELEOLI INDRU PENTIK LVIDA & LVOD TERMINALION CADINET SCRAM INI FTVALVE	~ >	zz	- <b>&gt;</b>	zz	A/N	_	- 1	zz	×				
-	RDS-ADV127 (C11-ADV127)	SCRAM DISCHARGE VALVE	- >	z	- >-	z	A/N	-	= 1	z	× ×				
~	RDS-A0V139 (C11-A0V139)	SCRAM PILOT VALVES	· >	z	- <b>,</b>	z	A/N		. I	z	×				
2	RDS-SOV139 (C11-SOV139)	SCRAM PILOT VALVE SOLENOIDS	~	z	~	z	N/A	_	т	z	×				
7	SWP-AOV599	STANDBY CLG TOWR 1 STAT BLACKOUT DIV 1 STNDBY SRVCE WTR RETURN VL	٢	z	۰,	۲	N/A	-		z					
6	SWP-FN1A	STANDBY COOLING TOWER FAN 1	Y	z	۰.	z	N/A	0	н	z					
6	SWP-FN1B	STANDBY COOLING TWR 1	7	z	γ*	z	N/A	0	т	z					
6	SWP-FN1C	STANDBY COOLING TOWER 1	> >	z	*	z	A/A	0	I	z					
D C	SWP-FNIU SWP-ENIE	STANDBY COULING TWIKT STANDBY COOLING TOWER FAN ENJE	× >	zz	÷. >	zz	N/A	00		zz					
n of	SWP-FN1E	STANDBY COOLING TWREAT AN THE STANDBY COOLING TWREAT IF IT	- >-	zz	- *-	zz	A/N	bo	- 1	zz					
6	SWP-FN1G	STANDBY COOLING TOWER FAN FN1G	~	z	*	z	NA	0	T	z					
6	SWP-FN1H	STANDBY COOLING TOWER FAN 1H	Y	z	**	z	N/A	0	т	z					
6	SWP-FN1J	STANDBY COOLING TOWER FAN FN1J	٢	z	۰,	z	N/A	0	н	z					
6	SWP-FN1K	STANDBY COOLING TOWER FAN FN1K	7	z	*	z	NA	0	I	z					
<b>Б</b>	SWP-FN1L	STANDBY COOLING TOWER FAN FNIL	× ×	z	*	z	A/N	0	I	z					
5	SWP-FNIM	STANDBY COOLING TOWER FAN TM	×	z		z	N/A	0	I :	z					
		STANDBY COOLING TOWER FAN FN IN	- >	2 2	*^	2 2	A/N	0	5 3	2 2					
σ	SWP-FN10	STANDBY COOLING TOWER FAN ENTO	- >	zz	*>	zz	A/N	oc	- 1	zz					
5	SWP-FN1R	STANDBY COOLING TOWER FAN 1R	~ >	z	*>	z	N/A	0	: т	z					
6	SWP-FN1S	STANDBY COOLING TOWER FAN FN1S	٢	z	+*	z	N/A	0	т	z					
6	SWP-FN1T	STANDBY COOLING TOWER FAN 1T	7	z	*	z	N/A	0	т	z					
6	SWP-FN1U	STANDBY COOLING TOWER FAN FN1U	> :	z	*	z	A/A	0	I:	z					
<b>.</b>	SWP+NIV	SIANDBY COOLING LOWER FAN TV	• >	z		z	N/A	- כ	F	z					
0 0	SWF-MOVZ/A	ול דוגד מבטס סוווידה עצה מיווידה מסומרגומה מימיד עדה מהיא דוג וממו אי מעדהי מימים מיווידה עצה מיווידה מסומרגומה מימיד עדה מהיא ידי וממו אי	- >	z	- *>	z	4/N	-		z				I	
0	SWP-MOVZ/B	CURE BLUG CHILLU WIR CHILLR CONDENSE B SVCE WIRSPLY LNE ISOL VL		z		z	A/N	-		z					
o o	SWP-MOV2/C	CNIKE BLOG CHILLD WIN CHILLR CONDENSE C SVCE WIN SPLY LINE ISOL VL		z		z	A/A	-		z					
20	SWP-MOVZ/D	CTRL BLDG CHILLED WTR CHILLER CNDNSER D SVC WTR SPLY LINE ISOL VL	×	z	- × ×	z	N/A	-	-	z				;	
æ a	SWP-MOV502A	CUTINMALTURIT CLA ASPLY HEADER INBRU CNTNMALTISOL VLV	• >	zz	• >	zz	N/A	-	<b>E</b> I	zz				×>	
~	SWP-MOV503A		~	2	- >-	z	N/A	_	. 1	z				< ×	
~	SWP-MOV503B	CNTNMNT UNIT CLR B RETURN HEADER INBRD CNTNMNT ISOL VLV	~	z	~ >-	z	NA	_	T	z				: ×	
8	SWP-MOV504A	SSW TO RBCCW DIV I HEADER (RHR PUMP A)	Y	z	7	z	N/A	_		z				×	
8	SWP-MOV504B	SSW TO RECCW DIV II HEADER (RHR PUMP B)	Y	N	Y	z	N/A	_		v				×	
8	SWP-MOV510A	SSW FROM RBCCW DIV I HEADER (RHR PUMP A)	٢	z	٢	z	N/A	_		z				×	
8	SWP-MOV510B	SSW FROM RBCCW DIV II HEADER (RHR PUMP B)	~	z	~	z	N/A	_		z				×	
80	SWP-MOVF040A (SWP-MOV40A)	STANDBY SVCE WTR PMP A DISCH ISOL VLV	<b>&gt;</b> :	z	*	z	A/N	_	x:	z					
0 0	SWP-MOVFU4UB (SWP-MOV4UB)	STANDEY SVCE WITK PMP BUISCH ISOL VLV ISTANDEY SVCE WTE PMP C DISCH ISOL VLV	->	zz	*>	zz	ANN ANN	_	- 3	zz				I	
~	SWP-MOVF040D (SWP-MOV40D)	STANDBY SVCE WTR PMP D DISCH ISOL VLV	~>	z	*>	z	N/A		T	z					
8	SWP-MOVF055A (SWP-MOV55A)	STBY CLG TOWER 1 INLET	٢	z	۰,	z	N/A	-		z					
8	SWP-MOVF055B (SWP-MOV55B)	STBY CLG TOWER 1 INLET	Y	z	*	z	N/A	_		z					
9	SWP-P2A	STBY SVC WP	۲	z	۲*	z	N/A	_	т	z					
9	SWP-P2B	STBY SVCE WP P2B	> >	z	*	z	N/A	_	I	z					
9	SWP-P2C	HPCS DIESEL GENERALOR SERVICE WALER PUMP	×	z	**	z	NA NA		I	z					
0 4	SWF-FZU SWE D2A		- >	zz	- >	zz	V/N	-	-	zz				I	
	SWP-P3R		- >-	zz	*>	z	A/N	-		zz					
2	SWP-P3C		<b>,</b>	z	۰.	z	N/A	-		z					
2	SWP-P3D	CONTROL BLDG CHILLER RECIRC PUMP 3D	~ >	z	*>	z	N/A	_		z					
7	SWP-PVY32A	SVCE WTR OUT/BYP HVK-CHL1A (CJ-1-102')	7	z	*	~	N/A	_		z					
7	SWP-PVY32B	SVCE WTR OUT/BYP HVK-CHL1B (CD-1-102')	~	z	*	~	N/A	_		z					
7	SWP-PVY32C	SVCE WTR OUT/BYP HVK-CHL1C (CD-2-102')	~	z	*	~	N/A	_		z					
7	SWP-PVY32D	SVCE WTR OUT/BYP HVK-CHL1D (CA-2-102')	Y	z	**	≻	N/A	_		z					
8	SWP-SOV602A (B) (C)	STNDBY CLG TWR STATION BLACKOUT RETURN VLV AIR SPLY LINE CNTRL SO	٨	z	۰.	٢	N/A	-		z					
	SWP-TWR1	STANDBY COOLING TOWER	Y	z	*	z	N/A			z					
18	JPB-RAK3	AUX BLDG LOCAL INSTR RACK 3	٢	z	Υ*	v	N/A	-		N					
18	JPB-RAK4	AUX BLDG EL 141 INSTR RACK 4	~	z	*~	z	N/A	_		z					
20	CMS-LT23A	SUPPRESSION POOL TRANSMITTER (AX 112? - 122')	>>	z	*	z :	A/N	_	Ŧ	z				1	
20	CMS-LT23B	SUPPRESSION POOL TRANSMITTER (AZZ757-1222)	~	z		z	N/A	_	T	z					

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Table B.1 Base List 1 (BL 1)

Equipment D			h										
Screen 1         Screen 2         Screen 3         Screen 3         Screen 4			Containme					x	×	×	×	x	X
Equipment ID         Extend 1         Screen 1         Screen 2         Screen 3         Screen 4	ctions**		Decay Heat Removal										
Equipment ID         Equipment ID         Screen 1         Screen 2         Screen 3         Screen 3         Screen 4         Screen 3         Screen 4	ve Safety Fun		Inventory Control										
Equipment ID         Extend 1         Screen 1	H		Pressure Control										
Equipment ID         Ecrean 1         Screen 2         Screen 3         Screen 4			Reactivity Control										
Equipment ID         Equipment ID         Screen 1         Screen 2         Screen 3         Screen 4         Screen 4           Equipment ID         Equipment ID         Equipment ID         Independence         Independence         Independence         Independence           Equipment ID         Equipment ID         Equipment ID         Independence         Independence         Independence         Independence           Equipment ID         Equipment ID         Equipment ID         Independence         Independence         Independence         Independence           Equipment ID         Equipment ID         Equipment ID         Independence         Independence         Independence         Independence         Independence           Equipment ID         Equipment ID         Independence         Indepindence         Indepindence <t< td=""><td></td><td></td><td>Borated System</td><td>z</td><td>z</td><td>z</td><td>z</td><td>z</td><td>z</td><td>z</td><td>z</td><td>z</td><td>N</td></t<>			Borated System	z	z	z	z	z	z	z	z	z	N
Equipment ID         Equipment ID         Equipment ID         Screen 1         Screen 2         Screen 3         Screen 4           Equipment ID         Equipment ID         Equipment ID         Equipment ID         Selami 17         Contrigonation Maintaine at least 1 of hespections         Maintaine at least 1 of hespections         P         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N         N </td <td></td> <td>Environment</td> <td>High Temp/Humidity (T/H)</td> <td>H</td> <td>т</td> <td>н</td> <td>т</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		Environment	High Temp/Humidity (T/H)	H	т	н	т						
Equipment ID         Equipment ID<	Screen 4		Inside/Outside (VO)	-		_	_	-	_	-	_	_	_
Equipment (b         Equipment Discription         Equi			IPEEE	N/A	N/A	N/A	NA	N/A	N/A	N/A	N/A	N/A	N/A
Equipment ID         Equipment Discription         Exerem 1         Screem 2         Screem 2         Screem 3           Equipment ID         Equipment Discription         Equipme			Replaced	z	z	z	z	z	z	z	z	z	N
Equipment ID         Equipment Discription         Screen 1         Screen 1         Screen 1         Screen 1           Requipment ID         Equipment Discription         Equipment Discription         Selamic 17         Undrago Regular Undrago Regular naspections           R00000         ChritMMT A TMOS AND LEXACRE MONTORING SYS RESISTANCE TEMP DETECTOR         Y         N           R00000         ChritMMT A TMOS AND LEXACRE MONTORING SYS RESISTANCE TEMP DETECTOR         Y         N           R00000         ChritMMT A TMOS AND LEXACRE MONTORING SYS RESISTANCE TEMP DETECTOR         Y         N           R00000         ChritMMT A TMOS AND LEXACRE MONTORING SYS RESISTANCE TEMP DETECTOR         Y         N           R00000         ChritMMT A TMOS AND LEXACRE MONTORING SYS RESISTANCE TEMP DETECTOR         Y         N           R00000         ChritMMT A TMOS AND LEXACRE MONTORING SYS RESISTANCE TEMP DETECTOR         Y         N           R00000         ChritMMT A TMOS AND LEXACRE MONTORING SYS RESISTANCE TEMP DETECTOR         Y         N           R00000         ChritMMT A TMOS AND LEXACRE MONTORING SYS RESISTANCE TEMP DETECTOR         Y         N           R00000         ChritMMT A TMOS AND LEXACRE MONTORING SYS RESISTANCE TEMP DETECTOR         Y         N           R00000         ChritMMT A TMOS AND LEXACRE MUTTR         Y         N         N	Screen 3		Maintains at least 1 of the 5 safety functions	۰λ	۰.	۰,	*	٨	Y	٢	٨	٨	٨
Equipment ID         Equipment Discription         Screen 1           Equipment ID         Equipment Discription         Selamic 17           CODID         Equipment Discription         Selamic 17           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR         Y           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR         Y           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR         Y           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR         Y           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR         Y           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR         Y           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR         Y           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR         Y           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR         Y           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR         Y           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR         Y           CODID         ChritMMT ATMOS AND LEAKAGE MONTORING SYS RESISTANCE TEMP DETECTOR	Screen 2		Undergo Regular Configuration Inspections	N	v	z	z	z	z	z	N	N	z
Equipment ID         Equipment Discription	Screen 1		Seismic 1?	٢	٨	٢	~	٢	٨	٢	٨	٨	٢
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MSF			Equipment ID	:MS-RTD040A	:MS-RTD040B	:MS-RTD040C	:MS-RTD040D	:MS-AT25A	:MS-AT25B	HS-MCC2K	ICS-IGN04A	IVR-AOV165	1VR-AOV123
Souce Equipment Class 19 19 19 19 19 19 19 19 19 19 19 19 19		soug	Equipment Class	19 C	19 C	19 C	19 C	20 C	20 C	1	0	4 2	4 <u>7</u>

Indicates that the item supports a secondary safety function with ultimately supports at least one of the 5 safety functions
 \*Note: the equipment items that do not indicate one of the five safety functions support secondary functions. (Ie. SS-AC, SS-DC, SS-SWC)
 Bolded tems were those of chosen to be on SWEL 1

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 Table B.2
 Seismic Walkdown Equipment List 1 (SWEL 1)

									EN	VIRONMENT			
SWEL 1#	EQUIPMENT ID	DESCRIPTION	BLDG	ELEV (FT)	ROOM	TRAIN	SYSTEM TYPE	CLASS	Inside/Outside (I/O)	High Temp/Humidity (T/H)	Borated System	ANC	DWG
SWEL1-001	B21-AOVF022B	MAIN STM LINE INBRD ISOL VLV B	DW	130	9303	2	CI	7	-	T/H		z	EM-2B
SWEL1-002	B21-AOVF028B	MAIN STM LINE OUTBRD ISOL VLV B	MST	130	8205	7	CI	2	I	т		z	EM-34B
SWEL1-003	B21-RVF041D	MAIN STM LINE D PRESS RELIEF VLV	DW	125	9202	7	PC	7	_	T/H		z	EM-2B
SWEL1-004	B21-RVF047B	MAIN STM LINE B AUTO DEPRESSURIZATION SYS PRESS RELIEF VLV	DW	125	9202	2	PC	7	-	T/H		z	EM-2B
SWEL1-005, SWEL1-006*	C11-ACC125	SCRAM CHARGING WTR LINE ACCUM	RB	114	7203	z	RC	21	-	т		z	EM-2B
SWEL1-007, SWEL1-008*	C11-ACC128	SCRAM CHARGING WTR LINE NITROGEN ACCUM	RB	114	7203	z	RC	21	_	т		z	EM-2B
SWEL1-009	C11-AOVF011	SCRAM DISCH VOL VENT & DRAIN AZ-174, EL-119 CONTAINMENT	RB	114	7200	z	RC	7	_	т		z	EK-303T
SWEL1-010	C11-AOVF180	SCRAM DISCH VOL VENT & DRAIN (AZ - 60? - 142') CONTAINMENT BLDG	RB	141	7200	z	RC	7	I	т		z	EK-303AA
SWEL1-011	C11-SOVF009	SCRAM DISCH VOL VENT & DRAIN(AZ - 174? - 119')	RB	114	7211	3	RC	8	I	т		z	EK-303T
SWEL1-012	C11-SOVF110A	SCRAM PILOT VLVS INSTR AIR SPLY LINE 3-WAY SOLENOID VLV	RB	114	7200	+	RC	8	_	т		z	EE-460W
SWEL1-013	C11-SOVF182	SCRAM AIR HDR(AZ - 176? - 119')	RB	114	7200	3	RC	8	I	т		z	EK-303T
SWEL1-014	Number not being used. Placeholder												
SWEL1-015	E12-EB001C	RHR HEAT EXCHGR C	AB	70	6006	۲	DHR	21	I			z	EM-034C
SWEL1-016	E12-MOVF004A	RHR PUMP A SUPPR POOL SUCTION VLV	AB	70	6008	۲	DHR	8	I			z	EP-071D
SWEL1-017	E12-MOVF024A	RHR A TEST RETURN TO SUPP POOL	AB	95	6112	1	DHR	8	I			z	EZ-071ZF
SWEL1-018	E12-MOVF048A	RHR A HX SHELL SIDE BYPASS VALVE	AB	70	6006	٢	DHR	8	I			z	EP-071D
SWEL1-019	E12-MOVF064A	RHR PUMP A MIN FLOW TO SUPPR POOL	AB	70	6006	٢	DHR	8	I			z	EP-071E
SWEL1-020	E12-MOVF068B	RHR HX B SVCE WTR RTN (OR) RHR B HX SERVICE WATER OUTLET	TUNNEL D	70	20D1	2	DHR	8	I			z	EP-108D
SWEL1-021	E12-PC002A	RESIDUAL HEAT REMOVAL PMP 2A	AB	70	6006	٢	DHR	9	-			Y	EM-034C
SWEL1-022	E21-MOVF011	LPCS PUMP MIN FLOW TO SUPPR POOL	AB	95	6112	1	IC	8	-			z	EZ-071ZF
SWEL1-023	E22-EGS001	HPCS DIESEL GENERATOR DIESEL ENG	DG	98	1104	3	SS-AC	17	-			٢	EM-13A
SWEL1-024	E22-LTN054G	CONDS STOR TK 1CNS-TK1FG-5-71" "F" TUNNEL	F TUNNEL	67	5000	3	IC	20	-			٢	EP-108A
SWEL1-025	E22-MOVF015	SUPPRESSION POOL PUMP SUCTION VALVE	AB	70	6001	3	IC	8	-			N	EP-083A
SWEL1-026	E22-PC001	HPCS MOTOR FEEDER	AB	70	6002	3	IC	9	-			z	EM-034C
SWEL1-027	E22-PNLS001	125V DC PANEL DIV III	DG	98	1104	3	SS-DC	2	-			N	EM-13A
SWEL1-028	E22-S001BAT	125V DC DIV III BATTERY	СВ	116	N/A	3	SS-DC	15	-			Y	EE-027B
SWEL1-029	E22-S003	HPCS TRANSFORMER FEEDER	CB	116	N/A	3	SS-AC	4	-			Y	EE-027B
SWEL1-030	E22-S004	DIV III 4160V AC SWITCHGEAR	CB	116	N/A	3	SS-AC	3	-			z	EE-027B
SWEL1-031	E22-SKDS001-TK1A	DIESEL 1C AIR START RECEIVER TNK	DG	98	N/A	з	SS-AC	21	-			×	EM-13A
SWEL1-032	E51-EC002	RX CORE ISOL CLG TURB LUBE OIL CLR	AB	70	6005	z	IC	21	-			Y	EP-076A
SWEL1-033	Number not being used. Placeholder												

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Table B.2 Seismic Walkdown Equipment List 1 (SWEL 1)

									ū	NVIRONMENT			
SWEL 1#	EQUIPMENT ID	DESCRIPTION	BLDG	ELEV (FT)	ROOM	TRAIN	SYSTEM TYPE	CLASS	Inside/Outside (I/O)	High Temp/Humidity (T/H)	Borated System	ANC	DWG
SWEL1-034	E51-MOVF045	RX CORE ISOL CLG TURB STM SPLY ISOL VLV	AB	70	6005	1	C	8	-			z	EZ-013ZB
SWEL1-035	E51-PC001	RX CORE ISOL CLG PMP	AB	20	6005	z	C	5	-			۲	EM-034C
SWEL1-036	E51-PNLC002	RCIC TURB GOVERNOR PNL	CB	20	6112	z	IC	20	-			۲	EC-058CA
SWEL1-037	E51-TC002	RX CORE ISOL CLG TURB	AB	20	6005	z	IC	0	-			z	EM-034C
SWEL1-038	EGA-TK1C	SDG AIR START SYS AIR RECEIVER TK 1C	DG	98	1100	۲	SS-AC	21	-			≻	EM-13A
SWEL1-039	EGA-TK2A	SDG AIR START SYS AIR RECEIVER TK 2A	DG	98	1100	٦	SS-AC	21	-			z	EM-13A
SWEL1-040	EGE-CAB01A	DIV I DG EXCITER CABINET	DG	98	N/A	٦	SS-AC	14	-			z	EM-13A
SWEL1-041	EGF-P1A	FUEL OIL TRANSFER PUMP	DG	86	N/A	1	SS-AC	9	-			z	EM-13A
SWEL1-042	EGF-TK2A	SDG FUEL OIL DAY TK A	DG	86	1100	۲	SS-AC	21	-			z	EM-13A
SWEL1-043	EGS-EG1A	SDG A ENGINE	DG	98	1106	٦	SS-AC	17	-			≻	EM-13A
SWEL1-044	EGT-E1A	SDG CLG SVS JACKET WTR CLR A	DG	98	N/A	۲	SS-AC	21	-			≻	EP-19K
SWEL1-045	EHS-MCC14A	STANDBY SWGR RM 1A 480V MCC14A	CB	98	1117	+	SS-AC	-	-			≻	EE-027C
SWEL1-046	EHS-MCC15A	DIESEL GEN RM A MCC15A	DG	98	1107	۲	SS-AC	-	-			z	EM-13A
SWEL1-047	EHS-MCC16A	STANDBY CLG TOWER 1 MITR CNTRL CENTER 16A	SCT	118	104	1	SS-SWP	۲	-	т		≻	EP-019H
SWEL1-048	EHS-MCC2B	EHS-MCC2B AUX BLDG	AB	141	6302	2	RC, PC, DHR, CI	۲	-			z	EM-034B
SWEL1-049	EHS-MCC2L	AUXILIARY BUILDING MCC2L	AB	141	6306	+	DHR, IC, CI, PC	-	-			z	EM-034B
SWEL1-051	EJS-LDC2A	REMOTE SHUTDOWN SYSTEM CONTROL POWER: 1HVR*UC11A,1HVR*UC1A	AB	141	6306	1	SS-AC	3	-			۲	EM-034B
SWEL1-052	EJS-SWG1A	STANDBY SWGR RM 1A 480V SWG1A	CB	98	1117	۲	SS-AC	e	-			≻	EE-027C
SWEL1-053	EJS-X1A	STANDBY SWGR ROOM 1A SWGR 1A PWR XFORMR 1A	CB	98	1117	٦	SS-AC	4	-			z	EE-027C
SWEL1-054	EJS-X2A	AUX BLDG STANDBY SWGR 2A PWR XFORMR	AB	141	6306	1	SS-AC	4	-			۲	EM-034B
SWEL1-055	EJS-X3A	4.16kv - 480 v transformer	SBCT	136	N/A	1	SS-AC	4	-	н		٢	EE-590V
SWEL1-056	ENB-BAT01A	STANDBY BUS A 125 VOLTS DIRECT CURRENT SYS BATTERY BANK 1A	CB	116	N/A	1	SS-DC	15	-			۲	EE-027B
SWEL1-057	ENB-CHGR1A	STDBY BUS A 125 VOLTS DIRECT CURRENT SYS BATRY BANK 1A CHARGER 1A	CB	116	1214	1	SS-DC	16	-			۲	EE-027B
SWEL1-058	ENB-INV01A	ENB*INV01A VITAL BUS A INVERTER	CB	98	N/A	+	SS-DC	16	-			z	EE-027
SWEL1-059	Number not being used. Placeholder												
SWEL1-060	ENB-PNL02A	125V DC PANEL	CB	136	1310	۲	SS-DC	14	-			z	EE-420AD
SWEL1-061	ENB-SWG01A	125V DC SWITCHGEAR 1A	CB	98	1117	۲	SS-DC	2	-			≻	EE-027C
SWEL1-062	ENS-SWG1A	4160V STANDBY SWGR BUS 1A	CB	86	1117	1	SS-AC	3	-			¥	EE-027C
SWEL1-063	H13-P693	RPS LOGIC DIV C	CB	136	1310	1	RC	20	-			۲	EE-027A
SWEL1-064	H22-P004	RX VSL LEVEL AND PRESS LOCAL PNL A	RB	114	7207	N	RC	18	-	н		z	EM-2B
SWEL1-065	HVC-ACU1A	CONTROL ROOM AIR HLDG UNIT ACU1A	CB	116	1201	-	SS-AC	10	_			z	EE-027B

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Table B.2 Seismic Walkdown Equipment List 1 (SWEL 1)

									Ĩ	IVIRONMENT			
SWEL 1#	EQUIPMENT ID	DESCRIPTION	BLDG	ELEV (FT)	ROOM	TRAIN	SYSTEM TYPE	CLASS	Inside/Outside (I/O)	High Temp/Humidity (T/H)	Borated System	ANC	DWG
SWEL1-066	HVC-ACU2A	CONTROL BLDG AIR HLDG UNIT ACU2A	СВ	70	1011	1	SS-AC	10	-			z	EK-310A
SWEL1-067	HVR-UC5	HPCS PUMP ROOM UNIT COOLER	AB	114	6201	3	SS-AC	10	I			z	EM-034B
SWEL1-068	HVC-AOD12A	1HVC*ACU2A AIR OUTLET (CD-2-89')	CB	70	1000	1	SS-AC	7	I			z	EK-310A
SWEL1-069	HVC-AOD5B	1HVC*FN2B AIR INLET (CA-2-80')	CB	70	N/A	2	SS-AC	7	-			z	EK-310A
SWEL1-070	HVC-AOD6A	1HVC*ACU1A AIR OUTLET (CD-1-130')	CB	115	1200	-	SS-AC	7	-			z	EK-310F
SWEL1-071	HVC-CH1A	CONTROL ROOM AIR HLDG UNIT HEATER CH1A	CB	115	N/A	-	SS-AC	0	I			٨	EE-027B
SWEL1-072	HVC-CH3A	CNTRL BLDG BATTERY ROOM 1A COIL HTR	CB	116	1200	1	SS-DC	0	I			٢	EE-420M
SWEL1-073	HVC-FN2A	STBY SWGR RETURN FAN	CB	70	1000	1	SS-AC	6	Ι			٢	EE-420B
SWEL1-074	HVC-FN3D	BATTERY ROOM 1A EXHAUST FAN	CB	116	N/A	-	SS-DC	6	I			z	EE-027E
SWEL1-075	HVK-CHL1C	HVKC01 CONTROL BLDG CHILLED WATER COMPRESSOR CHL1C	CB	98	1124	-	SS-AC	11	-			~	EE-027C
SWEL1-076	HVK-MOV20C	CNTRL BLDG CHILLED WTR PMP 1C DISCH MTR OPERATED ISOL VLV	CB	98	1110	1	SS-AC	8	I			z	EB-081B
SWEL1-077	HVK-P1A	1HVK*P1A CONTROL BLDG CHILLED WATER PUMP	CB	98	1124	-	SS-AC	5	I			z	EE-027C
SWEL1-078	НИК-ТК1А	CNTRL BLDG CHILLED WTR SURGE TK 1A	CB	98	1110	-	SS-AC	21	I			z	EE-027C
SWEL1-079	HVP-AOD11A	DSL GEN CONT RM A AIR SPLY (DC-3-131')	DG	126	1305	-	SS-AC	7	I			z	EB-007C
SWEL1-080	Number not being used. Placeholder												
SWEL1-081	HVP-FN2A	DIESEL ROOM A EMER VENTILATING EXHAUST FAN	DG	98	1100	-	SS-AC	6	-			Y	EM-13A
SWEL1-082	HVP-FN6A	DSL GEN CONT RM A VENT SUPPLY FAN	DG	126	1305	-	SS-AC	6	I			Y	EB-007C
SWEL1-083	HVP-PNL12A	DIESEL GENERATOR VENTILATION PNL 12A	DG	98	1106	-	SS-AC	3	I			z	EM-13A
SWEL1-084	HVR-UC1A	CONTMIT UNIT COOLER	RB	162	7408	1	DHR	10	I	н		٢	EM-2A
SWEL1-085	HVR-UC6	AUX BLDG UNIT COOLER	AB	114	6205	1	DHR, IC	10	Ι			٢	EM-034B
SWEL1-086	LSV-C3A	PENETRATION VALVE LEAKAGE CONT SYSTEM AIR	AB	141	6301	1	PC	12	-			٢	EM-034B
SWEL1-087	LSV-C3B	PENETRATION VALVE LEAKAGE CONT SYSTEM AIR COMPRESSOR	AB	141	6301	2	PC	12	-			z	EM-034B
SWEL1-088	RCP-TCA03	RX CNTMNT ELECT OUTBRD PENTR NMS13 & LVI13A TERMINATION CABINET	AB	114	6207	z	RC	14	Ι			z	EM-034B
SWEL1-089	RCP-TCF04	RX CNTMNT ELECT OUTBRD PENTR LVC21 & LVI20A TERMINATION CABINET	FB	113	5205	z	RC	14	Ι	Н		٢	EM-033C
SWEL1-090	RCP-TCR01F	RX CNTMNT ELECT INBRD PENTR NMS19 & LVI19A TERMINATION CABINET	RB	114	7200	z	RC	14	-	Н		٢	EM-2B
SWEL1-091, SWEL1-092*	C11-AOV126	SCRAM INLET VALVE	RB	N/A	N/A	z	RC	7	-	н		z	EM-2B
SWEL1-093, SWEL1-094*	C11-A0V127	SCRAM DISCHARGE VALVE	RB	N/A	N/A	z	RC	7	-	н		z	EM-2B
SWEL1-095, SWEL1-096*	C11-AOV139	SCRAM PILOT VALVES	RB	114	7200	z	RC	7	-	Н		z	EM-2B
SWEL1-097	Number not being used. Placeholder												
SWEL1-098	Number not being used. Placeholder												
SWEL1-099	SWP-AOV599	STANDBY CLG TOWR 1 STAT BLACKOUT DIV 1 STNDBY SRVCE WTR RETURN VL	G tunnel	67	20G1	٢	SS-SWP	7	-			z	EP-108G

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Table B.2 Seismic Walkdown Equipment List 1 (SWEL 1)

									Ē	IVIRONMENT			
EL 1#	EQUIPMENT ID	DESCRIPTION	BLDG	ELEV (FT)	ROOM	TRAIN	SYSTEM TYPE	CLASS	Inside/Outside (I/O)	High Temp/Humidity (T/H)	Borated System	ANC	DWG
L1-100	SWP-FN1B	STANDBY COOLING TWR 1	SCT	137	200	2	SS-SWP	6	0	н		¥	EM-032B
L1-101	SWP-FN1J	STANDBY COOLING TOWER FAN FN1J	SCT	137	200	-	SS-SWP	6	0	т		z	EP-019H
L1-102	SWP-FN1N	STANDBY COOLING TOWER FAN FN1N	SCT	137	200	-	SS-SWP	6	0	т		z	EM-032B
L1-103	SWP-FN1V	STANDBY COOLING TOWER FAN 1V	SCT	137	200	2	SS-SWP	6	0	н		¥	EM-032B
L1-104	SWP-MOV27C	CNTRL BLDG CHILLD WTR CHILLR CONDENSR C SVCE WTR SPLY LNE ISOL VL	CB	98	1110	-	SS-AC	8	-			z	EP-019G
L1-105	SWP-MOV502A	CNTNMNT UNIT CLR A SPLY HEADER INBRD CNTNMNT ISOL VLV	RB	162	7408	-	DHR	8	-	н		z	EP-19X
L1-106	SWP-MOV40A	STANDBY SVCE WTR PMP A DISCH ISOL VLV	SCT	118	104	-	SS-SWP	80	-	т		z	EM-032B
L1-107	SWP-MOV55A	STBY CLG TOWER 1 INLET	G TUNNEL	67	0	-	SS-SWP	8	-			z	EP-108G
-1-108	SWP-P2A	STBY SVC WP	SCT	118	100	-	SS-SWP	9	-	н		¥	EM-032B
-1-109	SWP-P3C	CONTROL BLDG CHILLER RECIRC PUMP P3C	CB	98	1100	-	SS-AC	5	-			z	EE-027C
-1-11	SWP-SOV602A	STNDBY CLG TWR STATION BLACKOUT RETURN VLV AIR SPLY LINE CNTRL SO	G tunnel	108	N/A	-	SS-SWP	80	-			z	EK-308D
-1-112	JPB-RAK3	AUX BLDG LOCAL INSTR RACK 3	AB	141	6302	z	DHR	18	-			z	EM-034B
1-113	CMS-LT23A	SUPPRESSION POOL TRANSMITTER (AX 112? - 122')	RB	114	7200	-	DHR	20	-	н		¥	EK-14A
1-114	CMS-RTD040A	CNTNMNT ATMOS AND LEAKAGE MONITORING SYS RESISTANCE TEMP DETECTOR	RB	95	7100	-	DHR	19	-	н		z	EK-14A
.1-115	CMS-RTD040C	CNTNMNT ATMOS AND LEAKAGE MONITORING SYS RESISTANCE TEMP DETECTOR	RB	95	7100	1	DHR	19	-	н		z	EK-14A
.1-116	CMS-AT25A	CNTNMNT MONITORING SYS H2 ANALYZER XMITTR	AB	114	6306	1	CI	20	-			z	EK-306A
-1-17	EHS-MCC2K	480v MCC (power to B H2 igniters)	AB	141	N/A	2	CI	1	-			z	EM-034B
.1-118	HCS-IGN04A	H2 RECOMB IGNITER 04A	RB	186	7500	٢	CI	0	-			z	EE-460AW
.1-119	HVR-AOV165	CONTMT SPLY OUTBD ISOL(AL-2-152')	AB	141	6307	٢	CI	7	-			z	EK-306G
.1-120	HVR-AOV123	CONTMT SPLY INBD ISOL(42? - 152')	RB	141	9408	-	CI	7	-			z	EB-15G

Note: \* denotes that two of these items were walked down (one on either side of the reactor bldg). The items had the same ID on both sides.

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Base List 2 (BL 2)

Table B.3

	N/R	z	z	z	Ν	Ν	z	z	z	z	z	z	z	z	z	z	z	z	z	z	z	N	z	N	Ν	N	Ν	Ν	Ν	Ν	Ν	z	N	z	z
	Borated System																																		
ENVIRONMENT	High Temp/Humidity (T/H)															т	т	г	т	г	г	н	I	н	н	н	н	н	н	н	н				
	Inside/ Outside (I/O)	-	-	-	_	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	_
	CLASS	80	8	8	8	8	8	8	8	٢	-	-	-	с	с	7	7	7	7	7	7	21	21	20	20	20	20	5	5	19	19	8	8	8	80
	SYSTEM TYPE	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC
	TRAIN	2	1	1	2	2	2	1	2					-	2	٢	-	٦	٢	1	1	-		1	2	1	1	1	1	1	2	۲	2	-	2
	ROOM	6008	6008	6008	6008	5013	5013	6008	6008	6206	6203	1117	1114	1117	1114	5018	5019	5000	5021	N/A	N/A	5000	5000	5000	5000	5100	5100	5011	5012	5000	5000	6008	6001	6008	6001
	ELEV	70	70	70	70	70	70	70	70	114	114	98	98	98	98	70	70	70	70	95	95	70	70	70	70	95	95	70	70	70	70	70	70	70	70
	BLDG	AB	AB	AB	AB	FB	FB	AB	AB	AB	AB	В	СВ	CB	CB	8	FB	FB	8	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB	FB	AB	AB	AB	AB
	DESCRIPTION	CCP LOOP B OUTLET ISOL VLV	CCP LOOP A OUTLET ISOL VLV	RPCCW LOOP A NORM SUPPLY VALVE	RPCCW LOOP B NORM SUPPLY VALVE	CRD PUMPS SUPPLY VLV	CRD PUMPS SUPPLY VALVE	CCP LOOP A OUTLET MTR OPERATED ISOL VLV	CCP LOOP B OUTLET MTR OPERATED ISOL VLV	AUXILIARY BUILDING MCC2G	AUXILIARY BUILDING MCC2H	STANDBY SWGR RM 1A 480V MCC8A	STANDBY SWGR RM 1B MCC8B	STANDBY SWGR RM 1A 480V SWG1A	STANDBY SWGR RM 1B 480V SWG1B	F POOL PRFCN FLT1A BYP FD-6-87'	F POOL PRFCN FLT1B BYP FD-9-87'	F POOL PRFCN FLT1A INLET FD-7-87'	F POOL PRFCN FLT1B INLET FD-9-87'	FUEL POOL PRFCN FLT 1A OUTLET FD-8-105'	FUEL POOL PRFCN FLT 1B OUTLET FD-8-105'	FUEL STORAGE POOL FUEL POOL CLR A	FUEL STORAGE POOL FUEL POOL CLR B	CLR WTR TO SPENT FUEL POOLS FE-8-70'	CLR WTR TO SPENT FUEL POOLS FE-8-75	FUEL STORAGE POOL (SPENT FUEL) LEVEL XMITTR	FUEL STORAGE POOL (SPENT FUEL) LEVEL XMITTR	FUEL POOL COOLING PUMP 1A	FUEL POOL COOLING PUMP 1B	FUEL POOL CLG PMP A SUCT HEADER RESISTANCE TEMP DETECTOR	FUEL POOL CLG PMP B SUCT HEADER RESISTANCE TEMP DETECTOR	FUEL POOL CLR A SVCE WTR RETURN LINE ISOL VLV	RPCCW SYSTEM RETURN	RPCCW SYSTEM SUPPLY	RPCCW SYSTEM SUPPLY
	EQUIPMENT ID	CP-MOV129	CP-MOV130	CP-MOV16A	CP-MOV16B	SCP-MOV163	CP-MOV169	3CP-MOV335	3CP-MOV336	EHS-MCC2G	EHS-MCC2H	EHS-MCC8A	EHS-MCC8B	EJS-SWG1A	EJS-SWG1B	FC-AOV31A	SFC-AOV31B	SFC-AOV32A	SFC-AOV32B	SFC-AOV37A	SFC-AOV37B	SFC-E1A	SFC-E1B	SFC-FT19A	SFC-FT19B	SFC-LT28A	SFC-LT28B	SFC-P1A	SFC-P1B	SFC-RTD7A	SFC-RTD7B	SWP-MOV504A	SWP-MOV504B	SWP-MOV510A	WP-MOV510B
	BL2#	2001 C	2002 0	2003 C	2004 C	2005 C	2006 C	2007 0	2008 C	2009 E	2010 E	2011 E	2012 E	2013 E	2014 E	2015 5	2016 S	2017 S	2018 5	2019 5	2020 5	2021 S	2022 5	2023 S	2024 5	2025 5	2026 S	2027 S	2028 S	2029 5	2030 5	2031 S	2032 5	2033 5	2034 5

# Rapid Drain-Down List (RDD)

Table B.4

RDD#	Description	Basis for Inclusion/Exclusion	RDD
	Note: Ther review of p	e are no items that will cause rapid drain-down of the spent fuel pool, based on viping, liner, and concrete drawings. There are no penetrations below about 10 ft	
R-01	above the	top of the fuel assemblies.	
R-02			
R-03			
	Ref. RBS I	USAR Section 9.1.2.3.3 and dwgs EC-062U, V, W, EP-077 Series, and EV-003A	
R-04	Series		
R-05			

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Table B.5 Seismic Walkdown Equipment List 2 (SWEL 2)

	RDD		N/A	N/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	NIA NIA NIA NIA NIA	NIA NIA NIA NIA NIA NIA	NIA NIA NIA NIA NIA NIA NIA	NUA NUA NUA NUA NUA NUA NUA					
	N/R	z	z	z	z	z	z		z	z			z	z	z	z	z	z
	Borated System																	
Environment	High Temp/Humidity (T/H)								н	н			Н	т	т	н		
	Inside/ Outside (I/O)	_	_	_	_	_	_		_	_			_	_	_	_	_	_
	Class	8	8	8	8	Ļ	Ļ		7	7			20	20	5	19	80	œ
	System Type	SFPC	SFPC	SFPC	SFPC	SFPC	SFPC		SFPC	SFPC			SFPC	SFPC	SFPC	SFPC	SFPC	SFPC
	Train	٢	٢	2	٦	2	2		Ļ	٢			2	Ļ	Ļ	2	2	2
	Room	6008	6008	5013	6008	6203	1114		5018	5021			5000	5100	5011	5000	6001	6001
	Elev.	70	70	70	70	114	98		70	70			70	95	70	70	70	70
	BLDG	AB	AB	AB	AB	AB	CB		FB	FB			FB	EB	EB	FB	AB	AB
	Description	CCP LOOP A OUTLET ISOL VLV	RPCCW LOOP A NORM SUPPLY VALVE	CRD PUMPS SUPPLY VLV	CCP LOOP A OUTLET MTR OPERATED ISOL VLV	AUXILIARY BUILDING MCC2H	STANDBY SWGR RM 1B MCC8B	ig used. Placeholder	F POOL PRFCN FLT1A BYP FD-6-87	F POOL PRFCN FLT1B INLET FD-9-87'	ig used. Placeholder	ig used. Placeholder	CLR WTR TO SPENT FUEL POOLS FE-8-75'	FUEL STORAGE POOL (SPENT FUEL) LEVEL XMITTR	FUEL POOL COOLING PUMP 1A	FUEL POOL CLG PMP B SUCT HEADER RESISTANCE T	RPCCW SYSTEM RETURN	RPCCW SYSTEM SUPPLY
	Equipment ID	CCP-MOV130	CCP-MOV16A	CCP-MOV163	CCP-MOV335	EHS-MCC2H	EHS-MCC8B	Number not bein	SFC-AOV31A	SFC-AOV32B	Number not bein	Number not bein	SFC-FT19B	SFC-LT28A	SFC-P1A	SFC-RTD7B	SWP-MOV504B	SWP-MOV510B
	SWEL 2#	SWEL2-001	SWEL2-002	SWEL2-003	SWEL2-004	SWEL2-005	SWEL2-006	SWEL2-007	SWEL2-008	SWEL2-009	SWEL2-010	SWEL2-011	SWEL2-012	SWEL2-013	SWEL2-014	SWEL2-015	SWEL2-016	SWEL2-017

### Attachment C

### Seismic Walkdown Checklists (SWC)

PAGE 1 OF 5

Status: Y N U
Seismic Walkdown Checklist (SWC) SWEL1-005
Equipment ID No. <u>C11-ACC125</u> Equip. Class <sup>1</sup> 21 - Tanks and Heat Exhangers
Equipment Description SCRAM ACCUMULATOR - WATER SIDE
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7203</u>
Manufacturer, Model, Etc. (optional but recommended) <u>GE 105D6138G001</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ul> <li>2. Is the anchorage free of bent, broken, missing or loose hardware? Y⊠ N□ U□ N/A□</li> <li>4 bolts mounting CRD Scram Equipment rack to unistrut embedded in the floor. Accumulator is strapped with 2 bolts mounting the strap to equipment rack.</li> </ul>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A No visible corrosion.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the anchors?</li> <li>No visible cracks in concrete near equipment rack anchorage.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
	Attachment C Page 3 of 615
PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-005</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>C11-ACC125</u> Equip. Class <u>21 – Tanks and heat e</u>	exchangers
Equipment Description SCRAM ACCUMULATOR - WATER SIDE	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

PAGE 3 OF 5

Seismic Walkdown Checklist (SWC)	SWEL1-005	Status: Y⊠ N∐ U∐
Equipment ID No. <u>C11-ACC125</u>	Equip. Class 21 – Tanks and	heat exchangers
Equipment Description SCRAM ACCUMU	ILATOR - WATER SIDE	
Other Adverse Conditions		
11. Have you looked for and found no o adversely affect the safety functions	other seismic conditions that cours of the equipment?	ld Y⊠ N□ U□

<u>Comments (Additional pages may be added as necessary)</u>

None

Alon		
Evaluated by: Jason Halsey	Date:	<u>10-9-2012</u>
Matt Keeney Matt Keeney		<u>10-9-2012</u>

PAGE 4 OF 5



### Seismic Walkdown Checklist (SWC) SWEL1-005

Equipment ID No. <u>C11-ACC125</u> Equip. Class <u>21 – Tanks and heat exchangers</u>

Equipment Description SCRAM ACCUMULATOR - WATER SIDE

### Photographs





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### Seismic Walkdown Checklist (SWC) SWEL1-005

Equipment ID No. <u>C11-ACC125</u> Equip. Class <u>21 – Tanks and heat exchangers</u>

Equipment Description SCRAM ACCUMULATOR - WATER SIDE





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Status: Y N U
Seismic Walkdown Checklist (SWC) SWEL1-006
Equipment ID No. <u>C11-ACC125</u> Equip. Class <sup>1</sup> <u>21 – Tanks and heat exchangers</u>
Equipment Description SCRAM ACCUMULATOR - WATER SIDE
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7203</u>
Manufacturer, Model, Etc. (optional but recommended) <u>GE 105D6138G001</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ul> <li>2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A</li> <li>4 bolts mounting CRD Scram Equipment rack to unistrut embedded in the floor. Accumulator is strapped with 2 bolts mounting the strap to equipment rack.</li> </ul>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A U N/A No visible corrosion.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the anchors?</li> <li>No visible cracks in concrete near equipment rack anchorage.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
	Attachment C Page 8 of 615
Page 2 of 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-006</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>C11-ACC125</u> Equip. Class <u>21 – Tanks and heat e</u>	exchangers
Equipment Description SCRAM ACCUMULATOR - WATER SIDE	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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□

PAGE 3 OF 5

Seismic Walkdown Checklist (SWC)	SWEL1-006	Status:	YX NL UL
Equipment ID No. <u>C11-ACC125</u>	Equip. Class 21 – Tanks and	heat exchangers	
Equipment Description SCRAM ACCUMU	LATOR - WATER SIDE		
<u>Other Adverse Conditions</u> 11. Have you looked for and found no o adversely affect the safety functions	ther seismic conditions that cousies of the equipment?	ld Y⊠N⊟ U	1

<u>Comments</u> (Additional pages may be added as necessary)

None

And	
	Date: 10-9-2012

Evaluated by: Jason Halsey

Matt Keeney ~\_\_\_\_

<u>10-9-2012</u>

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### Seismic Walkdown Checklist (SWC) SWEL1-006

Equipment ID No. <u>C11-ACC125</u> Equip. Class <u>21 – Tanks and heat exchangers</u>

Equipment Description SCRAM ACCUMULATOR - WATER SIDE

### Photographs





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### Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-006

Equipment ID No. <u>C11-ACC125</u> Equip. Class <u>21 – Tanks and heat exchangers</u>

Equipment Description SCRAM ACCUMULATOR - WATER SIDE

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Note:	Note:

PAGE 1 OF 5

Status: Y N U
Seismic Walkdown Checklist (SWC) SWEL1-007
Equipment ID No. <u>C11-ACC128</u> Equip. Class <sup>1</sup> <u>21 – Tanks and heat exchangers</u>
Equipment Description SCRAM ACCUMULATOR - NITROGEN SIDE
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7203</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Not Available</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A</li> <li>Y N N U N/A</li> <li>Y N N U N/A</li> <li>Y N N U N/A</li></ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A U N/A No visible corrosion.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the anchors?</li> <li>No visible cracks in concrete near equipment rack anchorage.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
	Attachment C Page 13 of 615
PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) SWEL1-007	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>C11-ACC128</u> Equip. Class <u>21 – Tanks and heat e</u>	exchangers
Equipment Description SCRAM ACCUMULATOR - NITROGEN SIDE	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

PAGE 3 OF 5

Seismic Walkdov	wn Checklist (SWC)	SWEL1-007	Status:	Y⊠N∐U∐
Equipment ID No.	C11-ACC128	Equip. Class <u>21 – Tanks and P</u>	neat exchangers	
Equipment Descrip	tion SCRAM ACCUMU	LATOR - NITROGEN SIDE		
Other Adverse Co 11. Have you lo adversely at	n <b>ditions</b> loked for and found no o ffect the safety functions	ther seismic conditions that cou s of the equipment?	ld Y⊠ N⊟ I	U

<u>Comments</u> (Additional pages may be added as necessary)

None

Adap
1 tange

Evaluated by: Jason Halsey

Matt Keeney

<u>10-9-2012</u>

\_\_\_ Date: <u>10-9-2012</u>

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### Seismic Walkdown Checklist (SWC) SWEL1-007

Equipment ID No. <u>C11-ACC128</u> Equip. Class <u>21 – Tanks and heat exchangers</u>

Equipment Description SCRAM ACCUMULATOR - NITROGEN SIDE

### Photographs





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### Seismic Walkdown Checklist (SWC) SWEL1-007

Equipment ID No. <u>C11-ACC128</u> Equip. Class <u>21 – Tanks and heat exchangers</u>

Equipment Description <u>SCRAM ACCUMULATOR - NITROGEN SIDE</u>





Note:

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	Status: Y⊠ N□ U□
Seismic Walkdown Checklist (SWC) SWEL1-008	
Equipment ID No. <u>C11-ACC128</u> Equip. Class <sup>1</sup> <u>21 – Tanks and heat e</u>	exchangers
Equipment Description SCRAM ACCUMULATOR - NITROGEN SIDE	
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7203</u>	
Manufacturer, Model, Etc. (optional but recommended)	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of a SWEL. The space below each of the following questions may be used to record the findings. Additional space is provided at the end of this checklist for documenting	an item of equipment on the he results of judgments and other comments.
Anchorage	
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ol>	Y□ N⊠
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>4 bolts mounting CRD Scram Equipment rack to unistrut embedded in the floor. Accumulator is strapped with 2 bolts mounting the strap to equipment rack.</li> </ol>	Y⊠ N∏ U∏ N/A∏
<ol> <li>Is the anchorage free of corrosion that is more than mild surface oxidation? No visible corrosion.</li> </ol>	Y⊠ N∏ U∏ N/A∏
<ul><li>4. Is the anchorage free of visible cracks in the concrete near the anchors?</li><li>No visible cracks in concrete near equipment rack anchorage.</li></ul>	Y⊠ N□ U□ N/A□

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RB	S-CS-12-00001
	Attachment C	Page 18 of 615
PAGE 2 OF 5		
	Status: YD	
Seismic Walkdown Checklist (SWC) <u>SWEL1-008</u>		
Equipment ID No. <u>C11-ACC128</u> Equip. Class <u>21 – Tanks and heat of the second se</u>	exchangers	
Equipment Description SCRAM ACCUMULATOR - NITROGEN SIDE	-	
5. Is the anchorage configuration consistent 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
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□	

PAGE 3 OF 5

Seismic Walkdown Checklist (SWC)	SWEL1-008	Status: Y⊠ N_ U_
Equipment ID No. <u>C11-ACC128</u>	Equip. Class 21 – Tanks and he	at exchangers
Equipment Description SCRAM ACCUML	JLATOR - NITROGEN SIDE	
Other Adverse Conditions 11. Have you looked for and found no c adversely affect the safety functions	other seismic conditions that could s of the equipment?	Y⊠ N□ U□

<u>Comments (Additional pages may be added as necessary)</u>

None

Andap		
Evaluated by: Jason Halsey	Date: <u>10-9-2012</u>	
Matt Keeney	<u>10-9-2012</u>	

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### Seismic Walkdown Checklist (SWC) SWEL1-008

Equipment ID No. <u>C11-ACC128</u> Equip. Class <u>21 – Tanks and heat exchangers</u>

Equipment Description SCRAM ACCUMULATOR - NITROGEN SIDE

### Photographs





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### Seismic Walkdown Checklist (SWC) SWEL1-008

Equipment ID No. <u>C11-ACC128</u> Equip. Class <u>21 – Tanks and heat exchangers</u>

Equipment Description SCRAM ACCUMULATOR - NITROGEN SIDE



Engineering Report No. RBS-CS-12-00001
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PAGE 1 OF 5
Status: YX N_ U_ Seismic Walkdown Checklist (SWC) <u>SWEL1-009</u>
Equipment ID No. <u>C11-AOVF011</u> Equip. Class <sup>1</sup> 7 – Pneumatic-Operated Valves
Equipment Description SCRAM DISCH VOL VENT & DRAIN AZ-174, EL-119 CONTAINMENT
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>
Manufacturer, Model, Etc. (optional but recommended) Fisher Controls Model 667-ES
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A In-line mounted valve welded to the pipe with the pipe clamped upstream and downstream of valve.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Surfaces are painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N U N/A N ∪ N/A N U N/A N U N/A N ∪ N/A N U N</li></ul>
In-line valve mounted to process pipe

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.
	Status: Y🛛 N🗌 U
Seismic Walkdown Checklist (SWC) <u>SWEL1-009</u>	
Equipment ID No. <u>C11-AOVF011</u> Equip. Class <u>7 – Pneumatic-Opera</u>	ted Valves
Equipment Description SCRAM DISCH VOL VENT & DRAIN AZ-174, EL-119 (	CONTAINMENT
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

Seismic Walkdown Checklist (SWC) <u>SWEL1-009</u> Status: Y N U
Equipment ID No. <u>C11-AOVF011</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>
Equipment Description SCRAM DISCH VOL VENT & DRAIN AZ-174, EL-119 CONTAINMENT
Other Adverse Conditions         11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?

<u>Comments</u> (Additional pages may be added as necessary)

Evaluated by: Matt Keeney	Date: 10-9-2012
And	
Jason Halsey	<u>10-9-2012</u>

# Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-009

Equipment ID No. <u>C11-AOVF011</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description SCRAM DISCH VOL VENT & DRAIN AZ-174, EL-119 CONTAINMENT

#### Photographs





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Note:

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# Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-009

Equipment ID No. <u>C11-AOVF011</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

### Equipment Description SCRAM DISCH VOL VENT & DRAIN AZ-174, EL-119 CONTAINMENT



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PAGE 1 OF 5
Status: YX NUU Seismic Walkdown Checklist (SWC) <u>SWEL1-010</u>
Equipment ID No. <u>C11-AOVF180</u> Equip. Class <sup>1</sup> 7 – Pneumatic-Operated Valve
Equipment Description SCRAM DISCH VOL VENT & DRAIN (AZ - 60? - 142') CONTAINMENT BLDG
Location: Bldg. RB Floor El. 141 Room, Area 7200
Manufacturer, Model, Etc. (optional but recommended) ITT Hammel Dahl Conaflow Model 667-ES
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N□ U□ N/A□</li> <li>In-line mounted valve, pipe clamp or welded upstream and downstream of valve.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Surfaces are painted.</li> </ol>
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y N U N/A N U N</li></ol>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engineering Report No. RBS-CS-12-00001		
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Saiamia Walkdown Chaokligt (SWC) SWEL1 010	Status: Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC) <u>SWELT-010</u>	
Equipment ID No. <u>C11-AOVF180</u> Equip. Class <u>7 – Pneumatic-Opera</u>	ted Valve
Equipment Description SCRAM DISCH VOL VENT & DRAIN (AZ - 60? - 142')	CONTAINMENT BLDG
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

Statu Seismic Walkdown Checklist (SWC) <u>SWEL1-010</u>	ıs: Y⊠ N∏ U∏
Equipment ID No. <u>C11-AOVF180</u> Equip. Class <u>7 – Pneumatic-Operated Valve</u>	
Equipment Description SCRAM DISCH VOL VENT & DRAIN (AZ - 60? - 142') CONTAIN	IMENT BLDG
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[]

<u>Comments</u> (Additional pages may be added as necessary)

Evaluated by: Matt Keeney	Date: 10-9-2012
$\mathcal{A}\mathcal{O}\mathcal{O}$	
Jason Halsey	10-9-2012

# Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-010

Equipment ID No. <u>C11-AOVF180</u> Equip. Class <u>7 – Pneumatic-Operated Valve</u>

Equipment Description SCRAM DISCH VOL VENT & DRAIN (AZ - 60? - 142') CONTAINMENT BLDG

### Photographs





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# Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-010</u>

Equipment ID No. <u>C11-AOVF180</u> Equip. Class <u>7 – Pneumatic-Operated Valve</u>

### Equipment Description SCRAM DISCH VOL VENT & DRAIN (AZ - 60? - 142') CONTAINMENT BLDG



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Sciencia Wellsdown Checklist (SWC) SWEL1 011
Seismic Walkdown Checklist (SWC) <u>SWEL1-011</u>
Equipment ID No. <u>C11-SOVF009</u> Equip. Class <sup>1</sup> 8 – Motor-Operated and Solenoid-Operated Valve
Equipment Description SCRAM DISCH VOL VENT & DRAIN (AZ - 174? - 119')
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7211</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Valcor Model V70900-45</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A Valve is bolted to bracket which is welded to tube steel. All hardware is intact and undamaged.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y    N    U    N/A    N</li> </ol>
No visible corrosion.
4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A anchors?
Component mounted to tube steel.

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-011</u>	
Equipment ID No. <u>C11-SOVF009</u> Equip. Class <u>8 – Motor-Operated a</u>	nd Solenoid-Operated Valve
Equipment Description SCRAM DISCH VOL VENT & DRAIN (AZ - 174? - 119)	)
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

Seismic Walkdown Checklist (SWC) <u>SWEL1-011</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>C11-SOVF009</u> Equip. Class <u>8 – Motor-Operated a</u>	nd Solenoid-Operated Valve
Equipment Description SCRAM DISCH VOL VENT & DRAIN (AZ - 174? - 119)	)
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□

<u>Comments (Additional pages may be added as necessary)</u>

And	
Evaluated by: Jason Halsey	Date: <u>10-10-2012</u>
Di TZ.	
David Bassi	10-10-2012



## Seismic Walkdown Checklist (SWC) <u>SWEL1-011</u>

 Equipment ID No.
 C11-SOVF009
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valve

 Equipment Description
 SCRAM DISCH VOL VENT & DRAIN (AZ - 174? - 119')

#### Photographs



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## Seismic Walkdown Checklist (SWC) SWEL1-011

Equipment ID No. <u>C11-SOVF009</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valve</u> Equipment Description <u>SCRAM DISCH VOL VENT & DRAIN (AZ - 174? - 119'</u>)

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Note:	Note:	

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Status: YX NUU Seismic Walkdown Checklist (SWC) <u>SWEL1-012</u>
Equipment ID No. <u>C11-SOVF110A</u> Equip. Class <sup>1</sup> <u>8 – Motor-Operated and Solenoid-Operated Valve</u>
Equipment Description SCRAM PILOT VLVS INSTR AIR SPLY LINE 3-WAY SOLENOID VLV
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Valcor Model V70900-43</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A</li> <li>Rigid in-line mounted valve welded to piping. Attached piping is supported by tube steel.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A No visible surface oxidation.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</li></ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

	Status: Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC) <u>SWEL1-012</u>	
Equipment ID No. <u>C11-SOVF110A</u> Equip. Class <u>8 – Motor-Operated a</u>	nd Solenoid-Operated Valve
Equipment Description SCRAM PILOT VLVS INSTR AIR SPLY LINE 3-WAY S	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

### Seismic Walkdown Checklist (SWC) <u>SWEL1-012</u>

Equipment ID No. <u>C11-SOVF110A</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valve</u>

Equipment Description SCRAM PILOT VLVS INSTR AIR SPLY LINE 3-WAY SOLENOID VLV

#### **Other Adverse Conditions**

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

<u>Comments</u> (Additional pages may be added as necessary)

ریر Evaluated by: <u>Matt Keeney</u>	att Kener	Date: <u>10-3-2012</u>	
John Dunkelberg	& RAfenhellerg	10-3-2012	

Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-012

 Equipment ID No.
 C11-SOVF110A
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valve

 Equipment Description
 SCRAM PILOT VLVS INSTR AIR SPLY LINE 3-WAY SOLENOID VLV

### Photographs





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Sciemic Welkdown Checklist (SWC) SWEL1 012
Seismic Walkdown Checklist (SWC) <u>SWEL1-013</u>
Equipment ID No. <u>C11-SOVF182</u> Equip. Class <sup>1</sup> 8 – Motor-Operated and Solenoid-Operated Valve
Equipment Description <u>SCRAM AIR HDR (AZ - 176? - 119')</u>
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Valcor Model V70900-45</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
2. Is the anchorage free of bent, broken, missing or loose hardware? Y⊠ N□ U□ N/A□
Valve bolted to bracket that is welded to tube steel. All hardware is intact and good condition.
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N□ U□ N/A□ oxidation?</li> </ol>
No visible corrosion.
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N U N/A N ∪ N/A N U N/A N N U N/A N N N N N N N N N N N N N N N N N N</li></ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-013</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>C11-SOVF182</u> Equip. Class <u>8 – Motor-Operated a</u>	nd Solenoid-Operated Valve
Equipment Description SCRAM AIR HDR (AZ - 176? - 119')	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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 Y⊠ N□ U□ of potentially adverse seismic interaction effects?

Seismic Walkdown Checklist (SWC)	SWEL1-013	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>C11-SOVF182</u>	Equip. Class <u>8 – Motor-Operated</u>	and Solenoid-Operated Valve
Equipment Description SCRAM AIR HDR	(AZ - 176? - 119')	
Other Adverse Conditions 11. Have you looked for and found no c adversely affect the safety functions	other seismic conditions that could s of the equipment?	YX N U

<u>Comments</u> (Additional pages may be added as necessary)

None

	And	
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Evaluated by: Jason Halsey

Date: <u>10-10-2012</u>

) B \_\_\_\_\_ David Bassi

<u>10-10-2012</u>



### Seismic Walkdown Checklist (SWC) <u>SWEL1-013</u>

 Equipment ID No.
 C11-SOVF182
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valve

 Equipment Description
 SCRAM AIR HDR (AZ - 176? - 119')

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### Photographs





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## Seismic Walkdown Checklist (SWC) SWEL1-013

Equipment ID No. <u>C11-SOVF182</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valve</u> Equipment Description <u>SCRAM AIR HDR (AZ - 176? - 119')</u>

Note:	Note:

Engineering Report No. RBS-CS-12-00001
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PAGE 1 OF 5
Status: Y N U
Equipment ID No. E12-EB001C Equip. Class <sup>1</sup> 21 – Tanks and Heat Exchangers
Equipment Description RHR HEAT EXCHGR C
Location: Bldg. <u>AB</u> Floor El. <u>70</u> Room, Area <u>6006</u>
Manufacturer, Model, Etc. (optional but recommended) <u>GE Model 21A9425</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>No bent, broken, loose or missing hardware visible.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A ∪</li> <li>N/A N/A ∪</li> <li>Some minor mild corrosion noted.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A</li> <li>No cracks observed.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

	Status: YX N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-015</u>	
Equipment ID No. E12-EB001C Equip. Class 21 – Tanks and Heat	Exchangers
Equipment Description RHR HEAT EXCHGR C	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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□

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Status: Y N U
Equipment ID No. E12-EB001C Equip. Class 21 – Tanks and Heat Exchangers
Equipment Description RHR HEAT EXCHGR C
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□

<u>Comments (Additional pages may be added as necessary)</u>

Evaluated by: John Dunkelberg	Date:	10-6-2012
Jose Cardona		<u>10-6-2012</u>



### Seismic Walkdown Checklist (SWC) SWEL1-015

Equipment ID No. E12-EB001C Equip. Class 21 – Tanks and Heat Exchangers

Equipment Description RHR HEAT EXCHGR C

#### Photographs

Note:





Note:

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# Status: Y N U

# Seismic Walkdown Checklist (SWC) <u>SWEL1-015</u>

Equipment ID No. E12-EB001C Equip. Class 21 – Tanks and Heat Exchangers

Equipment Description RHR HEAT EXCHGR C



Engineering Report No. RBS-CS-12-00001
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PAGE 1 OF 4
Status: YX NUU Seismic Walkdown Checklist (SWC) <u>SWEL1-016</u>
Equipment ID No. E12-MOVF004A Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valve</u>
Equipment Description RHR PUMP A SUPPR POOL SUCTION VLV
Location: Bldg. <u>AB</u> Floor El. <u>70</u> Room, Area <u>6008</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Velan Model B22-1054B-02TS</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>In-line valve bolts all good</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A ∪</li> <li>No corrosion noted</li> </ol>
4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A A N ∪ N/A N U N/A N In-line valve

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 4	
Seismic Walkdown Checklist (SWC) <u>SWEL1-016</u>	Status: Y⊠ N□ U□
Equipment ID No. E12-MOVF004A Equip. Class 8 – Motor-Operated a	nd Solenoid-Operated Valve
Equipment Description RHR PUMP A SUPPR POOL SUCTION VLV	_
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Y⊠ N□ U□
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□

	Status: Y🛛 N🗌 U
Seismic Walkdown Checklist (SWC) <u>SWEL1-016</u>	
Equipment ID No. E12-MOVF004A Equip. Class 8 – Motor-Operated a	nd Solenoid-Operated Valve
Equipment Description RHR PUMP A SUPPR POOL SUCTION VLV	
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: John Dunkelberg	Date:	<u>10/6/2012</u>
April Cardona		
Jose` Cardona		10/6/2012



## Seismic Walkdown Checklist (SWC) <u>SWEL1-016</u>

 Equipment ID No.
 E12-MOVF004A
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valve

 Equipment Description
 RHR PUMP A SUPPR POOL SUCTION VLV

### Photographs



Engineering Report No. RBS-CS-12-00001
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PAGE 1 OF 4
Status: Y N U
Equipment ID No. E12-MOVF024A Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valve</u>
Equipment Description RHR A TEST RETURN TO SUPP POOL
Location: Bldg. <u>AB</u> Floor El. <u>70</u> Room, Area <u>6112</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Enertech Model MAK</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>In-line, insulated, no missing hardware observed.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Operation?</li> <li>Operation fasteners free of corrosion</li> </ul>
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y□ N□ U□ N/A⊠ anchors?</li> <li>In-line valve.</li> </ol>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 4	
Seismic Walkdown Checklist (SWC) <u>SWEL1-017</u>	Status: Y⊠ N□ U□
Equipment ID No. E12-MOVF024A Equip. Class 8 – Motor-Operated a	nd Solenoid-Operated Valve
Equipment Description RHR A TEST RETURN TO SUPP POOL	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

Status: Y N U
Equipment ID No. E12-MOVF024A Equip. Class 8 – Motor-Operated and Solenoid-Operated Valve Equipment Description RHR A TEST RETURN TO SUPP POOL
Other Adverse Conditions         11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?
<u>Comments</u> (Additional pages may be added as necessary)
in-line insulated valve.

Evaluated by: John Dunkelberg	Date:	10/6/2012
Jose' Cardona		10/6/2012



## Seismic Walkdown Checklist (SWC) <u>SWEL1-017</u>

 Equipment ID No.
 E12-MOVF024A
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valve

 Equipment Description
 RHR A TEST RETURN TO SUPP POOL

#### Photographs


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PAGE 1 OF 4
Status: YX NU U
Equipment ID No. E12-MOVF048A Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valve</u>
Equipment Description RHR A HX SHELL SIDE BYPASS VALVE
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <u>6006</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Velan Model B19-1074C-02TS</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A</li> <li>In-line valve, insulated. No observed fasteners missing, bent, broken, loose fasteners.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A</li> <li>oxidation?</li> <li>Mild corrosion observed on valve fasteners.</li> </ul>
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y□ N□ U□ N/A⊠ anchors?</li> <li>In-line valve</li> </ol>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 4	
Seismic Walkdown Checklist (SWC) <u>SWEL1-018</u>	Status: Y⊠ N□ U□
Equipment ID No. E12-MOVF048A Equip. Class 8 – Motor-Operated a	nd Solenoid-Operated Valve
Equipment Description RHR A HX SHELL SIDE BYPASS VALVE	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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? See Comments	Y⊠ N□ U□

	Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-018</u>	
Equipment ID No. E12-MOVF048A Equip. Class 8 – Motor-Operated	and Solenoid-Operated Valve
Equipment Description RHR A HX SHELL SIDE BYPASS VALVE	
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	YX N U

<u>Comments</u> (Additional pages may be added as necessary)

Valve body below 78' elevation. Grating, actuator above. Inspection performed from 78' elevation.

Opening in grating is covered with 2 piece collar, welded in place above grating opening. Approximately 3" clear around valve, so there are no interaction concerns.

Evaluated by: John Dunkelberg

April Cardono

Jose` Cardona

Date: <u>10/6/2012</u>

10/6/2012



#### Seismic Walkdown Checklist (SWC) <u>SWEL1-018</u>

 Equipment ID No.
 E12-MOVF048A
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valve

 Equipment Description
 RHR A HX SHELL SIDE BYPASS VALVE



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PAGE 1 OF 4
Status: YX NUU Seismic Walkdown Checklist (SWC) <u>SWEL1-019</u>
Equipment ID No. E12-MOVF064A Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valve</u>
Equipment Description RHR PUMP A MIN FLOW TO SUPPR POOL
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <u>6006</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Limitorque Model SB-00S</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>In-line mounted valve, no damaged or missing hardware.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□</li> <li>oxidation?</li> <li>No significant corrosion, value body insulated.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A NA</li> <li>A N/A N N/A</li> <li>A N/A</li> <li>A</li></ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 4	
Seismic Walkdown Checklist (SWC) <u>SWEL1-019</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. E12-MOVF064A Equip. Class 8 – Motor-Operated a	nd Solenoid-Operated Valve
Equipment Description RHR PUMP A MIN FLOW TO SUPPR POOL	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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□

Status: YX N U	]
Seismic Walkdown Checklist (SWC) <u>SWEL1-019</u>	
Equipment ID No. <u>E12-MOVF064A</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valve</u>	
Equipment Description RHR PUMP A MIN FLOW TO SUPPR POOL	
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions that could Y⊠ N□ U□ adversely affect the safety functions of the equipment?	

<u>Comments (Additional pages may be added as necessary)</u>

None

Evaluated by: John Dunkelberg	Date:	<u>10-6-2012</u>
April Cardono		
Jose Cardona	-	10-6-2012

Status: YX N U

#### Seismic Walkdown Checklist (SWC) SWEL1-019

 Equipment ID No.
 E12-MOVF064A
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valve

 Equipment Description
 RHR PUMP A MIN FLOW TO SUPPR POOL





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PAGE 1 OF 5 Status: Y⊠ N⊡ U⊡ Seismic Walkdown Checklist (SWC) SWEL1-020
Equipment ID No. E12-MOV/E068A Equip Class 8 – Motor-Operated and Solenoid-Operated Valve
Equipment Description BHR HX A SUCE WTR BTN (OR) BHR A HX SERVICE WATER OUT ET
Leastion Ridg D Tunnel Floor EL 70 Boom Area 2001
Location: Bidg. <u>D Tunnel</u> Floor El. <u>70</u> Room, Area <u>2001</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Atwood Morrill Model 50472-C</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>All hardware present and in good condition.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>No corrosion visible.</li> </ol>
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A</li> <li>In-line mounted value.</li> </ol>

Engineering Report No. RBS-CS-12-00001 Rev. 000

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 5 Status: Y N U SWEL1-020 Seismic Walkdown Checklist (SWC) Equipment ID No. <u>E12-MOVF068A</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valve</u> Equipment Description RHR HX A SVCE WTR RTN (OR) RHR A HX SERVICE WATER OUTLET 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) 6. Based on the above anchorage evaluations, is the anchorage free of Y⊠ N□ U□ potentially adverse seismic conditions? Interaction Effects  $Y \boxtimes N \square U \square N/A \square$ 7. Are soft targets free from impact by nearby equipment or structures? 8. Are overhead equipment, distribution systems, ceiling tiles and lighting,  $Y \boxtimes N \square U \square N/A \square$ and masonry block walls not likely to collapse onto the equipment?  $Y \boxtimes N \square U \square N/A \square$ 9. Do attached lines have adequate flexibility to avoid damage?

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

Seismic Walkdown Checklist (SWC) <u>SWEL1-020</u>	Status: Y⊠ N∐ U∐
Equipment ID No. <u>E12-MOVF068A</u> Equip. Class <u>8 – Motor-Operated</u>	and Solenoid-Operated Valve
Equipment Description RHR HX A SVCE WTR RTN (OR) RHR A HX SERV	ICE WATER OUTLET
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□

<u>Comments</u> (Additional pages may be added as necessary)

None

Andrey		
Evaluated by: Jason Halsey	Date:	10-10-2012
David Bassi		<u>10-10-2012</u>

Status: YX N U

# Seismic Walkdown Checklist (SWC) <u>SWEL1-020</u>

 Equipment ID No.
 E12-MOVF068A
 Equip. Class 8 – Motor-Operated and Solenoid-Operated Valve

 Equipment Description
 RHR HX A SVCE WTR RTN (OR)
 RHR A HX SERVICE WATER OUTLET



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Status: YX N U

#### Seismic Walkdown Checklist (SWC) <u>SWEL1-020</u>

 Equipment ID No.
 E12-MOVF068A
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valve

 Equipment Description
 RHR HX A SVCE WTR RTN (OR)
 RHR A HX SERVICE WATER OUTLET





Note:

Note:

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PAGE 1 OF 5 Status: Y N U
Equipment ID No. <u>E12-PC002A</u> Equip. Class <u>6 – Vertical Pump</u>
Equipment Description RESIDUAL HEAT REMOVAL PMP 2A
Location: Bldg. <u>AB</u> Floor El. <u>70</u> Room, Area <u>6006</u>
Manufacturer, Model, Etc. (optional but recommended) Byron Jackson Model 28DX18.5CKXL-3STG
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N□ U□ N/A□</li> <li>Anchorage is free of bent, broken, missing or loose hardware. Could not observe several anchors below piping.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Light corrosion observed.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A U N/A No cracks observed.</li> </ul>

Engineering Report No. RBS-CS-12-00001 Rev. 000

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
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PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-021</u>	Status: Y⊠ N_ U_
Equipment ID No. <u>E12-PC002A</u> Equip. Class <u>6 – Vertical Pump</u>	
Equipment Description RESIDUAL HEAT REMOVAL PMP 2A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) EC-066G</li> </ol>	Y⊠ N□ U□ N/A□
EC-066E	
<ul> <li>6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> </ul>	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?	YX NL UL N/AL
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□

	Status: YX N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-021</u>	
Equipment ID No. E12-PC002A Equip. Class 6 – Vertical Pump	
Equipment Description RESIDUAL HEAT REMOVAL PMP 2A	
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□

<u>Comments</u> (Additional pages may be added as necessary)

Observations made from 78' elevation down to 70' floor. 70' elevation is a contaminated zone not surveyed and no step off pad.

Evaluated by: John Dunkelberg Date: 10-6-2012 Jose Cardona 10-6-2012

## Status: Y N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-021</u>

Equipment ID No. E12-PC002A Equip. Class 6 – Vertical Pump

Equipment Description RESIDUAL HEAT REMOVAL PMP 2A



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## Status: YX N U

### Seismic Walkdown Checklist (SWC) <u>SWEL1-021</u>

Equipment ID No. E12-PC002A Equip. Class 6 – Vertical Pump

Equipment Description RESIDUAL HEAT REMOVAL PMP 2A



Engineering Report No. RBS-CS-12-00001
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Page 1 of 4
Status: Y N U
Equipment ID No. E21-MOVF011 Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valve</u>
Equipment Description LPCS PUMP MIN FLOW TO SUPPR POOL
Location: Bldg. <u>AB</u> Floor El. <u>095</u> Room, Area <u>6112</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Velan Model B12-1054B-02TS</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>In-line valve, free of ben, broken, loose and missing fasteners.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A ∪</li> <li>N/A Fasteners/valve painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A N/A</li> <li>In-line valve</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 4	
Seismic Walkdown Checklist (SWC) <u>SWEL1-022</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>E21-MOVF011</u> Equip. Class <u>8 – Motor-Operated a</u>	nd Solenoid-Operated Valve
Equipment Description LPCS PUMP MIN FLOW TO SUPPR POOL	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

Sciemic Welkdown Checklict (SWC) SWEL1 022	Status: Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC) <u>SWEL1-022</u>	
Equipment ID No. E21-MOVF011 Equip. Class 8 – Motor-Operated a	and Solenoid-Operated Valve
Equipment Description <u>LPCS PUMP MIN FLOW TO SUPPR POOL</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)	
Valve elevation is 95', west crescent area.	
Evaluated by: John Dunkelberg	Date: <u>10/6/2012</u>
1	
April Cardons	
Jose' Cardona	10/6/2012



#### Seismic Walkdown Checklist (SWC) SWEL1-022

 Equipment ID No.
 E21-MOVF011
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valve

 Equipment Description
 LPCS PUMP MIN FLOW TO SUPPR POOL



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Seismic Walkdown Checklist (SWC) SWEL1-023	Status: Y⊠ N∐ U∐ ₃	
Equipment ID No. <u>E22-EGS001</u> Equip. Class <u>1 17 – Er</u>	igine Generator	
Equipment Description HPCS DIESEL GENERATOR DIESEL EN	1G	
Location: Bldg. DG Floor El. 098 Room, Area	1104	
Manufacturer, Model, Etc. (optional but recommended) <u>Electro I</u>	Motive GM Model 20-645-E4	
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is of the 50% of SWEL items requiring such verification)?</li> </ol>	the item one Y⊠ N⊡	
<ol> <li>Is the anchorage free of bent, broken, missing or loose hard 30 Anchor bolts with nuts mounting equipment skid to conc bolts/nuts anchoring diesel engine to skid.</li> </ol>	dware? Y⊠ N⊡ U⊡ N/A⊡ crete, 8	
<ol> <li>Is the anchorage free of corrosion that is more than mild su oxidation?</li> <li>Painted, no visible corrosion</li> </ol>	ırface Y⊠ N⊡ U⊡ N/A⊡	
4. Is the anchorage free of visible cracks in the concrete near anchors?	the YX N UNA	
Concrete pad is heavily painted no visible cracks near anch	norage.	

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Status: YX N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-023</u>	
Equipment ID No. E22-EGS001 Equip. Class 17 – Engine Generato	r
Equipment Description HPCS DIESEL GENERATOR DIESEL ENG	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>EC-29E</li> <li>Verified in accordance with above dwg</li> </ul>	Y⊠ N∏ U∏ N/A∏
<ul> <li>6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> </ul>	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□

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PAGE 3 OF 5	
Seismic Walkdown Checklist (SWC) SWEL1-023	Status: Y⊠ N∏ U∏
Equipment ID No. E22-EGS001 Equip. Class 17 – Engine Ge	enerator
Equipment Description HPCS DIESEL GENERATOR DIESEL ENG	
Other Adverse Conditions	

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

<u>Comments</u> (Additional pages may be added as necessary)

None

Anday		
Evaluated by: <u>Jason Halsey</u>	Date:	10/5/2012
		10/5/0010
Brandon Nissing		10/5/2012

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## Seismic Walkdown Checklist (SWC) SWEL1-023

Equipment ID No. E22-EGS001 Equip. Class 17 – Engine Generator

Equipment Description HPCS DIESEL GENERATOR DIESEL ENG

#### Photographs





Note:

Note:

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Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-023

Equipment ID No. E22-EGS001 Equip. Class 17 – Engine Generator

Equipment Description HPCS DIESEL GENERATOR DIESEL ENG





NI	otor	
N	ole.	

Note:

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Page 1 of 4 Seismic Walkdown Checklist (SWC) SWEL1-024	Status: Y⊠ N⊡ U⊡		
Equipment ID No. <u>E22-LTN054G</u> Equip. Class <u>1_20 – Instrument and C</u>	Control Panel		
Equipment Description CONDS STOR TK 1CNS-TK1FG-5-71' "F" TUNNEL			
Location: Bldg. <u>F Tunnel</u> Floor El. <u>67</u> Room, Area <u>5000</u>			
Manufacturer, Model, Etc. (optional but recommended) Rosemount Model 11	52DP3E22T0280PB		
Instructions for Completing Checklist			
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.			
<ul> <li>Anchorage</li> <li>1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ul>	Y⊠ N□		
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware? No missing bolts or hardware. Instrument is rack mounted to wall with (4) 1" concrete anchors</li> </ol>	Y⊠ N∏ U∏ N/A∏		
<ol> <li>Is the anchorage free of corrosion that is more than mild surface oxidation?</li> <li>Painted support</li> </ol>	Y⊠ N□ U□ N/A□		

4. Is the anchorage free of visible cracks in the concrete near the anchors?
 No cracks observed

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-024</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. E22-LTN054G Equip. Class 20 – Instrument and C	Control Panel
Equipment Description CONDS STOR TK 1CNS-TK1FG-5-71' "F" TUNNEL	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) ICRN-308A-10C; BZ-314DN; BZ-314F</li> <li>Verified in accordance with above dwg</li> </ol>	Y⊠ N□ U□ N/A□
<ol> <li>Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> </ol>	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□

Seismic Walkdown Checklist (SWC)	SWEL1-024	Status: Y⊠ N∐ U∐
Equipment ID No. <u>E22-LTN054G</u> E	Equip. Class <u>20 – Instrument and</u>	Control Panel
Equipment Description CONDS STOR TK 1CNS-TK1FG-5-71' "F" TUNNEL		
Other Adverse Conditions 11. Have you looked for and found no oth adversely affect the safety functions o	er seismic conditions that could f the equipment?	Y⊠ N∏ U∏

Comments (Additional pages may be added as necessary)

None

Evaluated by: John Dunkelberg	Date:	<u>10/5/2012</u>
Jose' Cardona		<u>10/5/2012</u>



## Seismic Walkdown Checklist (SWC) SWEL1-024

Equipment ID No. E22-LTN054G Equip. Class 20 – Instrument and Control Panel

Equipment Description CONDS STOR TK 1CNS-TK1FG-5-71' "F" TUNNEL



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Status: Y N O		
Equipment ID No. E22-MOVF015 Equip. Class <sup>1</sup> 8 – Motor-Operated & Solenoid-Operated Valve		
Equipment Description SUPPRESSION POOL PUMP SUCTION VALVE		
Location: Bldg. <u>AB</u> Floor El. <u>70</u> Room, Area <u>6001</u>		
Manufacturer, Model, Etc. (optional but recommended) Anchor Darling Model 2994-3		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>		
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A N</li> <li>No missing or damaged hardware in-line mounted valve</li> </ol>		
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>No corrosion visible</li> </ol>		
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A</li> <li>In-line mounted value</li> </ul>		

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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1,100	_	<u> </u>	-

	Status: YX N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-025</u>	
Equipment ID No. E22-MOVF015 Equip. Class 8 – Motor-Operated &	Solenoid-Operated Valve
Equipment Description SUPPRESSION POOL PUMP SUCTION VALVE	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

Seismic Walkdown Checklist (SWC) SWEL1-025	Status: Y⊠ N∏ U∏	
Equipment ID No. E22-MOVF015 Equip. Class 8 – Motor-Operated	& Solenoid-Operated Valve	
Equipment Description SUPPRESSION POOL PUMP SUCTION VALVE		
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□	

<u>Comments (Additional pages may be added as necessary)</u>

None

Adap		
Evaluated by: <u>J. Halsey</u>	Date:	10/10/12
D. Bassi		10/10/12

Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-025

 Equipment ID No.
 E22-MOVF015
 Equip. Class 8 – Motor-Operated & Solenoid-Operated Valve

 Equipment Description
 SUPPRESSION POOL PUMP SUCTION VALVE



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Status: YX N U

#### Seismic Walkdown Checklist (SWC) <u>SWEL1-025</u>

Equipment ID No. <u>E22-MOVF015</u> Equip. Class <u>8 – Motor-Operated & Solenoid-Operated Valve</u>

Equipment Description SUPPRESSION POOL PUMP SUCTION VALVE

Note:	Note:
Attachment C Page 95 of 615 PAGE 1 OF 5 Status: YX N U Seismic Walkdown Checklist (SWC) SWEL1-027 Equipment ID No. E22-PNLS001 Equip. Class<sup>1</sup> 2 – Low Voltage Switchgear & Breaker Panels Equipment Description 125V DC PANEL DIV III Location: Bldg. DG Floor El. 098 Room, Area 1104 Manufacturer, Model, Etc. (optional but recommended) Morrison-Knudsen (GE) Model 22711AU Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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  $Y \square N \boxtimes$ of the 50% of SWEL items requiring such verification)? 2. Is the anchorage free of bent, broken, missing or loose hardware? No missing or damaged anchor bolts/nuts. 3. Is the anchorage free of corrosion that is more than mild surface  $Y \boxtimes N \square U \square N/A \square$ oxidation? No visible corrosion. 4. Is the anchorage free of visible cracks in the concrete near the anchors? No visible cracks in concrete.

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<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Soismic Walkdown Chacklist (SWC) SWEL 1-027	Status: Y⊠ N⊡ U⊡
Seisinic Wardown Checklist (SWC) <u>SWELT-021</u>	
Equipment ID No. <u>E22-PNLS001</u> Equip. Class <u>2 – Low Voltage Switc</u>	hgear & Breaker Panels
Equipment Description 125V DC PANEL DIV III	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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∏
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□

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Seismic Walkdown Checklist (SWC)	SWEL1-027	Status: Y⊠ N∏ U∏
Equipment ID No. <u>E22-PNLS001</u>	Equip. Class <u>2 – Low Voltage S</u>	witchgear & Breaker Panels
Equipment Description 125V DC PANEL I	DIV III	
Other Adverse Conditions 11. Have you looked for and found no c adversely affect the safety functions	other seismic conditions that could s of the equipment?	YX NI UI

Comments (Additional pages may be added as necessary)

None

Andag		
Evaluated by: <u>Jason Halsey</u>	_ Date:	<u>10-5-2012</u>
Brandon Nissing		10-5-2012

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## Seismic Walkdown Checklist (SWC) SWEL1-027

Equipment ID No. E22-PNLS001 Equip. Class 2 – Low Voltage Switchgear & Breaker Panels

Equipment Description <u>125V DC PANEL DIV III</u>



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## Status: YX N U

# Seismic Walkdown Checklist (SWC) SWEL1-027

Equipment ID No. E22-PNLS001 Equip. Class 2 – Low Voltage Switchgear & Breaker Panels

Equipment Description <u>125V DC PANEL DIV III</u>



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Status. F N O
Equipment ID No. E22-S001BAT Equip. Class 15 – Battery Racks
Equipment Description 125V DC DIV III BATTERY
Location: Bldg. <u>CB</u> Floor El. <u>115</u> Room, Area <u>1207</u>
Manufacturer, Model, Etc. (optional but recommended) <u>GNB Batteries Model NCN-11</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ Anchorage was fully intact.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Anchorage was painted, no visible corrosion.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A anchors?</li> <li>No visible cracks in concrete.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Page 2 of 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-028</u>	Status: Y N U
Equipment ID No. E22-S001BAT Equip. Class 15 – Battery Racks	
Equipment Description 125V DC DIV III BATTERY	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y⊠ N□ U□ N/A□
The right side rack (as viewed from entrance) was bolted to the floor and the left side rack was welded to floor plates IAW: 0244.527-809-002, 0244.527-809-003, 0244.521-809-005	
<ol> <li>Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> </ol>	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∏

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	Status: Y⊠ N∏ U∏
Seismic Walkdown Checklist (SWC) <u>SWEL1-028</u>	
Equipment ID No. E22-S001BAT Equip. Class 15 – Battery Racks	3
Equipment Description 125V DC DIV III BATTERY	
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□

<u>Comments</u> (Additional pages may be added as necessary)

None

Andrey		
Evaluated by: <u>Jason Halsey</u>	_ Date: 1	0-5-2012
Brandon Nissing	<u> </u>	0-5-2012

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### Seismic Walkdown Checklist (SWC) SWEL1-028

Equipment ID No. E22-S001BAT Equip. Class 15 – Battery Racks

Equipment Description <u>125V DC DIV III BATTERY</u>

#### Photographs



**Note:** Left side battery rack



**Note:** Right side battery rack

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## Status: Y 🛛 N 🗌 U

### Seismic Walkdown Checklist (SWC) SWEL1-028

Equipment ID No. E22-S001BAT Equip. Class 15 – Battery Racks

Equipment Description <u>125V DC DIV III BATTERY</u>



**Note:** Rack mount bolted to the floor



**Note:** Rack mount welded to floor plates

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Page 1 of 5 Status: Y⊠ N□ U□
Seismic Walkdown Checklist (SWC) SWEL1-029
Equipment ID No. E22-S003 Equip. Class <sup>1</sup> 4 – Transformer
Equipment Description HPCS TRANSFORMER FEEDER
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area <u>NA</u>
Manufacturer, Model, Etc. (optional but recommended) <u>GE (Elma Power Transformers) Model #317</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Component is welded to the floor plate.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A All surfaces painted, no visible corrosion.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A U N/A N∩ U N/A N∩ U N/A</li> <li>No cracks visible.</li> </ul>

Engineering Report No. RBS-CS-12-00001

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
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Seismic Walkdown Checklist (SWC) <u>SWEL1-029</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. E22-S003 Equip. Class 4 – Transformer	
Equipment Description HPCS TRANSFORMER FEEDER	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) EE-38C</li> </ol>	Y⊠ N□ U□ N/A□
<ul><li>Verified IAW above dwg</li><li>6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li></ul>	Y⊠ N□ U□
Interaction Effects 7. Are soft targets free from impact by nearby equipment or structures?	
<ol> <li>Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?</li> </ol>	
<ol> <li>9. Do attached lines have adequate flexibility to avoid damage?</li> </ol>	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∏

Engi	neering Report No. RBS-CS-12-00001 Rev. 000
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	Status: Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC) SWEL1-029	
Equipment ID No. E22-S003 Equip. Class 4 – Transformer	
Equipment Description HPCS TRANSFORMER FEEDER	
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)	
None	
And	
Evaluated by: Jason Halsey	Date: <u>10-5-2012</u>

		1.
Brandon Nissing	-	C

10-5-2012

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## Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-029

Equipment ID No. E22-S003 Equip. Class 4 – Transformer

Equipment Description HPCS TRANSFORMER FEEDER



Status: Y N U

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Seismic Walkdown Checklist (SWC) SWEL1-029

Equipment ID No. E22-S003 Equip. Class 4 – Transformer

Equipment Description HPCS TRANSFORMER FEEDER



Engineering Report No. RBS-CS-12-00001
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PAGE 1 OF 5
Status: YX N_ U_ Seismic Walkdown Checklist (SWC) <u>SWEL1-030</u>
Equipment ID No. E22-S004 Equip. Class <u>3 – Medium Voltage, Metal-clad Switchgear</u>
Equipment Description DIV III 4160V AC SWITCHGEAR
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area <u>NA</u>
Manufacturer, Model, Etc. (optional but recommended) <u>GE Model M26</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>No broken or missing hardware.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A All surfaces either painted or galvanized.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No visible cracking in concrete.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 5	
	Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-030</u>	
Equipment ID No. <u>E22-S004</u> Equip. Class <u>3 – Medium Voltage</u> ,	Metal-clad Switchgear
Equipment Description DIV III 4160V AC SWITCHGEAR	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

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Status:	Y⊠	N	U

#### Seismic Walkdown Checklist (SWC) <u>SWEL1-030</u>

Equipment ID No. E22-S004 Equip. Class 3 – Medium Voltage, Metal-clad Switchgear

Equipment Description DIV III 4160V AC SWITCHGEAR

#### **Other Adverse Conditions**

 Have you looked for and found no other seismic conditions that could Y N□ U□ adversely affect the safety functions of the equipment? See comments

<u>Comments</u> (Additional pages may be added as necessary)

Backside of switchgear cabinet (3<sup>rd</sup> access panel away from entry door) is bowed out at the bottom 1/3<sup>rd</sup> of the panel. Judged to be cosmetic only, not a seismic issue

Andap		
Evaluated by: Jason Halsey	Date:	10-5-2012
Brandon Nissing		10-5-2012
Brandon Nissing		10-5-2012

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#### Seismic Walkdown Checklist (SWC) <u>SWEL1-030</u>

Equipment ID No. E22-S004 Equip. Class 3 – Medium Voltage, Metal-clad Switchgear

Equipment Description DIV III 4160V AC SWITCHGEAR



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### Seismic Walkdown Checklist (SWC) SWEL1-030

Equipment ID No. E22-S004 Equip. Class 3 – Medium Voltage, Metal-clad Switchgear

Equipment Description DIV III 4160V AC SWITCHGEAR



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PAGE 1 OF 5 Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-031</u>
Equipment ID No. <u>E22-SKDS001-TK1A</u> Equip. Class <sup>1</sup> 21 – Tanks and Heat Exchangers
Equipment Description DIESEL 1C AIR START RECEIVER TNK
Location: Bldg. <u>DG</u> Floor El. <u>098</u> Room, Area <u>NA</u>
Manufacturer, Model, Etc. (optional but recommended) <u>GE (Stewart &amp; Stevenson) Model 25131</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ul> <li>2. Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A</li> <li>Y N U N/A</li> <li>Y N U N/A</li> </ul>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Painted surfaces, no visible corrosion.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A N/A N/A</li> <li>Tank is mounted to steel platform.</li> </ul>

Engineering Report No. RBS-CS-12-00001 Rev. 000

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Statuc: VM NM UM
Seismic Walkdown Checklist (SWC) <u>SWEL1-031</u>	
Equipment ID No. E22-SKDS001-TK1A Equip. Class 21 – Tanks and Heat	Exchangers
Equipment Description DIESEL 1C AIR START RECEIVER TNK	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) 0221.415-000-141</li> </ol>	Y⊠ N□ U□ N/A□
Verified in accordance with above dwg	
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□

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PAGE 3 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-031</u>	Status: Y⊠ N∏ U∏
Equipment ID No. E22-SKDS001-TK1A Equip. Class 21 – Tanks and Hea	t Exchangers
Equipment Description DIESEL 1C AIR START RECEIVER TNK	
<u>Other Adverse Conditions</u> 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)

None

And		
Evaluated by: Jason Halsey	Date:	10/5/2012
Brandon Nissing		<u>10/5/2012</u>

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## Status: YX N U

### Seismic Walkdown Checklist (SWC) <u>SWEL1-031</u>

Equipment ID No. <u>E22-SKDS001-TK1A</u> Equip. Class <u>21 – Tanks and Heat Exchangers</u>

Equipment Description DIESEL 1C AIR START RECEIVER TNK



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Status: YX N U

### Seismic Walkdown Checklist (SWC) <u>SWEL1-031</u>

Equipment ID No. E22-SKDS001-TK1A Equip. Class 21 – Tanks and Heat Exchangers

Equipment Description DIESEL 1C AIR START RECEIVER TNK



Engineering Report No. RBS-CS-12-00001 Rev. 000
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PAGE 1 OF 7       Status: Y⊠ N□ U□         Seismic Walkdown Checklist (SWC)SWEL1-032       SWEL1-032         Equipment ID NoE51-EC002 Equip. Class¹_21 – Tanks and Heat Exchangers       Equipment Description RX CORE ISOL CLG TURB LUBE OIL CLR         Location: Bldg. AB Floor El. 070 Room, Area _6005       Manufacturer, Model, Etc. (optional but recommended) Terry Turbine (Whitlock) Model 1-R-4
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y ∑ N U N/A Anchors are in good condition.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y∑ N□ U□ N/A□ oxidation?</li> <li>Only minor rust.</li> </ol>
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No visible cracks</li> </ol>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Status <sup>.</sup> Y⊠ N⊟ U⊟	
Seismic Walkdown Checklist (SWC) <u>SWEL1-032</u>		
Equipment ID No. <u>E51-EC002</u> Equip. Class <u>21 – Tanks and Heat</u>	Exchangers	
Equipment Description RX CORE ISOL CLG TURB LUBE OIL CLR		
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>2221 452 000 001K, pdf page 281</li> </ol>	Y⊠ N□ U□ N/A□	
5221.452-000-00TK, put page 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,	Y⊠ N□ U□ N/A□	
9. Do attached lines have adequate flexibility to avoid damage?	Y N N U N/A	
10. Based on the above seismic interaction evaluations, is equipment free		
of potentially adverse seismic interaction effects?		

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PAGE 3 OF 7	
Status: Y⊠ N[	_ U_
Seismic Walkdown Checklist (SWC) <u>SWEL1-032</u>	
Equipment ID No. E51-EC002 Equip. Class 21 – Tanks and Heat Exchangers	
Equipment Description RX CORE ISOL CLG TURB LUBE OIL CLR	
Other Adverse Conditions         11. Have you looked for and found no other seismic conditions that could       Y IN U	
adversely affect the safety functions of the equipment?	

Comments (Additional pages may be added as necessary)

None

Evaluated by: Matt Keeney	Date: <u>10/8/2012</u>
$\sim$	
Halag	
Jason Halsey	10/8/2012

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### Seismic Walkdown Checklist (SWC) <u>SWEL1-032</u>

Equipment ID No. <u>E51-EC002</u> Equip. Class <u>21 – Tanks and Heat Exchangers</u>

Equipment Description RX CORE ISOL CLG TURB LUBE OIL CLR



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### Seismic Walkdown Checklist (SWC) SWEL1-032

Equipment ID No. <u>E51-EC002</u> Equip. Class <u>21 – Tanks and Heat Exchangers</u>

Equipment Description RX CORE ISOL CLG TURB LUBE OIL CLR





Note:

Note:

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### Seismic Walkdown Checklist (SWC) <u>SWEL1-032</u>

Equipment ID No. <u>E51-EC002</u> Equip. Class <u>21 – Tanks and Heat Exchangers</u>

Equipment Description RX CORE ISOL CLG TURB LUBE OIL CLR





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Note:

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## Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-032</u>

Equipment ID No. E51-EC002 Equip. Class 21 – Tanks and Heat Exchangers

Equipment Description RX CORE ISOL CLG TURB LUBE OIL CLR

<image/>	
Note:	Note:

Engineering Report No. RBS-CS-12-00001 Rev. 000		
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Status: Y N O		
Equipment ID No. E51-MOVF045 Equip. Class <u>8 – Motor-Operated &amp; Solenoid-operated Valve</u>		
Equipment Description RX CORE ISOL CLG TURB STM SPLY ISOL VLV		
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <u>6005</u>		
Manufacturer, Model, Etc. (optional but recommended) Velan Model B12-7074P-02TS		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>		
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A</li> <li>All visible anchorage is present and in good condition. Valve body to pipe connection was not visible due to installed insulation.</li> </ol>		
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A No corrosion observed on exposed anchorage.</li> </ul>		
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A</li> <li>In-line mounted value</li> </ul>		

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC) <u>SWEL1-034</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>E51-MOVF045</u> Equip. Class <u>8 – Motor-Operated 8</u>	Solenoid-operated Valve
Equipment Description RX CORE ISOL CLG TURB STM SPLY ISOL VLV	_
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

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PAGE 3 OF 5
Status: Y N U
Equipment ID No. <u>E51-MOVF045</u> Equip. Class <u>8 – Motor-Operated &amp; Solenoid-operated Valve</u>
Equipment Description RX CORE ISOL CLG TURB STM SPLY ISOL VLV
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□

<u>Comments (Additional pages may be added as necessary)</u>

None

Evaluated by: David Bassi	Date: <u>10-10-2012</u>
$\mathcal{A}$	
Jason Halsey	10-10-2012

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### Seismic Walkdown Checklist (SWC) SWEL1-034

 Equipment ID No.
 E51-MOVF045
 Equip. Class\_8 – Motor-Operated & Solenoid-operated Valve

 Equipment Description
 RX CORE ISOL CLG TURB STM SPLY ISOL VLV


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Status: YX N U

### Seismic Walkdown Checklist (SWC) <u>SWEL1-034</u>

 Equipment ID No.
 E51-MOVF045
 Equip. Class 8 – Motor-Operated & Solenoid-operated Valve

 Equipment Description
 RX CORE ISOL CLG TURB STM SPLY ISOL VLV





Note:

Engineering Report No. RBS-CS-12-00001 Rev. 000
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PAGE 1 OF 7 Seismic Walkdown Checklist (SWC) <u>SWEL1-035</u> Equipment ID No. E51-PC001 Equip. Class <sup>1</sup> 5 – Horizontal Pump
Equipment Description RX CORE ISOL CLG PMP
Location: Bldg. AB Floor El. 070 Room, Area 6005
Manufacturer, Model, Etc. (optional but recommended) Sulzer Bingham Model 6X6X10-1/2, 4STG Type CP
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>The anchors are in good condition.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A O</li> <li>N/A O</li> <li>Only mild rust.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A U N/A N∩ U N/A N∩ U N/A</li> <li>No cracks visible.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-035</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>E51-PC001</u> Equip. Class <u>5– Horizontal Pump</u>	
Equipment Description RX CORE ISOL CLG PMP	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>EC-66A, EC-66E, EC-66G</li> <li>Anchorage matches what is seen on the drawings</li> </ol>	Y⊠ N∏ U∏ N/A∏
<ol> <li>Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> </ol>	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□

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PAGE 3 OF 7	
Seismic Walkdown Checklist (SWC) <u>SWEL1-035</u>	Status: Y⊠ N∐ U∐
Equipment ID No. <u>E51-PC001</u> Equip. Class <u>5 – Horizontal Pum</u>	p
Equipment Description RX CORE ISOL CLG PMP	
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□

<u>Comments</u> (Additional pages may be added as necessary)

None

Evaluated by: Matt Keeney	Date: 10/8/2012
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Halag	
Jason Halsey	10/8/2012

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## Status: Y N U

### Seismic Walkdown Checklist (SWC) <u>SWEL1-035</u>

Equipment ID No. E51-PC001 Equip. Class 5- Horizontal Pump

Equipment Description RX CORE ISOL CLG PMP



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## Seismic Walkdown Checklist (SWC) <u>SWEL1-035</u>

Equipment ID No. E51-PC001 Equip. Class 5– Horizontal Pump

Equipment Description RX CORE ISOL CLG PMP



Note:			



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Status: Y N U

### Seismic Walkdown Checklist (SWC) SWEL1-035

Equipment ID No. E51-PC001 Equip. Class 5– Horizontal Pump

Equipment Description RX CORE ISOL CLG PMP



Note:			



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## Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-035</u>

Equipment ID No. E51-PC001 Equip. Class 5

Equipment Description RX CORE ISOL CLG PMP





Note:

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PAGE 1 OF 6 Status: Y N U Seismic Walkdown Checklist (SWC) SWEL1-037 Equipment ID No. E51-TC002 Equip Class: 0-Other
Equipment Description RX CORE ISOL CLG TURB
Location: Bldg. AB Floor El. 070 Room. Area 6005
Manufacturer, Model, Etc. (optional but recommended) <u>Terry Turbine Model GS-2</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Anchors are in good condition</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Only minor rust</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N_N/A N_N V N_N/A</li> <li>No cracks</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Status: VM ND UD
Seismic Walkdown Checklist (SWC) <u>SWEL1-037</u>	
Equipment ID No. <u>E51-TC002</u> Equip. Class <u>0-Other</u>	
Equipment Description RX CORE ISOL CLG TURB	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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∏
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□

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Seismic Walkdown Checklist (SWC) <u>SWEL1-037</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>E51-TC002</u> Equip. Class <u>0-Other</u>	
Equipment Description RX CORE ISOL CLG TURB	
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	YX N U

Engineering Report No. RBS-CS-12-00001

<u>Comments (Additional pages may be added as necessary)</u>

None

Evaluated by: M. Keeney	Date: <u>10/8/12</u>
Adam	
J. Halsey	10/8/12

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## Status: Y N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-037</u>

Equipment ID No. E51-TC002 Equip. Class 0-Other

Equipment Description RX CORE ISOL CLG TURB





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## Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-037</u>

Equipment ID No. E51-TC002 Equip. Class 0-Other

Equipment Description RX CORE ISOL CLG TURB





Note:

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## Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-037</u>

Equipment ID No. E51-TC002 Equip. Class 0-Other

Equipment Description RX CORE ISOL CLG TURB





Note:		

Engineerir	ng Report No. RBS-CS-12-00001 Rev 000
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Seismic Walkdown Checklist (SWC) <u>SWEL1-038</u>	
Equipment ID No. EGA-TK1C Equip. Class <u>21-Tanks &amp; Heat Excha</u>	ngers
Equipment Description SDG AIR START SYS AIR RECEIVER TK 1C	
Location: Bldg. <u>DG</u> Floor El. <u>98</u> Room, Area <u>1100</u>	
Manufacturer, Model, Etc. (optional but recommended) <u>Thermxchanger Model D</u>	1529
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of an SWEL. The space below each of the following questions may be used to record the findings. Additional space is provided at the end of this checklist for documenting or	i item of equipment on the eresults of judgments and ther comments.
Anchorage	
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y of the 50% of SWEL items requiring such verification)?</li> </ol>	′⊠ N□
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>All 12 bolts are present and engaged.</li> </ol>	∕⊠ N∏ U∏ N/A∏
<ul><li>3. Is the anchorage free of corrosion that is more than mild surface Y oxidation?</li><li>Bolts are painted</li></ul>	″⊠ N□ U□ N/A□
4. Is the anchorage free of visible cracks in the concrete near the Y anchors?	∕⊠ N∏ U∏ N/A∏
No cracks were evident in the concrete	

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) SWEL 1-038	Status: Y⊠ N⊡ U⊡
Seisinic Walkdown Checklist (SWC) <u>SWLL1-050</u>	
Equipment ID No. <u>EGA-TK1C</u> Equip. Class <u>21-Tanks &amp; Heat Exc</u>	hangers
Equipment Description SDG AIR START SYS AIR RECEIVER TK 1C	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>Dwg Ref. 0244.700-041-024</li> <li>The drawing indicated that 12 ¾" bolts surrounded the tank which was</li> </ul>	Y⊠ N□ U□ N/A□
<ul><li>verified in the field</li><li>6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li></ul>	Y⊠ N□ U□
Interaction Effects 7. Are soft targets free from impact by nearby equipment or structures? No soft targets	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? Nothing over-head	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□

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Seismic Walkdown Checklist (SWC) <u>SWEL1-038</u>	Status: Y⊠ N⊡ U⊡	
Equipment ID No. <u>EGA-TK1C</u> Equip. Class <u>21-Tanks &amp; Heat Exch</u>	angers	
Equipment Description SDG AIR START SYS AIR RECEIVER TK 1C		
<u>Other Adverse Conditions</u> 11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	Y⊠ N□ U□	

<u>Comments</u> (Additional pages may be added as necessary)

None

Evaluated by: D. Bassi	Date: <u>10-2-12</u>
J. Dunkelberg	10-2-12

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## Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-038

Equipment ID No. EGA-TK1C Equip. Class 21-Tanks & Heat Exchangers

Equipment Description SDG AIR START SYS AIR RECEIVER TK 1C



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Status: Y N U Seismic Walkdown Checklist (SWC) SWEL1-039		
Equipment ID No. EGA-TK2A Equip. Class <sup>1</sup> 21-Tanks & Heat Exchangers		
Equipment Description SDG AIR START SYS AIR RECEIVER TK 2A		
Location: Bldg. DG Floor El. 098 Room, Area 1100		
Manufacturer, Model, Etc. (optional but recommended) <u>Thermxchanger Model D1529</u>		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>		
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>All 12 bolts present and engaged</li> </ol>		
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Bolts are painted</li> </ul>		
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A</li> <li>NA cracks are evident in the concrete</li> </ul>		

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-039</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. EGA-TK2A Equip. Class 21-Tanks & Heat Excl	hangers
Equipment Description SDG AIR START SYS AIR RECEIVER TK 2A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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	
<ol> <li>Are soft targets free from impact by nearby equipment or structures? Tank is not a soft target</li> </ol>	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? Overhead light is secured	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□

	Er	igineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 151 of 615
PAGE 3 OF 5		
Seismic Walkdown Checklist (SWC) _	SWEL1-039	Status: Y⊠ N∏ U∏
Equipment ID No. EGA-TK2A	Equip. Class 21-Tanks & Heat E	xchangers
Equipment Description SDG AIR START SYS AIR RECEIVER TK 2A		
Other Adverse Conditions 11. Have you looked for and found no of adversely affect the safety functions	ther seismic conditions that could of the equipment?	Y⊠ N□ U□

Comments (Additional pages may be added as necessary)

None

Evaluated by: D. Bassi	Date: <u>10-2-12</u>
J. Dunkelberg	10-2-12

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Status:	Y⊠	N	U
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# Seismic Walkdown Checklist (SWC) SWEL1-039

Equipment ID No. EGA-TK2A Equip. Class 21-Tanks & Heat Exchangers

Equipment Description SDG AIR START SYS AIR RECEIVER TK 2A



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Seismic Walkdown Checklist (SWC)	Status: Y N U
Equipment ID No. EGA-TK2A Equip. Cla	ass <u>21</u>
Equipment Description SDG AIR START SYS AIR R	ECEIVER TK 2A
Z IB31 AM	
Note:	Note:

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Attachment C Page 154 01 015
Page 1 of 5
Status: Y N U Seismic Walkdown Checklist (SWC) SWEL1-040
Equipment ID No. EGE-CAB01A Equip. Class <u>14-Distribution Panels &amp; Auto Transfer Switches</u>
Equipment Description DIV I DG EXCITER CABINET
Location: Bldg. <u>DG</u> Floor El. <u>098</u> Room, Area <u>1106</u>
Manufacturer, Model, Etc. (optional but recommended) RTE Delta Corp Model NA
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Cabinet is welded to the floor.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□</li> <li>oxidation?</li> <li>Surfaces are painted, no visible corrosion.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the YX NU VA N/A</li> <li>Anchors?</li> <li>No visible cracking at embedment.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
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PAGE 2 OF 5	
	Status: YX N U
Seismic Walkdown Checklist (SWC) SWEL1-040	
Equipment ID No. EGE-CAB01A Equip. Class 14 Distribution Panels	& Auto Transfer Switches
Equipment Description DIV I DG EXCITER CABINET	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

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Seismic Walkdown Checklist (SWC)	SWEL1-040	Status: Y⊠ N∐ U∐
Equipment ID No. EGE-CAB01A	Equip. Class 14 Distribution Par	nels & Auto Transfer Switches
Equipment Description DIV I DG EXCITER CABINET		
Other Adverse Conditions		
11. Have you looked for and found no o adversely affect the safety functions	other seismic conditions that could s of the equipment?	YX N U

<u>Comments</u> (Additional pages may be added as necessary)

None

17.	Patt Keeney	
Evaluated by: <u>Matt Keeney</u>		Date: <u>10-4-2012</u>
John Dunkolhora	J. P. Klunhlong	10 4 2012

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## Seismic Walkdown Checklist (SWC) SWEL1-040

 Equipment ID No.
 EGE-CAB01A
 Equip. Class
 14 Distribution Panels & Auto Transfer Switches

 Equipment Description
 DIV I DG EXCITER CABINET





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Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-040

Equipment ID No. EGE-CAB01A Equip. Class 14 Distribution Panels & Auto Transfer Switches

Equipment Description DIVIDG EXCITER CABINET



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PAGE 1 OF 5 Status: YX N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-041</u>
Equipment ID No. EGF-P1A Equip. Class <sup>1</sup> 6-Vertical Pump
Equipment Description FUEL OIL TRANSFER PUMP
Location: Bldg. DG Floor El. <u>98</u> Room, Area <u>NA/1102</u>
Manufacturer, Model, Etc. (optional but recommended) Crane Deming Model 4703-40008999
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ Bolts were all engaged and present</li> </ol>
3. Is the anchorage free of corrosion that is more than mild surface Y⊠ N□ U□ N/A□ oxidation?
No oxidation or corrosion
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y N U N/A NA</li> <li>Y N U N/A NA</li> </ol>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-041</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>EGF-P1A</u> Equip. Class_ <u>6-Vertical Pump</u>	
Equipment Description FUEL OIL TRANSFER PUMP	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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? Light suspended above secured properly	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□

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PAGE 3 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-041</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>EGF-P1A</u> Equip. Class <u>6-Vertical Pump</u>	
Equipment Description FUEL OIL TRANSFER PUMP	
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that cou adversely affect the safety functions of the equipment?	ıld Y⊠ N⊡ U⊡

<u>**Comments**</u> (Additional pages may be added as necessary)

Pump mounted in bottom of pit that is a confined space, so all observations made from 98' Elev. Pump at approximately 87' Elev.

Evaluated by: J. Dunkelberg	Date: 10-2-12
D. Bassi	10-2-12

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## Status: Y N U

### Seismic Walkdown Checklist (SWC) <u>SWEL1-041</u>

Equipment ID No. EGF-P1A Equip. Class 6-Vertical Pump

Equipment Description FUEL OIL TRANSFER PUMP



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# Status: Y N U

### Seismic Walkdown Checklist (SWC) <u>SWEL1-041</u>

Equipment ID No. EGF-P1A Equip. Class 6-Vertical Pump

Equipment Description FUEL OIL TRANSFER PUMP



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Status: Y N O
Equipment ID No. EGF-TK2A Equip. Class <u>21-Tanks &amp; Heat Exchangers</u>
Equipment Description SDG FUEL OIL DAY TK A
Location: Bldg. DG Floor El. <u>98</u> Room, Area <u>1100</u>
Manufacturer, Model, Etc. (optional but recommended) Richmonds Eng Model D-76-632
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Suspended tank. Attached to W steel sections that are attached to the wall and braced. Connection is covered in fire proofing</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Steel is coated in fire proofing. No evidence of water.</li> </ul>
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A</li> <li>Tank is suspended from the wall.</li> </ol>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
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PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-042</u>	
Equipment ID No. EGF-TK2A Equip. Class 21-Tanks & Heat Excl	hangers
Equipment Description SDG FUEL OIL DAY TK A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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	
<ol> <li>Are soft targets free from impact by nearby equipment or structures?</li> <li>No soft targets</li> </ol>	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 Resed on the above seismic interaction evaluations, is equipment free	
of potentially adverse seismic interaction effects?	

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Status:	Y⊠	N	U
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#### Seismic Walkdown Checklist (SWC) <u>SWEL1-042</u>

Equipment ID No. EGF-TK2A Equip. Class 21-Tanks & Heat Exchangers

Equipment Description SDG FUEL OIL DAY TK A

#### **Other Adverse Conditions**

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

**<u>Comments</u>** (Additional pages may be added as necessary)

No cracks seen in the fire proofing on cantilever structural steel support off wall which indicates no damage/degradation to the supports

Evaluated by: D. Bassi	Ju B-	Date: <u>10-2-12</u>
J. Dunkelberg	J. R. Kunhlberg	10-2-12


## Seismic Walkdown Checklist (SWC) <u>SWEL1-042</u>

Equipment ID No. EGF-TK2A Equip. Class 21-Tanks & Heat Exchangers

Equipment Description SDG FUEL OIL DAY TK A



Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-042</u>

Equipment ID No. EGF-TK2A Equip. Class 21-Tanks & Heat Exchangers

Equipment Description SDG FUEL OIL DAY TK A



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Seismic Walkdown Checklist (SWC) <u>SWEL1-043</u>
Equipment ID No. EGS-EG1A Equip. Class <sup>1</sup> _17-Engine Generators
Equipment Description SDG A ENGINE
Location: Bldg. DG Floor El. 98 Room, Area 1106
Manufacturer, Model, Etc. (optional but recommended) <u>Cooper Model DSR-48</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>All bolts are fully engaged</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Bolts are painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A U N/A N/A N/A</li> <li>There were no cracks observed in the concrete.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
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	Statua: VM ND UD
Seismic Walkdown Checklist (SWC) <u>SWEL1-043</u>	
Equipment ID No. EGS-EG1A Equip. Class 17-Engine Generators	6
Equipment Description SDG A ENGINE	
5 Is the anchorage configuration consistent with plant documentation?	
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	
Dwg Ref. 0244.700-041-005. All anchors present per reference.	
6. Based on the above anchorage evaluations, is the anchorage free of	Y⊠ N□ U□
potentially adverse seismic conditions?	
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 V/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□

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PAGE 3 OF 6	
Status: Y⊠ N	Status: YX N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-043</u>	
Equipment ID No. <u>EGS-EG1A</u> Equip. Class <u>17-Engine Generato</u>	rs
Equipment Description SDG A ENGINE	
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)

None

Evaluated by: J. Dunkelberg	Date: <u>10-2-12</u>	
D. Bassi	10-2-12	

# Status: Y N U

# Seismic Walkdown Checklist (SWC) <u>SWEL1-043</u>

Equipment ID No. EGS-EG1A Equip. Class 17-Engine Generators

Equipment Description SDG A ENGINE



Status: Y N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-043</u>

Equipment ID No. EGS-EG1A Equip. Class 17-Engine Generators

Equipment Description SDG A ENGINE



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# Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-043

Equipment ID No. EGS-EG1A Equip. Class 17-Engine Generators

Equipment Description SDG A ENGINE

2 11:12 AM	
<b>Note:</b> Anchor bolts down the south side of the generator	Note:

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PAGE 1 OF 7 Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-044</u>
Equipment ID No. EGT-E1A Equip. Class <sup>1</sup> _21-Tanks & Heat Exchangers
Equipment Description SDG CLG SYS JACKET WTR CLR A
Location: Bldg. DG Floor El. <u>98</u> Room, Area <u>NA</u>
Manufacturer, Model, Etc. (optional but recommended) Cooper Ind. Model 74039-109
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>All bolting painted, rust free</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>No rust observed</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A</li> <li>No cracks in area observed.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
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Page 2 of 7	
Seismic Walkdown Checklist (SWC) SWEL1-044	Status: Y N N
Equipment ID No. ECT E14	hangara
Equipment ID No. EGT-ETA Equip. Class 21-Tanks & Heat Exc	nangers
Equipment Description SDG CLG SYS JACKET WTR CLR A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y⊠ N□ U□ N/A□
0244.700-041-005. 0244.700-041-018H. 0244.700-041-124.	
0244.700-041-125	
Verified in accordance with above dwgs.	
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 V/A
9 Are everbeed equipment distribution systems, spiling tiles and lighting	
and masonry block walls not likely to collapse onto the equipment?	
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□

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Status. F Seismic Walkdown Checklist (SWC) SWEL1-044	14
Equipment ID No. EGT-E1A Equip. Class 21-Tar	iks & Heat Exchangers
Equipment Description SDG CLG SYS JACKET WTR CLR A	
Other Adverse Conditions 11. Have you looked for and found no other seismic condition adversely affect the safety functions of the equipment?	is that could Y⊠ N⊡ U⊡

Engineering Report No. RBS-CS-12-00001

<u>**Comments**</u> (Additional pages may be added as necessary)

None

Evaluated by: J. Dunkelberg	Date: 10-2-12
D. Bassi	10-2-12

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## Seismic Walkdown Checklist (SWC) SWEL1-044

Equipment ID No. EGT-E1A Equip. Class 21-Tanks & Heat Exchangers

Equipment Description SDG CLG SYS JACKET WTR CLR A





## Seismic Walkdown Checklist (SWC) SWEL1-044

Equipment ID No. EGT-E1A Equip. Class 21-Tanks & Heat Exchangers

Equipment Description SDG CLG SYS JACKET WTR CLR A





Note:

Note:

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## Seismic Walkdown Checklist (SWC) SWEL1-044

Equipment ID No. EGT-E1A Equip. Class 21-Tanks & Heat Exchangers

Equipment Description SDG CLG SYS JACKET WTR CLR A



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Status:	Y⊠	N	U
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## Seismic Walkdown Checklist (SWC) SWEL1-044

Equipment ID No. EGT-E1A Equip. Class 21-Tanks & Heat Exchangers

Equipment Description SDG CLG SYS JACKET WTR CLR A

E TRUM	
Note:	Note:

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PAGE 1 OF 4
Status: Y N U
Equipment ID No. EHS-MCC14A Equip. Class <sup>1</sup> 1-Motor Control Center & Wall Mounted Contactors
Equipment Description STANDBY SWGR RM 1A 480V MCC14A
Location: Bldg. <u>CB</u> Floor El. <u>98</u> Room, Area <u>1117</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Gould Model Series 5600</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Welded to floor sill plate.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A N/A</li> <li>N N/A</li> <li>Anchorage painted.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A</li> <li>No visible cracks in concrete.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Status: Y N U

Seismic Walkdown Checklist (SWC) <u>SWEL1-045</u>	
Equipment ID No. EHS-MCC14A Equip. Class 1-Motor Control Center	er & Wall Mounted Contactors
Equipment Description STANDBY SWGR RM 1A / 1B 480V MCC14A / B	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>248.000, EE-038A</li> <li>Varified in accordance with above dwas</li> </ul>	Y⊠ N∏ U∏ N/A∏
<ul><li>6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li></ul>	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?	YKINLI ULI N/ALI
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	Y⊠ N□ U□

of potentially adverse seismic interaction effects?

PAGE 3 OF 4

Status:	Y⊠	N	U
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#### Seismic Walkdown Checklist (SWC) SWEL1-045

Equipment ID No. EHS-MCC14A Equip. Class 1-Motor Control Center & Wall Mounted Contactors

Equipment Description STANDBY SWGR RM 1A / 1B 480V MCC14A / B

#### **Other Adverse Conditions**

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

<u>Comments</u> (Additional pages may be added as necessary)

See attached list of open items that need a WO / CR written. (typed out below)

WR to adjust latch handle EHS-MCC14A cubical so door can be open with safety latch

Door top hinge not attached completely, pin present on breaker 2AT & 2AB two hinge on door, two screw latches on right. Size of door is approx 12"x12"

Control power Transformer – screw hole in bottom right missing screw. Looks like it may never have had a screw, red "paint" behind hole. Occurred in cubicles 2C, 4A, 4C, 4D, 4E, 4F. Missing lower left screw in cubicle 4B

Ref. CR-RBS-2012-6323; LB-09

Evaluated by: David Bassi	Date: <u>10-4-2012</u>	
& RAfundellang		

John Dunkelberg

10-4-2012

Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-045</u>

 Equipment ID No.
 EHS-MCC14A
 Equip. Class\_ 1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 STANDBY SWGR RM 1A / 1B 480V MCC14A / B

#### Photographs





Note:

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PAGE 1 OF 5
Status: Y N U
Equipment ID No. EHS-MCC15A Equip. Class <sup>1</sup> 1-Motor Control Center & Wall Mounted Contactors
Equipment Description DIESEL GEN RM A MCC15A
Location: Bldg. <u>DG</u> Floor El. <u>98</u> Room, Area <u>1107</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Gould Model Series 5600</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N□ U□ N/A□</li> <li>MCC is welded to floor.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A ∪</li> <li>N/A ∪</li> <li>Surfaces are painted, no visible corrosion.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</li></ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-046</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>EHS-MCC15A</u> Equip. Class_ <u>1-Motor Control Cente</u>	er & Wall Mounted Contactors
Equipment Description DIESEL GEN RM A MCC15A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

Status: Y N U

PAGE 3 OF 5

## Seismic Walkdown Checklist (SWC) <u>SWEL1-046</u>

Equipment ID No. EHS-MCC15A Equip. Class 1-Motor Control Center & Wall Mounted Contactors

Equipment Description DIESEL GEN RM A MCC15A

#### **Other Adverse Conditions**

 Have you looked for and found no other seismic conditions that could Y N□ U□ adversely affect the safety functions of the equipment? See Comments

<u>Comments</u> (Additional pages may be added as necessary)

Grommet loose in cubicle 1BB, between cubicle and cable way.

Ref. CR-RBS-2012-06525.

77,	att Keenerg	
Evaluated by: <u>Matt Keeney</u>		Date: <u>10-4-2012</u>
John Dunkelberg	& RAfundleig	10_4-2012

# Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-046</u>

 Equipment ID No.
 EHS-MCC15A
 Equip. Class\_1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 DIESEL GEN RM A MCC15A



Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-046

 Equipment ID No.
 EHS-MCC15A
 Equip. Class\_ 1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 DIESEL GEN RM A MCC15A



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PAGE 1 OF 5
Status: YX NU U
Equipment ID No. EHS-MCC16A Equip. Class <sup>1</sup> 1-Motor Control Center & Wall Mounted Contactors
Equipment Description STANDBY CLG TOWER 1 MTR CNTRL CENTER 16A
Location: Bldg. <u>SCT</u> Floor El. <u>118</u> Room, Area <u>0104</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Gould Model Series 5600</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N□ U□ N/A□</li> <li>MCC is welded to floor sill.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Painted surfaces</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A U N/A N/A N/A</li> <li>No cracks visible in the floor.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-047</u>	
Equipment ID No. EHS-MCC16A Equip. Class 1-Motor Control Center	er & Wall Mounted Contactors
Equipment Description STANDBY CLG TOWER 1 MTR CNTRL CENTER 16A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Welded per 248.000, EE-038K, EC-047BE</li> </ol>	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□
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	YX N U

of potentially adverse seismic interaction effects?

Attaciment of Tage 130 01013
PAGE 3 OF 5
Status: YX NU U
Equipment ID No. EHS-MCC16A Equip. Class 1-Motor Control Center & Wall Mounted Contactors
Equipment Description STANDBY CLG TOWER 1 MTR CNTRL CENTER 16A
Other Adverse Conditions         11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?         See comments
<u>Comments</u> (Additional pages may be added as necessary) Out of alignment door hinge on bucket 4D. Screw appears to be missing in buckets 5B & 2A on transformers.
Ref. CR-RBS-2012-6311; LB-05

Matt Keenerg	
Evaluated by: Matt Keeney	Date: <u>10-4-2012</u>
& Phlunklong	
John Dunkelberg	<u>10-4-2012</u>

Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-047

 Equipment ID No.
 EHS-MCC16A
 Equip. Class\_ 1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 STANDBY CLG TOWER 1 MTR CNTRL CENTER 16A



Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-047</u>

 Equipment ID No.
 EHS-MCC16A
 Equip. Class
 1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 STANDBY CLG TOWER 1 MTR CNTRL CENTER 16A





Note:

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Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-048</u>
Equipment ID No. <u>EHS-MCC2B</u> Equip. Class <sup>1</sup> <u>1-Motor Control Center &amp; Wall Mounted Contactors</u>
Equipment Description EHS-MCC2B AUX BLDG
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6302</u>
Manufacturer, Model, Etc. (optional but recommended) Gould Model Series 5600
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ MCC is welded to sill</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N□ U□ N/A□ oxidation?</li> <li>Painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A U N/A N/A N/A</li> <li>No visible cracks</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

	-
PAGE 2 OF 8	
Seismic Walkdown Checklist (SWC) <u>SWEL1-048</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. EHS-MCC2B Equip. Class 1-Motor Control Center	er & Wall Mounted Contactors
Equipment Description EHS-MCC2B AUX BLDG	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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□

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Status: YX NU U	
Equipment ID No. EHS-MCC2B Equip. Class 1-Motor Control Center & Wall Mounted Contactors	
Equipment Description EHS-MCC2B AUX BLDG	
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions that could Y N V□ N U□ adversely affect the safety functions of the equipment?	
See comments	
Comments (Additional pages may be added as necessary)	
Cubicle 7A – Missing a bolt on transformer, upper right, 1 of 4 bolts (screws)	
Cubicle 5A – one screw is missing on the rear wall of the cubicle on the upper right side to side plate	
Cubicle 4A – no cover on split term block (spare cubicle) – Not a seismic issue	
Cubicle 1CT – missing grommet on right side (power entering cubicle)- Not seismic issue.	
Cubicle 1CB – missing lower right back panel screw.	
Cubicle 1D, grommet is not engaged on right side of cubicle. Not seismic issue.	
Ref. LB-20; CR-RBS-2012-06866	
Matt Keenerg	
Evaluated by: M. Keeney Date: 10/10/12	
April Cardono	
J. Cardona / 10/10/12	

# Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-048</u>

 Equipment ID No.
 EHS-MCC2B
 Equip. Class\_ 1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 EHS-MCC2B AUX BLDG



## Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-048</u>

Equipment ID No. EHS-MCC2B Equip. Class 1

Equipment Description EHS-MCC2B AUX BLDG





Note:

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## Seismic Walkdown Checklist (SWC) SWEL1-048

 Equipment ID No.
 EHS-MCC2B
 Equip. Class\_ 1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 EHS-MCC2B AUX BLDG





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## Seismic Walkdown Checklist (SWC) SWEL1-048

 Equipment ID No.
 EHS-MCC2B
 Equip. Class\_ 1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 EHS-MCC2B AUX BLDG


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## Seismic Walkdown Checklist (SWC) SWEL1-048

Equipment ID No. <u>EHS-MCC2B</u> Equip. Class <u>1-Motor Control Center & Wall Mounted Contactors</u>

Equipment Description EHS-MCC2B AUX BLDG

#### Photographs





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Page 1 of 12
Status: YX NUU Seismic Walkdown Checklist (SWC) SWEL1-049
Equipment ID No. <u>EHS-MCC2L</u> Equip. Class <sup>1</sup> <u>1-Motor Control Center &amp; Wall Mounted Contactors</u>
Equipment Description AUXILIARY BUILDING MCC2L
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6306</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Gould Model Series 5600</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ Welded to sill</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No visible crack.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Rev. 000 Attachment C Page 205 of 615 PAGE 2 OF 12 Status: Y N U Seismic Walkdown Checklist (SWC) SWEL1-049 Equipment ID No. EHS-MCC2L Equip. Class <u>1-Motor Control Center & Wall Mounted Contactors</u> Equipment Description AUXILIARY BUILDING MCC2L  $Y \square N \square U \square N/A \boxtimes$ 5. Is the anchorage configuration consistent with plant documentation? (Note: This guestion only applies if the item is one of the 50% for which an anchorage configuration verification is required.) 6. Based on the above anchorage evaluations, is the anchorage free of Y⊠ N□ U□ potentially adverse seismic conditions? Interaction Effects  $Y \boxtimes N \square U \square N/A \square$ 7. Are soft targets free from impact by nearby equipment or structures? 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, Y N U N/A and masonry block walls not likely to collapse onto the equipment?  $Y \boxtimes N \square U \square N/A \square$ 9. Do attached lines have adequate flexibility to avoid damage?  $Y \boxtimes N \square U \square$ 10. Based on the above seismic interaction evaluations, is equipment free

of potentially adverse seismic interaction effects?

Engineering Report No. RBS-CS-12-00001

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Status: YX N U
Seismic Walkdown Checklist (SWC) SWEL1-049
Equipment ID No. <u>EHS-MCC2L</u> Equip. Class <u>1-Motor Control Center &amp; Wall Mounted Contactors</u>
Equipment Description AUXILIARY BUILDING MCC2L
Other Adverse Conditions         11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?         See comments
Comments (Additional pages may be added as necessary)
Cubical 1C – Transformer has 3 bolts installed. Upper right bolt missing. Cubical 2B – Missing screw on back plate of breaker in the upper right corner. Ref. CR-RBS-2012-06483; LB-10
Cubical 2B – Terminal block cover worn at attachment points may need to replace cover. See M94- 0048 & 242.561 & 242.562 deviations for justifications

Cubical 3D – Breaker handle cracked. Cubical 4A – Missing trip indicator cover. Handle issues, see M94-0048 & 242.561 & 242.562 deviations for justifications

Cubicals 5B, 4C - Control power split block terminal cover top tab damaged. Ref. M94-0048 & 242.561 & 242.562 deviations for justifications

Cubical 4D – Indication on handle of breaker. Ref. M94-0048 & 242.561 & 242.562 deviations for justifications

Cubicals 4B, 5D, 6AT, 6AB, 6D – Could not observe, "protected". Scaffold on North side of equipment, installed per plant requirements, not potential interaction with the cabinet.

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Status: Y N U

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Seismic Walkdown Checklist (SWC) SWEL1-049

Equipment ID No. EHS-MCC2L Equip. Class 1-Motor Control Center & Wall Mounted Contactors

Equipment Description AUXILIARY BUILDING MCC2L

Mat 7 eme

Evaluated by: Matt Keeney

Date: 10/5/2012

John Dunkelberg

10/5/2012

PAGE 5 OF 12

# Status: Y N U

# Seismic Walkdown Checklist (SWC) SWEL1-049

 Equipment ID No.
 EHS-MCC2L
 Equip. Class\_1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 AUXILIARY BUILDING MCC2L

#### Photographs





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Note:

Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-049

Equipment ID No. <u>EHS-MCC2L</u> Equip. Class <u>1-Motor Control Center & Wall Mounted Contactors</u> Equipment Description <u>AUXILIARY BUILDING MCC2L</u>





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Note:

Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-049

Equipment ID No. <u>EHS-MCC2L</u> Equip. Class <u>1-Motor Control Center & Wall Mounted Contactors</u> Equipment Description <u>AUXILIARY BUILDING MCC2L</u>





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# Status: YX N U

### Seismic Walkdown Checklist (SWC) <u>SWEL1-049</u>

 Equipment ID No.
 EHS-MCC2L
 Equip. Class\_1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 AUXILIARY BUILDING MCC2L



Note:		



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## Seismic Walkdown Checklist (SWC) SWEL1-049

Status: Status: Y N U

Equipment ID No. <u>EHS-MCC2L</u> Equip. Class <u>1-Motor Control Center & Wall Mounted Contactors</u> Equipment Description <u>AUXILIARY BUILDING MCC2L</u>





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Status: Y N U

## Seismic Walkdown Checklist (SWC) SWEL1-049

 Equipment ID No.
 EHS-MCC2L
 Equip. Class
 1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 AUXILIARY BUILDING MCC2L





Note:			

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Status: Y N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-049</u>

Equipment ID No. <u>EHS-MCC2L</u> Equip. Class <u>1-Motor Control Center & Wall Mounted Contactors</u> Equipment Description <u>AUXILIARY BUILDING MCC2L</u>





Note:

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Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-049

 Equipment ID No.
 EHS-MCC2L
 Equip. Class\_1-Motor Control Center & Wall Mounted Contactors

 Equipment Description
 AUXILIARY BUILDING MCC2L





Note:

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PAGE 1 OF 7 Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-051</u>
Equipment ID No. <u>EJS-LDC2A</u> Equip. Class <sup>1</sup> <u>3-Medium voltage, Metal-clad Switchgear</u>
Equipment Description <u>REMOTE SHUTDOWN SYSTEM CONTROL POWER: 1HVR*UC11A,1HVR*UC1A</u>
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6306</u>
Manufacturer, Model, Etc. (optional but recommended) Powell Electric Model AKDG-EJS-LDC2
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Cubical – the rails are in place and in good condition.</li> <li>MCC – welded to sill</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>No oxidation noticed.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A U N/A NO Cracks visible.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-051</u>	Status: Y⊠ N∐ U∐
Equipment ID No. EJS-LDC2A Equip. Class <u>3-Medium voltage, Me</u>	etal-clad Switchgear
Equipment Description REMOTE SHUTDOWN SYSTEM CONTROL POWER:	1HVR*UC11A,1HVR*UC1A
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>EE-038E, 248.000</li> <li>Verified in accordance with above dwgs</li> </ul>	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□
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□

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Status:	Y⊠	N	U
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#### Seismic Walkdown Checklist (SWC) <u>SWEL1-051</u>

Equipment ID No. EJS-LDC2A Equip. Class <u>3-Medium voltage</u>, Metal-clad Switchgear

Equipment Description REMOTE SHUTDOWN SYSTEM CONTROL POWER: 1HVR\*UC11A,1HVR\*UC1A

#### **Other Adverse Conditions**

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

**<u>Comments</u>** (Additional pages may be added as necessary)

On the left hand side of cubical 36, there is a tie rap and small screw loose (resting on shelf) outside of the rails. Not a seismic concern. Housekeeping (foreign material)

Ref. CR-RBS-2012-06686 WR 00287361 initiated.

977.	att Keenerg		
Evaluated by: Matt Keeney		Date:	10/5/2012
John Dunkolhorg	& Philaden		10/5/2012

John Dunkelberg

10/5/2012

PAGE 4 OF 7

# Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-051

 Equipment ID No.
 EJS-LDC2A
 Equip. Class\_3-Medium voltage, Metal-clad Switchgear

 Equipment Description
 REMOTE SHUTDOWN SYSTEM CONTROL POWER: 1HVR\*UC11A,1HVR\*UC1A

#### Photographs



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Status: YX N U

# Seismic Walkdown Checklist (SWC) SWEL1-051

Equipment ID No. EJS-LDC2A Equip. Class 3-Medium voltage, Metal-clad Switchgear

# Equipment Description <u>REMOTE SHUTDOWN SYSTEM CONTROL POWER: 1HVR\*UC11A,1HVR\*UC1A</u>



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Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-051</u>

Equipment ID No. EJS-LDC2A Equip. Class 3-Medium voltage, Metal-clad Switchgear

# Equipment Description <u>REMOTE SHUTDOWN SYSTEM CONTROL POWER: 1HVR\*UC11A,1HVR\*UC1A</u>





Note:

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Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-051

 Equipment ID No.
 EJS-LDC2A
 Equip. Class\_3-Medium voltage, Metal-clad Switchgear

 Equipment Description
 REMOTE SHUTDOWN SYSTEM CONTROL POWER: 1HVR\*UC11A,1HVR\*UC1A



Note:



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Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-052</u>
Equipment ID No. EJS-SWG1A Equip. Class <sup>1</sup> _3-Medium Voltage, Metal-clad Switchgear
Equipment Description STANDBY SWGR RM 1A 480V SWG1A
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1117</u>
Manufacturer, Model, Etc. (optional but recommended) Gould Model EJS-SWG1
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Welded to floor sills.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N□ U□ N/A□ oxidation?</li> <li>Painted surfaces</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N_ V N/A N_ V N/A N/A</li> <li>No cracks observed.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 4	
Seismic Walkdown Checklist (SWC) <u>SWEL1-052</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>EJS-SWG1A</u> Equip. Class <u>3-Medium Voltage, M</u>	etal-clad Switchgear
Equipment Description STANDBY SWGR RM 1A 480V SWG1A	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>248.000, EE-38A Verified in accordance with above dwgs</li> </ul>	
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	YX NL UL
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□

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Status: YX N U
Equipment ID No. EJS-SWG1A Equip. Class <u>3-Medium Voltage, Metal-clad Switchgear</u>
Equipment Description STANDBY SWGR RM 1A 480V SWG1A
Other Adverse Conditions
11. Have you looked for and found no other seismic conditions that could Y⊠ N□ U□ adversely affect the safety functions of the equipment?
Comments (Additional pages may be added as necessary)
<ul> <li>ACB010-lower right side behind cradle appears to be small piece of wire or tie-wrap.</li> <li>AC002-small amount of trash on left side outside of the equipment track.</li> <li>ACB009-1 washer, 2 small machine screws, terminal wire and 1 clip on the right side</li> <li>ACB014-tie wraps on left side, lug on right side, also difficulty closing door on cubicle (can it possibly be adjusted to fit better without interference?)</li> <li>ACB003-small nut in the back right corner</li> <li>ACB004-machine screw on left side and nut on right side</li> <li>ACB011small machine screw front left corner, small wire in back left corner, wire lug in back right corner</li> <li>ACB006-tie wrap on right side(longer piece along the whole side)</li> <li>ACB007-piece of tie wrap on left side</li> <li>ACB012-unidentifiable foreign material no the left side, less than 2" long and approx the diameter of a tie wrap (~1/8"). Could be dust/bug.</li> <li>Above items all considered to be housekeeping, not seismic issue.</li> <li>Ref. WR-00286241</li> </ul>
Evaluated by: John Dunkelberg Date: 10-4-012
David Bassi 10-4-2012

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### Seismic Walkdown Checklist (SWC) <u>SWEL1-052</u>

 Equipment ID No.
 EJS-SWG1A
 Equip. Class\_ 3-Medium Voltage, Metal-clad Switchgear

 Equipment Description
 STANDBY SWGR RM 1A 480V SWG1A

#### Photographs



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PAGE 1 OF 4 Status: Y N U
Equipment ID No. EJS-X1A Equip. Class <sup>1</sup> _4-Transformer
Equipment Description STANDBY SWGR ROOM 1A SWGR 1A PWR XFORMR 1A
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1117</u>
Manufacturer, Model, Etc. (optional but recommended) Southern Transformer Model T5049
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Welded to floor sills.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Painted surfaces, no corrosion.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No cracks observed.</li> </ul>

Engineering Report No. RBS-CS-12-00001 Rev. 000

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 4 Seismic Walkdown Checklist (SWC) SWEL1-053 Equipment ID No. E IS-X1A Equip. Class. 4-Transformer	Status: Y⊠ N⊡ U⊡
Equipment Description_STANDBY SWGB ROOM 1A SWGB 1A PWB XEORM	R 1A
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ul>	
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	Y⊠ N□ U□

of potentially adverse seismic interaction effects?

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Seismic Walkdown Checklist (SWC) <u>SWEL1-053</u>	Status: Y⊠ N∐ U∐
Equipment ID No. <u>EJS-X1A</u> Equip. Class <u>4-Transformer</u>	
Equipment Description STANDBY SWGR ROOM 1A SWGR 1A PWR XFORME	R 1A
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	YX N U

<u>Comments (Additional pages may be added as necessary)</u>

None

Evaluated by: John Dunkelberg	Date:	10-4-2012
Di R.		
David Bassi	-	<u>10-4-2012</u>

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# Status: YX N U

# Seismic Walkdown Checklist (SWC) <u>SWEL1-053</u>

Equipment ID No. EJS-X1A Equip. Class 4-Transformer

### Equipment Description STANDBY SWGR ROOM 1A SWGR 1A PWR XFORMR 1A

#### Photographs



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Page 1 of 5 Seismic Walkdown Checklist (SWC) <u>SWEL1-054</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. EJS-X2A Equip. Class <u>4-Transformer</u>	
Equipment Description AUX BLDG STANDBY SWGR 2A PWR XFORMR	
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6306</u>	
Manufacturer, Model, Etc. (optional but recommended) Southern Transformer	Model T5051
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of a SWEL. The space below each of the following questions may be used to record the findings. Additional space is provided at the end of this checklist for documenting	an item of equipment on the he results of judgments and other comments.
Anchorage	
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ol>	Y⊠ N□
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware? Welded to floor sill.</li> </ol>	Y⊠ N∏ U∏ N/A∏
<ol> <li>Is the anchorage free of corrosion that is more than mild surface oxidation?</li> <li>Painted</li> </ol>	Y⊠ N∏ U∏ N/A∏
<ol> <li>Is the anchorage free of visible cracks in the concrete near the anchors?</li> <li>No cracks visible</li> </ol>	Y⊠ N□ U□ N/A□

Engineering Report No. RBS-CS-12-00001 Rev. 000

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001 Rev 000
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PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-054</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>EJS-X2A</u> Equip. Class <u>4</u>	
Equipment Description AUX BLDG STANDBY SWGR 2A PWR XFORMR	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Spec 248.000, EE-038E</li> </ol>	Y⊠ N□ U□ N/A□
Verified in accordance with above dwgs	
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	Y⊠ N□ U□

of potentially adverse seismic interaction effects?

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Seismic Walkdown Checklist (SWC) <u>SWEL1-054</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>EJS-X2A</u> Equip. Class <u>4</u>	
Equipment Description AUX BLDG STANDBY SWGR 2A PWR XFORMR	
Other Adverse Conditions11. 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)

None

Matt Keenerg	
Evaluated by: Matt Keeney	Date: <u>10/5/2012</u>
& Philamblerg	
John Dunkelberg	10/5/2012

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# Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-054

Equipment ID No. EJS-X2A Equip. Class 4-Transformer

## Equipment Description AUX BLDG STANDBY SWGR 2A PWR XFORMR

#### Photographs



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# Status: YX N U

# Seismic Walkdown Checklist (SWC) <u>SWEL1-054</u>

Equipment ID No. EJS-X2A Equip. Class 4-Transformer

### Equipment Description AUX BLDG STANDBY SWGR 2A PWR XFORMR

Note:	Note:

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PAGE 1 OF 5       Status: Y N□ U□         Seismic Walkdown Checklist (SWC) SWEL1-055       Status: Y □ U□         Equipment ID No       EJS-X3A
Equipment Description N/A
Location: Bldg. SCT Floor El. 136 Room, Area N/A
Manufacturer, Model, Etc. (optional but recommended) <u>Southern Transformer Model T5115</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ Transformer is welded to sill plate.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A O</li> <li>N/A Painted surfaces, no visible corrosion.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the anchors?</li> <li>No cracking visible around sills.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	Attachment C Page 237 of 615
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Seismic Walkdown Checklist (SWC) <u>SWEL1-055</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. EJS-X3A Equip. Class 4-Transformer	
Equipment Description <u>N/A</u>	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>EE-038K, EC-047BH, 0242.533-265-142</li> <li>Plug welds on the inside of transformer case could not be visually</li> </ul>	Y⊠ N∏ U∏ N/A∏
<ul> <li>verified.</li> <li>6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> </ul>	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□

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Seismic Walkdown Checklist (SWC) <u>SWEL1-055</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. EJS-X3A Equip. Class 4-Transformer	
Equipment Description <u>N/A</u>	
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that co adversely affect the safety functions of the equipment?	uld Y⊠ N□ U□

<u>Comments (Additional pages may be added as necessary)</u>

None

Matt Keener	
Evaluated by: Matt Keeney	Date: <u>10-4-2012</u>
John Dunkelberg	<u>10-4-2012</u>
# Status: YX N U

# Seismic Walkdown Checklist (SWC) <u>SWEL1-055</u>

Equipment ID No. EJS-X3A Equip. Class 4-Transformer

Equipment Description N/A

Photographs





## Seismic Walkdown Checklist (SWC) <u>SWEL1-055</u>

Equipment ID No. EJS-X3A Equip. Class 4-Transformer

Equipment Description N/A



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PAGE 1 OF 5
Status: Y N U
Equipment ID No. ENB-BAT01A Equip. Class <sup>1</sup> 15-Battery Racks
Equipment Description STANDBY BUS A 125 VOLTS DIRECT CURRENT SYS BATTERY BANK 1A
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area <u>N/A</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Nuclear Logistics Model NCN-29</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
2. Is the anchorage free of bent, broken, missing or loose hardware? Y $\square$ N $\blacksquare$ U $\square$ N/A $\square$
See Q. 5.
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No cracks visible</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 5 Seismic Walkdown Checklist (SWC) <u>SWEL1-056</u> Equipment ID No. ENB-BAT01A Equip. Class 15-Battery Racks	Status: Y□ N□ U□
Equipment Description STANDBY BUS A 125 VOLTS DIRECT CURRENT SY	S BATTERY BANK 1A
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>EE-038C, EE-038AA</li> <li>Verified in accordance with above dwgs</li> <li>Missing 2 weldments to sills at battery 42 and 38</li> </ul>	Y N U N/A
<ol> <li>Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Missing 2 welds, see Q 5 above</li> </ol>	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? Light fixture "S" hook closed	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□

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Seismic Walkdown Checklist (SWC) <u>SWEL1-056</u>	Status. 1	
Equipment ID No. ENB-BAT01A Equip. Class 15-Battery Racks		
Equipment Description STANDBY BUS A 125 VOLTS DIRECT CURRENT SY	<u>S BATTERY B/</u>	ANK 1A
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[	
See comments		

\_\_\_

<u>**Comments**</u> (Additional pages may be added as necessary)

Missing welds, see question 5. Ref. LB-07

E&DCR C-20908A evaluated and approved deletion of these welds. Condition in compliance with design/licensing basis.

Evaluated by: John Dunkelberg Date: 10/4/2012 David Bassi 10/4/2012

# Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-056</u>

Equipment ID No. ENB-BAT01A Equip. Class 15-Battery Racks

Equipment Description STANDBY BUS A 125 VOLTS DIRECT CURRENT SYS BATTERY BANK 1A

#### Photographs





Note:

Note:

Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-056</u>

Equipment ID No. ENB-BAT01A Equip. Class 15-Battery Racks

Equipment Description STANDBY BUS A 125 VOLTS DIRECT CURRENT SYS BATTERY BANK 1A





Note:

Note:

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PAGE 1 OF 5       Status: Y⊠ N□ □         Seismic Walkdown Checklist (SWC)SWEL1-057       SWEL1-057         Equipment ID No. ENB-CHGR1AEquip. Class¹ 16-Battery Chagers and Inverters       Equipment Description STDBY BUS A 125 VOLTS DIRECT CURRENT SYS BATRY BANK 1A CHARGER 1A         Location: Bldg. CB Floor El. 116 Room, Area 1214       Manufacturer, Model, Etc. (optional but recommended) Power Conversion Model 3SD-130-300
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and finding. Additional ensure is provided at the and of this checklist for documenting other comments.
Anchorage 1. Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Welded to embed plate</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N□ U□ N/A□ oxidation?</li> <li>painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No cracks visible</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-057</u>	Status: Y⊠ N∐ U∐
Equipment ID No. ENB-CHGR1A Equip. Class_16-Battery Chagers a	nd Inverters
Equipment Description STDBY BUS A 125 VOLTS DIRECT CURRENT SYS B	ATRY BANK 1A CHARGER
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>EE-038C, 248.000</li> <li>Verified in accordance with the above dwgs</li> </ul>	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∏
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□

PAGE 3 OF 5
Status: YX NU U
Equipment ID No. ENB-CHGR1A Equip. Class 16-Battery Chagers and Inverters
Equipment Description STDBY BUS A 125 VOLTS DIRECT CURRENT SYS BATRY BANK 1A CHARGER
Other Adverse Conditions
<ul> <li>11. Have you looked for and found no other seismic conditions that could Y N V U N</li> <li>N V U N</li> <li>See comments</li> </ul>
Comments (Additional pages may be added as necessary)
Missing 2 screws on interior mounting panel.
Ref. CR-RBS-2012-6326; LB-08
Evaluated by: John Dunkelberg Date: 10/4/2012
David Bassi 10/4/2012

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# Status: Y N U

#### Seismic Walkdown Checklist (SWC) SWEL1-057

 Equipment ID No.
 ENB-CHGR1A
 Equip. Class\_16-Battery Chagers and Inverters

 Equipment Description
 STDBY BUS A 125 VOLTS DIRECT CURRENT SYS BATRY BANK 1A CHARGER

 1A

#### Photographs



# Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-057

Equipment ID No. ENB-CHGR1A Equip. Class 16-Battery Chagers and Inverters

# Equipment Description STDBY BUS A 125 VOLTS DIRECT CURRENT SYS BATRY BANK 1A CHARGER

Note:	
Note:	Note:

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Page 1 of 6
Status: Y N U
Equipment ID No. ENB-INV01A Equip. Class <sup>1</sup> _16-Battery Chagers and Inverters
Equipment Description ENB*INV01A VITAL BUS A INVERTER
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>N/A</u>
Manufacturer, Model, Etc. (optional but recommended) Solid State Controls Model 85-VC0200-46
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Welded to structure framework base plate anchored to floor with expansion anchors.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N□ U□ N/A□</li> <li>Oxidation?</li> </ol>
Painted to base plate, plated anchors, no rust.
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A</li> <li>No cracks</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engin	eering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 252 of 615
PAGE 2 OF 6         Seismic Walkdown Checklist (SWC)         Swell-058         Equipment ID No.       ENB-INV01A         Equipment Description       ENB*INV01A VITAL BUS A INVERTER	Status: Y N U
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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	

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

Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 253 of 615
PAGE 3 OF 6 Status: Y N U
Equipment ID No. ENB-INV01A Equip. Class <u>16-Battery Chagers and Inverters</u>
Equipment Description ENB*INV01AVITAL BUS AINVERTER
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□         See comments       See comments

<u>Comments</u> (Additional pages may be added as necessary)

Could not open component for interior inspection. Back side attachment not visible.

Evaluated by John Dupkalbara	Data: 10/4/2012
Evaluated by. John Dunkelberg	Date. <u>10/4/2012</u>
David Bassi	<u>10/4/2012</u>



## Seismic Walkdown Checklist (SWC) SWEL1-058

Equipment ID No. ENB-INV01A Equip. Class 16-Battery Chagers and Inverters

Equipment Description ENB\*INV01A VITAL BUS A INVERTER

#### Photographs





## Seismic Walkdown Checklist (SWC) SWEL1-058

Equipment ID No. ENB-INV01A Equip. Class 16-Battery Chagers and Inverters

Equipment Description ENB\*INV01AVITAL BUS A INVERTER





Note:

Note:

PAGE 6 OF 6

## Status: Y N U

1

## Seismic Walkdown Checklist (SWC) <u>SWEL1-058</u>

Equipment ID No. ENB-INV01A Equip. Class 16-Battery Chagers and Inverters

Equipment Description ENB\*INV01A VITAL BUS A INVERTER



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PAGE 1 OF 4       Status: Y N ∨ U         Seismic Walkdown Checklist (SWC) SWEL1-060         Equipment ID No. ENB-PNL02A       Equip. Class <sup>1</sup> 14-Distribution Panels & Auto Transfer Switches         Equipment Description N/A
Location: Bldg. <u>CB</u> Floor El. <u>136</u> Room, Area <u>1310</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Square D Model ENB-PNL02</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N∑ U N/A Could not observe panel attachment to wall due to adjacent equipment and internal mounting of hardware. Tools required to open panel</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A U N/A ∪</li> <li>oxidation?</li> <li>Location in MCR, not susceptible to oxidation, controlled environment.</li> <li>Other nearby equipment showed no signs of oxidation</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the anchors?</li> <li>Panel is mounted to a horizontal channel, (3 total) that are in turn, mounted to embedded struts (vertical). No cracks observed.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
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PAGE 2 OF 4	
	Status: V NV U
Seismic Walkdown Checklist (SWC) <u>SWEL1-060</u>	
Equipment ID No. ENB-PNL02A Equip. Class 14-Distribution Panels	& Auto Transfer Switches
Equipment Description N/A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	YLI NLI ULI N/AKI
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? Ceiling tile above is seismically designed.	Y⊠ N□ U□ N/A□
9. Do attached lines have adequate flexibility to avoid damage?	Y□ N⊠ U□ N/A□
Unable to verify, special tools required to disassemble panel bottom/raised floor	
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Y⊠ N□ U□

Engine	ering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 259 of 615
PAGE 3 OF 4	
Seismic Walkdown Checklist (SWC) <u>SWEL1-060</u>	Status: Y N⊠ U
Equipment ID No. <u>ENB-PNL02A</u> Equip. Class <u>14-Distribution Panels</u>	& Auto Transfer Switches
Equipment Description <u>N/A</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?	
Comments (Additional pages may be added as necessary)	
See Question 2, could not observe panel attachment anchors inside pane	el.
See Question 9, could not observe the cables that enter from the bottom.	

Ref. CR-RBS-2012-06877

Evaluated by: J. Dunkelberg	Date:	10/12/12
Attal		
J. Cardona		10/12/12

#### Seismic Walkdown Checklist (SWC) SWEL1-060

Equipment ID No. ENB-PNL02A Equip. Class 14-Distribution Panels & Auto Transfer Switches

Equipment Description N/A

Photographs



Status: Y N U

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PAGE 1 OF 4       Status: Y N U         Seismic Walkdown Checklist (SWC)       SWEL1-061         Equipment ID No.       ENB-SWG01A         Equip. Class1_2-Low Voltage Switchgear & Breaker Panel
Equipment Description <u>125V DC SWITCHGEAR 1A</u>
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1117</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Gould Model 54237-B0001 / 54237-D0026-A</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Welded to sill plate.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Painted, no corrosion</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the YXN UNANA</li> <li>No cracks observed in concrete.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 4

Status:	Y⊠	N	υ
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Seismic Walkdown Checklist (SWC) SWEL1-061	
Equipment ID No. <u>ENB-SWG01A</u> Equip. Class <u>2-Low Voltage Switch</u>	gear & Breaker Panel
Equipment Description 125V DC SWITCHGEAR 1A	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>248.000, EE-038A Verified in accordance with above dwgs</li> <li>6. Record on the above applearage evaluations, is the applearage free of</li> </ul>	
b) Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	
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□

PAGE 3 OF 4

Status: YX N	U
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### Seismic Walkdown Checklist (SWC) SWEL1-061

Equipment ID No. ENB-SWG01A Equip. Class 2-Low Voltage Switchgear & Breaker Panel

Equipment Description 125V DC SWITCHGEAR 1A

#### Other Adverse Conditions

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

<u>**Comments**</u> (Additional pages may be added as necessary)

ENB-SWG01A ACB570 observed pieces of white material resembling insulation (hard). Judged to be housekeeping item.

Ref CR-RBS-2012-6526 WR 00287352

Evaluated by: John Dunkelberg

Date: 10-4-2012

David Bassi

10-4-2012

# Status: Y N U

### Seismic Walkdown Checklist (SWC) SWEL1-061

Equipment ID No. ENB-SWG01A Equip. Class 2-Low Voltage Switchgear & Breaker Panel

Equipment Description <u>125V DC SWITCHGEAR 1A</u>

#### Photographs



Note:



Engineering Report No. RBS-CS-12-00001
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PAGE 1 OF 5
Status: Y N U
Equipment ID No. ENS-SWG1A Equip. Class <sup>1</sup> 3-Medium Voltage, Metal-clad Switchgear
Equipment Description 4160V STANDBY SWGR BUS 1A
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1117</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Asea Brown Boveri Model 5HK-250</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ Switchgear is welded to sill.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Surfaces are painted, no visible corrosion.</li> </ol>
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No visible cracks in concrete.</li> </ol>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-062</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>ENS-SWG1A</u> Equip. Class <u>3-Medium Voltage, M</u>	etal-clad Switchgear
Equipment Description 4160V STANDBY SWGR BUS 1A	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>0242.521-102-002, EC-058C Verified in accordance with above dwgs</li> </ul>	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∏
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□

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	Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-062</u>	
Equipment ID No. <u>ENS-SWG1A</u> Equip. Class <u>3-Medium Voltage, N</u>	Netal-clad Switchgear
Equipment Description 4160V STANDBY SWGR BUS 1A	
Other Adverse Conditions	
<ul> <li>11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?</li> <li>See comments</li> </ul>	Y N U
Comments (Additional pages may be added as necessary)	
Lower hinge pin raised @ ACB08.	
Upper hinge pin raised @ ACB04.	
Middle hinge pin raised @ ACB06.	
Piece of ziptie (ty-wrap) on right side ACB07.	
Upper wire tie to cabinet at door is broken on ACB08 hinge side.	
Ref. LB-06 and CR-RBS-2012-6312	
Matt Keenerg	
Evaluated by: Matt Keeney	Date: <u>10-4-2012</u>

& RAfundleig

John Dunkelberg

10-4-2012

# Status: Y N U

## Seismic Walkdown Checklist (SWC) SWEL1-062

Equipment ID No. <u>ENS-SWG1A</u> Equip. Class<u>3-Medium Voltage, Metal-clad Switchgear</u> Equipment Description <u>4160V STANDBY SWGR BUS 1A</u>

#### Photographs





# Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-062</u>

Equipment ID No. ENS-SWG1A Equip. Class 3-Medium Voltage, Metal-clad Switchgear

Equipment Description <u>4160V STANDBY SWGR BUS 1A</u>



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PAGE 1 OF 5       Status: Y⊠ N□ U□         Seismic Walkdown Checklist (SWC)SWEL1-063       Equipment ID No. H13-P693Equip. Class <sup>1</sup> _20-Instrumentation and Control Panel         Equipment Description RPS LOGIC DIV C       Equipment Description RPS LOGIC DIV C         Location: Bldg. CB Floor El. 136 Room, Area 1310       Manufacturer, Model, Etc. (optional but recommended) General Electric Model 442X822         Instructions for Completing Checklist       This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the
SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A Bolted per GE mounting pattern with 5/8" dia. Bolts, total of 16 bolts, 8 per bay. (2 bay PNL) Bolt spacing = 6" o.c., front & back sides of panel.
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A ∪</li> <li>No corrosion observed</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A</li> <li>Anchor to floor framing steel.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

	-
Page 2 of 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-063</u>	Status: Y⊠ N∐ U∐
Equipment ID No. <u>H13-P693</u> Equip. Class <u>20-Instrumentation an</u>	d Control Panel
Equipment Description RPS LOGIC DIV C	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Ref. doc: 8224-600-000-048A. No documentation for number of bolts in panel attachment. Bolts installed in all holes in panel and support structure.</li> </ol>	Y
CR-RBS-2012-6238 initiated. Ref LB-03	
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? Suspended ceiling over head is designed for seismic event.	Y⊠ N∏ U∏ N/A∏
<ol> <li>Do attached lines have adequate flexibility to avoid damage? Sufficient slack provided in bottom entry cables.</li> </ol>	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□

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Seismic Walkdown Checklist (SWC) <u>SWEL1-063</u>	Status:	Y⊠ N∏ U∏
Equipment ID No. <u>H13-P693</u> Equip. Class <u>20-Instrumentation an</u>	d Control Pa	nel
Equipment Description RPS LOGIC DIV C		
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
Temp. work table set up on front side of panel, potential interaction with panel switches/instruments. See AWC-1063 for photos and evaluation.		

<u>Comments</u> (Additional pages may be added as necessary)

Ref. CR-RBS-2012-6238 for lack of documentation issue Ref. LB-03

Evaluated by: John Dunkelberg	Date: 10-1-2012
April Cardono	
Jose` Cardona	10-1-2012

# Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-063

Equipment ID No. <u>H13-P693</u> Equip. Class <u>20-Instrumentation and Control Panel</u>

Equipment Description RPS LOGIC DIV C

#### Photographs

Note:







## Seismic Walkdown Checklist (SWC) SWEL1-063

Equipment ID No. <u>H13-P693</u> Equip. Class <u>20-Instrumentation and Control Panel</u>

Equipment Description RPS LOGIC DIV C



**Note:** Anchor bolts at rear of cabinet



**Note:** another view of cabinet
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PAGE 1 OF 5       Status: Y N U         Seismic Walkdown Checklist (SWC) SWEL1-064       Status: Y N U         Equipment ID No.       H22-P004       Equip. Class <sup>1</sup> 18-Instrument Racks         Equipment Description       RX VSL LEVEL AND PRESS LOCAL PNL A		
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7207</u>		
Manufacturer, Model, Etc. (optional but recommended) <u>General Electric Model 368X543BA</u>		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>		
<ul> <li>2. Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A</li> <li>4 bolted connections mounting the panel to unistrut. No bent, broken, loose, or missing hardware.</li> </ul>		
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>No visible corrosion.</li> </ol>		
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Anchors?</li> <li>Panel is mounted to unistrut.</li> </ul>		

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 5		
Seiemie Welkdeum Checklist (SWC) SWEL1 061	Status: Y⊠ N⊡ U⊡	
Seismic Walkdown Checklist (SWC) <u>SWEL 1-064</u>		
Equipment ID No. <u>H22-P004</u> Equip. Class <u>18-Instrument Racks</u>		
Equipment Description RX VSL LEVEL AND PRESS LOCAL PNL A		
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□	
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□	

Rev. 000
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Status: YX N U
Y⊠ N□ U□

<u>Comments</u> (Additional pages may be added as necessary)

None

0	Andag		
/	(	Date:	10-9-2012

Evaluated by: <u>Jason Halsey</u>

Engineering Report No. RBS-CS-12-00001

Matt Keeney

<u>10-9-2012</u>

# Status: Y N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-064</u>

Equipment ID No. <u>H22-P004</u> Equip. Class <u>18-Instrument Racks</u>

Equipment Description RX VSL LEVEL AND PRESS LOCAL PNL A



## Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-064</u>

Equipment ID No. <u>H22-P004</u> Equip. Class <u>18-Instrument Racks</u>

Equipment Description RX VSL LEVEL AND PRESS LOCAL PNL A



Engineering Report No. RBS-CS-12-00001
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PAGE 1 OF 6
Status: Y N U
Equipment ID No. HVC-ACU1A Equip. Class <u>10-Air Handlers</u>
Equipment Description CONTROL ROOM AIR HLDG UNIT ACU1A
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area <u>1201</u>
Manufacturer, Model, Etc. (optional but recommended) <u>N/A</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>No missing, loose or broken hardware.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A N/A</li> <li>All anchorage bolts/nuts have a coating of paint.</li> </ul>
<ol> <li>Is the anchorage free of visible cracks in the concrete near the anchors?</li> </ol>
No visible cracks in concrete pad and concrete is painted, minor honeycomb.

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 6	
	Status: Y⊠ N∏ U∏
Seismic Walkdown Checklist (SWC) <u>SWEL1-065</u>	
Equipment ID No. <u>HVC-ACU1A</u> Equip. Class <u>10-Air Handlers</u>	
Equipment Description CONTROL ROOM AIR HLDG UNIT ACU1A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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□

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Page 3 of 6 Seismic Walkdown Checklist (SWC) SWEL1-065	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>HVC-ACU1A</u> Equip. Class <u>10-Air Handlers</u>	
Equipment Description CONTROL ROOM AIR HLDG UNIT ACU1A	
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that cou adversely affect the safety functions of the equipment?	ıld Y⊠ N⊟ U⊟
Comments (Additional pages may be added as necessary)	
None	

Evaluated by: Jason Halsey

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Date: 10/2/2012

Matt Keney Matt Keeney

10/2/2012

# Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-065</u>

Equipment ID No. <u>HVC-ACU1A</u> Equip. Class <u>10-Air Handlers</u>

Equipment Description CONTROL ROOM AIR HLDG UNIT ACU1A



Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-065</u>

Equipment ID No. HVC-ACU1A Equip. Class 10-Air Handlers

Equipment Description CONTROL ROOM AIR HLDG UNIT ACU1A







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### Seismic Walkdown Checklist (SWC) SWEL1-065

Equipment ID No. HVC-ACU1A Equip. Class 10-Air Handlers

Equipment Description CONTROL ROOM AIR HLDG UNIT ACU1A



Note:



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PAGE 1 OF 8       Status: Y N□ U□         Seismic Walkdown Checklist (SWC) SWEL1-066       Status: Y □ U□         Equipment ID No. HVC-ACU2A       Equip Class: 10-Air Handlers		
Equipment Description CONTROL BLDG AIR HLDG UNIT ACU2A		
Location: Bldg, CB Floor El, 070 Room, Area 1011		
Manufacturer, Model, Etc. (optional but recommended) Buffalo Forge Model 29B5		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>		
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>ACU is Bolted to a raised concrete pad on all four sides.</li> </ol>		
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□</li> <li>oxidation?</li> <li>Painted, no corrosion.</li> </ol>		
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No cracks visible.</li> </ul>		

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 8	
	Status: Y⊠ N∏ U∏
Seismic Walkdown Checklist (SWC) <u>SWEL1-066</u>	
Equipment ID No. <u>HVC-ACU2A</u> Equip. Class <u>10-Air Handlers</u>	
Equipment Description CONTROL BLDG AIR HLDG UNIT ACU2A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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	
<ol> <li>Are soft targets free from impact by nearby equipment or structures? ACU is not a soft target. Large duct pieces are installed over the ACU but are supported by very rigid support structures.</li> </ol>	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? Suspended light fixture adjacent to ACU can fail due to seismic event. It	Y⊠ N□ U□ N/A□
will target valves and is considered acceptable. HVK-V118, HVK-V210, HVK-V126, HVK-V117	
<ol> <li>Do attached lines have adequate flexibility to avoid damage? Attached cables and attached ducts are either flexible or are attached with flexible ductwork (expansion joint).</li> </ol>	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□

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PAGE 3 OF 8	
Seismic Walkdown Checklist (SWC) <u>SWEL1-066</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>HVC-ACU2A</u> Equip. Class <u>10-Air Handlers</u>	
Equipment Description CONTROL BLDG AIR HLDG UNIT ACU2A	
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□
<u>Comments (</u> Additional pages may be added as necessary) None	
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Evaluated by: <u>A.S. Dalawari</u>	Ja Samar

Date: <u>10/1/2012</u>

Matt Kener

Matt Keeney

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10/1/2012

# Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-066

Equipment ID No. <u>HVC-ACU2A</u> Equip. Class <u>10-Air Handlers</u>

Equipment Description CONTROL BLDG AIR HLDG UNIT ACU2A



## Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-066

Equipment ID No. HVC-ACU2A Equip. Class 10-Air Handlers

Equipment Description CONTROL BLDG AIR HLDG UNIT ACU2A





Note:

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### Seismic Walkdown Checklist (SWC) SWEL1-066

Equipment ID No. HVC-ACU2A Equip. Class 10-Air Handlers

Equipment Description CONTROL BLDG AIR HLDG UNIT ACU2A



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### Seismic Walkdown Checklist (SWC) SWEL1-066

Equipment ID No. <u>HVC-ACU2A</u> Equip. Class <u>10-Air Handlers</u>

Equipment Description CONTROL BLDG AIR HLDG UNIT ACU2A



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### Seismic Walkdown Checklist (SWC) SWEL1-066

Equipment ID No. <u>HVC-ACU2A</u> Equip. Class <u>10-Air Handlers</u>

Equipment Description CONTROL BLDG AIR HLDG UNIT ACU2A



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Page 1 of 6
Status: Y N U
Equipment ID No. <u>HVR-UC5</u> Equip. Class <sup>1</sup> <u>10-Air Handlers</u>
Equipment Description HPCS PUMP ROOM UNIT COOLER
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6201</u>
Manufacturer, Model, Etc. (optional but recommended) Buffalo Forge Model 29B5
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A NA</li> <li>No bent, broken, missing, or loose hardware</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A All surfaces are painted</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A U N/A anchors?</li> <li>Heavy painted concrete pad, no cracks visible.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Sciemic Welkdown Checklist (SWC) SWEL 1 067	Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWELT-067</u>	
Equipment ID No. <u>HVR-UC5</u> Equip. Class <u>10-Air Handlers</u>	
Equipment Description HPCS PUMP ROOM UNIT COOLER	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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∏
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□

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PAGE 3 OF 6	
Seismic Walkdown Checklist (SWC) <u>SWEL1-067</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>HVR-UC5</u> Equip. Class <u>10-Air Handlers</u>	
Equipment Description HPCS PUMP ROOM UNIT COOLER	
Other Adverse Conditions           11. Have you looked for and found no other seismic conditions that con adversely affect the safety functions of the equipment?	uld Y N U
<u><b>Comments</b></u> (Additional pages may be added as necessary)	

None

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Evaluated by: <u>J. Halsey</u>	Date: <u>10/10/12</u>	
D.T.S.		
D. Bassi	10/10/12	

# Status: Y N U

## Seismic Walkdown Checklist (SWC) SWEL1-067

Equipment ID No. <u>HVR-UC5</u> Equip. Class <u>10-Air Handlers</u>

Equipment Description HPCS PUMP ROOM UNIT COOLER



## Status: Y N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-067</u>

Equipment ID No. <u>HVR-UC5</u> Equip. Class <u>10-Air Handlers</u>

Equipment Description HPCS PUMP ROOM UNIT COOLER



Note:		



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### Seismic Walkdown Checklist (SWC) SWEL1-067

Equipment ID No. <u>HVR-UC5</u> Equip. Class <u>10-Air Handlers</u>

Equipment Description HPCS PUMP ROOM UNIT COOLER



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PAGE 1 OF 5
Status: Y N U
Equipment ID No. <u>HVC-AOD12A</u> Equip. Class <sup>1</sup> <u>7-Pneumatic-operated valve</u>
Equipment Description <u>1HVC*ACU2A AIR OUTLET (CD-2-89')</u>
Location: Bldg. <u>CB</u> Floor El. <u>070</u> Room, Area <u>1000</u>
Manufacturer, Model, Etc. (optional but recommended) Quality Air Design Model DD-5617-2
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A</li> <li>In-line AOD attached to duct on both sides. Bolts visible on 3 sides</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A N/A N/A</li> <li>Minor surface oxidation on the channel. Acceptable</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A Anchors?</li> <li>Attached to duct both sides</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-068</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>HVC-AOD12A</u> Equip. Class <u>7-Pneumatic-operated</u>	d valve
Equipment Description <u>1HVC*ACU2A AIR OUTLET (CD-2-89')</u>	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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?	
AOD is Not a soft target. (no targets in the area as well)	
<ol> <li>Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? No block walls. Overhead equipment is not likely to collapse</li> </ol>	Y⊠ N∐ U∐ N/A∐
9. Do attached lines have adequate flexibility to avoid damage? Attached cable to AOD is flexible	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□

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Status	
Seismic Walkdown Checklist (SWC) <u>SWEL1-068</u>	
Equipment ID No. HVC-AOD12A Equip. Class 7-Pneumatic-operated valve	
Equipment Description <u>1HVC*ACU2A AIR OUTLET (CD-2-89')</u>	
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions that could Y⊠ N□ adversely affect the safety functions of the equipment?	U

<u>Comments (Additional pages may be added as necessary)</u>

None

Evaluated by: D. Bassi	Date: <u>10-1-2012</u>
AB a Samari	
A. S. Dalawari	10-1-2012

## Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-068

Equipment ID No. HVC-AOD12A Equip. Class 7-Pneumatic-operated valve

Equipment Description <u>1HVC\*ACU2A AIR OUTLET (CD-2-89')</u>



Note:

Status: Y N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-068</u>

Equipment ID No. HVC-AOD12A Equip. Class 7-Pneumatic-operated valve

Equipment Description <u>1HVC\*ACU2A AIR OUTLET (CD-2-89')</u>





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PAGE 1 OF 6       Status: Y⊠ N□ U□         Seismic Walkdown Checklist (SWC)
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the
SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y∑ N□ U□ N/A□</li> <li>Anchorage was free of bent, broken, missing or loose hardware.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Painted surfaces, no corrosion visible.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A U N/A N∩ V N/A N/A N N/A N∩ V N/A N/A N/A N N/A N/A N N/A N/A N N/A N/A</li></ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001 Rev. 000
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PAGE 2 OF 6	
Seismic Walkdown Checklist (SWC) <u>SWEL1-069</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>HVC-AOD5B</u> Equip. Class <u>7-Pneumatic-operated</u>	d valve
Equipment Description <u>1HVC*FN2B AIR INLET (CA-2-80')</u>	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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□

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Seismic Walkdown Checklist (SWC) <u>SWEL1-069</u>	Status: Y⊠ N∐ U∐
Equipment ID No. <u>HVC-AOD5B</u> Equip. Class <u>7-Pneumatic-operatec</u>	l valve
Equipment Description <u>1HVC*FN2B AIR INLET (CA-2-80')</u>	
<ul> <li>Other Adverse Conditions</li> <li>11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?</li> </ul>	Y⊠ N□ U□

<u>Comments (Additional pages may be added as necessary)</u>

None

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Evaluated by: Jason Halsey	Date:	<u>10/8/2012</u>
Matt Keener		
Matt Keeney		10/8/2012

## Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-069

Equipment ID No. <u>HVC-AOD5B</u> Equip. Class <u>7-Pneumatic-operated valve</u>

Equipment Description <u>1HVC\*FN2B AIR INLET (CA-2-80')</u>



## Status: Y N U

## Seismic Walkdown Checklist (SWC) SWEL1-069

Equipment ID No. <u>HVC-AOD5B</u> Equip. Class <u>7-Pneumatic-operated valve</u>

Equipment Description <u>1HVC\*FN2B AIR INLET (CA-2-80')</u>





Note:

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Note:

## Status: Y N U

# Seismic Walkdown Checklist (SWC) SWEL1-069

Equipment ID No. <u>HVC-AOD5B</u> Equip. Class <u>7-Pneumatic-operated valve</u>

Equipment Description <u>1HVC\*FN2B AIR INLET (CA-2-80')</u>




Engineering Report No. RBS-CS-12-00001 Rev. 000		
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Status: Y N U		
Seismic Walkdown Checklist (SWC) <u>SWEL1-070</u>		
Equipment ID No. <u>HVC-AOD6A</u> Equip. Class <sup>1</sup> <u>7-Pneumatic-operated valve</u>		
Equipment Description <u>1HVC*ACU1A AIR OUTLET (CD-1-130')</u>		
Location: Bldg. <u>CB</u> Floor El. <u>115</u> Room, Area <u>1200</u>		
Manufacturer, Model, Etc. (optional but recommended) Quality Air Design Model DD-5617-2		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>		
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N□ U□ N/A□</li> <li>All anchorage hardware was intact and free of bent, broken, or loose pieces.</li> </ol>		
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N□ U□ N/A□ oxidation?</li> </ol>		
No corrosion was noted. Anchorage hardware was either painted of galvanized.		
4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N U N/A N N ∪ N/A N N N/A N N N N N N N N N N N N N N		
Component is mounted in-line with the associated ducting and is not anchored to concrete.		

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
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PAGE 2 OF 5	
	Status: VM NM UM
Seismic Walkdown Checklist (SWC) <u>SWEL1-070</u>	
Equipment ID No. <u>HVC-AOD6A</u> Equip. Class_7-Pneumatic-operated	d valve
Equipment Description <u>1HVC*ACU1A AIR OUTLET (CD-1-130')</u>	
5. Is the anchorage configuration consistent 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∏
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?	
10. Record on the above opic interaction evolutions, is a minor of the	
of potentially adverse seismic interaction evaluations, is equipment free	

PAGE 3 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-070</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. HVC-AOD6A Equip. Class 7-Pneumatic-operated	valve
Equipment Description <u>1HVC*ACU1A AIR OUTLET (CD-1-130')</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□

<u>**Comments**</u> (Additional pages may be added as necessary)

N/A

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Evaluated by: Jason Halsey

Date: <u>10-2-2012</u>

Matt Kener Matt Keeney

10-2-2012

# Status: Y N U

# Seismic Walkdown Checklist (SWC) <u>SWEL1-070</u>

Equipment ID No. <u>HVC-AOD6A</u> Equip. Class <u>7-Pneumatic-operated valve</u>

Equipment Description <u>1HVC\*ACU1A AIR OUTLET (CD-1-130')</u>



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#### Seismic Walkdown Checklist (SWC) SWEL1-070

Equipment ID No. <u>HVC-AOD6A</u> Equip. Class <u>7-Pneumatic-operated valve</u>

Equipment Description <u>1HVC\*ACU1A AIR OUTLET (CD-1-130')</u>



**Note:** Mechanical limit switches on side of damper



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PAGE 1 OF 5       Status: Y⊠ N□ U□         Seismic Walkdown Checklist (SWC)       SWEL1-071         Equipment ID No. HVC-CH1A       Equip. Class 1
Equipment Description CONTROL ROOM AIR HLDG UNIT HEATER CH1A
Location: Bldg. <u>CB</u> Floor El. <u>115</u> Room, Area <u>N/A</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Nutherm Model 1023-51751-33</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A Clean and free of damage visible on three sides.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>No corrosion noted.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N ∪ N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A</li></ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-071</u>	Status: YX N U
Equipment ID No. <u>HVC-CH1A</u> Equip. Class <u>0-Other</u>	
Equipment Description CONTROL ROOM AIR HLDG UNIT HEATER CH1A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y⊠ N□ U□ N/A□
See document 0216.200-113-032	
Verified in accordance with above dwg	
6. Based on the above anchorage evaluations, is the anchorage free of	$Y \boxtimes N \square U \square$
potentially adverse seismic conditions?	
Interaction Effects	
7. Are soft targets free from impact by nearby equipment or structures?	YX N U N/A
No equipment nearby that is not supported.	
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,	Y N U U N/A
9. Do attached lines have adequate flexibility to avoid damage?	YX NL UL N/AL
10 Based on the above seismic interaction evaluations is equipment free	
of potentially adverse seismic interaction effects?	

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Seismic Walkdown Checklist (SWC) <u>SWEL1-071</u>	Status: Y N U
Equipment ID No. <u>HVC-CH1A</u> Equip. Class <u>0-Other</u>	
Equipment Description CONTROL ROOM AIR HLDG UNIT HEATER CH1A	
<ul> <li><u>Other Adverse Conditions</u></li> <li>11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?</li> </ul>	Y⊠ N□ U□

Comments (Additional pages may be added as necessary)

None

Matt Keener		
Evaluated by: Matt Keeney	Date:	10/2/2012
Halaay Halaay		10/2/2012
Jason Halsey		10/2/2012

# Status: Y N U

#### Seismic Walkdown Checklist (SWC) <u>SWEL1-071</u>

Equipment ID No. HVC-CH1A Equip. Class 0-Other

#### Equipment Description CONTROL ROOM AIR HLDG UNIT HEATER CH1A



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# Status: Y N U

#### Seismic Walkdown Checklist (SWC) SWEL1-071

Equipment ID No. HVC-CH1A Equip. Class 0-Other

#### Equipment Description CONTROL ROOM AIR HLDG UNIT HEATER CH1A



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PAGE 1 OF 6       Status: Y □ N□ U□         Seismic Walkdown Checklist (SWC) _ SWEL1-072       SWEL1-072         Equipment ID No. HVC-CH3A _ Equip. Class <sup>1</sup> 0-Other       Equipment Description CNTRL BLDG BATTERY ROOM 1A COIL HTR         Location: Bldg. CB _ Floor El. 116 _ Room, Area 1200       Manufacturer, Model, Etc. (optional but recommended) N/A
Instructions for Completing Checklist
SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>No missing, bent, broken, loose hardware.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>No corrosion visible</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No cracking noted around embed. mounting plate.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Page 2 of 6	
Seismic Walkdown Checklist (SWC) <u>SWEL1-072</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>HVC-CH3A</u> Equip. Class_0-Other	
Equipment Description CNTRL BLDG BATTERY ROOM 1A COIL HTR	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Drawing 0216.130-995-013, (28) 0.375" diameter bolts installed. See drawings 12210-EZ-539ZC-7,12210-BZ-539YD-2 1 and 2 of 4. Verified in accordance with above dwgs</li> </ol>	Y⊠ N∏ U∏ N/A∏
<ul> <li>6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> </ul>	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□

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Seismic Walkdown Checklist (SWC) <u>SWEL1-072</u>	Status: Y⊠ N∐ U∐
Equipment ID No. <u>HVC-CH3A</u> Equip. Class <u>0-Other</u>	
Equipment Description CNTRL BLDG BATTERY ROOM 1A COIL HTR	
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could	YX N U
adversely affect the safety functions of the equipment?	

Comments (Additional pages may be added as necessary)

None

Aag		
Evaluated by: <u>Jason Halsey</u>	Date:	10/2/2012
Matt Kener		
Matt Keeney		<u>10/2/2012</u>

# Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-072

Equipment ID No. HVC-CH3A Equip. Class 0-Other

### Equipment Description CNTRL BLDG BATTERY ROOM 1A COIL HTR



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# Status: YX N U

### Seismic Walkdown Checklist (SWC) <u>SWEL1-072</u>

Equipment ID No. HVC-CH3A Equip. Class 0-Other

#### Equipment Description CNTRL BLDG BATTERY ROOM 1A COIL HTR





Note:

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# Status: Y N U

### Seismic Walkdown Checklist (SWC) <u>SWEL1-072</u>

Equipment ID No. HVC-CH3A Equip. Class 0-Other

#### Equipment Description CNTRL BLDG BATTERY ROOM 1A COIL HTR



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PAGE 1 OF 5       Status: Y □ □         Seismic Walkdown Checklist (SWC) _SWEL1-073       SWEL1-073         Equipment ID No. HVC-FN2A       Equip. Class <sup>1</sup> 9-Fans         Equipment Description STBY SWGR RETURN FAN       Location: Bldg. CB         Location: Bldg. CB       Floor El. 070       Room, Area 1000         Manufacturer, Model, Etc. (optional but recommended)       N/A         Instructions for Completing Checklist         This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following guestions may be used to record the results of judgments and
findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A U</li> <li>N/A U</li> <li>N/A</li> <li>Spacing approx 9" oc</li> </ol>
3. Is the anchorage free of corrosion that is more than mild surface Y⊠ N□ U□ N/A□ oxidation?
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the anchors?</li> <li>Steel support structure attached to concrete wall</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-073</u>	Status: YX N U
Equipment ID No. <u>HVC-FN2A</u> Equip. Class <u>9-Fans</u>	
Equipment Description STBY SWGR RETURN FAN	
5. Is the anchorage configuration consistent 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□
0215.350-073-001 Rev 300	
6. Based on the above anchorage evaluations, is the anchorage free of	Y⊠ N□ U□
potentially adverse seismic conditions?	
Interaction Effects	
7. Are soft targets free from impact by nearby equipment or structures?	Y
Not a soft target	
8. Are overnead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	YX NL UL N/AL
Ductwork supported separately from fan	
9. Do attached lines have adequate flexibility to avoid damage?	Y⊠ N□ U□ N/A□
Flex conductors are used on duct work and electrical	
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Y⊠ N□ U□

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PAGE 3 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-073</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>HVC-FN2A</u> Equip. Class <u>9-Fans</u> Equipment Description <u>STBY SWGR RETURN FAN</u>	
Other Adverse Conditions11. Have you looked for and found no other seismic conditions that co adversely affect the safety functions of the equipment?	ould Y⊠ N⊡ U⊡

Comments (Additional pages may be added as necessary)

None

Matt Keener		
Evaluated by: M. Keeney	_ Date:	<u>10-1-2012</u>
D. T.		
D. Bassi	_	<u>10-1-2012</u>

# Status: Y N U

# Seismic Walkdown Checklist (SWC) <u>SWEL1-073</u>

Equipment ID No. HVC-FN2A Equip. Class\_9-Fans

Equipment Description STBY SWGR RETURN FAN



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# Status: YX N U

# Seismic Walkdown Checklist (SWC) <u>SWEL1-073</u>

Equipment ID No. HVC-FN2A Equip. Class 9-Fans

Equipment Description STBY SWGR RETURN FAN



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PAGE 1 OF 4	Status: Y⊠ N⊟ U⊟
Seismic Walkdown Checklist (SWC) <u>SWEL1-074</u>	
Equipment ID No. <u>HVC-FN3D</u> Equip. Class <u></u> <sup>1</sup> <u>9-Fans</u>	
Equipment Description BATTERY ROOM 1A EXHAUST FAN	
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area <u>N/A</u>	
Manufacturer, Model, Etc. (optional but recommended) <u>N/A</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of a SWEL. The space below each of the following questions may be used to record the findings. Additional space is provided at the end of this checklist for documenting	an item of equipment on the ne results of judgments and other comments.
Anchorage	
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ol>	Y□ N⊠
2. Is the anchorage free of bent, broken, missing or loose hardware?	Y N N U N/A
Fan and motor are anchored to a concrete pad with six 74 anchor boils.	
<ol><li>Is the anchorage free of corrosion that is more than mild surface oxidation?</li></ol>	Y⊠ N□ U□ N/A□
Anchorage was painted and free of corrosion.	
4. Is the anchorage free of visible cracks in the concrete near the anchors?	Y N U U N/A
No visible cracks in the concrete near the anchors. Minor hairline cracks were noted in other areas of the grout pad, OK.	

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 4	
Seismic Walkdown Checklist (SWC) <u>SWEL1-074</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>HVC-FN3D</u> Equip. Class <u>9-Fans</u>	
Equipment Description BATTERY ROOM 1A EXHAUST FAN	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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∏

Engineering Report No. RBS-CS-12-00001

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	Status: YX N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-074</u>	
Equipment ID No. <u>HVC-FN3D</u> Equip. Class <u>9-Fans</u>	
Equipment Description BATTERY ROOM 1A EXHAUST FAN	
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)

None

Matt Kener	
Evaluated by: Matt Keeney	Date: <u>10-2-2012</u>
Jason Halsey	10-2-2012
Jasui Haisey	10-2-2012

# Status: YX N U

### Seismic Walkdown Checklist (SWC) <u>SWEL1-074</u>

Equipment ID No. <u>HVC-FN3D</u> Equip. Class <u>9-Fans</u>

Equipment Description BATTERY ROOM 1A EXHAUST FAN



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Page 1 of 9
Status: Y N U
Equipment ID No. HVK-CHL1C Equip. Class <sup>1</sup> 11 – Chillers
Equipment Description HVKC01 CONTROL BLDG CHILLED WATER COMPRESSOR CHL1C
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1124</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Carrier Model 17FA443-B-114-14-10-S</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ul> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A</li> <li>The drawing shows 1 nut on each bolt. There are 2 nuts in the field. 4 bolts (2 on either end). Not a seismic issue</li> </ul>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A U N/A N/A U N/A N/A</li> <li>Mild surface oxidation is present on all 4 bolts.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No visible cracks.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engin	eering Report No. RBS-CS-12-00001 Rev. 000
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Seismic Walkdown Checklist (SWC) <u>SWEL1-075</u>	Status: Y⊠ N□ U□
Equipment ID No. <u>HVK-CHL1C</u> Equip. Class <u>11 – Chillers</u>	
Equipment Description HVKC01 CONTROL BLDG CHILLED WATER COMPR	RESSOR CHL1C
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>Verified IAW drawing: 0216.210-085-003</li> </ul>	YX 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? There are two lights in the area; one fixture has gage that is properly shielded from impact, the other could impact unprotected small-bore pipe attached to HVK-chlic-cond. Not a seismic concern-schedule 80 CS pipe is not a soft target	Y⊠ N□ U□ N/A□
<ol> <li>Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Overhead lights suspended adequately with chains.</li> </ol>	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□

Engine	eering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 338 of 615
PAGE 3 OF 9 Seismic Walkdown Checklist (SWC) <u>SWEL1-075</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>HVK-CHL1C</u> Equip. Class <u>11 – Chillers</u>	
Equipment Description HVKC01 CONTROL BLDG CHILLED WATER COMPR	ESSOR CHL1C
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□
<u>Comments</u> (Additional pages may be added as necessary) None	

Evaluated by: David Bassi	Date:	10/1/2012
· · · · · · · · · · · · · · · · · · ·	_	
Matt Keney		
Matt Keeney	_	10/1/2012

# Status: YX N U

# Seismic Walkdown Checklist (SWC) - SWEL1-075

Equipment ID No. <u>HVK-CHL1C</u> Equip. Class <u>11 – Chillers</u>

Equipment Description <u>HVKC01 CONTROL BLDG CHILLED WATER COMPRESSOR CHL1C</u>



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Status: YX N U

#### Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. <u>HVK-CHL1C</u> Equip. Class <u>11 – Chillers</u>

Equipment Description HVKC01 CONTROL BLDG CHILLED WATER COMPRESSOR CHL1C





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	LC.	

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Status: Y N U

# Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. <u>HVK-CHL1C</u> Equip. Class <u>11 – Chillers</u>

Equipment Description <u>HVKC01 CONTROL BLDG CHILLED WATER COMPRESSOR CHL1C</u>





Note:

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### Status: Y N U

### Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. <u>HVK-CHL1C</u> Equip. Class <u>11 – Chillers</u>

Equipment Description HVKC01 CONTROL BLDG CHILLED WATER COMPRESSOR CHL1C





Note:

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# Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. <u>HVK-CHL1C</u> Equip. Class <u>11 – Chillers</u>

Equipment Description HVKC01 CONTROL BLDG CHILLED WATER COMPRESSOR CHL1C





Note:

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# Status: Y N U

# Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. <u>HVK-CHL1C</u> Equip. Class <u>11 – Chillers</u>

Equipment Description HVKC01 CONTROL BLDG CHILLED WATER COMPRESSOR CHL1C



			_	
Note:				



Engineering Report No. RBS-CS-12-00001 Rev. 000				
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Status: Y N U				
Equipment ID No. <u>HVK-MOV20C</u> Equip. Class <sup>1</sup> 8 – Motor-Operated and Solenoid-Operated Valves				
Equipment Description CNTRL BLDG CHILLED WTR PMP 1C DISCH MTR OPERATED ISOL VLV				
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1110</u>				
Manufacturer, Model, Etc. (optional but recommended) <u>Jamesbury Model 815L-S9273301-22HB-SL-C /</u> 8226-EX-C-6				
Instructions for Completing Checklist				
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.				
Anchorage				
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>				
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N□ U□ N/A□</li> <li>It is an inline valve with a horizontal operator</li> </ol>				
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Valve and operator are free of corrosion</li> </ol>				
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y N U N/A NA</li> <li>Y N U N/A NA</li> </ol>				

Not attached to concrete, inline

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

|--|

Status: Y N U

ipr	ment ID No. <u>HVK-MOV20C</u> Equip. Class <u>8 – Motor-Operated a</u>	nd Solenoid-Operated Valve		
iipr	ment Description CNTRL BLDG CHILLED WTR PMP 1C DISCH MTR O	PERATED ISOL VLV		
5.	Is the anchorage configuration consistent 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□		
raction Effects				
7.	Are soft targets free from impact by nearby equipment or structures? MOV is not a soft target	Y⊠ N□ U□ N/A□		

8. Are overhead equipment, distribution systems, ceiling tiles and lightin and masonry block walls not likely to collapse onto the equipment? No overhead equipment that is not seismically qualified	g, Y⊠ N∏ U∏ N/A∏
<ol> <li>Do attached lines have adequate flexibility to avoid damage? MOV is powered with flexible conduit</li> </ol>	Y⊠ N∏ U∏ N/A∏
10. Based on the above seismic interaction evaluations, is equipment free	e Y⊠ N⊡ U⊡

#### Seismic Walkdown Checklist (SWC) SWEL1-076

Equipment ID No. HV es

Equipment Description	CNTRL BLDG CHILLED WTR PMP 1C DISCH MTR OPERATED ISOL VLV
• •	

Interaction Effects		

of potentially adverse seismic interaction effects?
Status: Y N U

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#### Seismic Walkdown Checklist (SWC) SWEL1-076

Equipment ID No. <u>HVK-MOV20C</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valves</u>

Equipment Description CNTRL BLDG CHILLED WTR PMP 1C DISCH MTR OPERATED ISOL VLV

#### **Other Adverse Conditions**

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

<u>Comments</u> (Additional pages may be added as necessary)

None

Evaluated by: A.S. Dalawari Date: 10-1-2012 D. Bassi 10-1-2012

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# Status: YX N U

#### Seismic Walkdown Checklist (SWC) SWEL1-076

 Equipment ID No.
 HVK-MOV20C
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 CNTRL BLDG CHILLED WTR PMP 1C DISCH MTR OPERATED ISOL VLV



Engineering Report No. RBS-CS-12-00001
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Page 1 of 5
Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-077</u>
Equipment ID No. <u>HVK-P1A</u> Equip. Class <sup>1</sup> <u>5-Horizontal Pump</u>
Equipment Description <u>1HVK*P1A CONTROL BLDG CHILLED WATER PUMP</u>
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1124</u>
Manufacturer, Model, Etc. (optional but recommended) Gould Model 3196-MT SZ 3X4-8G
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Pump is secured using 4 bolts with single nuts on concrete pad</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A N/A</li> <li>Bolts and nuts are painted</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No visible cracks</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) SWEI 1-077	Status: Y⊠ N□ U□
Equipment ID No. <u>HVK-P1A</u> Equip. Class <u>5-Horizontal Pump</u>	
Equipment Description <u>1HVK*P1A CONTROL BLDG CHILLED WATER PUMP</u>	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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? One soft target no threatened	Y⊠ N□ U□ N/A□
<ol> <li>Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Light fixture will not fail, bulb can dislodge and fall but will not affect equipment</li> </ol>	Y⊠ N□ U□ N/A□
9. Do attached lines have adequate flexibility to avoid damage? Flexible lines	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□

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	Status: Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC) <u>SWEL1-0/7</u>	
Equipment ID No. <u>HVK-P1A</u> Equip. Class <u>5-Horizontal Pump</u>	
Equipment Description <u>1HVK*P1A CONTROL BLDG CHILLED WATER PUMP</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)

None

Evaluated by: D. Bassi	_ Date:	<u>10/1/12</u>
RR Down	0.01	<u></u>
A. Dalawari		<u>10/1/12</u>

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## Status: Y N U

#### Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. HVK-P1A Equip. Class 5-Horizontal Pump

Equipment Description <u>1HVK\*P1A CONTROL BLDG CHILLED WATER PUMP</u>





Note:	Note:

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## Status: YX N U

#### Seismic Walkdown Checklist (SWC) - SWEL1-077

Equipment ID No. HVK-P1A Equip. Class 5-Horizontal Pump

#### Equipment Description <u>1HVK\*P1A CONTROL BLDG CHILLED WATER PUMP</u>



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PAGE 1 OF 6
Seismic Walkdown Checklist (SWC) - SWEL1-078
Equipment ID No. <u>HVK-TK1A</u> Equip. Class <sup>1</sup> 21 – Tanks and Heat Exchangers
Equipment Description CNTRL BLDG CHILLED WTR SURGE TK 1A
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1100</u>
Manufacturer, Model, Etc. (optional but recommended) Reco Model D-76-629
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N∑ U N/A Tank installed on approx. 6" high pad, anchored with 8 bolts. Two nuts are not fully engaged (90-95% engaged)</li> </ol>
Ref. CR-RBS-2012-6242; LB-01
3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A
Anchors are painted. No corrosion.
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y∑ N□ U□ N/A□ anchors?</li> <li>No cracks observed. Pad is coated</li> </ul>
No ordono observed. E du lo codicu.

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>- SWEL1-078</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>HVK-TK1A</u> Equip. Class <u>21 – Tanks and Heat</u>	Exchangers
Equipment Description CNTRL BLDG CHILLED WTR SURGE TK 1A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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	
<ol> <li>Are soft targets free from impact by nearby equipment or structures? Tank not a soft target.</li> </ol>	Y⊠ N□ U□ N/A□
<ol> <li>Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Light fixture near tank but tank is not a soft target.</li> </ol>	Y⊠ N□ U□ N/A□
<ol> <li>Do attached lines have adequate flexibility to avoid damage? Yes, tubes attached on one side and pipes on the other 2 sides are flexible.</li> </ol>	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□

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PAGE 3 OF 6	
Seismic Walkdown Checklist (SWC) <u>SWEL1-078</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>HVK-TK1A</u> Equip. Class <u>21 – Tanks and H</u>	leat Exchangers
Equipment Description <u>CNTRL BLDG CHILLED WTR SURGE TK 1A</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?	d Y⊠ N□ U□
Comments (Additional pages may be added as necessary)	
None	
Ref. CR-RBS-2012-6242; LB-01	
AS a Somari	
Evaluated by: <u>A. S. Dalawari</u>	Date: <u>10/1/2012</u>
	10/1/22/22
David Bassi	10/1/2012

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Status:	Y⊠	N	U
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#### Seismic Walkdown Checklist (SWC) SWEL1-078

Equipment ID No. <u>HVK-TK1A</u> Equip. Class <u>21 – Tanks and Heat Exchangers</u>

Equipment Description CNTRL BLDG CHILLED WTR SURGE TK 1A



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## Seismic Walkdown Checklist (SWC) SWEL1-078

Equipment ID No. <u>HVK-TK1A</u> Equip. Class <u>21 – Tanks and Heat Exchangers</u>

Note:

Equipment Description CNTRL BLDG CHILLED WTR SURGE TK 1A





Note:	

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		Status: Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC)	SWEL1-078	
Equipment ID No. HVK-TK1A	Equip. Class 21 – Tanks and Heat	t Exchangers
Equipment Description CNTRL BLDG CH	LLED WTR SURGE TK 1A	
1	3:43 рм	
Note:	Note:	

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PAGE 1 OF 4       Status: Y □ □         Seismic Walkdown Checklist (SWC) SWEL1-079       SWEL1-079         Equipment ID No. HVP-AOD11A       Equip. Class <sup>1</sup> 7 – Pneumatic-Operated Valves         Equipment Description DSL GEN CONT RM A AIR SPLY (DC-3-131')       Equipment Description DSL GEN CONT RM A AIR SPLY (DC-3-131')         Location: Bldg. DG       Floor El. 126       Room, Area 1305         Manufacturer, Model, Etc. (optional but recommended)       Quality Air Design Model DD-5617-2
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ul> <li>2. Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A</li> <li>Missing the top left bolt, not judged to be seismic issue (21 of 22 bolts present).</li> <li>Need a CR for missing bolt.</li> </ul>
Ref.CR-RBS-2012-6236
3. Is the anchorage free of corrosion that is more than mild surface Y № N U N/A oxidation?
No major corrosion evident
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N U N/A Archaracteria</li> <li>Attached to equipment</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-079</u>	Status: YX N U
Equipment ID No. <u>HVP-AOD11A</u> Equip. Class <u>7 – Pneumatic-Opera</u>	ted Valves
Equipment Description DSL GEN CONT RM A AIR SPLY (DC-3-131')	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y N U N/A
<ol> <li>Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> <li>Bolt missing but adequate number remaining</li> </ol>	Y⊠ N□ U□
Interaction Effects	
<ul> <li>7. Are soft targets free from impact by nearby equipment or structures?</li> <li>No soft targets</li> </ul>	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? Equipment not in danger of overhead equipment falling	Y⊠ N□ U□ N/A□
9. Do attached lines have adequate flexibility to avoid damage? Flexible conduits are attached to the AOD	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□

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Seismic Walkdown Checklist (SWC)	SWEL1-079	Status: Y⊠ N∐ U∐
Equipment ID No. <u>HVP-AOD11A</u>	Equip. Class <u>7 – Pneumatic-</u>	Operated Valves
Equipment Description DSL GEN CONT F	RM A AIR SPLY (DC-3-131')	
Other Adverse Conditions		
11. Have you looked for and found no o adversely affect the safety functions	ther seismic conditions that co s of the equipment?	uld Y N N U

<u>Comments</u> (Additional pages may be added as necessary)

Ref. CR-RBS-2012-6236 WR-328656 installed missing bolt

Evaluated by: D. Bassi	_ Date: <u>10-2-</u>	12
J. Dunkelberg	<u>10-2-</u>	12

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Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. <u>HVP-AOD11A</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description DSL GEN CONT RM A AIR SPLY (DC-3-131')



**Note:** AOD anchorage (with missing bolt shown in top left corner)



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Seismic Walkdown Checklist (SWC) SWEL1-081	Status: Y⊠ N∐ U∐ I
Equipment ID No. <u>HVP-FN2A</u> Equip. Class <u></u> 9 - Fan	S
Equipment Description DIESEL ROOM A EMER VENTILATING I	EXHAUST FAN
Location: Bldg. <u>DG</u> Floor El. <u>098</u> Room, Area	1100
Manufacturer, Model, Etc. (optional but recommended) <u>N/A</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic SWEL. The space below each of the following questions may be u findings. Additional space is provided at the end of this checklist fo	Walkdown of an item of equipment on the used to record the results of judgments and or documenting other comments.
Anchorage	
<ol> <li>Is the anchorage configuration verification required (i.e., is of the 50% of SWEL items requiring such verification)?</li> </ol>	the item one Y⊠ N□
<ol> <li>Is the anchorage free of bent, broken, missing or loose har Bolts were properly engaged and all present (from what wa Could not see 2 of 5 attachment bolts on south side. North are good.</li> </ol>	rdware? Y⊠ N⊡ U⊡ N/A⊡ as seen). side 5 bolts
3. Is the anchorage free of corrosion that is more than mild su oxidation?	urface Y N U N/A
Bolts are painted. Could not see 2 of 5 attachment bolts on North side 5 bolts are good.	n south side.
4. Is the anchorage free of visible cracks in the concrete near anchors?	the Y N U N/A
Fan is attached to structural steel.	

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Status: Y N U
Seismic Walkdown Checklist (SWC) SWEL1-081	
Equipment ID No. <u>HVP-FN2A</u> Equip. Class <u>9 - Fans</u>	
Equipment Description DIESEL ROOM A EMER VENTILATING EXHAUST FA	N
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>Dwg. Ref. 0215.350-073-017K</li> <li>10" spacing looked correct and bolts appeared to be 1". Could not see 2 of 5 attachment bolts on south side. North side 5 bolts are good.</li> </ul>	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□
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□

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Equipment ID No. <u>HVP-FN2A</u> Equip. Class <u>9 - Fans</u> Equipment Description <u>DIESEL ROOM A EMER VENTILATING EXHAUST FAN</u>	Seismic Walkdown Checklist (SWC) <u>- SWEL1-081</u>	Status: Y⊠ N∏ U∏
Equipment Description DIESEL ROOM A EMER VENTILATING EXHAUST FAN	Equipment ID No. <u>HVP-FN2A</u> Equip. Class <u>9 - Fans</u>	
	Equipment Description DIESEL ROOM A EMER VENTILATING EXHAUST F	FAN
Other Adverse Conditions         11. Have you looked for and found no other seismic conditions that could       Y⊠ N□ U□         adversely affect the safety functions of the equipment?	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□

<u>Comments</u> (Additional pages may be added as necessary)

Fan is high in the overhead, all observations were from the floor, could not measure bolt size/spacing Could not see 2 of 5 attachment bolts on south side. North side 5 bolts are good. No evidence or basis to conclude that the 2 bolts that could not be observed are not in place. Based on discussion with EOI (J Drake), it was determined that this is an acceptable inspection.

Jerkenhleig	5.	
Evaluated by: <u>J. Dunkelberg</u>	Date:	<u>10-2-12</u>
D: B.		
D. Bassi	-	10-2-12

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Status: Y N U

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Seismic Walkdown Checklist (SWC) SWEL1-081

Equipment ID No. <u>HVP-FN2A</u> Equip. Class <u>9 - Fans</u>

#### Equipment Description DIESEL ROOM A EMER VENTILATING EXHAUST FAN



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Seismic Walkdown Checklist (SWC)	SWEL1-081	Status: Y⊠ N□ U□
Equipment ID No. <u>HVP-FN2A</u> Equ	ip. Class <u>9 - Fans</u>	_
Equipment Description DIESEL ROOM A EME	R VENTILATING EXHAUST FAN	_
<b>Note:</b> Visible bolts on the south side of the fan.	Note:	

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Page 1 oF 5 Status: Y⊠ N□ U□ Seismic Walkdown Checklist (SWC)SWEL1-082
Equipment ID No. <u>HVP-FN6A</u> Equip. Class <u>9 - Fans</u>
Equipment Description DSL GEN CONT RM A VENT SUPPLY FAN
Location: Bldg. DG Floor El. <u>126</u> Room, Area <u>1305</u>
Manufacturer, Model, Etc. (optional but recommended) Buffalo Forge Model 30/BL PC
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>All bolts were present and no problems</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>No corrosion observed</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No cracking was observed near the anchors.</li> </ul>

Engineering Report No. RBS-CS-12-00001

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

	Status: Y🛛 N🗌 U
Seismic Walkdown Checklist (SWC) SWEL1-082	
Equipment ID No. <u>HVP-FN6A</u> Equip. Class <u>9 - Fans</u>	
Equipment Description DSL GEN CONT RM A VENT SUPPLY FAN	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>EC-029G</li> <li>Verified in accordance with above dwg</li> </ol>	Y⊠ N□ U□ N/A□
<ol> <li>Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> </ol>	Y⊠ N□ U□
Interaction Effects	
<ol> <li>Are soft targets free from impact by nearby equipment or structures? No soft targets</li> </ol>	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? Lighting directly attached to building steel	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□

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Seismic Walkdown Checklist (SWC) <u>SWEL1-082</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>HVP-FN6A</u> Equip. Class <u>9 - Fans</u>	
Equipment Description DSL GEN CONT RM A VENT SUPPLY FAN	
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions that cou adversely affect the safety functions of the equipment?	Id Y⊠ N□ U□
<u>Comments (</u> Additional pages may be added as necessary)	
None	
Evaluated by: J. Dunkelberg	Date: <u>10-2-12</u>
D.T.S.	
D. Bassi	10-2-12

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Seismic Walkdown Checklist (SWC)	SWEL1-082	Status: Y⊠ N□ U□
Equipment ID No. <u>HVP-FN6A</u>	Equip. Class <u>9 - Fans</u>	
Equipment Description DSL GEN CONT F	RM A VENT SUPPLY FAN	



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Seismic Walkdown Checklist (SWC)
SWEL1-082

Equipment ID No.
HVP-FN6A

Equip. Class 9 - Fans

Equipment Description DSL GEN CONT RM A VENT SUPPLY FAN

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PAGE 1 OF 4		
Seismic Walkdown Checklist (SWC) SWEL1-083		
Equipment ID No. <u>HVP-PNL12A</u> Equip. Class <u>3 – Medium Voltage, Metal-Clad Switchgear</u>		
Equipment Description DIESEL GENERATOR VENTILATION PNL 12A		
Location: Bldg. DG Floor El. 098 Room, Area 1106		
Manufacturer, Model, Etc. (optional but recommended) Model HVP-PNL12A		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>		

2.	Is the anchorage free of bent, broken, missing or loose hardware? Panel is anchored to the wall by four bolts to embedded unistrut channel.	Y⊠ N□ U□ N/A□
3.	Is the anchorage free of corrosion that is more than mild surface oxidation? No visible corrosion.	Y⊠ N□ U□ N/A□
4.	Is the anchorage free of visible cracks in the concrete near the anchors?	Y⊠ N□ U□ N/A□

No visible cracks in the concrete near embedment.

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-083</u>	Status: Y⊠ N⊡ U⊡	
Equipment ID No. <u>HVP-PNL12A</u> Equip. Class <u>3 – Medium Voltage, I</u>	Metal-Clad Switchgear	
Equipment Description DIESEL GENERATOR VENTILATION PNL 12A		
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□	
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□	

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Seismic Walkdown Checklist (SWC) <u>SWEL1-083</u>	Status: Y⊠ N∏ U∏		
Equipment ID No. <u>HVP-PNL12A</u> Equip. Class <u>3 – Medium Voltage</u>	e, Metal-Clad Switchgear		
Equipment Description DIESEL GENERATOR VENTILATION PNL 12A			
Other Adverse Conditions			
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	YX N U		

Comments (Additional pages may be added as necessary)

None

77	Patt Keener	
Evaluated by: Matt Keeney		Date: <u>10-4-2012</u>
	& Philaden	
John Dunkelberg	U U	10-4-2012

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# Status: YX N U

#### Seismic Walkdown Checklist (SWC) SWEL1-083

Equipment ID No. <u>HVP-PNL12A</u> Equip. Class <u>3 – Medium Voltage, Metal-Clad Switchgear</u>

Equipment Description DIESEL GENERATOR VENTILATION PNL 12A



Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 378 of 615			
PAGE 1 OF 5 Seismic Walkdown Checklist (SWC) SWEL1-084 Equipment ID No. HVR UC10 Equip Classe 10 Air Handlors			
Equipment Description CONTMT UNIT COOLER			
Location: Bldg, RB Floor El, 162 Room, Area 7408			
Manufacturer, Model, Etc. (optional but recommended) Buffalo Forge Model 390 PC/48D9-1750-22			
Instructions for Completing Checklist			
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.			
Anchorage			
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>			
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>No damage noticed on anchorage.</li> </ol>			
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A U N/A Light rusting noted on anchorage bolts.</li> </ul>			
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y□ N□ U□ N/A⊠ anchors?</li> <li>Component is mounted on steel.</li> </ol>			

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-084</u>	Status: Y N U
Equipment ID No. <u>HVR-UC1A</u> Equip. Class <u>10 – Air Handlers</u>	
Equipment Description CONTMT UNIT COOLER	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>Verified IAW drawings: 0215.252-057-010, 0215.252-057-009, ES-053P</li> </ul>	Y⊠ N□ U□ N/A□
<ol> <li>Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> </ol>	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,	Y⊠ N□ U□ N/A□
and masonry block walls not likely to collapse onto the equipment?	
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∏

Engineering Report No. RBS-CS-12-00001

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	Status: YX N U
Seismic Walkdown Checklist (SWC) SWEL1-084	
Equipment ID No. <u>HVR-UC1A</u> Equip. Class <u>10 – Air Handler</u>	rs
Equipment Description CONTMT UNIT COOLER	
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions that cou adversely affect the safety functions of the equipment?	uld Y⊠ N∏ U∏

Comments (Additional pages may be added as necessary)

None

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7.	Natt Keener	
Evaluated by: Matt Keeney		_ Date: <u>10-3-2012</u>
John Dunkelberg	J. P. Klunhelberg	10 3 2012

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## Seismic Walkdown Checklist (SWC) SWEL1-084

Equipment ID No. <u>HVR-UC1A</u> Equip. Class <u>10 – Air Handlers</u>

Equipment Description CONTMT UNIT COOLER



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### Status: YX N U

# Seismic Walkdown Checklist (SWC) SWEL1-084

Equipment ID No. <u>HVR-UC1A</u> Equip. Class <u>10 – Air Handlers</u>

Equipment Description CONTMT UNIT COOLER


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PAGE 1 OF 4       Status: Y⊠ N□ U□         Seismic Walkdown Checklist (SWC) - SWEL1-085       Status: Y⊠ N□ U□         Equipment ID No. HVR-UC6       Equip. Class <sup>1</sup> 10 – Air Handlers
Equipment Description AUX BLDG UNIT COOLER
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6205</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Westinghouse Elec Model 326TCZ</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>All hardware good condition, all in place</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y∑ N□ U□ N/A□ oxidation?</li> <li>Painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the YX NU VA NA</li> <li>Anchors?</li> <li>No visible cracks</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engin	eering Report No. RBS-CS-12-00001
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Saismia Walkdown Chaoklist (SWC) SWEL1 085	Status: Y⊠ N_ U_
Equipment ID No. <u>HVR-UC6</u> Equip. Class <u>10 – Air Handlers</u>	
Equipment Description AUX BLDG UNIT COOLER	
5. Is the anchorage configuration consistent 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□
Verified IAW the following Drawings:	
EC-066G, EC-067C, 0215.252-057-038	
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,	Y⊠ N□ U□ N/A□
and masonry block walls not likely to collapse onto the equipment?	
9. Do attached lines have adequate flexibility to avoid damage?	Y N N U N/A
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	YX N U

	En	gineering Report No. F	RBS-CS-12-00001 Rev. 000
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PAGE 3 OF 4			
		Status: Y	
Seismic Walkdown Checklist (SWC)	SWEL1-085		
Equipment ID No. <u>HVR-UC6</u> E	Equip. Class <u>10 – Air Handlers</u>		
Equipment Description AUX BLDG UNIT CO	DOLER		
Other Adverse Conditions			
<ol> <li>Have you looked for and found no othe adversely affect the safety functions of</li> </ol>	er seismic conditions that could of the equipment?	Y⊠ N∏ U[	

Comments (Additional pages may be added as necessary)

None

Evaluated by: J. Dunkelberg	J. R. Kunhloug	Date:	10/8/12
D. Bassi	DB:		10/8/12

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## Seismic Walkdown Checklist (SWC) SWEL1-085

Equipment ID No. <u>HVR-UC6</u> Equip. Class <u>10 – Air Handlers</u>

Equipment Description <u>AUX BLDG UNIT COOLER</u>





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Page 1 oF 6 Status: Y⊠ N□ U□ Seismic Walkdown Checklist (SWC)SWEL1-086
Equipment ID No. LSV-C3A Equip. Class <u>12 – Air Compressors</u>
Equipment Description PENETRATION VALVE LEAKAGE CONT SYSTEM AIR
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6301</u>
Manufacturer, Model, Etc. (optional but recommended) Nash Model AD 74N
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y    N    U    N/A    All anchors are present and in good condition</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Anchors are clean steel or painted</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N∑ U N/A anchors?</li> <li>The grout bed is cracked on one anchor.</li> </ul>

Engineering Report No. RBS-CS-12-00001

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Status: Y🛛 N🗌 U🗌
Seismic Walkdown Checklist (SWC) SWEL1-086	
Equipment ID No. LSV-C3A Equip. Class 12 – Air Compressors	
Equipment Description PENETRATION VALVE LEAKAGE CONT SYSTEM AIR	3
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) EC-066G</li> </ol>	Y⊠ N□ U□ N/A□
Verified in accordance with above dwg	
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Y⊠ N□ U□
Grout bed is intact regardless of crack in grout	
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,	Y⊠ N□ U□ N/A□
and masonry block walls not likely to collapse onto the equipment?	
9. Do attached lines have adequate flexibility to avoid damage?	Y N U U N/A
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Y⊠ N□ U□

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	Status:		
SWEL1-086			
Class <u>12 – Air Compressors</u>			
EAKAGE CONT SYSTEM AII	۲		
iomic conditions that could			
equipment?			
	SWEL1-086 Class <u>12 – Air Compressors</u> EAKAGE CONT SYSTEM All ismic conditions that could equipment?	Status: <u>SWEL1-086</u> Class <u>12 – Air Compressors</u> <u>EAKAGE CONT SYSTEM AIR</u> ismic conditions that could Y N N	Status: Y N U <u>SWEL1-086</u> Class <u>12 – Air Compressors</u> <u>EAKAGE CONT SYSTEM AIR</u> ismic conditions that could Y N U

<u>Comments</u> (Additional pages may be added as necessary)

Grout bed cracked but is still in good condition. Judged to not be a seismic issue. CR-RBS-2012-6400 initiated to address.

Matt Keenerg		
Evaluated by: M. Keeney	Date:	10/8/12
Adag		
J. Halsey	_	10/8/12

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# Seismic Walkdown Checklist (SWC) SWEL1-086

Equipment ID No. LSV-C3A Equip. Class 12 – Air Compressors

Equipment Description <u>PENETRATION VALVE LEAKAGE CONT SYSTEM AIR</u>

#### Photographs





Note:

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Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-086

Equipment ID No. LSV-C3A Equip. Class 12 – Air Compressors

Equipment Description <u>PENETRATION VALVE LEAKAGE CONT SYSTEM AIR</u>





Note:

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<u> </u>		
Status:	YЦ	U

## Seismic Walkdown Checklist (SWC) SWEL1-086

Equipment ID No. LSV-C3A Equip. Class 12 – Air Compressors

Equipment Description PENETRATION VALVE LEAKAGE CONT SYSTEM AIR





Note:

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PAGE 1 OF 6       Status: Y⊠ N□ U□         Seismic Walkdown Checklist (SWC)       SWEL1-087         Equipment ID No.       LSV-C3B         Equipment Description       RENETRATION VALVE LEAKAGE CONT SYSTEM AIR COMPRESSOR
Location: Bldg AB Eloor El 141 Boom Area 6301
Manufacturer, Model, Etc. (optional but recommended) Nash Model AD 74N
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>All visible bolt holes filled.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U U N/A oxidation?</li> <li>Clean steel or painted</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A</li> <li>Mounted to steel</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001 Rev. 000
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	Status: Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC) <u>SWEL1-087</u>	
Equipment ID No. <u>LSV-C3B</u> Equip. Class <u>12 – Air Compressors</u>	
Equipment Description <u>PENETRATION VALVE LEAKAGE CONT SYSTEM AII</u>	R COMPRESSOR
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

PAGE 3 OF 6	
Seismic Walkdown Checklist (SWC) SWEL1-087	Status: Y⊠ N∐ U∐
Equipment ID No. <u>LSV-C3B</u> Equip. Class <u>12 – Air Compressors</u>	
Equipment Description PENETRATION VALVE LEAKAGE CONT SYSTEM AIR	COMPRESSOR
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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<u>Comments (Additional pages may be added as necessary)</u>

None

Matt Keener		
Evaluated by: Matt Keeney	_ Date:	10/8/2012
Brandon Nissing	_	<u>10/8/2012</u>

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# Seismic Walkdown Checklist (SWC) SWEL1-087

Equipment ID No. LSV-C3B Equip. Class 12 – Air Compressors

Equipment Description PENETRATION VALVE LEAKAGE CONT SYSTEM AIR COMPRESSOR

#### Photographs



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### Status: YX N U

### Seismic Walkdown Checklist (SWC) - SWEL1-087

Equipment ID No. LSV-C3B Equip. Class 12 – Air Compressors

Equipment Description PENETRATION VALVE LEAKAGE CONT SYSTEM AIR COMPRESSOR





Note:

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Status: YX N U

### Seismic Walkdown Checklist (SWC) - SWEL1-087

Equipment ID No. <u>LSV-C3B</u> Equip. Class <u>12 – Air Compressors</u>

#### Equipment Description PENETRATION VALVE LEAKAGE CONT SYSTEM AIR COMPRESSOR



Note:

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Status: YX N_ U_
Equipment ID No. <u>RCP-TCA03</u> Equip. Class <sup>1</sup> 14 – Distribution Panels
Equipment Description RX CNTMNT ELECT OUTBRD PENTR NMS13 & LVI13A TERMINATION CABINET
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6207</u>
Manufacturer, Model, Etc. (optional but recommended) General Electric Model EB-25
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Welded connection to sills on two sides</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No cracks visible in concrete</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-088</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>RCP-TCA03</u> Equip. Class <u>14 – Distribution Pane</u>	els
Equipment Description RX CNTMNT ELECT OUTBRD PENTR NMS13 & LVI1	3A TERMINATION CABINET
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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□

PAGE 3 OF 5

Status:	Y⊠	N	U
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#### Seismic Walkdown Checklist (SWC) - SWEL1-088

Equipment ID No. <u>RCP-TCA03</u> Equip. Class <u>14 – Distribution Panels</u>

Equipment Description RX CNTMNT ELECT OUTBRD PENTR NMS13 & LVI13A TERMINATION CABINET

#### **Other Adverse Conditions**

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

**<u>Comments</u>** (Additional pages may be added as necessary)

None

Evaluated by: <u>D. Bassi</u>	D'B:	_ Date:	<u>10/9/12</u>
J. Dunkelberg	J. P. Klunhloug	-	<u>10/9/12</u>

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## Status: Y N U

## Seismic Walkdown Checklist (SWC) SWEL1-088

Equipment ID No. <u>RCP-TCA03</u> Equip. Class <u>14 – Distribution Panels</u>

Equipment Description RX CNTMNT ELECT OUTBRD PENTR NMS13 & LVI13A TERMINATION CABINET

#### Photographs



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Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-088

Equipment ID No. <u>RCP-TCA03</u> Equip. Class <u>14 – Distribution Panels</u>

Equipment Description RX CNTMNT ELECT OUTBRD PENTR NMS13 & LVI13A TERMINATION CABINET





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PAGE 1 OF 5
Status. TAIN 0
Equipment ID No. <u>RCP-TCF04</u> Equip. Class <sup>1</sup> <u>14</u> – Distribution Panels
Equipment Description RX CNTMNT ELECT OUTBRD PENTR LVC21 & LVI20A TERMINATION CABINET
Location: Bldg. <u>FB</u> Floor El. <u>113</u> Room, Area <u>5205</u>
Manufacturer, Model, Etc. (optional but recommended) <u>General Electric Model EB-25</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Welded to floor sills, 2 sides, continuous weldment.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N□ U□ N/A□ oxidation?</li> <li>painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A N/A</li> <li>No cracks observed</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001 Rev. 000
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Seismic Walkdown Checklist (SWC) <u>SWEL1-089</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>RCP-TCF04</u> Equip. Class <u>14 – Distribution Pane</u>	els
Equipment Description RX CNTMNT ELECT OUTBRD PENTR LVC21 & LVI20	DA TERMINATION CABINET
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) EE-038F; 248.000</li> </ol>	Y⊠ N□ U□ N/A□
<ul><li>Verified in accordance with above dwg</li><li>6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li></ul>	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□

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Seismic Walkdown Checklist (SWC)	SWEL1-089	Status: Y⊠ N∏ U∏
Equipment ID No. <u>RCP-TCF04</u>	Equip. Class <u>14 – Distribution Pa</u>	nels
Equipment Description RX CNTMNT ELE	CT OUTBRD PENTR LVC21 & LVI	20A TERMINATION CABINET
Other Adverse Conditions 11. Have you looked for and found no c adversely affect the safety functions See comments	other seismic conditions that could s of the equipment?	Y⊠ N□ U□

<u>Comments</u> (Additional pages may be added as necessary)

Rag observed at back right side of cabinet, against containment. Recommend removal, housekeeping item, not seismic issue.

CR-RBS-2012-6693 initiated.

Evaluated by: John Dunkelberg	Date: 10/9/2012
	Date: 10/0/2012
David Bassi	10/9/2012

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Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-089

Equipment ID No. <u>RCP-TCF04</u> Equip. Class <u>14 – Distribution Panels</u>

Equipment Description RX CNTMNT ELECT OUTBRD PENTR LVC21 & LVI20A TERMINATION CABINET

#### Photographs



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## Status: Y N U

### Seismic Walkdown Checklist (SWC) SWEL1-089

Equipment ID No. <u>RCP-TCF04</u> Equip. Class <u>14 – Distribution Panels</u>

#### Equipment Description RX CNTMNT ELECT OUTBRD PENTR LVC21 & LVI20A TERMINATION CABINET



Engineering Report No. RBS-CS-12-00001
Attachment C Page 409 of 615
Status: YX N_ U_ Seismic Walkdown Checklist (SWC) SWEL1-090
Equipment ID No. <u>RCP-TCR01F</u> Equip. Class <sup>1</sup> <u>14</u> – Distribution Panels
Equipment Description RX CNTMNT ELECT INBRD PENTR NMS19 & LVI19A TERMINATION CABINET
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>
Manufacturer, Model, Etc. (optional but recommended) Raychem Model RCP-TCR01F
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Bolted steel cabinet welded to steel plate at base to floor.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U U N/A oxidation?</li> <li>Painted surfaces with some mild surface oxidation.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A NAN ANAN NO.</li> <li>Mounted to steel floor plate.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-090</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>RCP-TCR01F</u> Equip. Class_14 – Distribution Pane	els
Equipment Description RX CNTMNT ELECT INBRD PENTR NMS19 & LVI19A	TERMINATION CABINET
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>EE-035A</li> <li>Verified in accordance with above dwg</li> </ol>	Y⊠ N□ U□ N/A□
<ol> <li>Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> </ol>	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□

	Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 411 of 615
PAGE 3 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-090</u>	Status: Y⊠ N∏ U∏
Equipment ID No.         RCP-TCR01F         Equip. Class_14           Equipment Description         RX CNTMNT ELECT INBRD PENTR NMS19 & I	VI19A TERMINATION CABINET
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that co adversely affect the safety functions of the equipment?	ould Y⊠ N⊡ U⊡

Comments (Additional pages may be added as necessary)

None

Matt Keenerg	-
Evaluated by: Matt Keeney	_ Date: <u>10-9-2012</u>
Hang	40.0.2012
Jason Halsey	10-9-2012

PAGE 4 OF 5

Status: YX N U

# Seismic Walkdown Checklist (SWC) SWEL1-090

Equipment ID No. <u>RCP-TCR01F</u> Equip. Class <u>14 – Distribution Panels</u>

Equipment Description RX CNTMNT ELECT INBRD PENTR NMS19 & LVI19A TERMINATION CABINET

Photographs



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## Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-090

Equipment ID No. <u>RCP-TCR01F</u> Equip. Class <u>14 – Distribution Panels</u>

Equipment Description RX CNTMNT ELECT INBRD PENTR NMS19 & LVI19A TERMINATION CABINET



Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 414 of 615
PAGE 1 OF 5 Status: Y N U
Equipment ID No. C11 AOV/126 Equip Class 1.7 Proumatic Operated Valves
Equipment Description SCRAM INLET VALVE
Location: Bldg, RB Floor El, 114 Room, Area, 7200, 7203
Manufacturer, Model, Etc. (optional but recommended) <u>General Electric Model 767E652P001</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ Rack mounted in-line valve.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N□ U□ N/A□ oxidation?</li> <li>painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N U N/A N N U N/A N N N U N/A N N N N N N N N N N N N N N N N N N</li></ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Attachment C Page 415 of 615	
PAGE 2 OF 5		
Seismic Walkdown Checklist (SWC) <u>SWEL1-091</u>	Status: Y⊠ N⊡ U⊡	
Equipment ID No. <u>C11-AOV126</u> Equip. Class <u>7 – Pneumatic-Operat</u>	ed Valves	
Equipment Description SCRAM INLET VALVE		
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y	
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□	

PAGE 3 OF 5		
Seismic Walkdown Checklist (SWC)	SWEL1-091	Status: Y⊠ N□ U□
Equipment ID No. <u>C11-AOV126</u>	Equip. Class <u>7 – Pneumatic-Opera</u>	ated Valves
Equipment Description SCRAM INLET VA	LVE	
Other Adverse Conditions 11. Have you looked for and found no o adversely affect the safety functions	ther seismic conditions that could of the equipment?	Y⊠ N□ U□

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Comments (Additional pages may be added as necessary)

None

Matt Keener	_	
Evaluated by: Matt Keeney	Date:	10/9/2012
Aag		40/0/0040
Jason Halsey		<u>10/9/2012</u>

Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 417 of 615

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## Seismic Walkdown Checklist (SWC) SWEL1-091

Equipment ID No. <u>C11-AOV126</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description SCRAM INLET VALVE

#### Photographs



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## Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-091

Equipment ID No. <u>C11-AOV126</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description SCRAM INLET VALVE


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PAGE 1 OF 5
Status: Y N U
Equipment ID No. <u>C11-AOV126</u> Equip. Class <sup>1</sup> 7 – Pneumatic-Operated Valves
Equipment Description SCRAM INLET VALVE
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200, 7203</u>
Manufacturer, Model, Etc. (optional but recommended) General Electric Model 767E652P001
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ Rack mounted in-line valve</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A ∪</li> <li>oxidation?</li> <li>painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A</li> <li>Mounted on steel</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	ering Report No. RBS-CS-12-00001
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Page 2 of 5	
Seismic Walkdown Checklist (SWC) SWEL1-092	Status: Y N N
Equipment ID No. <u>C11-AOV126</u> Equip. Class <u>7 – Pneumatic-Operat</u>	ed valves
Equipment Description SCRAM INLET VALVE	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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	YX N U

of potentially adverse seismic interaction effects?

Page 3 of 5		
Seismic Walkdown Checklist (SWC)	SWEL1-092	Status: Y⊠ N□ U□
Equipment ID No. <u>C11-AOV126</u>	Equip. Class 7 – Pneumatic-Opera	ated Valves
Equipment Description SCRAM INLET VA	LVE	
Other Adverse Conditions 11. Have you looked for and found no o adversely affect the safety functions	ther seismic conditions that could of the equipment?	Y⊠ N□ U□

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Comments (Additional pages may be added as necessary)

None

Matt Keener		
Evaluated by: Matt Keeney	_ Date:	10/9/2012
Jacon Halaay		10/0/2012
Jason Halsey		10/9/2012

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### Seismic Walkdown Checklist (SWC) SWEL1-092

Equipment ID No. <u>C11-AOV126</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description SCRAM INLET VALVE

#### Photographs



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## Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-092

Equipment ID No. <u>C11-AOV126</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description SCRAM INLET VALVE



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PAGE 1 OF 4       Status: Y N U         Seismic Walkdown Checklist (SWC)       SWEL1-093         Equipment ID No.       C11-AOV127         Equipment Description       SCRAM DISCHARGE VALVE
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>
Manufacturer, Model, Etc. (optional but recommended) <u>General Electric Model 767E653P001</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ Rack mounted in-line valve.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A ∪</li> <li>oxidation?</li> <li>painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A NA</li> <li>Mounted on steel</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

		E	ingineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 425 of 615
PAGE 2 OF 4			
Seismic Walkdov	wn Checklist (SWC)	SWEL1-093	Status: Y⊠ N∏ U∏
Equipment ID No.	<u>C11-AOV127</u>	Equip. Class <u>7 – Pneumatic-Op</u>	perated Valves
Equipment Descript	tion SCRAM DISCHAR	GE VALVE	
5. Is the ancho (Note: This o an anchorag	rage configuration cons question only applies if t je configuration verificat	istent with plant documentation? he item is one of the 50% for whi ion is required.)	Y N U N/A⊠ ich
6. Based on th potentially a	e above anchorage eval dverse seismic condition	luations, is the anchorage free of ns?	
7. Are soft targ	⊧ets free from impact by	nearby equipment or structures?	Y⊠ N□ U□ N/A□
8. Are overhea and masonr	d equipment, distribution y block walls not likely to	n systems, ceiling tiles and lightin collapse onto the equipment?	ng, Y⊠ N□ U□ N/A□
9. Do attached	lines have adequate fle	exibility to avoid damage?	Y⊠ N∏ U∏ N/A∏

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

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Seismic Walkdown Checklist (SWC) SWEL1-093	Status: Y⊠ N∏ U∏	
Equipment ID No. <u>C11-AOV127</u> Equip. Class <u>7 – Pneumatic-Oper</u>	rated Valves	
Equipment Description SCRAM DISCHARGE VALVE		
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)

None

Matt Keener	_	
Evaluated by: Matt Keeney	_ Date:	10/9/2012
Andag		
Jason Halsey		10/9/2012

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### Seismic Walkdown Checklist (SWC) SWEL1-093

Equipment ID No. <u>C11-AOV127</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description SCRAM DISCHARGE VALVE

#### Photographs



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Page 1 oF 4 Status: Y⊠ N□ U□ Seismic Walkdown Checklist (SWC) SWEL1-094
Equipment ID No. <u>C11-AOV127</u> Equip. Class <sup>1</sup> 7 – Pneumatic-Operated Valves
Equipment Description SCRAM DISCHARGE VALVE
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>
Manufacturer, Model, Etc. (optional but recommended) <u>General Electric Model 767E653P001</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ Rack mounted in-line valve</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A NAN ANAN NO.</li> <li>Mounted on steel</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001
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PAGE 2 OF 4	
	Status: VM NM UM
Seismic Walkdown Checklist (SWC) <u>SWEL1-094</u>	
Equipment ID No. <u>C11-AOV127</u> Equip. Class <u>7 – Pneumatic-Opera</u>	ted Valves
Equipment Description SCRAM DISCHARGE VALVE	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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∏
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□

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Seismic Walkdown Checklist (SWC) SWEL1-094	Status: Y⊠ N∏ U∏
Equipment ID No. <u>C11-AOV127</u> Equip. Class <u>7 – Pneumatic-Ope</u>	erated Valves
Equipment Description SCRAM DISCHARGE VALVE	
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)

None

Matt Keener	_	
Evaluated by: Matt Keeney	_ Date:	10/9/2012
Andag		
Jason Halsey		10/9/2012

Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 431 of 615

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## Status: YX N U

# Seismic Walkdown Checklist (SWC) SWEL1-094

Equipment ID No. <u>C11-AOV127</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description SCRAM DISCHARGE VALVE

#### Photographs

<image/>	
Note:	Note:

Engineering Report No. RBS-CS-12-00001
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Page 1 of 4
Status: YX NU U
Equipment ID No. <u>C11-AOV139</u> Equip. Class <sup>1</sup> <u>7 – Pneumatic-Operated Valves</u>
Equipment Description SCRAM PILOT VALVES
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>
Manufacturer, Model, Etc. (optional but recommended) <u>N/A</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ In-line valve.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A N/A</li> <li>N/A N/A N/A N/A</li> <li>The body of the value is brass</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A NA</li> <li>Mounted on steel</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engine	eering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 433 of 615
PAGE 2 OF 4	
Seismic Walkdown Checklist (SWC) <u>SWEL1-095</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>C11-AOV139</u> Equip. Class <u>7 – Pneumatic-Opera</u>	ted Valves
Equipment Description SCRAM PILOT VALVES	_
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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 Y N U U of potentially adverse seismic interaction effects?

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Status: YX N	] U[]
Equipment ID No. <u>C11-AOV139</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>	
Equipment Description SCRAM PILOT VALVES	
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions that could Y⊠ N□ U□ adversely affect the safety functions of the equipment?	

Comments (Additional pages may be added as necessary)

None

Matt Kener		
Evaluated by: Matt Keeney	Date:	10/9/2012
Adap		
Jason Halsey	-	10/9/2012

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### Seismic Walkdown Checklist (SWC) SWEL1-095

Equipment ID No. <u>C11-AOV139</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description SCRAM PILOT VALVES

#### Photographs





Note	
	-

Note:

Engineering Report No. RBS-CS-12-00001
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Status: Y N U
Equipment ID No. <u>C11-AOV139</u> Equip. Class <sup>1</sup> <u>7 - Pneumatic-Operated Valves</u>
Equipment Description SCRAM PILOT VALVES
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>
Manufacturer, Model, Etc. (optional but recommended) <u>N/A</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y∑ N□ U□ N/A□ In-line valve</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A The valve body is brass</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A NA</li> <li>Mounted on steel</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 4		
Seismic Walkdown Checklist (SWC) <u>SWEL1-096</u>	Status: Y⊠ N⊡ U⊡	
Equipment ID No. <u>C11-AOV139</u> Equip. Class <u>7 – Pneumatic-Operat</u>	ted Valves	
Equipment Description SCRAM PILOT VALVES		
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y	
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□	

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PAGE 3 OF 4			
Seismic Walkdown Checklist (SWC)	SWEL1-096	Status: Y⊠	N UU
Equipment ID No. <u>C11-AOV139</u>	Equip. Class 7 – Pneumatic-	Operated Valves	
Equipment Description SCRAM PILOT VA	ALVES		
Other Adverse Conditions			

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

<u>**Comments**</u> (Additional pages may be added as necessary)

None

Matt Keener	
Evaluated by: Matt Keeney	Date: <u>10/9/2012</u>
$\bigcap$	
Hand	
Jason Halsey	10/9/2012

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### Seismic Walkdown Checklist (SWC) SWEL1-096

Equipment ID No. <u>C11-AOV139</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description SCRAM PILOT VALVES

#### Photographs





NOTE:	Ν	ote:
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Note:

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Status: Y N U			
Equipment ID No. <u>SWP-AOV599</u> Equip. Class <sup>1</sup> 7 – Pneumatic-Operated Valves			
Equipment Description STANDBY CLG TOWR 1 STAT BLACKOUT DIV 1 STNDBY SRVCE WTR RETURN			
Location: Bldg. <u>GT</u> Floor El. <u>067</u> Room, Area <u>20G1</u>			
Manufacturer, Model, Etc. (optional but recommended) <u>Jamesbury Model 8226-18-A</u>			
Instructions for Completing Checklist			
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.			
Anchorage			
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>			
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>In-line mounted valve, no bolts missing, bent or loose.</li> </ol>			
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Painted, some light rust.</li> </ol>			
4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N U N/A N ∪ N/A N U N/A N U N/A N N U N/A N N U N/A N N N N N N N N N N N N N N N N N N			

In-line mounted valve.

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-099</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>SWP-AOV599</u> Equip. Class <u>7 – Pneumatic-Opera</u>	ted Valves
Equipment Description STANDBY CLG TOWR 1 STAT BLACKOUT DIV 1 STI	NDBY SRVCE WTR RETURN
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

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Seismic Walkdown Checklist (SWC) <u>SWEL1-099</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>SWP-AOV599</u> Equip. Class <u>7 – Pneumatic-Opera</u>	ted Valves
Equipment Description STANDBY CLG TOWR 1 STAT BLACKOUT DIV 1 STM	NDBY SRVCE WTR RETURN
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)	
None	
J. P. Klunkloug	
Evaluated by: John Dunkelberg V	Date: <u>10-5-2012</u>

no ca.

Jose Cardona

10-5-2012

Status: Y N U

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Seismic Walkdown Checklist (SWC) SWEL1-099

Equipment ID No. <u>SWP-AOV599</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description STANDBY CLG TOWR 1 STAT BLACKOUT DIV 1 STNDBY SRVCE WTR RETURN VL

#### Photographs



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### Seismic Walkdown Checklist (SWC) SWEL1-099

Equipment ID No. <u>SWP-AOV599</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description STANDBY CLG TOWR 1 STAT BLACKOUT DIV 1 STNDBY SRVCE WTR RETURN VL





Note:

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Seismic Walkdown Checklist (SWC) SWEL1-104 Status: Y // N U
Equipment ID No. <u>SWP-MOV27C</u> Equip. Class <sup>1</sup> 8 – Motor-Operated and Solenoid-Operated Valves
Equipment Description CNTRL BLDG CHILLD WTR CHILLR CONDENSR C SVCE WTR SPLY LNE ISOL VL
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1110</u>
Manufacturer, Model, Etc. (optional but recommended) Jamesbury Model 815L-S9273301-22HB-SL-C
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y∑ N□ U□ N/A□ In-line vertical valve.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N□ U□ N/A□ oxidation?</li> <li>All fittings were painted.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A A N/A N/A N/A N/A N/A N/A N/A N/A N</li></ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC) <u>SWEL1-104</u>	Status: Y⊠ N□ U□
Equipment ID No. <u>SWP-MOV27C</u> Equip. Class <u>8 – Motor-Operated a</u>	and Solenoid-Operated Valves
Equipment Description CNTRL BLDG CHILLD WTR CHILLR CONDENSR C S	SVCE WTR SPLY LNE ISOL VL
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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	
<ol> <li>Are soft targets free from impact by nearby equipment or structures? Not a soft target.</li> </ol>	Y□ N□ U□ N/A⊠
<ol> <li>Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? No lights or masonry block walls nearby.</li> </ol>	Y⊠ N∏ U∏ N/A∏
<ol> <li>Do attached lines have adequate flexibility to avoid damage? Yes, electrical connections are flexible.</li> </ol>	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□

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Seismic Walkdown Checklist (SWC)	SWEL1-104	Status: Y⊠ N∏ U∏
Equipment ID No. <u>SWP-MOV27C</u>	Equip. Class <u>8 – Motor-Operate</u>	d and Solenoid-Operated Valves
Equipment Description CNTRL BLDG CHI	LLD WTR CHILLR CONDENSR	C SVCE WTR SPLY LNE ISOL VL
Other Adverse Conditions 11. Have you looked for and found no of adversely affect the safety functions	ther seismic conditions that could of the equipment?	YX N U
<u>Comments (</u> Additional pages may be adde None	ed as necessary)	

Evaluated by: David Bassi	ate: <u>10/1/2012</u>
Matt Keeney	<u>10/1/2012</u>

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## Seismic Walkdown Checklist (SWC) SWEL1-104

 Equipment ID No.
 SWP-MOV27C
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 CNTRL BLDG CHILLD WTR CHILLR CONDENSR C SVCE WTR SPLY LNE ISOL VL

Note:

#### Photographs





Note:			

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Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-104

 Equipment ID No.
 SWP-MOV27C
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 CNTRL BLDG CHILLD WTR CHILLR CONDENSR C SVCE WTR SPLY LNE ISOL VL





Note:

Note:

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Status: Y N U				
Equipment ID No. <u>SWP-MOV502A</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valves</u>				
Equipment Description CNTNMNT UNIT CLR A SPLY HEADER INBRD CNTNMNT ISOL VLV				
Location: Bldg. <u>RB</u> Floor El. <u>162</u> Room, Area <u>7408</u>				
Manufacturer, Model, Etc. (optional but recommended) Velan Valve Model B14-0054B-02TS				
Instructions for Completing Checklist				
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.				
Anchorage				
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>				
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Component is an in-line mounted valve. Valve body to bonnet fasteners were covered by insulation.</li> </ol>				
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A U N/A Oxidation?</li> <li>Anchorage was covered by insulation.</li> </ul>				
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y N U N/A N U N/A N N ∪ N/A N N N/A</li> <li>In-line valve not mounted to concrete.</li> </ol>				

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 5			
Seismic Walkdown Checklist (SWC) <u>SWEL1-105</u>	Status: Y⊠ N∏ U∏		
Equipment ID No. <u>SWP-MOV502A</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valves</u>			
Equipment Description CNTNMNT UNIT CLR A SPLY HEADER INBRD CNTN	IMNT ISOL VLV		
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□		
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□		

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Seismic Walkdown Checklist (SWC) <u>SWEL1-105</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>SWP-MOV502A</u> Equip. Class <u>8 – Motor-Operated</u>	and Solenoid-Operated Valves
Equipment Description CNTNMNT UNIT CLR A SPLY HEADER INBRD CNT	INMNT ISOL VLV
<ul> <li><u>Other Adverse Conditions</u></li> <li>11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?</li> </ul>	Y⊠ N□ U□

<u>Comments</u> (Additional pages may be added as necessary)

Valve body was covered with insulation.

<i>77</i>	Patt Kener	
Evaluated by: <u>Matt Keeney</u>		Date: <u>10-3-2012</u>
	& RAfundlong	
John Dunkelberg	U U	<u>10-3-2012</u>

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# Status: Y⊠ N□ U□

### Seismic Walkdown Checklist (SWC) SWEL1-105

 Equipment ID No.
 SWP-MOV502A
 Equip. Class
 8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 CNTNMNT UNIT CLR A SPLY HEADER INBRD CNTNMNT ISOL VLV

Photographs



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# Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-105

 Equipment ID No.
 SWP-MOV502A
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 CNTNMNT UNIT CLR A SPLY HEADER INBRD CNTNMNT ISOL VLV



**Note:** Valve bonnet and operator



**Note:** Structural steel support
Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 455 of 615
Status: YX N U
Equipment ID No. <u>SWP-MOV40A</u> Equip. Class <sup>1</sup> 8 – Motor-Operated and Solenoid-Operated Valves
Equipment Description STANDBY SVCE WTR PMP A DISCH ISOL VLV
Location: Bldg. <u>SCT</u> Floor El. <u>118</u> Room, Area <u>0104</u>
Manufacturer, Model, Etc. (optional but recommended) Jamesbury Model ND-44475-5
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y ⋈ U N/A</li> <li>Component is an in-line valve with bolted flanges attaching it to the piping.</li> </ol>
3. Is the anchorage free of corrosion that is more than mild surface Y⊠ N□ U□ N/A□ oxidation?
Bolting was painted with mild surface corrosion noted.
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A NA</li> <li>Yalve is mounted in-line with the piping system</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 5 Status: Y N U SWEL1-106 Seismic Walkdown Checklist (SWC) Equipment ID No. <u>SWP-MOV40A</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valves</u> Equipment Description STANDBY SVCE WTR PMP A DISCH ISOL VLV 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.) 6. Based on the above anchorage evaluations, is the anchorage free of Y⊠ N□ U□ potentially adverse seismic conditions? Interaction Effects  $Y \boxtimes N \square U \square N/A \square$ 7. Are soft targets free from impact by nearby equipment or structures? 8. Are overhead equipment, distribution systems, ceiling tiles and lighting,  $Y \boxtimes N \square U \square N/A \square$ and masonry block walls not likely to collapse onto the equipment?  $Y \boxtimes N \square U \square N/A \square$ 9. Do attached lines have adequate flexibility to avoid damage?

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

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Seismic Walkdown Checklist (SWC)	SWEL1-106	Status: Y⊠ N∐ U∐
Equipment ID No. SWP-MOV40A	Equip. Class <u>8 – Motor-Operate</u>	ed and Solenoid-Operated Valves
Equipment Description STANDBY SVCE V	WTR PMP A DISCH ISOL VLV	
<u>Other Adverse Conditions</u> 11. Have you looked for and found no o adversely affect the safety functions	ther seismic conditions that could s of the equipment?	a Y⊠ N∏ U∏

<u>Comments</u> (Additional pages may be added as necessary)

None

K

Evaluated by: John Dunkelberg

Date: 10-2-2012

Jason Halsey

<u>10-2-2012</u>

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## Seismic Walkdown Checklist (SWC) SWEL1-106

 Equipment ID No.
 SWP-MOV40A
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 STANDBY SVCE WTR PMP A DISCH ISOL VLV

Photographs



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## Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-106

Equipment ID No. <u>SWP-MOV40A</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valves</u>





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Status: YX NUU Seismic Walkdown Checklist (SWC) SWEL1-107
Equipment ID No. <u>SWP-MOV55A</u> Equip. Class <sup>1</sup> 8 – Motor-Operated and Solenoid-Operated Valves
Equipment Description STBY CLG TOWER 1 INLET
Location: Bldg. <u>GT</u> Floor El. <u>067</u> Room, Area <u>0000</u>
Manufacturer, Model, Etc. (optional but recommended) Jamesbury Model ND-44475-4
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>36" In-line mounted butterfly valve, no missing or damaged hardware.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Painted surfaces.</li> </ol>
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y N U N/A A N/A N/A N/A</li> <li>In-line mounted valve.</li> </ol>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-107</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>SWP-MOV55A</u> Equip. Class <u>8 – Motor-Operated and Sectors</u>	olenoid-Operated Valves
Equipment Description STBY CLG TOWER 1 INLET	
<ol> <li>Is the anchorage configuration consistent with plant documentation? Y[ (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	] N∏ U∏ N/A⊠
6. Based on the above anchorage evaluations, is the anchorage free of Y∑ potentially adverse seismic conditions?	⊠ 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, Y∑ and masonry block walls not likely to collapse onto the equipment?	⊠ N□ U□ N/A□
9. Do attached lines have adequate flexibility to avoid damage? Y∑	⊠ N∏ U∏ N/A∏
<ol> <li>Based on the above seismic interaction evaluations, is equipment free Y∑ of potentially adverse seismic interaction effects?</li> </ol>	⊠ N□ U□

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Status: Y N U

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Seismic Walkdown Checklist (SWC)	SWEL1-107	
Equipment ID No. <u>SWP-MOV55A</u>	Equip. Class <u>8 – Motor-Opera</u>	ated and Solenoid-Operated Valves
Equipment Description STBY CLG TOWER 1 INLET		
Other Adverse Conditions		
<ol> <li>Have you looked for and found no o adversely affect the safety functions</li> </ol>	ther seismic conditions that coust of the equipment?	uld Y⊠ N□ U□

<u>**Comments**</u> (Additional pages may be added as necessary)

None

Evaluated by: John Dunkelberg

Date: 10-5-2012

Jose Cardona

<u>10-5-2012</u>

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# Seismic Walkdown Checklist (SWC) SWEL1-107

 Equipment ID No.
 SWP-MOV55A
 Equip. Class\_8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 STBY CLG TOWER 1 INLET

Photographs



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Seismic Walkdown Checklist (SWC) SWEL1-108
Equipment ID No. <u>SWP-P2A</u> Equip. Class <u>1 6 – Vertical Pumps</u>
Equipment Description STBY SVC WP
Location: Bldg. <u>SCT</u> Floor El. <u>118</u> Room, Area <u>0100</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Hayward-Tyler Pump Model 18X23VSN</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Four cast in-place anchor bolts are free of bent, broken, missing or loose hardware.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Anchors are painted with only mild surface oxidation noted.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No visible cracks in grout pad near anchor bolts.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) SWEL1-108	Status: Y⊠ N⊡ U⊡
Equipment ID No. SWP-P2A Equip. Class 6 – Vertical Pumps	
Equipment Description STBY SVC WP	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>Four anchor bolts verified IAW Dwg. 0232-920-257-013H</li> </ul>	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□
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□

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PAGE 3 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL1-108</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>SWP-P2A</u> Equip. Class <u>6 – Vertical Pumps</u>	
Equipment Description STBY SVC WP	
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□
<u>Comments (Additional pages may be added as necessary)</u>	
None	
Evaluated by: John Dunkelberg	Date: <u>10-2-2012</u>
Aday	

Jason Halsey

10-2-2012

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# Seismic Walkdown Checklist (SWC) SWEL1-108

Equipment ID No. <u>SWP-P2A</u> Equip. Class <u>6 – Vertical Pumps</u>

Equipment Description STBY SVC WP

### Photographs



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## Status: Y N U

# Seismic Walkdown Checklist (SWC) SWEL1-108

Equipment ID No. <u>SWP-P2A</u> Equip. Class <u>6 – Vertical Pumps</u>

Equipment Description STBY SVC WP



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PAGE 1 OF 5         Status: Y⊠ N□ U□           Seismic Walkdown Checklist (SWC)         SWEL1-109			
Equipment ID No. <u>SWP-P3C</u> Equip. Class <sup>1</sup> <u>5</u> – Horizontal Pumps			
Equipment Description CONTROL BLDG CHILLER RECIRC PUMP P3C			
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1110</u>			
Manufacturer, Model, Etc. (optional but recommended) Gould Pumps Model 3196-MT SZ 4X6-13			
Instructions for Completing Checklist			
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.			
Anchorage			
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>			
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Pump anchored to concrete pad using 4 bolts with double nuts.</li> </ol>			
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Anchor bolts painted.</li> </ol>			
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A</li> <li>No cracks in concrete.</li> </ul>			

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<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Status: Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC) SWEL1-109	
Equipment ID No. <u>SWP-P3C</u> Equip. Class <u>5 – Horizontal Pumps</u>	
Equipment Description CONTROL BLDG CHILLER RECIRC PUMP P3C	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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	
<ol> <li>Are soft targets free from impact by nearby equipment or structures? One soft target (fluid bulb) that is not in path of any adverse collision.</li> </ol>	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? Lighting properly secured.	Y⊠ N∏ U∏ N/A∏
<ol> <li>Do attached lines have adequate flexibility to avoid damage? Flexible conduits (electrical) are attached.</li> </ol>	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□

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PAGE 3 OF 5	
Seismic Walkdown Checklist (SWC) SWEL1-109	Status: Y⊠ N∏ U∏
Equipment ID No. <u>SWP-P3C</u> Equip. Class <u>5 – Horizontal Pun</u>	nps
Equipment Description CONTROL BLDG CHILLER RECIRC PUMP P3C	
<ul> <li>Other Adverse Conditions</li> <li>11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?</li> </ul>	Y⊠ N□ U□
<u>Comments (</u> Additional pages may be added as necessary) None	
Evaluated by: David Bassi Matt Kenery	Date: <u>10/1/2012</u>
Matt Keeney	10/1/2012

Matt Keeney

10/1/2012

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Status:	Y⊠	N	U
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## Seismic Walkdown Checklist (SWC) SWEL1-109

Equipment ID No. <u>SWP-P3C</u> Equip. Class <u>5 – Horizontal Pumps</u>

Equipment Description CONTROL BLDG CHILLER RECIRC PUMP P3C

Photographs





Note:

Note:			

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### Seismic Walkdown Checklist (SWC) SWEL1-109

Equipment ID No. <u>SWP-P3C</u> Equip. Class <u>5 – Horizontal Pumps</u>

Equipment Description CONTROL BLDG CHILLER RECIRC PUMP P3C





Note:

Note:

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Seismic Walkdown Checklist (SWC) SWEL1-111
Equipment ID No. <u>SWP-SOV602A</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valves</u>
Equipment Description STNDBY CLG TWR STATION BLACKOUT RETURN VLV AIR SPLY LINE CNTRL
Location: Bldg. <u>CW</u> Floor El. <u>108</u> Room, Area <u>0000</u>
Manufacturer, Model, Etc. (optional but recommended) <u>Tyco Instrument Model EF8327G41</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>No missing, broken, bent or loose hardware.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A</li> <li>vidation?</li> <li>Painted, stainless or galvanized surfaces.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the YX NU VA N/A</li> <li>Anchors?</li> <li>No cracking visible.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Attachment C Page 475 of 615 PAGE 2 OF 5 Status: YX N U Seismic Walkdown Checklist (SWC) SWEL1-111 Equipment ID No. <u>SWP-SOV602A</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valves</u> Equipment Description STNDBY CLG TWR STATION BLACKOUT RETURN VLV AIR SPLY LINE CNTRL SO  $Y \square N \square U \square N/A \boxtimes$ 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) 6. Based on the above anchorage evaluations, is the anchorage free of  $Y \boxtimes N \square U \square$ potentially adverse seismic conditions? Interaction Effects Y N U N/A 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? 9. Do attached lines have adequate flexibility to avoid damage?  $Y \boxtimes N \square U \square N/A \square$ 10. Based on the above seismic interaction evaluations, is equipment free

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of potentially adverse seismic interaction effects?

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Statuce V	
Status: Y	
Equipment ID No. <u>SWP-SOV602A</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated an</u>	erated Valves
Equipment Description STNDBY CLG TWR STATION BLACKOUT RETURN VLV AIR SPLY L	INE CNTRL
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions that could Y⊠ N□ U□ adversely affect the safety functions of the equipment?	]
<u>Comments</u> (Additional pages may be added as necessary)	
None	
OPA Candlerg	
* ()	
Evaluated by: John Dunkelberg V Date: 10-5-20	)12

April Cardono

Jose Cardona

10-5-2012

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# Seismic Walkdown Checklist (SWC) SWEL1-111 Equipment ID No. SWP-SOV602A Equip. Class 8 – Motor-Operated and Solenoid-Operated Valves Equipment Description STNDBY CLG TWR STATION BLACKOUT RETURN VLV AIR SPLY LINE CNTRL SO

### Photographs



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Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-111

 Equipment ID No.
 SWP-SOV602A
 Equip. Class
 8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 STNDBY CLG TWR STATION BLACKOUT RETURN VLV AIR SPLY LINE CNTRL SO



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PAGE 1 OF 5         Status: Y⊠ N□ U□           Seismic Walkdown Checklist (SWC)         SWEL1-112
Equipment ID No. <u>JPB-RAK3</u> Equip. Class <u>1 18 – Instrument Racks</u>
Equipment Description AUX BLDG LOCAL INSTR RACK 3
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6302</u>
Manufacturer, Model, Etc. (optional but recommended) Mercury Co/Norwood Model JPB-RAK3
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>No missing, bent, broken, or loose hardware</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Painted rack, fasteners without oxidation</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No cracks at sill</li> </ul>

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<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-112</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>JPB-RAK3</u> Equip. Class <u>18 – Instrument Rack</u>	S
Equipment Description AUX BLDG LOCAL INSTR RACK 3	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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	
<ol><li>Are soft targets free from impact by nearby equipment or structures?</li></ol>	YKINLI ULI N/ALI
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□

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Seismic Walkdown Checklist (SWC) <u>SWEL1-112</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>JPB-RAK3</u> Equip. Class <u>18 – Instrument</u> Equipment Description <u>AUX BLDG LOCAL INSTR RACK 3</u>	Racks
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that cou adversely affect the safety functions of the equipment?	ild Y⊠ N⊡ U⊡

<u>**Comments**</u> (Additional pages may be added as necessary)

Rack has 7 instruments mounted on it and panel on north side, per dwg 0247.411-296-012E. Panel mounted on sills (welded) with shim blicks, 4" of weld each side, 4 places plus grout under base plate between sills (approx 1" thick)

J. P. Klunhlong		
Evaluated by: <u>J. Dunkelberg</u>	Date:	10/9/12
D: B.		
D. Bassi	-	10/9/12

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### Seismic Walkdown Checklist (SWC) SWEL1-112

Equipment ID No. JPB-RAK3 Equip. Class 18 – Instrument Racks

Equipment Description AUX BLDG LOCAL INSTR RACK 3

### Photographs







Note:

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### Seismic Walkdown Checklist (SWC) SWEL1-112

Equipment ID No. JPB-RAK3 Equip. Class 18 – Instrument Racks

Equipment Description AUX BLDG LOCAL INSTR RACK 3





Note:

Note:			

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Seismic Walkdown Checklist (SWC) SWEL1-113
Equipment ID No. <u>CMS-LT23A</u> Equip. Class <sup>1</sup> <u>20 – Instrumentation and Control Panels</u>
Equipment Description SUPPRESSION POOL TRANSMITTER (AX 112? - 122')
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>
Manufacturer, Model, Etc. (optional but recommended) Rosemount Model 1153DB5PG / 1154DP5RB
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Component is bolted to bracket and the mounting bracket is bolted to support.</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A U N/A Oxidation?</li> <li>Stainless steel mounting bracket with no visible oxidation.</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A</li> <li>Component is mounted to steel.</li> </ul>

Engineering Report No. RBS-CS-12-00001 Rev. 000

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Seismic Walkdown Checklist (SWC) SWEL1-113	Status: Y⊠ N∏ U∏			
Equipment ID No. CMS LT22A Equip Class 20 Instrumentation and Control Banols				
Equipment Description SUPPRESSION POOL TRANSMITTER (AX 1122 - 122)				
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ul>	Y⊠ N□ U□ N/A□			
Anchorage verified in accordance with the following dwgs: 0247.481-130-007 ICRN-14A-06B C-32002				
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	YX 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□			

PAGE 3 OF 5			
Seismic Walkdown Checklist (SWC) <u>SWEL1-113</u>	Status: Y⊠ N⊡ U⊡		
Equipment ID No. <u>CMS-LT23A</u> Equip. Class <u>20 – Instrumentation and</u>	1 Control Panels		
Equipment Description SUPPRESSION POOL TRANSMITTER (AX 112? - 122')			
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could Y⊠ N□ U□ adversely affect the safety functions of the equipment?			

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Comments (Additional pages may be added as necessary)

None

7)	Natt Keener	<i>.</i>
Evaluated by: Matt Keeney		Date: <u>10-3-2012</u>
John Dunkelberg	J. P. Kunhlong	10-3-2012

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# Seismic Walkdown Checklist (SWC) SWEL1-113

Equipment ID No. <u>CMS-LT23A</u> Equip. Class <u>20 – Instrumentation and Control Panels</u>

Equipment Description SUPPRESSION POOL TRANSMITTER (AX 112? - 122')

### Photographs





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Status:	Y⊠	N	U
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### Seismic Walkdown Checklist (SWC) SWEL1-113

Equipment ID No. <u>CMS-LT23A</u> Equip. Class <u>20 – Instrumentation and Control Panels</u>

Equipment Description <u>SUPPRESSION POOL TRANSMITTER (AX 112? - 122')</u>



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PAGE 1 OF 4			
Status: Y N U			
Equipment ID No. CMS-RTD24F Equip. Class <u>19 – Temperature Sensors</u>			
Equipment Description CNTNMNT ATMOS AND LEAKAGE MONITORING SYS RESISTANCE TEMP DETECTOR			
Location: Bldg. <u>RB</u> Floor El. <u>095</u> Room, Area <u>7100</u>			
Manufacturer, Model, Etc. (optional but recommended) Pyco Model 122-3046-12-120.6			
Instructions for Completing Checklist			
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.			
Anchorage			
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>			
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ No bent, broken, missing or loose hardware.</li> </ol>			
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>No visible corrosion.</li> </ol>			
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A</li> <li>No visible cracks in concrete.</li> </ul>			

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-114</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>CMS-RTD24F</u> Equip. Class <u>19 – Temperature Ser</u>	isors
Equipment Description CNTNMNT ATMOS AND LEAKAGE MONITORING SY DETECTOR	S RESISTANCE TEMP
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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∏
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□
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PAGE 3 OF 4	
Status: Y N U	
Equipment ID No. CMS-RTD40A Equip. Class 19 – Temperature Sensors	
Equipment Description CNTNMNT ATMOS AND LEAKAGE MONITORING SYS RESISTANCE TEMP DETECTOR	
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions that could Y⊠ N□ U□ adversely affect the safety functions of the equipment?	
Comments (Additional pages may be added as necessary)	
None	
Adap	
Evaluated by: Jason Halsey Date: 10-10-2012	

David Bassi 10-10-2012

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## Seismic Walkdown Checklist (SWC) - SWEL1-114

Equipment ID No. <u>CMS-RTD40A</u> Equip. Class <u>19 – Temperature Sensors</u>

Equipment Description CNTNMNT ATMOS AND LEAKAGE MONITORING SYS RESISTANCE TEMP DETECTOR

#### Photographs



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PAGE 1 OF 4       Status: Y⊠ N□ U□         Seismic Walkdown Checklist (SWC)       SWEL1-115         Equipment ID No.       CMS_BTD400			
Equipment D No. <u>CNTNMNT ATMOS AND LEAKAGE MONITORING SYS RESISTANCE TEMP</u> DETECTOR			
Location: Bldg. <u>RB</u> Floor El. <u>095</u> Room, Area <u>7100</u>			
Manufacturer, Model, Etc. (optional but recommended) Pyco Model 122-3046-12-120.6			
Instructions for Completing Checklist			
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.			
Anchorage			
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>			
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A</li> <li>Item threaded into support pipe and mounted vertically. Pipe welded to Drywell wall.</li> </ol>			
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Stainless steel material no corrosion noted,</li> </ul>			
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N U N/A N N ∪ N/A N N N/A N N N/A N N N N/A N N N N N</li></ul>			

Item is not mounted to concrete.

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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Seismic Walkdown Checklist (SWC) <u>SWEL1-115</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>CMS-RTD40C</u> Equip. Class <u>19 – Temperature Ser</u>	isors
Equipment Description <u>CNTNMNT ATMOS AND LEAKAGE MONITORING SY</u> <u>DETECTOR</u>	S RESISTANCE TEMP
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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□

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PAGE 3 OF 4
Status: Y N U
Equipment ID No. <u>CMS-RTD40C</u> Equip. Class <u>19 – Temperature Sensors</u>
Equipment Description CNTNMNT ATMOS AND LEAKAGE MONITORING SYS RESISTANCE TEMP DETECTOR
Other Adverse Conditions
11. Have you looked for and found no other seismic conditions that could Y N U U adversely affect the safety functions of the equipment?
Comments (Additional pages may be added as necessary)
None
Matt Kener
Evaluated by: Matt Keeney Date: 10-3-2012
Rhundling

John Dunkelberg

10-3-2012

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## Seismic Walkdown Checklist (SWC) SWEL1-115

Equipment ID No. <u>CMS-RTD40C</u> Equip. Class <u>19 – Temperature Sensors</u>

Equipment Description CNTNMNT ATMOS AND LEAKAGE MONITORING SYS RESISTANCE TEMP DETECTOR

#### Photographs





Note:

Engir	neering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 497 of 615
PAGE 1 OF 4 Seismic Walkdown Checklist (SWC) SWEL1-116 Equipment ID No. CMS-AT25A & CMS- Equip. Class 1 20	Status: Y⊠ N∏ U∏
<u>PNL-10A</u>	
Equipment Description CNTNMNT MONITORING SYS H2 ANALYZER XMIT	TR &PNL10A
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6306</u>	
Manufacturer, Model, Etc. (optional but recommended) <u>Comsip / Delphi Moc</u>	del B5-K-III
nstructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of SWEL. The space below each of the following questions may be used to record findings. Additional space is provided at the end of this checklist for documenting	of an item of equipment on the d the results of judgments and ng other comments.
<ul> <li>Anchorage</li> <li>1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ul>	Y□ N⊠
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware? Bolts/welding to plate in place. Acceptable</li> </ol>	Y⊠ N□ U□ N/A□
<ol> <li>Is the anchorage free of corrosion that is more than mild surface oxidation?</li> <li>Painted nuts-no corrosion. Concrete anchors have no corrosion</li> </ol>	Y⊠ N□ U□ N/A□
4. Is the anchorage free of visible cracks in the concrete near the anchors? No cracks noted	Y⊠ N□ U□ N/A□

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<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

PAGE 2 OF 4

	Status: Y N U
Seismic Walkdown Checklist (SWC) SWEL1-116	
Equipment ID No. <u>CMS-AT25A</u> Equip. Class <u>20</u>	
Equipment Description CNTNMNT MONITORING SYS H2 ANALYZER XMITT	R
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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□

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Seismic Walkdown Checklist (SWC)	SWEL1-116	Status: Y⊠ N∐ U∐
Equipment ID No. <u>CMS-AT25A</u>	Equip. Class <u>20</u>	
Equipment Description CNTNMNT MONI	TORING SYS H2 ANALYZER XMITT	R
Other Adverse Conditions 11. Have you looked for and found no c	other seismic conditions that could	YX N U
adversely affect the safety functions See comments	s of the equipment?	

<u>Comments</u> (Additional pages may be added as necessary)

Inspected internals, all fasteners tight, straight, no corrosion, no missing hardware

Evaluated by: I. Dunkelberg	Date <sup>.</sup>	10/8/12
Evaluated by: J. Dunkelberg	Date:	10/8/12
D. Bassi		<u>10/8/12</u>

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Status:	Y⊠	N	U
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# Seismic Walkdown Checklist (SWC) SWEL1-116

Equipment ID No. CMS-AT25A Equip. Class 20

## Equipment Description <u>CNTNMNT MONITORING SYS H2 ANALYZER XMITTR</u>

#### Photographs



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Status: Y N U
Equipment ID No. <u>EHS-MCC2K</u> Equip. Class <sup>1</sup> <u>1</u> – Motor Control Centers and Wall Mounted Contactors
Equipment Description AUXILIARY BUILDING MCC2K
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6302</u>
Manufacturer, Model, Etc. (optional but recommended) Gould Model Series 5600
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y ⋈ U N/A</li> <li>Welded to floor sills</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A</li> <li>N/A</li> <li>Painted</li> </ol>
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y⊠ N□ U□ N/A□ anchors?</li> <li>No cracks observed</li> </ol>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Status: Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC) <u>SWEL1-117</u>	
Equipment ID No. <u>EHS-MCC2K</u> Equip. Class_1 – Motor Control Cer Contactors	ters and Wall Mounted
Equipment Description AUXILIARY BUILDING MCC2K	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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 🗌
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□

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Status:	Y⊠	N	υ

#### Seismic Walkdown Checklist (SWC) SWEL1-117

Equipmen	t ID No.	EHS-MCC2K	_ Equip. Class <u>1 – Motor Control C</u> Contactors	enters and Wall Mounted
Equipmen	t Descript	tion AUXILIARY BUIL	DING MCC2K	
Other Adv	verse Co	nditions		
11. Ha adv	ve you loo versely af	oked for and found no fect the safety functior	other seismic conditions that could ns of the equipment?	Y□ N⊠ U□
See	e comme	nts		

<u>Comments</u> (Additional pages may be added as necessary)

6B, 6C, 3B, 2C – split block cover may not be fully engaged on bottom.

6D, 5A, 4D, 3D, 7D – missing screw in top right corner of cubicle. 2' cubicle – judged to not be a seismic issue, this portion of partition between cubicle and cableway to right secured sufficiently to maintain position.

6A - missing a screw on the transformer - lower right screw, red material directly behind fastener hole

See LB-19; CR-RBS-2012-06869

Evaluated by: <u>J. Dunkelberg</u>

Date: 10/10/12

M. Keeney

10/10/12

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# Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL1-117

Equipment ID No. <u>EHS-MCC2K</u> Equip. Class <u>1 – Motor Control Centers and Wall Mounted</u> Contactors

Equipment Description <u>AUXILIARY BUILDING MCC2K</u>

#### Photographs



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# Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-117

Equipment ID No. EHS-MCC2K

Equip. Class <u>1 – Motor Control Centers and Wall Mounted</u> Contactors

Equipment Description <u>AUXILIARY BUILDING MCC2K</u>





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Note:



### Seismic Walkdown Checklist (SWC) SWEL1-117

Equipment ID No. EHS-MCC2K

Equip. Class <u>1 – Motor Control Centers and Wall Mounted</u> <u>Contactors</u>

Equipment Description <u>AUXILIARY BUILDING MCC2K</u>



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## Seismic Walkdown Checklist (SWC) SWEL1-117

Equipment ID No. <u>EHS-MCC2K</u> Equip. Class <u>1 – Motor Control Centers and Wall Mounted</u> <u>Contactors</u>

Equipment Description <u>AUXILIARY BUILDING MCC2K</u>





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### Seismic Walkdown Checklist (SWC) SWEL1-117

Equipment ID No. EHS-MCC2K

\_ Equip. Class <u>1 – Motor Control Centers and Wall Mounted</u> Contactors

Equipment Description <u>AUXILIARY BUILDING MCC2K</u>





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### Seismic Walkdown Checklist (SWC) SWEL1-117

Equipment ID No. EHS-MCC2K

Equip. Class <u>1 – Motor Control Centers and Wall Mounted</u> Contactors

Equipment Description AUXILIARY BUILDING MCC2K





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Note:

# Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL1-117

Equipment ID No. EHS-MCC2K

Equip. Class <u>1 – Motor Control Centers and Wall Mounted</u> Contactors

Equipment Description <u>AUXILIARY BUILDING MCC2K</u>





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PAGE 1 OF 4 Status: Y N U			
Seismic Walkdown Checklist (SWC) SWEL1-118			
Equipment ID No. <u>HCS-IGN04A</u> Equip. Class <sup>1</sup> <u>0 – Other</u>			
Equipment Description H2 RECOMB IGNITER 04A			
Location: Bldg. <u>RB</u> Floor El. <u>186</u> Room, Area <u>7500</u>			
Manufacturer, Model, Etc. (optional but recommended) Power Sys Model 6043-12G / 6043-7G			
Instructions for Completing Checklist			
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.			
Anchorage			
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>			
<ul> <li>2. Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y∑ N□ U□ N/A□</li> <li>Component is on the roof/dome of RB viewed from the RF floor.</li> <li>Anchorage pieces visible from RF floor are intact, no damage</li> </ul>			
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Painted surfaces</li> </ol>			
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A NA</li> <li>Attached to steel containment</li> </ul>			

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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	Status: YX N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-118</u>	
Equipment ID No. <u>HCS-IGN04A</u> Equip. Class <u>0 – Other</u>	
Equipment Description H2 RECOMB IGNITER 04A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
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? No overhead 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□

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PAGE 3 OF 4	
Seismic Walkdown Checklist (SWC) <u>SWEL1-118</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>HCS-IGN04A</u> Equip. Class <u>0 – Other</u>	
Equipment Description H2 RECOMB IGNITER 04A	
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that cou adversely affect the safety functions of the equipment?	uld Y⊠ N⊟ U⊟
Comments (Additional pages may be added as necessary)	
None	

Ang		
Evaluated by: <u>J. Halsey</u>	Date:	10/10/12
		10/10/10
D. Bassi		10/10/12

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Status:	Y⊠	N	U
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# Seismic Walkdown Checklist (SWC) SWEL1-118

Equipment ID No. <u>HCS-IGN04A</u> Equip. Class <u>0 – Other</u>

Equipment Description H2 RECOMB IGNITER 04A

#### Photographs



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Page 1 of 6			
Status: Y N U			
Equipment ID No. <u>HVR-AOV165</u> Equip. Class <sup>1</sup> 7 – Pneumatic-Operated Valves			
Equipment Description CONTMT SPLY OUTBD ISOL(AL-2-152')			
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6307</u>			
Manufacturer, Model, Etc. (optional but recommended) Posi-Seal Intl Model 10837-3			
Instructions for Completing Checklist			
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.			
Anchorage			
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>			
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N∑ U∑ N/A∑</li> <li>Missing 1 of 8 bolts. Between mounting bracket and actuator. Ref. CR- RBS-2012-06352</li> </ol>			
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□</li> <li>oxidation?</li> <li>Fastener painted, or free of corrosion</li> </ul>			
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y N U N/A N ∪ N</li></ol>			

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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PAGE 2 OF 6	
Seismic Walkdown Checklist (SWC) <u>SWEL1-119</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>HVR-AOV165</u> Equip. Class <u>7 – Pneumatic-Opera</u>	ted Valves
Equipment Description CONTMT SPLY OUTBD ISOL(AL-2-152')	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y
<ol> <li>Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Missing 1 of 8 fasteners.</li> </ol>	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□

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Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL1-119</u>
Equipment ID No. <u>HVR-AOV165</u> Equip. Class 7 – Pneumatic-Operated Valves
Equipment Description CONTMT SPLY OUTBD ISOL(AL-2-152')
Other Adverse Conditions
11. Have you looked for and found no other seismic conditions that could Y N U U adversely affect the safety functions of the equipment? See comments
<u>Comments (Additional pages may be added as necessary)</u>
Valve not insulated, welded to containment, bolted to flange.
Missing 1 bolt, see question 2 above.
Flange bolts: could not observe all, no access of bolts/studs visible is OK.
CR-RBS-2012-06352 written
MCR contacted, Entergy supervisor and manager notified via email Ref. LB-12

Evaluated by: John Dunkelberg

Date: 10/8/2012

David Bassi

10/8/2012

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# Seismic Walkdown Checklist (SWC) SWEL1-119

Equipment ID No. <u>HVR-AOV165</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description <u>CONTMT SPLY OUTBD ISOL(AL-2-152')</u>

Photographs





Note:

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# Seismic Walkdown Checklist (SWC) SWEL1-119

Equipment ID No. <u>HVR-AOV165</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description <u>CONTMT SPLY OUTBD ISOL(AL-2-152')</u>





Note:

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## Seismic Walkdown Checklist (SWC) SWEL1-119

Equipment ID No. <u>HVR-AOV165</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description CONTMT SPLY OUTBD ISOL(AL-2-152')





Note:

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PAGE 1 OF 5			
Status: Y N U			
Equipment ID No. <u>HVR-AOV123</u> Equip. Class <sup>1</sup> 7 – Pneumatic-Operated Valves			
Equipment Description CONTMT SPLY INBD ISOL(42? - 152')			
Location: Bldg. <u>RB</u> Floor El. <u>141</u> Room, Area <u>9408</u>			
Manufacturer, Model, Etc. (optional but recommended) Posi-Seal Int Model 108375			
Instructions for Completing Checklist			
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.			
Anchorage			
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>			
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y    N    U    N/A    In-line mounted valve supported from containment wall.</li> </ol>			
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N□ U□ N/A□</li> <li>oxidation?</li> <li>Anchorage is painted, no corrosion observed.</li> </ol>			
<ol> <li>Is the anchorage free of visible cracks in the concrete near the Y□ N□ U□ N/A⊠ anchors?</li> <li>Component mounted in-line to pipe.</li> </ol>			

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Engineering Report No. RBS-CS-12-00001		
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Page 2 of 5		
	Status: YX N U	
Seismic Walkdown Checklist (SWC) <u>SWEL1-120</u>		
Equipment ID No. <u>HVR-AOV123</u> Equip. Class <u>7 – Pneumatic-Opera</u>	ted Valves	
Equipment Description CONTMT SPLY INBD ISOL(42? - 152')		
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	Y	
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□	

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Status: Y N U
Equipment ID No. <u>HVR-AOV123</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>
Equipment Description CONTMT SPLY INBD ISOL(42? - 152')
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□

<u>Comments (Additional pages may be added as necessary)</u>

None

77	Patt Keney		
Evaluated by: Matt Keeney		Date:	10-3-2012
John Dunkolhera	J. R. Kunhlberg		10 2 2012
John Dunkelberg	v	_	<u>10-3-2012</u>

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# Status: Y N U

## Seismic Walkdown Checklist (SWC) SWEL1-120

Equipment ID No. <u>HVR-AOV123</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description CONTMT SPLY INBD ISOL(42? - 152')

#### Photographs



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# Status: YX N U

## Seismic Walkdown Checklist (SWC) <u>SWEL1-120</u>

Equipment ID No. <u>HVR-AOV123</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description <u>CONTMT SPLY INBD ISOL(42? - 152')</u>

Note:	Note:

Sheet 1 of 5

Status: YX N U				
Equipment ID No. <u>CCP-MOV130</u> Equip. Class <sup>1</sup> 8 – Motor-Operated and Solenoid-Operated Valves				
Equipment Description CCP LOOP A OUTLET ISOL VLV				
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <u>6008</u>				
Manufacturer, Model, Etc. (optional but recommended) <u>Jamesbury Model 8226-EX-C-12</u>				
Instructions for Completing Checklist				
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.				
Anchorage				
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>				
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y∑ N□ U□ N/A□</li> <li>No missing, bent, broke, or loose fasteners</li> </ol>				
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Painted</li> </ol>				
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A N/A</li> <li>In-line valve</li> </ul>				

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.
Sheet 2 of 5

Sciencia Malledown Chacklist (SMC) SMEL2 004	Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWELZ-001</u>	
Equipment ID No. <u>CCP-MOV130</u> Equip. Class <u>8 – Motor-Operated and</u>	nd Solenoid-Operated Valves
Equipment Description CCP LOOP A OUTLET ISOL VLV	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

Sheet 3 of 5

	Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL2-001</u>	
Equipment ID No. <u>CCP-MOV130</u> Equip. Class <u>8 – Motor-Operated an</u>	d Solenoid-Operated Valves
Equipment Description CCP LOOP A OUTLET ISOL VLV	
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)	
Un-insulated, in-line valve	

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Evaluated by: <u>J. Dunkelberg</u>

Date: 10/8/12

D. Bassi

<u>10/8/12</u>

Status: Y N U

Sheet 4 of 5

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. <u>CCP-MOV130</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valves</u>

Equipment Description <u>CCP LOOP A OUTLET ISOL VLV</u>

Photographs



Sheet 1 of 5

Status: Y N U		
Seismic Walkdown Checklist (SWC) <u>SWEL2-002</u>		
Equipment ID No. <u>CCP-MOV16A</u> Equip. Class <sup>1</sup> <u>8 – Motor-Operated and Solenoid-Operated Valves</u>		
Equipment Description RPCCW LOOP A NORM SUPPLY VALVE		
Location: Bldg. AB Floor El. 070 Room, Area 6008		
Manufacturer, Model, Etc. (optional but recommended) Jamesbury Model 8226-EX-C-12		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>		
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>Anchor free of degraded conditions, none missing. In-line valve, not insulated</li> </ol>		
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Painted</li> </ol>		
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A</li> <li>In-line valve</li> </ul>		

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Sheet 2 of 5

Sciemic Welkdown Chasklist (SWC) SWEL2 002	Status: Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC) <u>SWEL2-002</u>	
Equipment ID No. <u>CCP-MOV16A</u> Equip. Class <u>8 – Motor-Operated a</u>	nd Solenoid-Operated Valves
Equipment Description RPCCW LOOP A NORM SUPPLY VALVE	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

Sheet 3 of 5

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<u>Comments</u> (Additional pages may be added as necessary)

Un-insulated valve, in-line. Lights are single hanging with metal safety cover/cage and lens

Evaluated by: J. Dunkelberg

Date: 10/8/12

D. Bassi

10/8/12

Sheet 4 of 5

Status: YX N U

### Seismic Walkdown Checklist (SWC) SWEL2-002

Equipment ID No. <u>CCP-MOV16A</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valves</u>

Equipment Description RPCCW LOOP A NORM SUPPLY VALVE

### Photographs



### Sheet 5 of 5

Status: YX N U

### Seismic Walkdown Checklist (SWC) <u>SWEL2-002</u>

Equipment ID No. <u>CCP-MOV16A</u> Equip. Class<u>8 – Motor-Operated and Solenoid-Operated Valves</u>

Equipment Description <u>RPCCW LOOP A NORM SUPPLY VALVE</u>



Sheet 1 of 5

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Seismic Walkdown Checklist (SWC) <u>SWEL2-003</u>	Status: Y⊠ N□ U□
Equipment ID No. <u>CCP-MOV163</u> Equip. Class <u>8 – Motor-Operated a</u>	nd Solenoid-Operated Valves
Equipment Description CRD PUMPS SUPPLY VLV	
Location: Bldg. <u>FB</u> Floor El. <u>070</u> Room, Area <u>5013</u>	
Manufacturer, Model, Etc. (optional but recommended) Velan Model W08-207	4X-02TS
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of SWEL. The space below each of the following questions may be used to record findings. Additional space is provided at the end of this checklist for documenting	an item of equipment on the the results of judgments and other comments.
Anchorage	
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ol>	Y□ N⊠
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware? In-line valve, CS, no bend, broken, or missing hardware.</li> </ol>	Y⊠ N∏ U∏ N/A∏
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Painted	Y⊠ N∏ U∏ N/A∏
4. Is the anchorage free of visible cracks in the concrete near the anchors? In-line valve	Y□ N□ U□ N/A⊠

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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SHEET 2 OF 5 Seismic Walkdown Checklist (SWC) <u>SWEL2-003</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>CCP-MOV163</u> Equip. Class <u>8 – Motor-Operated and</u>	nd Solenoid-Operated Valves
Equipment Description CRD PUMPS SUPPLY VLV	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

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SHEET 3 OF 5
Seismic Walkdown Checklist (SWC) <u>SWEL2-003</u>
Equipment ID No. <u>CCP-MOV163</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valves</u>
Equipment Description CRD PUMPS SUPPLY VLV
Other Adverse Conditions
11. Have you looked for and found no other seismic conditions that could Y⊠ N□ U□ adversely affect the safety functions of the equipment?
Comments (Additional pages may be added as necessary)
In-line, un-insulated valve
Evaluated by: David Bassi Date: 10/9/2012
O R Klinhloug

John Dunkelberg

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<u>10/9/2012</u>

### SHEET 4 OF 5



Seismic Walkdown Checklist (SWC) SWEL2-003

 Equipment ID No.
 CCP-MOV163
 Equip. Class 8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 CRD PUMPS SUPPLY VLV

Photographs



#### SHEET 5 OF 5



Seismic Walkdown Checklist (SWC) SWEL2-003

 Equipment ID No.
 CCP-MOV163
 Equip. Class 8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 CRD PUMPS SUPPLY VLV





Note:

### SHEET 6 OF 6



Seismic Walkdown Checklist (SWC) <u>SWEL2-003</u>

 Equipment ID No.
 CCP-MOV163
 Equip. Class 8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 CRD PUMPS SUPPLY VLV



Note:



Note:

Sheet 1 of 5

Status: Y N U		
Equipment ID No. <u>CCP-MOV335</u> Equip. Class <sup>1</sup> <u>8 – Motor-Operated and Solenoid-Operated Valves</u>		
Equipment Description CCP LOOP A OUTLET MTR OPERATED ISOL VLV		
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <u>6008</u>		
Manufacturer, Model, Etc. (optional but recommended) Jamesbury Model 8226-EX-C-12		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N</li></ol>		
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□</li> <li>No missing hardware. All Okay</li> </ol>		
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A O</li> <li>N/A Painted</li> </ol>		
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A</li> <li>In-line valve</li> </ul>		

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

SHEET 2 OF 5	Status: VM ND UD
Seismic Walkdown Checklist (SWC) <u>SWEL2-004</u>	
Equipment ID No. <u>CCP-MOV335</u> Equip. Class <u>8 – Motor-Operated a</u>	nd Solenoid-Operated Valves
Equipment Description CCP LOOP A OUTLET MTR OPERATED ISOL VLV	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

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SHEET 3 OF 5	Status: VV NO UD
Seismic Walkdown Checklist (SWC) <u>SWEL2-004</u>	
Equipment ID No. <u>CCP-MOV335</u> Equip. Class <u>8 – Motor-Operated a</u>	and Solenoid-Operated Valves
Equipment Description <u>CCP LOOP A OUTLET MTR OPERATED ISOL VLV</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?	YX N U

<u>Comments</u> (Additional pages may be added as necessary)

Un-insulated valve, in-line

Evaluated by: D. Bassi	_ Date: <u>10/8/12</u>
J. Dunkelberg	<u>10/8/12</u>

### SHEET 4 OF 5

Status: YX N U

Seismic Walkdown Checklist (SWC) SWEL2-004

 Equipment ID No.
 CCP-MOV335
 Equip. Class 8 – Motor-Operated and Solenoid-Operated Valves

 Equipment Description
 CCP LOOP A OUTLET MTR OPERATED ISOL VLV

#### Photographs



#### SHEET 5 OF 5

# Status: YX N U

# Seismic Walkdown Checklist (SWC) <u>SWEL2-004</u>

Equipment ID No. <u>CCP-MOV335</u> Equip. Class <u>8 – Motor-Operated and Solenoid-Operated Valves</u>

Equipment Description <u>CCP LOOP A OUTLET MTR OPERATED ISOL VLV</u>



Status: YX NU U		
Equipment ID No. <u>EHS-MCC2H</u> Equip. Class <sup>1</sup> <u>1</u> – Motor Control Centers and Wall-Mounted Contactors		
Equipment Description AUXILIARY BUILDING MCC2H		
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6203</u>		
Manufacturer, Model, Etc. (optional but recommended) Gould Model Series 5600		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N of the 50% of SWEL items requiring such verification)?</li> </ol>		
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N□ U□ N/A□</li> <li>MCC is welded to embedded sill.</li> </ol>		
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Painted</li> </ol>		
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A N/A</li> <li>No cracks visible.</li> </ul>		

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

	Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL2-005</u>	
Equipment ID No. <u>EHS-MCC2H</u> Equip. Class <u>1 – Motor Control Centers and</u>	nd Wall-Mounted Contactors
Equipment Description AUXILIARY BUILDING MCC2H	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Ref. 248.000; 0242.562-082-087</li> <li>Verified in accordance with above dwg</li> </ul>	Y⊠ N∏ U∏ N/A∏
<ul> <li>6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?</li> </ul>	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□

Sheet 3 of 13

Seismic Walkdown Checklist (SWC) <u>SWEL2-005</u>	Status: Y⊠ N⊡ U⊡	
Equipment ID No. <u>EHS-MCC2H</u> Equip. Class <u>1 – Motor Control Centers and</u>	d Wall-Mounted Contactors	
Equipment Description AUXILIARY BUILDING MCC2H		
Other Adverse Conditions		
<ol> <li>Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? See comments</li> </ol>	Y⊠ N∏ U∏	
Comments (Additional pages may be added as necessary)		
<ul> <li>Cubicle 1E – May need edge guard at lower right side of bucket.</li> <li>Cubicle 3C – The Split block cover is not fully engaged at top.</li> <li>Cubicles 4D, 7D – Appears to be missing 2 mounting screws for breaker mounting plate. Top right and Middle right.</li> <li>Cubicle 5B – Split block cover is not installed and is loose in the bottom of bucket.</li> <li>Ref. CR-RBS-2012-6391; CR-RBS-2012-6399; LB-15</li> </ul>		
Matt Kener	5 / 10/10/2010	
Evaluated by: Matt Keeney	Date: <u>10/10/2012</u>	
J. P. Klunhlong		
John Dunkelberg	10/10/2012	

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### Seismic Walkdown Checklist (SWC) <u>SWEL2-005</u>

Equipment ID No. <u>EHS-MCC2H</u> Equip. Class <u>1 – Motor Control Centers and Wall-Mounted Contactors</u> Equipment Description <u>AUXILIARY BUILDING MCC2H</u>

#### Photographs





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### Seismic Walkdown Checklist (SWC) SWEL2-005



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# Seismic Walkdown Checklist (SWC) SWEL2-005





# Seismic Walkdown Checklist (SWC) SWEL2-005





# Seismic Walkdown Checklist (SWC) SWEL2-005



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# Seismic Walkdown Checklist (SWC) SWEL2-005



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# Seismic Walkdown Checklist (SWC) SWEL2-005



Sheet 11 of 13



## Seismic Walkdown Checklist (SWC) SWEL2-005



Sheet 12 of 13



# Seismic Walkdown Checklist (SWC) SWEL2-005





Sheet 13 of 13



## Seismic Walkdown Checklist (SWC) SWEL2-005



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Sheet 1 of 18		
Seismic Walkdown Checklist (SWC) SWEL 2-006		
Seisific Walkdown Checklist (SWC) <u>SWEE2-000</u>		
Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <sup>1</sup> <u>1</u> , Motor Control Centers and Wall-Mounted Contactors		
Equipment Description STANDBY SWGR RM 1B MCC8B		
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1114</u>		
Manufacturer, Model, Etc. (optional but recommended) Gould Model EHS-MCC8		
Instructions for Completing Checklist		
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.		
Anchorage		
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y⊠ N□ of the 50% of SWEL items requiring such verification)?</li> </ol>		
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ Welded to embedded sill</li> </ol>		
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A O</li> <li>N/A Painted</li> </ol>		
4. Is the anchorage free of visible cracks in the concrete near the $Y \boxtimes N \square U \square N/A \square$		

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anchors?

No visible cracks

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

	Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL2-006</u>	
Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Cent</u> <u>Contactors</u>	ers and Wall-Mounted
Equipment Description STANDBY SWGR RM 1B MCC8B	
<ul> <li>5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> <li>Ref. 248.000; 0242.562-082-004</li> <li>Verified in accordance with above dwg</li> </ul>	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□
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□

Sheet 3 of 18

Seismic Walkdown Checklist (SWC) <u>SWEL2-006</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Ce</u> <u>Contactors</u>	nters and Wall-Mounted
Equipment Description STANDBY SWGR RM 1B MCC8B	
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

See comments below

#### Sheet 4 of 18

### Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. EHS-MCC8B Equip. Class 1, Motor Control Centers and Wall-Mounted

<u>Contactors</u>

Equipment Description STANDBY SWGR RM 1B MCC8B

Comments (Additional pages may be added as necessary)

Cubicle 2AT – The breaker is missing the washer behind the rivet head, near the panel cover catch. (is not a seismic issue, REF MR 94-0048)

Cubicle 2B – Split block cover is not fully engaged at bottom---See E&DCR C26399B

Cubicle 1B, Right side of cubicle, temp tag in cableway, FME, not seismic issue.

Cubicle 2D, Right side of cubicle, power cable appears to be tight to bottom of MCC, touching steel. Not seismic issue.

Cubicle 3AB, missing grommet with power cable through back wall. Not seismic issue.

Cubicle 3B, cable way on right of cubicle, loose bolt. Bolt is between cable way and cubicle is installed, but not tight.

Cubicle 3B – top left screw in bucket to upper plate may not be fully engaged (tight)

Cubicle 4C, cableway on right, grommet is not fully engaged. Not seismic issue.

Cubicle 5E, at bottom of cubicle, bottom of door, catch plate appears out of alignment—not seismic issue.

Cubicles 4A, 5C, 7C – Control wire needs to be taped (not a seismic issue)

Cubicle 4D – On mounting plate, not all the mounting screws have washers, not seismic issue.

Cubicle 5A – Center fuse terminal screw on bottom is not seated (no cable installed at this location, not a seismic issue)

Cubicle 5B - Loose MCC screw on bottom right between cubicle and cable way

Cubicle 7A – Loose door latch thumb crew on top right side "door latch" (rework, not a seismic issue)

Cubicle 7F – a piece of foreign material approximately 3" long x  $\frac{1}{2}$ " wide x 1/8" thick is between breaker cubicle and outside panel on the left side of bottom (house keeping, not a seismic issue)

Ref. LB-14; CR-RBS-2012-06847

Status: YX N U
#### Sheet 5 of 18

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u>

Contactors

Equipment Description STANDBY SWGR RM 1B MCC8B

Mat ney

Evaluated by: M. Keeney

Date: 10/11/12

112

J. Dunkelberg

10/11/12



# Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> Contactors

Equipment Description STANDBY SWGR RM 1B MCC8B

## Photographs



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## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> Contactors



## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> Contactors



## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> <u>Contactors</u>





## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> <u>Contactors</u>





Sheet 11 of 18

Status: Y N U

## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> Contactors



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# Status: Y N U

## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> Contactors



Sheet 13 of 18

# Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> Contactors



Sheet 14 of 18



## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> Contactors





## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> Contactors



Sheet 16 of 18



## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> Contactors



## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> Contactors



Sheet 18 of 18

# Status: YX N U

## Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. <u>EHS-MCC8B</u> Equip. Class <u>1, Motor Control Centers and Wall-Mounted</u> Contactors



Sheet 1 of 5

Status: Y⊠ N∏ U∏
Seismic Walkdown Checklist (SWC) <u>SWEL2-008</u>
Equipment ID No. SFC-AOV31A Equip. Class <sup>1</sup> 7 – Pneumatic-Operated Valves
Equipment Description FPOOL PRFCN FLT1A BYP FD-6-87'
Location: Bldg. FB Floor El. 070 Room, Area 5018
Manufacturer, Model, Etc. (optional but recommended) <u>N/A</u>
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware? Y⊠ N□ U□ N/A□</li> <li>No missing hardware, in-line valve. Welded to pipe. Operator attachment bolts all acceptable.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Stainless steel materials</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A U N/A In-line valve</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

SHEET 2 OF 5	Statua: VM NI II
Seismic Walkdown Checklist (SWC) <u>SWEL2-008</u>	
Equipment ID No. SFC-AOV31A Equip. Class_7 – Pneumatic-Operation	ted Valves
Equipment Description FPOOL PRFCN FLT1A BYP FD-6-87'	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

Engi	neering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 579 of 615
Sheet 3 of 5	Status <sup>:</sup> Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC) <u>SWEL2-008</u>	
Equipment ID No. <u>SFC-AOV31A</u> Equip. Class <u>7 – Pneumatic-Oper</u>	ated Valves
Equipment Description FPOOL PRFCN FLT1A BYP FD-6-87'	
<ul> <li><u>Other Adverse Conditions</u></li> <li>11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?</li> </ul>	Y⊠ N□ U□

<u>Comments</u> (Additional pages may be added as necessary)

In-line, un-insulated valve

Evaluated by: John Dunkelberg	Date: <u>10/9/2012</u>
David Bassi	<u>10/9/2012</u>

#### SHEET 4 OF 4

# Status: Y N U

## Seismic Walkdown Checklist (SWC) SWEL2-008

Equipment ID No. SFC-AOV31A Equip. Class 7 – Pneumatic-Operated Valves

Equipment Description FPOOL PRFCN FLT1A BYP FD-6-87'

#### Photographs





Note:

Note:

Sheet 1 of 5

Status: YX N U
Equipment ID No. <u>SFC-AOV32B</u> Equip. Class <sup>1</sup> _7 – Pneumatic-Operated Valves
Equipment Description FPOOL PRFCN FLT1B INLET FD-9-87
Location: Bldg. FB Floor El. 070 Room, Area 5021
Manufacturer, Model, Etc. (optional but recommended) Vacco Model N5D10026
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y∑ N□ U□ N/A□</li> <li>Stainless in-line valve not insulated. No missing, bent, broken, loose hardware noted</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Stainless materials and painted</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A N/A</li> <li>In-line valve</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

SHEET 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL2-009</u>	
Equipment ID No. <u>SFC-AOV32B</u> Equip. Class <u>7 – Pneumatic-Operat</u>	ted Valves
Equipment Description FPOOL PRFCN FLT1B INLET FD-9-87'	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

	Attachment C Page 583 of 615
SHEET 3 OF 5 Status: YX NU U Seismic Walkdown Checklist (SWC) <u>SWEL2-009</u>	Status: Y⊠ N⊟ U⊟
Equipment ID No. SFC-AOV32B Equip. Class 7 – Pneumatic-Operated	d Valves
Equipment Description F POOL PRFCN FLT1B INLET FD-9-87'	
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□

Engineering Report No. RBS-CS-12-00001 Rev. 000

<u>Comments</u> (Additional pages may be added as necessary)

\_

In-line valve, stainless steel line, not insulated

Evaluated by: J. Dunkelberg	Date: 10/9/12
DITZ.	
D. Bassi	10/9/12

#### SHEET 4 OF 5

# Status: YX N U

Seismic Walkdown Checklist (SWC) SWEL2-009

Equipment ID No. <u>SFC-AOV32B</u> Equip. Class <u>7 – Pneumatic-Operated Valves</u>

Equipment Description FPOOL PRFCN FLT1B INLET FD-9-87'

## Photographs





Note	1
	-

Note:

#### SHEET 5 OF 5

# Status: YX N U

# Seismic Walkdown Checklist (SWC) SWEL2-009

Equipment ID No. SFC-AOV32B Equip. Class 7 – Pneumatic-Operated Valves

Equipment Description FPOOL PRFCN FLT1B INLET FD-9-87'



Sheet 1 of 5

Seismic Walkdown Checklist (SWC) <u>SWEL2-012</u>	
Equipment ID No. SFC-FT19B Equip. Class <u>20 – Instrumentation</u>	and Control Panels
Equipment Description CLR WTR TO SPENT FUEL POOLS FE-8-75'	
Location: Bldg. FB Floor El. 070 Room, Area 5000	
Manufacturer, Model, Etc. (optional but recommended) Rosemount Model 11	52DP5N22PB
Instructions for Completing Checklist	
This checklist may be used to document the results of the Seismic Walkdown of SWEL. The space below each of the following questions may be used to record findings. Additional space is provided at the end of this checklist for documenting	an item of equipment on the the results of judgments and g other comments.
Anchorage	
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?</li> </ol>	Y□ N⊠
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware? Transmitter mounted to a bracket with 4 bolts then mounted to instrument support. Support welded to wall embed.</li> </ol>	Y⊠ N∏ U∏ N/A∏
<ol> <li>Is the anchorage free of corrosion that is more than mild surface oxidation?</li> <li>No corrosion. Cadmium coated</li> </ol>	Y⊠ N□ U□ N/A□
4. Is the anchorage free of visible cracks in the concrete near the anchors?	Y□ N□ U□ N/A⊠

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Sheet 2 of 5	Statue: VM NM UM
Seismic Walkdown Checklist (SWC) <u>SWEL2-012</u>	
Equipment ID No. <u>SFC-FT19B</u> Equip. Class_ <u>20 – Instrumentation a</u>	and Control Panels
Equipment Description CLR WTR TO SPENT FUEL POOLS FE-8-75'	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 588 of 615
Status: Y N U
Equipment ID No. SFC-FT19B Equip. Class 20 – Instrumentation and Control Panels
Equipment Description CLR WTR TO SPENT FUEL POOLS FE-8-75'
Other Adverse Conditions
11. Have you looked for and found no other seismic conditions that could Y N U U adversely affect the safety functions of the equipment?

<u>Comments</u> (Additional pages may be added as necessary)

None

Evaluated by: David Bassi	_ Date: <u>10/9/2012</u>
J. P. Klundleig	
John Dunkelberg	10/9/2012

#### SHEET 4 OF 5



# Seismic Walkdown Checklist (SWC) SWEL2-012

Equipment ID No. <u>SFC-FT19B</u> Equip. Class <u>20 – Instrumentation and Control Panels</u>

# Equipment Description CLR WTR TO SPENT FUEL POOLS FE-8-75'

#### Photographs



SHEET 5 OF 5

Status: YX N U

Seismic Walkdown Checklist (SWC) SWEL2-012

Equipment ID No. SFC-FT19B Equip. Class 20 – Instrumentation and Control Panels

Equipment Description CLR WTR TO SPENT FUEL POOLS FE-8-75'





Note:

#### Sheet 6 of 6

# Status: Y N U

# Seismic Walkdown Checklist (SWC) SWEL2-012

Equipment ID No. <u>SFC-FT19B</u> Equip. Class <u>20 – Instrumentation and Control Panels</u>

Equipment Description CLR WTR TO SPENT FUEL POOLS FE-8-75'



Sheet 1 of 5

Status: VX NI LI				
Seismic Walkdown Checklist (SWC) <u>SWEL2-013</u>				
Equipment ID No. SFC-LT28A Equip. Class <sup>1</sup> 20 – Instrumentation and Control Panels				
Equipment Description FUEL STORAGE POOL (SPENT FUEL) LEVEL XMITTR				
Location: Bldg. <u>FB</u> Floor El. <u>095</u> Room, Area <u>5100</u>				
Manufacturer, Model, Etc. (optional but recommended) Rosemount Model 1153DB4PG				
Instructions for Completing Checklist				
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.				
Anchorage				
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>				
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A</li> <li>All hardware is in place and not bent, broken or loose.</li> </ol>				
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y N U N/A ∪</li> <li>N/A Stainless steel materials, no corrosion.</li> </ol>				
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Anchors?</li> <li>Component mounted to pool steel (liner/embed)</li> </ul>				

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

SHEET 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL2-013</u>	
Equipment ID No. <u>SFC-LT28A</u> Equip. Class <u>20 – Instrumentation a</u>	and Control Panels
Equipment Description FUEL STORAGE POOL (SPENT FUEL) LEVEL XMITT	R
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

SHEET 3 OF 5	Status: VM NM UM				
Seismic Walkdown Checklist (SWC) <u>SWEL2-013</u>					
Equipment ID No. SFC-LT28A Equip. Class 20 – Instrumentation an	d Control Panels				
Equipment Description FUEL STORAGE POOL (SPENT FUEL) LEVEL XMITTR					
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□					

<u>Comments</u> (Additional pages may be added as necessary)

None

Evaluated by: John Dunkelberg

Date: 10-5-2012

Jose Cardona

<u>10-5-2012</u>

#### SHEET 4 OF 5



## Seismic Walkdown Checklist (SWC) SWEL2-013

Equipment ID No. SFC-LT28A Equip. Class 20 – Instrumentation and Control Panels

Equipment Description FUEL STORAGE POOL (SPENT FUEL) LEVEL XMITTR

## Photographs



#### SHEET 5 OF 5

# Status: YX N U

# Seismic Walkdown Checklist (SWC) <u>SWEL2-013</u>

Equipment ID No. SFC-LT28A Equip. Class 20 – Instrumentation and Control Panels

## Equipment Description FUEL STORAGE POOL (SPENT FUEL) LEVEL XMITTR



Sheet 1 of 4

Seismic Walkdown Checklist (SWC) SWEI 2-014
Equipment ID No. <u>SFC-P1A</u> Equip. Class <sup>1</sup> <u>5 – Horizontal Pumps</u>
Equipment Description FUEL POOL COOLING PUMP 1A
Location: Bldg. FB Floor El. 070 Room, Area 5011
Manufacturer, Model, Etc. (optional but recommended) Gould Model 3405 SZ 10X12-12
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y⊠ N□ U□ N/A□ No missing, broken, bent or loose fasteners.</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Minor surface rust.</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A</li> <li>No cracks observed.</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

SHEET 2 OF 4	Status: VM NM UM
Seismic Walkdown Checklist (SWC) <u>SWEL2-014</u>	
Equipment ID No. <u>SFC-P1A</u> Equip. Class <u>5 – Horizontal Pumps</u>	
Equipment Description FUEL POOL COOLING PUMP 1A	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□
Εης	gineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 599 of 615
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Sheet 3 of 4	
Seismic Walkdown Checklist (SWC) <u>SWEL2-014</u>	
Equipment ID No. <u>SFC-P1A</u> Equip. Class <u>5 – Horizontal Pum</u>	ps
Equipment Description FUEL POOL COOLING PUMP 1A	
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	YX N U

Comments (Additional pages may be added as necessary)

None

Evaluated by: John Dunkelberg

Date: 10-5-2012

Jose Cardona

<u>10-5-2012</u>

#### SHEET 4 OF 4

# Status: Y N U

## Seismic Walkdown Checklist (SWC) <u>SWEL2-014</u>

Equipment ID No. SFC-P1A Equip. Class 5 – Horizontal Pumps

Equipment Description FUEL POOL COOLING PUMP 1A

## Photographs



Note:



Note:

Sheet 1 of 5

Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL2-015</u>
Equipment ID No. <u>SFC-RTD7A</u> Equip. Class <sup>1</sup> <u>19 – Temperature Sensors</u>
Equipment Description FUEL POOL CLG PMP A SUCT HEADER RESISTANCE TEMP DETECTOR
Location: Bldg. FB Floor El. 070 Room, Area 5000
Manufacturer, Model, Etc. (optional but recommended) Pyco Model 122-4030-04-4.2-9
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N∑ of the 50% of SWEL items requiring such verification)?</li> </ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N□ U□ N/A□</li> <li>In-line (in pipe) thermo well</li> </ol>
<ul> <li>3. Is the anchorage free of corrosion that is more than mild surface Y N U N/A ∪ N/A Stainless pipe and fittings</li> </ul>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A</li> <li>In line device</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

Soler 2 01 0	Status: Y⊠ N⊡ U⊡
Seismic Walkdown Checklist (SWC) <u>SWEL2-015</u>	
Equipment ID No. <u>SFC-RTD7A</u> Equip. Class <u>19 – Temperature Se</u>	nsors
Equipment Description FUEL POOL CLG PMP A SUCT HEADER RESISTANC	CE TEMP DETECTOR
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

SHEET 2 OF 5

SHEET 3 OF 5

Status: YX N U

Seismic Walkdown Checklist (SWC) SWEL2-015

Equipment ID No. SFC-RTD7A Equip. Class 19 – Temperature Sensors

Equipment Description FUEL POOL CLG PMP A SUCT HEADER RESISTANCE TEMP DETECTOR

#### **Other Adverse Conditions**

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

**<u>Comments</u>** (Additional pages may be added as necessary)

SFC pump room A

Evaluated by: John Dunkelberg

Date: 10/9/2012

Jose` Cardona

10/9/2012

#### SHEET 4 OF 5

# Status: Y N U

## Seismic Walkdown Checklist (SWC) SWEL2-015

Equipment ID No. SFC-RTD7A Equip. Class 19 – Temperature Sensors

Equipment Description FUEL POOL CLG PMP A SUCT HEADER RESISTANCE TEMP DETECTOR

#### Photographs





Note:

Note:

#### SHEET 5 OF 5

# Status: YX N U

# Seismic Walkdown Checklist (SWC) SWEL2-015

Equipment ID No. SFC-RTD7A Equip. Class 19 – Temperature Sensors

Equipment Description FUEL POOL CLG PMP A SUCT HEADER RESISTANCE TEMP DETECTOR



Sheet 1 of 5

Status: Y N U
Seismic Walkdown Checklist (SWC) <u>SWEL2-016</u>
Equipment ID No. <u>SWP-MOV504B</u> Equip. Class <sup>1</sup> 8 - Motor-Operated & Solenoid-Operated Valves
Equipment Description RPCCW SYSTEM RETURN
Location: Bldg. AB Floor El. 070 Room, Area 6001
Manufacturer, Model, Etc. (optional but recommended) Velan Model B18-0054B-02TS
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y N U N/A In-line valve, no insulation</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□</li> <li>oxidation?</li> <li>Light rusting</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A U N/A In-line valve</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

SHEET 2 OF 5	
Seismic Walkdown Checklist (SWC) <u>SWEL2-016</u>	
Equipment ID No. <u>SWP-MOV504B</u> Equip. Class <u>8 - Motor-Operated &amp;</u>	Solenoid-Operated Valves
Equipment Description RPCCW SYSTEM RETURN	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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∏
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□

Seismic Walkdown Checklist (SWC) <u>SWEL2-016</u>	Status: Y⊠ N∏ U∏
Equipment ID No. <u>SWP-MOV504B</u> Equip. Class <u>8 - Motor-Operated &amp; S</u>	Solenoid-Operated Valves
Equipment Description RPCCW SYSTEM RETURN	
Other Adverse Conditions	
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	YX N U

<u>Comments</u> (Additional pages may be added as necessary)

None

SHEET 3 OF 5

Matt Keener		
Evaluated by: Matt Keeney	Date:	10/8/2012
Brandon Nissing		10/8/2012

#### SHEET 4 OF 5

# Status: YX N U

Seismic Walkdown Checklist (SWC) SWEL2-016

 Equipment ID No.
 SWP-MOV504B
 Equip. Class 8 - Motor-Operated & Solenoid-Operated Valves

 Equipment Description
 RPCCW SYSTEM RETURN

#### Photographs



#### SHEET 5 OF 5

# Status: YX N U

# Seismic Walkdown Checklist (SWC) <u>SWEL2-016</u>

Equipment ID No. <u>SWP-MOV504B</u> Equip. Class <u>8 - Motor-Operated & Solenoid-Operated Valves</u>

Equipment Description <u>RPCCW SYSTEM RETURN</u>



Sheet 1 of 5

Seismic Walkdown Checklist (SWC) SWEI 2-017
Equipment ID No. <u>SWP-MOV510B</u> Equip. Class <sup>1</sup> 8 – Motor-Operated & Solenoid-Operated Valves
Equipment Description RPCCW SYSTEM SUPPLY
Location: Bldg. AB Floor El. 070 Room, Area 6001
Manufacturer, Model, Etc. (optional but recommended) Velan Model B18-0054B-02TS
Instructions for Completing Checklist
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.
Anchorage
<ol> <li>Is the anchorage configuration verification required (i.e., is the item one Y N N N N N N N N N N N N N N N N N N</li></ol>
<ol> <li>Is the anchorage free of bent, broken, missing or loose hardware?</li> <li>Y∑ N□ U□ N/A□ In-line valve</li> </ol>
<ol> <li>Is the anchorage free of corrosion that is more than mild surface</li> <li>Y⊠ N□ U□ N/A□ oxidation?</li> <li>Painted</li> </ol>
<ul> <li>4. Is the anchorage free of visible cracks in the concrete near the Y N U N/A N/A N/A N/A N/A</li> <li>In-line valve</li> </ul>

<sup>&</sup>lt;sup>1</sup> Enter the equipment class <u>name</u> from Appendix B: Classes of Equipment.

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SHEET 2 OF 5 Seismic Walkdown Checklist (SWC) <u>SWEL2-017</u>	Status: Y⊠ N⊡ U⊡
Equipment ID No. <u>SWP-MOV510B</u> Equip. Class <u>8 - Motor-Operated &amp;</u>	Solenoid-Operated Valves
Equipment Description RPCCW SYSTEM SUPPLY	
<ol> <li>Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)</li> </ol>	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□
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□

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Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment C Page 613 of 615
SHEET 3 OF 5
Status: Y N O
Equipment ID No. <u>SWP-MOV510B</u> Equip. Class <u>8 - Motor-Operated &amp; Solenoid-Operated Valves</u>
Equipment Description RPCCW SYSTEM SUPPLY
Other Adverse Conditions
11. Have you looked for and found no other seismic conditions that could Y⊠ N□ U□ adversely affect the safety functions of the equipment?

<u>Comments</u> (Additional pages may be added as necessary)

None

Matt Keener		
Evaluated by: Matt Keeney	Date:	10/8/2012
Brandon Nissing		10/8/2012

#### SHEET 4 OF 5

Status: YX N U

Seismic Walkdown Checklist (SWC) SWEL2-017

 Equipment ID No.
 SWP-MOV510B
 Equip. Class 8 - Motor-Operated & Solenoid-Operated Valves

 Equipment Description
 RPCCW SYSTEM SUPPLY

#### Photographs



#### SHEET 5 OF 5

Status: YX N U

Seismic Walkdown Checklist (SWC) <u>SWEL2-017</u>

 Equipment ID No.
 SWP-MOV510B
 Equip. Class 8 - Motor-Operated & Solenoid-Operated Valves

 Equipment Description
 RPCCW SYSTEM SUPPLY



Note:

Note:

# Attachment D

# Area Walk-By Checklists (AWC)

Table D-1 below shows which Seismic Walkdown Checklist(s) (SWC) are on each Area Walkby Checklist (AWC).

# Table D-1

AWC #	SWEL #
1010	1-010
1012	1-012
1014	1-014, 1-015, 1-018, 1-019, 1-021
1016	1-016, 2-002
1017	1-017, 1-022
1020	1-020
1023	1-023, 1-031
1024	1-024
1027	1-027
1028	1-028
1029	1-029, 10-30
1036	1-036
1037	1-037, 1-032, 1-034, 1-035
1043	1-043, 1-038, 1-039, 1-040, 1-041, 1-043, 1-044
1046	1-046, 1-083
1048	1-048
1049	1-049, 1-051, 1-054
1055	1-055
1056	1-056
1057	1-057, 1-058

AWC #	SWEL #
1062	1-062, 1-052, 1-053, 1-061
1063	1-063, 1-060
1064	1-064, 1-005, 1-007, 1-091, 1-093, 1-095
1066	1-066, 1-068, 1-073
1067	1-067
1069	1-069
1070	1-070, 1-065, 1-071
1072	1-072, 1-074
1075	1-075, 1-076, 1-077, 1-078, 1-104, 1-109
1082	1-082, 1-079, 1-080
1084	1-074, 1-105
1085	1-085
1086	1-086
1087	1-087
1088	1-088
1089	1-089
1090	1-090, 1-009, 1-011, 1-013
1092	1-092, 1-006, 1-008, 1-094, 1-096
1106	1-106, 1-047, 1-108
1107	1-107, 1-099 , 1-111
1112	1-112, 1-117
1113	1-113
1114	1-114

AWC #	SWEL #
1115	1-115
1116	1-116, 1-119
1118	1-118
1120	1-120
2001	2-001, 2-004
2003	2-003
2005	2-005
2006	2-006
2008	2-008
2009	2-009
2012	2-012
2013	2-013
2014	2-014, 2-015
2016	2-016, 1-025, 2-017

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Sheet 1 of 4	
Area Walk-By Checklist (AWC) <u>AWC-1010</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>RB</u> Floor El. <u>141</u> Room, Area <sup>1</sup> <u>7200</u>	
SWEL Components: <u>SWEL1-010</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near one space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other com	or more SWEL items. The judgments and findings. nments.
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□

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<sup>&</sup>lt;sup>1</sup> 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) <u>AWC-1010</u>	
Location: Bldg. <u>RB</u> Floor El. <u>141</u> Room, Area <u>7200</u>	
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∏
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□

Sheet 3 of 4

Area Walk-By	Checklis	t (AWC) <u>AWC-10</u>	10		Status: Y⊠ N∏ U∏
Location: Bldg.	RB	Floor El. <u>141</u>	Room, Area	<u>7200</u>	
8. Have you adversely	looked for affect the	and found no other s safety functions of the	eismic conditions e equipment in the	that could e area?	Y⊠ N□ U□
<u>Comments (</u> Add	itional pag	es may be added as	necessary)		
None					
		Matt 7	ener		-
Evaluated by: <u>Ma</u>	<u>att Keeney</u>				_ Date: <u>10-9-2012</u>
		A	$\frac{2}{0}$	>	
Jas	son Halsey	( ( )	(		<u>10-9-2012</u>

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Sheet 4 of 4

#### Area Walk-By Checklist (AWC) <u>AWC-1010</u>

Location: Bldg. <u>RB</u> Floor El. <u>141</u> Room, Area <u>7200</u>

# SWEL Components: SWEL1-010

#### Photographs





Note:



Note:

	Attachment D Page 9 of 222
Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1012</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <sup>1</sup> <u>7200</u>	
SWEL Components: <u>SWEL1-012</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near on space below each of the following questions may be used to record the results o Additional space is provided at the end of this checklist for documenting other co	e or more SWEL items. The f judgments and findings. mments.
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□

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<sup>&</sup>lt;sup>1</sup> 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  $\boxtimes$  N  $\square$  U  $\square$ 

Sheet 2 of 3

Area Walk-By Checklist (AWC) <u>AWC-1012</u>	
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>	
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∏
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∏

Sheet 3 of 3

Area Walk-By Checl	list (AWC) <u>AWC-10</u>	12_	Status: Y⊠ N∏ U∏
Location: Bldg. <u>RB</u>	Floor El. <u>114</u>	Room, Area <u>7200</u>	
8. Have you looked adversely affect	l for and found no other so the safety functions of the	eismic conditions that could e equipment in the area?	d Y⊠N□U□
Comments (Additional	pages may be added as r	necessary)	
None			
	Matt X	ener	
Evaluated by: <u><i>Matt Kee</i></u>	ney		Date: <u>10-3-2012</u>
	) PK	Lundberg	
<u>John Dur</u>	kelberg	0	<u>10-3-2012</u>
John Dur	kelberg PL	undling	<u>10-3-2012</u>

Sheet 1 of 3

Status: Y N U

# Area Walk-By Checklist (AWC) <u>AWC-1014</u>

Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area<sup>1</sup> <u>6006</u>

# SWEL Components: SWEL1-014, SWEL 1-015, SWEL 1-018, SWEL 1-019, SWEL 1-021

#### 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.

<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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 advers 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⊡ e

Status: Y N U

Area Walk-By Checklist (AWC) <u>AWC-1014</u>	
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <u>6006</u>	
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□
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□

Sheet 3 of 3

# Area Walk-By Checklist (AWC) <u>AWC-1014</u> Status: YX N U

Location: Bldg. <u>AB</u>	Floor El. <u>070</u>	Room, Area <u>6006</u>		
8. Have you looked fo adversely affect the	r and found no other s safety functions of the	eismic conditions that could e equipment in the area?	Y⊠ N□ U□	

#### <u>Comments</u> (Additional pages may be added as necessary)

None

Evaluated by: John Dunkelberg	_ Date: <u>10-6-2012</u>
Jose Cardona	<u>10-6-2012</u>

Sheet 1 of	3			
				Status: Y⊠ N⊡ U⊡
Area Wa	Ik-By Checklist	: (AWC) <u>AWC-</u>	<u>1016</u>	
Location:	Bldg. <u>AB</u>	Floor El. <u>070</u>	Room, Area <sup>1</sup> <u>6008</u>	
SWEL C	omponents: <u>SV</u>	<u>VEL1-016, SWEL</u>	.2-002	
Instructio	ns for Completir	ng 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. Do poi ope	es anchorage of e tentially adverse s ening cabinets)?	equipment in the ar seismic conditions (	ea appear to be free of if visible without necessarily	Y⊠ N∏ U∏ N/A∏
2. Do sig	es anchorage of e nificant degraded	equipment in the ar conditions?	ea appear to be free of	Y⊠ N□ U□ N/A□
3. Ba rac sei col	sed on a visual in eways and HVAC smic conditions (and the second tions) and the second tions of tion	spection from the f ducting appear to e.g., condition of su rays appear to be in	loor, do the cable/conduit be free of potentially advers ipports is adequate and fill nside acceptable limits)?	Y⊠ N⊡ U⊡ N/A⊡ se

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Status: Y N U

Area Walk-By Checklist (AWC) <u>AWC-1016</u>	
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <u>6008</u>	
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□
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□

Sheet 3 of 3

Area Walk-By Checklist (AWC)	AWC-1016	Status: Y	N U

 Location: Bldg. <u>AB</u>
 Floor El. <u>070</u>
 Room, Area <u>6008</u>

 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□

#### <u>Comments</u> (Additional pages may be added as necessary)

None

Evaluated by: John Dunkelberg	_ Date: <u>10/6/2012</u>
Jose' Cardona	<u>10/6/2012</u>

Sheet 1 of 3				
Area Walk-By Checklist (AWC) AWC-1017	Status: Y⊠ N□ U□			
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <sup>1</sup> <u>6112</u>				
SWEL Components: SWEL1-017, SWEL1-022				
Instructions for Completing Checklist				
This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.				
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□			

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Status: Y N U

Sheet 2 of 3

Area Walk-By Checklist (AWC) <u>AWC-1017</u>	
Location: Bldg. AB Floor El. 070 Room, Area 6112	
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□
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□
## Area Walk-By Checklist (AWC) <u>AWC-1017</u>

Status: Y N U

Location: Bldg. AB Floor El. 070 Room, Area 6112	
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□
<u><b>Comments</b></u> (Additional pages may be added as necessary)	
None	
Evaluated by: John Dunkelberg	Date: <u>10/6/2012</u>
April Cardono	
Jose' Cardona	10/6/2012

Sheet 1 of 4	
Area Walk By Checklint (AWC) AWC 1020	Status: Y⊠ N□ U□
Area waik-By Checklist (AWC) <u>AWC-1020</u>	
Location: Bldg. <u>D Tunnel</u> Floor El. <u>070</u> Room, Area <sup>1</sup> <u>20D1</u>	
SWEL Components: <u>SWEL1-020</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near on space below each of the following questions may be used to record the results o Additional space is provided at the end of this checklist for documenting other co	e or more SWEL items. The fjudgments and findings. mments.
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□

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Area Walk-By Checklist (AWC) <u>AWC-1020</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>D Tunnel</u> Floor El. <u>070</u> Room, Area <u>20D1</u>	
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□
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□

Attachment D Page 23 of 222 Sheet 3 of 4 Status: Y N U Area Walk-By Checklist (AWC) AWC-1020 Location: Bldg. D Tunnel \_\_\_ Floor El. 070 Room, Area 20D1  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) None Evaluated by: Jason Halsey Date: 10-10-2012 David Bassi 10-10-2012

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Sheet 4 of 4

## Status: YX N U

## Area Walk-By Checklist (AWC) <u>AWC-1020</u>

Location: Bldg. <u>D Tunnel</u> Floor El. <u>070</u> Room, Area <u>20D1</u>

#### SWEL Components: SWEL1-020

#### Photographs



Sheet 1 of 3				
				Status: Y⊠ N⊡ U⊡
Area Walk-By Cl	necklist (AWC)	AWC-1023	_	
Location: Bldg. D	G Floor El.	<u>098</u>	Room, Area <sup>1</sup> <u>1104</u>	
SWEL Compone	ents: <u>SWEL1-023,</u>	SWEL1-03	1	
Instructions for C	ompleting Checklis	st		
This checklist may space below each Additional space is	be used to documer of the following ques provided at the end	nt the results stions may be of this check	of the Area Walk-By near e used to record the result dist for documenting other	one or more SWEL items. The s of judgments and findings. comments.
<ol> <li>Does ancho potentially a opening cat</li> </ol>	prage of equipment in adverse seismic conc pinets)?	n the area ap ditions (if visi	opear to be free of ble without necessarily	Y⊠ N□ U□ N/A□
2. Does ancho significant d	brage of equipment in legraded conditions?	n the area ap	opear to be free of	Y⊠ N□ U□ N/A□
3. Based on a raceways a seismic con conditions c	visual inspection fro nd HVAC ducting ap ditions (e.g., condition f cable trays appear	m the floor, o pear to be fro on of support to be inside	do the cable/conduit ee of potentially adverse is is adequate and fill acceptable limits)?	Y⊠ N□ U□ N/A□

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Area Walk-By Checklist (AWC) <u>AWC-1023</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>DG</u> Floor El. <u>098</u> Room, Area <u>1104</u>	
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∏
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□

Area Walk By Checkli		0.0		Status: Y N U
		Poom Aroa	1104	
8. Have you looked for adversely affect the	pr and found no other s afety functions of the	eismic conditions e equipment in the	that could area?	Y N U
<u>Comments (</u> Additional pa None	ges may be added as	necessary)		
Evaluated by: <u>Jason Halse</u>	ev Aa	2	>	Date: <u>10/5/2012</u>
<u>Brandon Nis</u>	ssing	11:		<u>10/5/2012</u>

Sheet 1 of 3	
	Status: Y⊠ N□ U□
Area Walk-By Checklist (AWC) <u>AWC-1024</u>	
Location: Bldg. <u>F Tunnel</u> Floor El. <u>067</u> Room, Area <sup>1</sup> <u>5000</u>	
SWEL Components: <u>SWEL1-024</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	one or more SWEL items. The of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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Sheet 2 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1024</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>F Tunnel</u> Floor El. <u>067</u> Room, Area <u>5000</u>	
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□
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□

# Area Walk-By Checklist (AWC) <u>AWC-1024</u> Status: YX NI U

Location: Bldg. <u>F Tunnel</u> Flo	oor El. <u>067</u>	Room, Area	5000	
<ol> <li>Have you looked for and f adversely affect the safety</li> </ol>	ound no other seis	mic conditions quipment in the	that could e area?	Y⊠N□U□
<b>Comments</b> (Additional pages ma	iv be added as nec	essarv)		
None	,	<b>,</b> ,,		
Evaluated by: <u>John Dunkelberg</u>	JERK	mhle	eg	Date: <u>10/5/2012</u>
~	An	t. Car	loso	

Jose` Cardona

10/5/2012

Sheet 1 of 3	
Status: YX N	] U[]
Location: Bldg. DG Floor El. 098 Room, Area <sup>1</sup> 1104	
SWEL Components: <u>SWEL1-027</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near one or more SWEL items space below each of the following questions may be used to record the results of judgments and findin Additional space is provided at the end of this checklist for documenting other comments.	s. The gs.
<ol> <li>Does anchorage of equipment in the area appear to be free of Y N□ U□ N/A potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	]
<ol> <li>Does anchorage of equipment in the area appear to be free of Y⊠ N□ U□ N/A significant degraded conditions?</li> </ol>	
<ol> <li>Based on a visual inspection from the floor, do the cable/conduit</li> <li>Y⊠ N□ U□ N/A 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)?</li> </ol>	

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Status: Y N U

Area Walk-By Checklist (AWC)	AWC-1027	
Location: Bldg. DG Floor E	El. <u>098</u> Room, Area <u>1104</u>	
4. Does it appear that the area is spatial interactions with other and lighting)?	free of potentially adverse seismic equipment in the area (e.g., ceiling tiles	Y⊠ N∏ U∏ N/A∏
5. Does it appear that the area is interactions that could cause f	free of potentially adverse seismic ooding or spray in the area?	Y⊠ N∏ U∏ N/A∏
<ol> <li>Does it appear that the area is interactions that could cause a</li> </ol>	free of potentially adverse seismic fire in the area?	Y⊠ N∏ U∏ N/A∏
7. Does it appear that the area is interactions associated with he portable equipment, and temp shielding)?	free of potentially adverse seismic busekeeping practices, storage of orary installations (e.g., scaffolding, lead	Y⊠ N∏ U∏ N/A∏

Area Walk-By Checklis	t (AWC) <u>AWC-10</u>	27	Status: Y⊠ N_ U_
Location: Bldg. DG	Floor El. <u>098</u>	Room, Area <u>1104</u>	
8. Have you looked fo adversely affect the	r and found no other s safety functions of the	eismic conditions that co e equipment in the area?	ould Y⊠ N□ U□
Comments (Additional page	ges may be added as	necessary)	
None			
	Aa	2,0	
Evaluated by: Jason Halse	У	(	Date: <u>10-5-2012</u>
		1	~
Brandon Nis	sing	$\mathcal{C}$	10-5-2012

Sheet 1 of 3
Area Walk-By Checklist (AWC) <u>AWC-1028</u> Status: YX NU
Location: Bldg. CB Floor El. 115 Room, Area <sup>1</sup> 1207
SWEL Components: SWEL1-028
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.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>
2. Does anchorage of equipment in the area appear to be free of Y⊠ N□ U□ N/A□ significant degraded conditions?
3. Based on a visual inspection from the floor, do the cable/conduit Y⊠ N□ U□ N/A□ 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)?

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Status: Y N U

Area Walk-By Cł	hecklist (AWC)/	AWC-1028		Status: Y 🖄 N	
Location: Bldg. Cl	B Floor El.	<u>115</u> Roor	n, Area <u>1207</u>		
4. Does it apport spatial intera and lighting)	ear that the area is fro actions with other equ )?	ee of potentially ac upment in the area	lverse seismic a (e.g., ceiling tiles	Y⊠ N∏ U∏ N/A	
5. Does it appe interactions	ear that the area is fro that could cause floc	ee of potentially ac ding or spray in th	lverse seismic e area?	Y⊠ N∏ U∏ N/A	
6. Does it appoint the second	ear that the area is fro that could cause a fin	ee of potentially ac	lverse seismic	Y⊠ N∏ U∏ N/A	
<ol> <li>Does it apperint the second sec</li></ol>	ear that the area is fro associated with hous uipment, and tempora	ee of potentially ac ekeeping practice ary installations (e.	lverse seismic s, storage of g., scaffolding, lead	Y⊠ N□ U□ N/A	

Area Walk-By Checklist (AWC) <u>AWC-1028</u>	Status: Y N U
Location: Bldg. CB Floor El. 115 Room, A	Area <u>1207</u>
<ol> <li>Have you looked for and found no other seismic condit adversely affect the safety functions of the equipment</li> </ol>	ditions that could Y⊠ N⊡ U⊡ It in the area?
<u><b>Comments</b></u> (Additional pages may be added as necessary)	
None	
Evaluated by: Jason Halsey	Date: <u>10-5-2012</u>
Brandon Nissing	<u>10-5-2012</u>

Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1029</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area <sup>1</sup> <u>N/A</u>	
SWEL Components: SWEL1-029, SWEL1-030	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	ne or more SWEL items. The of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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Status: Y N U

Area Walk-By Checklist (AWC) <u>AWC-1029</u>	
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area <u>N/A</u>	
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□
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∏

Area Walk-By Checklist (AWC) <u>AWC-1029</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. CB Floor El. <u>116</u> Room, Area <u>N/A</u>	
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□
<u><b>Comments</b></u> (Additional pages may be added as necessary)	
None	
	_ Date. <u>10-5-2012</u>
Brandon Nissing	10-5-2012

Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1036</u>	Status: Y⊠ N□ U□
Location: Bldg. <u>CB</u> Floor El. <u>070</u> Room, Area <sup>1</sup> <u>6112</u>	
SWEL Components: <u>SWEL1-036</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other or	ne or more SWEL items. The of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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Area Walk-By Checklist (AWC)	AWC-1036	_			Status: Y⊠ N⊡ U⊡
Location: Bldg. CB Floor El.	070	Room, A	Area	<u>6112</u>	
4. Does it appear that the area is fr spatial interactions with other eq and lighting)?	ee of potenti uipment in th	ially adve ne area (e	rse s æ.g., c	eismic æiling tiles	Y⊠ N∏ U∏ N/A∏
5. Does it appear that the area is fr interactions that could cause floo	ee of potenti oding or spra	ally adve ay in the a	rse so irea?	eismic	Y⊠ N□ U□ N/A□
<ol> <li>Does it appear that the area is fr interactions that could cause a fi</li> </ol>	ee of potenti re in the are	ally adve a?	rse s	eismic	Y⊠ N□ U□ N/A□
<ol> <li>Does it appear that the area is fr interactions associated with hous portable equipment, and tempor shielding)?</li> </ol>	ee of potenti sekeeping pi ary installatio	ally adve ractices, s ons (e.g.,	rse s stora scaff	eismic ge of olding, lead	Y⊠ N□ U□ N/A□

Area Walk-By Checklist (AWC) <u>AWC-1036</u>	Status: Y⊠ N∐ U∐
Location: Bldg. CB Floor El. 070 Room, Area 6112	
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□
<u>Comments (</u> Additional pages may be added as necessary) None	
Evaluated by: Matt Keeney	_ Date: <u>10/8/2012</u>
Jason Halsey	<u>10/8/2012</u>

Area Walk-By Checklist (AWC) <u>AWC-1037</u>	Status: Y⊠ N⊟ U⊟		
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <sup>1</sup> <u>6005</u>			
SWEL Components: <u>SWEL1-037, SWEL1-035, SWEL1-032. SWEL1-0</u>	)34		
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.			
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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∏		

Sheet 1 of 6

Status: Y N U

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Area Walk-By Checklist (AWC) <u>AWC-1037</u>	
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <u>6005</u>	
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□
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□

Location: Bldg. <u>AB</u> Floor EI. <u>070</u> Room, Area <u>6005</u> 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? See Comments       Y N U <u>Comments</u> (Additional pages may be added as necessary)       General house keeping issue: small container with what appears to be oil (28 oz.)         Ref. WR-00288442       Walk-by area is elevation 70 ft of the RCIC room, Aux Bldg.         Evaluated by: M. Keeney       Date: 10/8/12         Evaluated by: M. Keeney       Date: 10/8/12	Area Walk-By Checklist (AWC) <u>AWC-1037</u>	Status: Y⊠ N∏ U∏
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□         See Comments       See Comments         Comments (Additional pages may be added as necessary)       General house keeping issue: small container with what appears to be oil (28 oz.)         Ref. WR-00288442       Walk-by area is elevation 70 ft of the RCIC room, Aux Bldg.         Matt Keeney       Date: 10/8/12         Evaluated by: M. Keeney       Date: 10/8/12	Location: Bldg. <u>AB</u> Floor El. <u>070</u> Ro	om, Area <u>6005</u>
Comments (Additional pages may be added as necessary)         General house keeping issue: small container with what appears to be oil (28 oz.)         Ref. WR-00288442         Walk-by area is elevation 70 ft of the RCIC room, Aux Bldg.         Evaluated by: M. Keeney         Date:       10/8/12	<ol> <li>Have you looked for and found no other seismic of adversely affect the safety functions of the equipr See Comments</li> </ol>	conditions that could Y⊠ N⊡ U⊡ nent in the area?
General house keeping issue: small container with what appears to be oil (28 oz.) Ref. WR-00288442 Walk-by area is elevation 70 ft of the RCIC room, Aux Bldg. Evaluated by: <u>M. Keeney</u> Date: <u>10/8/12</u> <u>J. Halsey</u> <u>10/8/12</u>	Comments (Additional pages may be added as necessa	ary)
Walk-by area is elevation 70 ft of the RCIC room, Aux Bldg.          Matt Kenney       Date: 10/8/12         Evaluated by: M. Keeney       Date: 10/8/12         J. Halsey       10/8/12	General house keeping issue: small container wit Ref. WR-00288442	h what appears to be oil (28 oz.)
Evaluated by: M. Keeney Date: 10/8/12 J. Halsey 10/8/12	Walk-by area is elevation 70 ft of the RCIC room,	Aux Bldg.
J. Halsey 10/8/12	Matt Ken	Date: 10/8/12
J. Halsey 10/8/12	Aug	
	J. Halsey	<u>10/8/12</u>

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## Status: YX N U

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## Area Walk-By Checklist (AWC) <u>AWC-1037</u>

Location: Bldg. AB Floor El. 070 Room, Area 6005

#### SWEL Components: SWEL1-037

### Photographs



Sheet 5 of 6

Note:



## Area Walk-By Checklist (AWC) <u>AWC-1037</u>

Location: Bldg. AB Floor El. 070 Room, Area 6005

#### SWEL Components: SWEL1-037





Note:

Sheet 6 of 6



## Area Walk-By Checklist (AWC) <u>AWC-1037</u>

Location: Bldg. AB Floor El. 070 Room, Area 6005

#### SWEL Components: <u>SWEL1-037</u>



Note:



Note:

Sheet 1 of 4

Status: YX N U

#### Area Walk-By Checklist (AWC) AWC-1043

Location: Bldg. DG Floor El. 098 Room, Area<sup>1</sup> 1106

## SWEL Components: <u>SWEL1-043, SWEL1-038, SWEL1-039, SWEL1-040, SWEL1-041, SWEL1-043, SWEL1-044</u>

#### 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.

<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

Area Walk-By Checklist (AWC) <u>AWC-1043</u>	<u>i                                     </u>	Status: Y⊠ N□ U□
Location: Bldg. DG Floor El. 098	Room, Area <u>1106</u>	
4. Does it appear that the area is free of potent spatial interactions with other equipment in t and lighting)?	tially adverse seismic he area (e.g., ceiling tiles	Y N U U N/A
5. Does it appear that the area is free of potent interactions that could cause flooding or spra	ially adverse seismic ay in the area?	Y⊠ N□ U□ N/A□
<ol> <li>Does it appear that the area is free of potent interactions that could cause a fire in the are</li> </ol>	ially adverse seismic a?	Y⊠ N∏ U∏ N/A∏
7. Does it appear that the area is free of potent interactions associated with housekeeping p portable equipment, and temporary installati shielding)?	tially adverse seismic practices, storage of ons (e.g., scaffolding, lead	Y⊠ N□ U□ N/A□

Area Walk-By Checklis	st (AWC) <u>AWC-1(</u>	943	Status: Y⊠ N∏ U∏
Location: Bldg, DG	Floor El. 098	Room, Area 1106	

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

<u>Comments</u> (Additional pages may be added as necessary)

Threaded fire protection piping connections used but all are adequately restrained.

Matt Keener	
Evaluated by: M. Keeney	Date: <u>10-2-12</u>
Adap	
J. Halsey	10-2-12

Sheet 4 of 4

## Status: YX N U

## Area Walk-By Checklist (AWC) <u>AWC-1043</u>

Location: Bldg. DG Floor El. 098 Room, Area 1106

#### SWEL Components: <u>SWEL1-043</u>

#### Photographs



**Note:** Over-head – facing East



**Note:** Over-head – facing west

Sheet 1 of 3			
Area Walk-By Checkli	st (AWC) AWC-10	46	Status: Y N U
Location: Bldg. DG	Floor El. <u>098</u>	Room, Area <sup>1</sup> <u>1107</u>	
SWEL Components: S	WEL1-046, SWEL1-	-083	
Instructions for Complete This checklist may be use space below each of the for Additional space is provide	ting Checklist of to document the resu ollowing questions may ed at the end of this ch	Its of the Area Walk-By nea / be used to record the resul ecklist for documenting othe	r one or more SWEL items. The ts of judgments and findings. r comments.
<ol> <li>Does anchorage o potentially adverse opening cabinets)?</li> </ol>	f equipment in the area seismic conditions (if v ?	appear to be free of visible without necessarily	Y⊠ N□ U□ N/A□
2. Does anchorage o significant degrade	f equipment in the area ed conditions?	appear to be free of	Y⊠ N□ U□ N/A□
<ol> <li>Based on a visual raceways and HVA seismic conditions conditions of cable</li> </ol>	inspection from the floc AC ducting appear to be (e.g., condition of supp trays appear to be insi	or, do the cable/conduit e free of potentially adverse ports is adequate and fill ide acceptable limits)?	Y⊠ N□ U□ N/A□

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Area Walk-By Checklist (AWC) <u>AWC-1046</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>DG</u> Floor El. <u>098</u> Room, Area <u>1</u>	107
4. Does it appear that the area is free of potentially adverse seise spatial interactions with other equipment in the area (e.g., ceili and lighting)?	mic Y⊠ N⊡ U⊡ N/A⊡ ing tiles
5. Does it appear that the area is free of potentially adverse seise interactions that could cause flooding or spray in the area?	mic Y⊠ N⊡ U⊡ N/A⊡
6. Does it appear that the area is free of potentially adverse seise interactions that could cause a fire in the area?	mic Y⊠ N⊡ U⊡ N/A⊡
7. Does it appear that the area is free of potentially adverse seise interactions associated with housekeeping practices, storage portable equipment, and temporary installations (e.g., scaffold shielding)?	mic Y⊠ N⊡ U⊡ N/A⊡ of ling, lead

Area Walk-By Checklist (AWC) <u>AWC-1046</u>	Status: Y⊠ N∏ U∏
Location: Bldg. DG Floor El. 098 Room, Area 1107	
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□
<b>Comments</b> (Additional pages may be added as necessary)	
None	
Andag	
Evaluated by: <u>Jason Halsey</u>	Date: <u>10-5-2012</u>
Brandon Nissing	10-5-2012
Sheet <b>1</b> of <b>5</b>	
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------
Area Walk-By Checklist (AWC) <u>AWC-1048</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <sup>1</sup> <u>6302</u>	
SWEL Components: <u>SWEL1-048</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other co	ne or more SWEL items. The of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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∏

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<sup>&</sup>lt;sup>1</sup> 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) <u>AWC-1048</u>	
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6302</u>	
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? See comments on sprinkler head	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□
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)? See comments	Y⊠ N□ U□ N/A□

# Status: Y N U

Area Walk-By Checklist (A	AWC) <u>AWC-104</u>	8		
Location: Bldg. <u>AB</u>	Floor El. <u>141</u>	Room, Area	6302	
8. Have you looked for ar adversely affect the sa See comments	nd found no other se ifety functions of the	ismic conditions equipment in the	that could e area?	Y N U
Comments (Additional pages	may be added as no	ecessary)		
EHS-MCC2D – backsi (approx ½" sticking out currently secure with ti 1TL803B Vertical Cabl cable tray. Behind EHS Above COP-H230 (EJS Ref. AWC-1112 for JP Ref. LB-18; CR-RBS-2	de, directly behind c t); backside, directly ght fit le tray – sprinkler he S-MCC2B, north end S-SWG2B area), the B-RAK3 for adjacent 2012-06446	ubicle 2D, lower behind cubicle 4 ad about 20' in c l. re is a length of t area	right hand door IA, door hinge n overhead is very rope in the over	screw is not fully engaged eeds readjustment. Door is close (almost touching) head.
Evaluated by: <u>D. Bassi</u>	De Jenta	B	- T	Date: <u>10/12/12</u>
J. Dunkelberg	U		0	10/12/12

Sheet 4 of 5

# Status: Y N U

# Area Walk-By Checklist (AWC) <u>AWC-1048</u>

Location: Bldg. AB Floor El. 141 Room, Area 6302

## SWEL Components: SWEL1-048

# Photographs



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# Area Walk-By Checklist (AWC) <u>AWC-1048</u>

Location: Bldg. AB Floor El. 141 Room, Area 6302

## SWEL Components: SWEL1-048



Sheet 1 of 3	
	Status: Y⊠ N∏ U∏
Area Walk-By Checklist (AWC) <u>AWC-1049</u>	
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6306</u>	
SWEL Components: <u>SWEL1-049, SWEL1-051, SWEL1-054</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By nea space below each of the following questions may be used to record the resul Additional space is provided at the end of this checklist for documenting othe	r one or more SWEL items. The Its of judgments and findings. er comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

Area Walk-B	y Checklist	(AWC)	AWC-1049	_			Status	:: Y⊠ N∏ U[	]
Location: Bldg	. <u>AB</u>	Floor El.	<u>141</u>	Room,	Area	6306			
4. Does it spatial i and ligh	appear that th nteractions wi ting)?	e area is fr th other eq	ee of potenti uipment in th	ally adve ne area (	erse se e.g., c	eismic eiling tiles	Y⊠ N□	] U N/A	
5. Does it interact	appear that th ons that could	le area is fr d cause floo	ee of potenti oding or spra	ally adve y in the a	erse se area?	eismic	Y⊠ N□	] U 🗌 N/A 🗌	
6. Does it interact	appear that th ons that could	le area is fr d cause a fi	ee of potenti re in the area	ally adve a?	erse se	eismic	Y⊠ N□	] U 🗌 N/A 🗌	
7. Does it interact portable shieldin	appear that th ons associate equipment, a g)?	e area is fr d with hou and tempor	ee of potenti sekeeping pi ary installatio	ally adve ractices, ons (e.g.,	erse se storaç scaff	eismic ge of olding, lead	Y⊠ N□	] U N/A	

	Status: Y🛛 N🗌 U	
Area Walk-By Checklist (AWC) <u>AWC-1049</u>		

Location: Bldg. <u>AB</u>	Floor El. <u>141</u>	Room, Area <u>6306</u>		
8. Have you looked adversely affect the	or and found no other s the safety functions of the	eismic conditions that could equipment in the area?	Y⊠ N□ U□	

#### Comments (Additional pages may be added as necessary)

None

Evaluated by: John Dunkelberg Date: 10-5-2012 Jose Cardona <u>10-5-2012</u>

Sheet 1 of 3	
Status: YX N U	]
Location: Bldg. <u>SCT</u> Floor El. <u>136</u> Room, Area <sup>1</sup> <u>N/A</u>	-
SWEL Components: <u>SWEL1-055</u>	
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.	
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	
<ol> <li>Does anchorage of equipment in the area appear to be free of Y⊠ N□ U□ N/A□ significant degraded conditions?</li> </ol>	
3. Based on a visual inspection from the floor, do the cable/conduit Y⊠ N□ U□ N/A□ 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)?	

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<sup>&</sup>lt;sup>1</sup> 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) <u>AWC-1055</u>	
Location: Bldg. <u>SCT</u> Floor El. <u>136</u> Room, Area <u>N/A</u>	
4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling t and lighting)?	Y⊠ N⊡ U⊡ N/A⊡ tiles
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, shielding)?	Y⊠ N⊡ U⊡ N/A⊡ lead

Area Walk-By Checkli	st (AWC) <u>AWC-10</u>	55_		Status: Y⊠ N⊡ U⊡
Location: Bldg. SCT	Floor El. <u>136</u>	Room, Area	<u>N/A</u>	
<ol> <li>Have you looked f adversely affect th</li> </ol>	or and found no other so the safety functions of the	eismic conditions equipment in the	that could area?	Y⊠ N∏ U∏
Comments (Additional pa	ages may be added as r	ecessary)		
None				
Evaluated by: Jason Hals	ev	2	)	Date: 10-4-2012
	Matt X	eener		
Matt Keene	εγ			10-4-2012

Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1056</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area <sup>1</sup> <u>N/A</u>	
SWEL Components: <u>SWEL1-056</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other co	ne or more SWEL items. The of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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) <u>AWC-1056</u>	
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area <u>N/A</u>	
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□
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□

Area Walk-By Checklist (AWC) <u>AWC-1056</u>	Sta	atus: Y N U
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area	a <u>N/A</u>	
<ol> <li>Have you looked for and found no other seismic condition adversely affect the safety functions of the equipment in t</li> </ol>	is that could Y⊠ he area?	N U U
Comments (Additional pages may be added as necessary)		
None		
Andrey	>	
Evaluated by: <u>Jason Halsey</u>	Date:	<u>10/5/2012</u>
Brandon Nissing		10/5/2012

Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1057</u>	Status: Y⊠ N∏ U∏
Location: Bldg. CB Floor El. <u>116</u> Room, Area <sup>1</sup> <u>1214</u>	
SWEL Components: <u>SWEL1-057, SWEL1-058</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	one or more SWEL items. The of judgments and findings. 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∏

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<sup>&</sup>lt;sup>1</sup> 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	t (AWC) <u>AWC-105</u>	57			
Location: Bldg. CB	Floor El. <u>116</u>	Room, Area	1214		
4. Does it appear that the spatial interactions we and lighting)?	he area is free of pote vith other equipment ir	ntially adverse se the area (e.g., c	∍ismic eiling tiles	Y⊠ N□ U□	N/A
5. Does it appear that t interactions that cou	the area is free of pote ld cause flooding or sp	ntially adverse se pray in the area?	eismic	Y⊠ N□ U□	N/A
6. Does it appear that t interactions that cou	he area is free of pote ld cause a fire in the a	ntially adverse se rea?	∍ismic	Y⊠N□U□	N/A
<ol> <li>Does it appear that the interactions associated portable equipment, shielding)?</li> </ol>	the area is free of pote ted with housekeeping and temporary installa	ntially adverse se practices, storag ations (e.g., scaffo	∍ismic ĵe of olding, lead	Y⊠ N□ U□	N/A

Area Walk-By Checklist (AWC) <u>AWC-1057</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area <u>1214</u>	
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 peopsary)	
<u>Comments (</u> Additional pages may be added as necessary)	
And	
Evaluated by: <u>Jason Halsey</u>	Date: <u>10/5/2012</u>
Brandon Nissing	10/5/2012

Area Walk-By Checklist (AWC) <u>AWC-1062</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <sup>1</sup> <u>1117</u>	
SWEL Components: SWEL1-062, SWEL1-052, SWEL1-053, SWEL1-	061
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	ne or more SWEL items. The of judgments and findings. 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□

Sheet 1 of 3

<sup>&</sup>lt;sup>1</sup> 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⊡
Y⊠ N□ U□ N/A□

Area Walk-By Checklist (AWC) <u>AWC-1062</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <u>1117</u>	
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)	
None	
Evaluated by: Jason Halsey	_ Date: <u>10-4-2012</u>
Matt Keeney	10-4-2012

Sheet 1 of 10

Area Walk-By Checklist (AWC) <u>AWC-1063</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. CB Floor El. <u>136</u> Room, Area <sup>1</sup> <u>1310</u>	
SWEL Components: <u>SWEL1-063, SWEL1-060</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	one or more SWEL items. The of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> <li>Main Control Panels closed, could not see anchorage.</li> </ol>	Y□ N□ U□ N/A⊠
<ol> <li>Does anchorage of equipment in the area appear to be free of significant degraded conditions? Could not observe.</li> </ol>	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□

<sup>&</sup>lt;sup>1</sup> 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.

Area Walk-By Checklist (AWC) <u>AWC-1063</u>	Status: Y⊠ N∏ U∏
Location: Bldg. CB Floor El. <u>136</u> Room, Area <u>1310</u>	
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 U N/A
Ceiling tiles/lighting seismically designed.	
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□
<ol> <li>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 objection)?</li> </ol>	Y□ N⊠ U□ N/A□
Temp I&C workd tables set up adjacent to panels, with loose equipment on table. Several loose items – P&ID chart, stick files on wheels, several office supply cabinets not attached to floor or adjacent panels. Further Evaluation Required. See LB-04	

Area Walk-By	Checklist (AW	/C) <u>AWC-1(</u>	063		Status: Y⊠ N⊡ U⊡
Location: Bldg.	<u>CB</u> FI	oor El. <u>136</u>	Room, Area	1310	
8. Have you adversely	looked for and f affect the safet	ound no other s	seismic conditions e equipment in the	that could e area?	Y⊠ N□ U□
<u>Comments (</u> Add	itional pages ma	ay be added as	necessary)		
See Ques Area – Ma	tion 7; I&C Mair ain Control Roor	ntenance contac n, CB Elev. 136	cted S'		
See LB-04	4				
Evaluated bv: Jol	nn Dunkelberg	JPL	funde	eg.	Date: 10-1-2012
	6	April	I Car	lose	
<u></u>	se` Cardona	ſ			<u>10-1-12</u>

Sheet 4 of 10

Area Walk-By Checklist (AWC) <u>AWC-1063</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. CB Floor El. 136	Room, Area <u>1310</u>
SWEL Components: <u>SWEL1-073</u>	
Photographs	
Note:	Note:

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# Area Walk-By Checklist (AWC) <u>AWC-1063</u>

Location: Bldg. CB Floor El. 136 Room, Area 1310

SWEL Components: SWEL1-063



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## Area Walk-By Checklist (AWC) <u>AWC-1063</u>

Location: Bldg. CB Floor El. 136 Room, Area 1310

#### SWEL Components: SWEL1-063



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# Status: YX N U

# Area Walk-By Checklist (AWC) <u>AWC-1063</u>

Location: Bldg. <u>CB</u> Floor El. <u>136</u> Room, Area <u>1310</u>

#### SWEL Components: <u>SWEL1-063</u>



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Status: Y N U

# Area Walk-By Checklist (AWC) <u>AWC-1063</u>

Location: Bldg. CB Floor El. <u>136</u> Room, Area <u>1310</u>

#### SWEL Components: SWEL1-063



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# Status: YX N U

# Area Walk-By Checklist (AWC) <u>AWC-1063</u>

Location: Bldg. <u>CB</u> Floor El. <u>136</u> Room, Area <u>1310</u>

#### SWEL Components: <u>SWEL1-063</u>



Sheet 10 of 10

# Status: YX N U

# Area Walk-By Checklist (AWC) <u>AWC-1063</u>

Location: Bldg. <u>CB</u> Floor El. <u>136</u> Room, Area <u>1310</u>

#### SWEL Components: SWEL1-063



Sheet 1 of 4

Status: YX N U

#### Area Walk-By Checklist (AWC) <u>AWC-1064</u>

Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area<sup>1</sup> <u>7207</u>

# SWEL Components: <u>SWEL1-064</u>, <u>SWEL1-005</u>, <u>SWEL1-007</u>, <u>SWEL1-091</u>, <u>SWEL1-093</u>, <u>SWEL1-095</u>

#### 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.

<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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∏

<sup>&</sup>lt;sup>1</sup> 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 (		<u>،</u>				
Location: Bldg.	RB	Floor El. <u>114</u>	Room, Area	<u>7207</u>		
4. Does it ap spatial inte and lightin	pear that the eractions with g)?	e area is free of po n other equipment	tentially adverse so in the area (e.g., c	eismic ceiling tiles	Y⊠ N□ U□ N/A□	
5. Does it ap interaction	pear that the is that could	e area is free of po cause flooding or	tentially adverse s spray in the area?	eismic	Y⊠ N□ U□ N/A□	
6. Does it ap interaction	pear that the	e area is free of po cause a fire in the	tentially adverse s area?	eismic	Y⊠ N∏ U∏ N/A∏	
7. Does it ap interaction portable e shielding)?	pear that the as associated quipment, ar ?	e area is free of po I with housekeepir nd temporary insta	tentially adverse song practices, storag ng practices, storag Illations (e.g., scaff	eismic ge of folding, lead	Y⊠ N⊡ U⊡ N/A⊡	

Area Walk-By	Checklist	(AWC) <u>AWC-1</u>	064		Status: Y⊠ N∏ U∏
Location: Bldg.	RB	_ Floor El. <u>114</u>	Room, Area	7207	
8. Have you adversely	looked for a affect the s	and found no other afety functions of th	seismic conditions ae equipment in the	that could e area?	Y⊠ N□ U□
<u>Comments (</u> Add None	itional page	s may be added as	necessary)		
Evaluated by: <u>Ma</u>	utt Keeney	Matt 7	Kener		_ Date: <u>10-9-2012</u>
<u>Ja</u> :	son Halsey	A	20,	>	<u>10-9-12</u>
	son naisey				10-9-12

Sheet 4 of 4

# Status: Y N U

# Area Walk-By Checklist (AWC) <u>AWC-1064</u>

Location: Bldg. RB Floor El. 114 Room, Area 7207

# SWEL Components: SWEL1-064

## Photographs

Note:





Note:

Sheet 1 of 3						
Area Walk-By Checklist (AWC) AWC-1066	Status: Y N U					
Location: Bldg. CB Floor El. 070 Room	, Area <sup>1</sup> <u>1011</u>					
SWEL Components: <u>SWEL1-066</u> , <u>SWEL1-068</u> , <u>SWE</u>	<u>EL1-073</u>					
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.						
<ol> <li>Does anchorage of equipment in the area appear to potentially adverse seismic conditions (if visible with opening cabinets)?</li> </ol>	be free of Y⊠ N⊡ U⊡ N/A⊡ out necessarily					
2. Does anchorage of equipment in the area appear to significant degraded conditions?	be free of Y⊠ N⊡ U⊡ N/A⊡					
<ol> <li>Based on a visual inspection from the floor, do the caraceways and HVAC ducting appear to be free of po seismic conditions (e.g., condition of supports is ade conditions of cable trays appear to be inside acceptation.</li> </ol>	able/conduit Y N U V/A tentially adverse quate and fill able limits)?					

<sup>&</sup>lt;sup>1</sup> 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.

Area W	Valk-By	Checklist	(AWC)	AWC-1066	_		Status: Y⊠ N⊡ U⊡	]
Locatio	n: Bldg.	СВ	Floor El.	070	Room, Area	<u>1011</u>		
4.	Does it ap spatial int and lightii	opear that th teractions w ng)?	ne area is fr ith other eq	ee of potenti uipment in th	ally adverse s le area (e.g., d	eismic ceiling tiles	Y⊠ N□ U□ N/A□	
5. I i	Does it ap Interactio	opear that th ns that could	ne area is fr d cause floo	ee of potenti oding or spra	ally adverse s y in the area?	eismic	Y⊠ N□ U□ N/A□	
6. l i	Does it ap Interactio	opear that th ns that could	ne area is fr d cause a fi	ee of potenti re in the area	ally adverse s a?	eismic	Y⊠ N□ U□ N/A□	
7.   i !	Does it ap interactio portable e shielding)	opear that th ns associate equipment, a )?	ne area is fr ed with hou and tempor	ee of potenti sekeeping pr ary installatic	ally adverse s actices, stora ons (e.g., scafi	eismic ge of folding, lead	Y⊠ N□ U□ N/A□	
Sheet 3 of 3

Area Walk-By Checklist (AWC) <u>AWC-1066</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>CB</u> Floor El. <u>070</u> Room, Area <u>1011</u>	
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□
<u>Comments (</u> Additional pages may be added as necessary)	
None	
Evaluated by: David Bassi	_ Date: <u>10/1/2012</u>
A.S. Dalawari	<u>10/1/2012</u>

Sheet 1 of 5	
Area Walk-By Checklist (AWC) <u>AWC-1067</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <sup>1</sup> <u>6201</u>	
SWEL Components: <u>SWEL1-067</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other c	ne or more SWEL items. The of judgments and findings. omments.
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□

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<sup>&</sup>lt;sup>1</sup> 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

Sheet 2 of 5

Area Walk-By Checklist (AWC) <u>AWC-1067</u>	
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6201</u>	
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∏
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∏

Sheet 3 of 5

Area Walk-By Checklis	st (AWC) <u>AWC-10</u>	<u>67</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>AB</u>	Floor El. <u>114</u>	Room, Area <u>6201</u>	
8. Have you looked for adversely affect the	or and found no other s e safety functions of the	eismic conditions that could e equipment in the area?	Y⊠ N□ U□

<u>**Comments**</u> (Additional pages may be added as necessary)

Loose dead ended cable sitting on top of RCP-TCA07 . TSE tag attached, identifying it as part of a temp installation

Evaluated by: J. Halsey Date: 10/10/12 D. Bassi <u>10/10/12</u>

Sheet 4 of 5

# Status: Y⊠ N□ U□

#### Area Walk-By Checklist (AWC) AWC-1067

Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6201</u>

#### SWEL Components: SWEL1-067

#### Photographs



Sheet 5 of 5

Note:



#### Area Walk-By Checklist (AWC) <u>AWC-1067</u>

Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6201</u>

SWEL Components: <u>SWEL1-067</u>





Note:

Sheet 1 of 4	
Area Walk-By Checklist (AWC) <u>AWC-1069</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>CB</u> Floor El. <u>070</u> Room, Area <sup>1</sup> <u>N/A</u>	
SWEL Components: <u>SWEL1-069</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other co	ne or more SWEL items. The of judgments and findings. omments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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.

Sheet 2 of 4

Area Walk-By Checklist (AWC) <u>AWC-1069</u>					Status: Y⊠ N∏ U∏		
Locatio	on: Bldg.	СВ	Floor El.	070	Room, Area	N/A	
4.	Does it a spatial in and lighti	ppear that th teractions wi ng)?	e area is fr ith other eq	ee of potenti uipment in th	ally adverse s ne area (e.g., d	eismic ceiling tiles	Y⊠ N□ U□ N/A□
5.	Does it a interactio	ppear that th ns that could	ie area is fr d cause floo	ee of potenti oding or spra	ally adverse s y in the area?	eismic	Y⊠ N□ U□ N/A□
6.	Does it a interactio	ppear that th ns that could	ie area is fr d cause a fi	ee of potenti re in the area	ally adverse s a?	eismic	Y⊠ N□ U□ N/A□
7.	Does it a interactio portable shielding	ppear that th ns associate equipment, a )?	e area is fr ed with hou and tempor	ee of potenti sekeeping pr ary installatic	ally adverse s actices, stora ons (e.g., scaff	eismic ge of olding, lead	Y⊠ N□ U□ N/A□

Attachment D Page 100 of 222 Sheet 3 of 4 Status: Y N U Area Walk-By Checklist (AWC) AWC-1069 Location: Bldg. CB Floor El. 070 Room, Area N/A  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) None Evaluated by: Jason Halsey Date: 10/8/2012 Mat ener Matt Keeney 10/8/2012

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#### Status: YX N U

#### Area Walk-By Checklist (AWC) AWC-1069

Location: Bldg. CB Floor El. 070 Room, Area N/A

#### SWEL Components: SWEL1-069

#### Photographs



Sheet 1 of 4	
Area Walk-By Checklist (AWC) <u>AWC-1070</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>CB</u> Floor El. <u>115</u> Room, Area <sup>1</sup> <u>1200</u>	
SWEL Components: SWEL1-070, SWEL1-065, SWEL1-071	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	one or more SWEL items. The of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

<sup>&</sup>lt;sup>1</sup> 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: YX N U

Sheet 2 of 4

#### Area Walk-By Checklist (AWC) <u>AWC-1070</u>

Location: Bldg. <u>CB</u> Floor El. <u>115</u> Room, Area <u>1200</u>	
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
Overhead hanging light fixture above HVC-PDI23A has open S hook on fixture north end chain support. South end fixture support chain S hook is closed. NOTE: there are no safety related soft targets in the area of this fixture, and therefore not a seismic issue if the chain were to fail.	
North end of room, light fixture north of HVC-FN1A, east end fixture support chain S hook is open. West side support chain S hook closed. NOTE: intervening 4x4TS structure will not allow contact of fixture with nearby safety related components, if the chain were to fail. Therefore not a seismic issue.	
South end of room, light fixture north of SCI-XRC10B1, light fixture north side support chain S hook is not properly attached to the fixture. South support chain S hook is closed. Note: There are no safety related soft targets in the area, and therefore not a seismic issue.	
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□

Sheet 3 of 4

## Status: YX N U

Area Walk-By Checklist (AWC) <u>AWC-1070</u>	
Location: Bldg. CB Floor El. <u>115</u> Room, Area <u>1200</u>	
8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?	YX N U
Comments (Additional pages may be added as necessary)	
See Q 4.	
Refer to LB-11	
CR-RBSD-2012-07090 has been written to address the condition. WR-2 290723 have been initiated to correct the condition.	290719, 290720,290721 and
Evaluated by: Jason Halsey Matt Keney	_ Date: <u>10-2-2012</u>
Matt Keeney	10-2-2012

Sheet 4 of 4

#### Status: Y N U

#### Area Walk-By Checklist (AWC) <u>AWC-1070</u>

Location: Bldg. CB Floor El. 115 Room, Area 1200

#### SWEL Components: SWEL1-070

#### Photographs



Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1072</u>	Status: Y⊠ N∏ U∏
Location: Bldg. CB Floor El. <u>116</u> Room, Area <sup>1</sup> <u>1200</u>	
SWEL Components: <u>SWEL1-072, SWEL1-074</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near space below each of the following questions may be used to record the result Additional space is provided at the end of this checklist for documenting othe	r one or more SWEL items. The ts of judgments and findings. r comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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) <u>AWC-1072</u>	
Location: Bldg. <u>CB</u> Floor El. <u>116</u> Room, Area <u>1200</u>	
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□
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□

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Status: Y N U

#### Area Walk-By Checklist (AWC) <u>AWC-1075</u>

Location: Bldg. CB Floor El. 098 Room, Area<sup>1</sup> 1124

# SWEL Components: <u>SWEL1-075, SWEL1-076, SWEL1-077, SWEL1-078, SWEL1-104, SWEL1-</u>109

#### 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.

<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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∏

<sup>&</sup>lt;sup>1</sup> 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: YX N U

# Location: Bldg. CB Floor El. 098 Room, Area 1124 $Y \square N \boxtimes U \square N/A \square$ 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)? Strut to pipe small interference ISAS-V836 Valve and Strut area HVK-MOV20C 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? $Y \boxtimes N \square U \square N/A \square$ 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? $Y \boxtimes N \square U \square N/A \square$ 7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)?

#### Area Walk-By Checklist (AWC) <u>AWC-1075</u>

Sheet 3 of 4

Area Walk-By Checkli	st (AWC) <u>AWC-10</u>	75		Status: Y⊠ N∏ U∏
Location: Bldg. CB	Floor El. 098	Room, Area	1124	
8. Have you looked fo adversely affect the	or and found no other s e safety functions of the	eismic conditions equipment in the	that could e area?	Y⊠ N□ U□
Comments (Additional pa	ges may be added as r	necessary)		
For strut interferen Ref. LB-02	ce Ref CR-RBS-2012-0	06241.		
Evaluated by: <u>Amar Dalav</u>	/ari	annau		_ Date: <u>10/1/2012</u>
	Matt &	emer	l	
Matt Keene	y	$\mathcal{O}$		10/1/2012

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#### Status: YX N U

#### Area Walk-By Checklist (AWC) <u>AWC-1075</u>

Location: Bldg. CB Floor El. 098 Room, Area 1124

#### SWEL Components: <u>SWEL1-075</u>

#### Photographs



Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1082</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>DG</u> Floor El. <u>126</u> Room, Area <sup>1</sup> <u>1305</u>	
SWEL Components: <u>SWEL1-082, SWEL1-079, SWEL1-080</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other co	ne or more SWEL items. The of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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∏

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<sup>&</sup>lt;sup>1</sup> 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.

Sheet 2 of 3

Area Walk-By Checklist (AWC) <u>AWC-1082</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>DG</u> Floor El. <u>126</u> Room, Area <u>1305</u>	
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? <i>No piping in mezzanine area.</i>	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□

Sheet 3 of 3 Status: Y N U Area Walk-By Checklist (AWC) AWC-1082 Location: Bldg. DG Room, Area 1305 Floor El. <u>126</u>  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) None Evaluated by: J. Dunkelberg Date: 10-2-12 D. Bassi 10-2-12

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Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1084</u>	Status: Y N U
Location: Bldg. <u>RB</u> Floor El. <u>162</u> Room, Area <sup>1</sup> <u>7408</u>	
SWEL Components: <u>SWEL1-084, SWEL1-105</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near o space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other c	ne or more SWEL items. The of judgments and findings. omments.
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□

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<sup>&</sup>lt;sup>1</sup> 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.

Area Walk-By Checklis	st (AWC) <u>AWC-10</u>	84		Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>RB</u>	Floor El. <u>162</u>	Room, Area	7408	
4. Does it appear that spatial interactions and lighting)?	t the area is free of pote with other equipment i	entially adverse se n the area (e.g., c	eismic eiling tiles	Y⊠ N∏ U∏ N/A∏
5. Does it appear that interactions that co	t the area is free of pote uld cause flooding or s	entially adverse se pray in the area?	eismic	Y⊠ N□ U□ N/A□
<ol> <li>Does it appear that interactions that co</li> </ol>	t the area is free of pote uld cause a fire in the a	entially adverse se area?	eismic	Y⊠ N□ U□ N/A□
<ol> <li>Does it appear that interactions associ- portable equipmen shielding)?</li> </ol>	t the area is free of pote ated with housekeeping t, and temporary install	entially adverse se g practices, storag ations (e.g., scaff	eismic ge of olding, lead	Y⊠ N□ U□ N/A□
<ul> <li>6. Does it appear that interactions that co</li> <li>7. Does it appear that interactions associ- portable equipmen shielding)?</li> </ul>	t the area is free of pote uld cause a fire in the a t the area is free of pote ated with housekeeping t, and temporary install	entially adverse se area? entially adverse se g practices, storag ations (e.g., scaff	eismic eismic ge of olding, lead	

Sheet 3 of 3 Status: Y N U Area Walk-By Checklist (AWC) AWC-1084 Location: Bldg. RB Floor El. <u>162</u> Room, Area 7408  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) None Matt Keney Evaluated by: Matt Keeney Date: 10-3-2012 PKD. John Dunkelberg 10-3-2012

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Sheet 1 of 5	
Area Walk-By Checklist (AWC) <u>AWC-1085</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <sup>1</sup> <u>6205</u>	
SWEL Components: <u>SWEL1-085</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other co	e or more SWEL items. The fjudgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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∏

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<sup>&</sup>lt;sup>1</sup> 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.

# Area Walk-By Checklist (AWC) <u>AWC-1085</u> Status: Y N U

Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6205</u>	
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)? Scaffold material stored in area has potential interaction with RTD	Y⊠ N□ U□ N/A□
connected to conduit 1CX8188C1 on north wall of area	
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)? See Q4 above	Y⊠ N□ U□ N/A□

Sheet 3 of 5

Status: Y N U

## Area Walk-By Checklist (AWC) <u>AWC-1085</u>

Location: Bldg. AB	Floor El. <u>114</u>	Room, Area <u>6205</u>	
8. Have you lool adversely affe See Q4 above	ked for and found no other se ect the safety functions of the e	ismic conditions that cou equipment in the area?	uld Y N U

<u>**Comments**</u> (Additional pages may be added as necessary)

General area: UC6 room, scaffold storage rack in area, west side, equipment laydown in southwest side.

Recommendation: remove scaffolding material suspended from rack, 2 places.

(Revised 14:30 10/8/12) Maintenance replied to request, all suspended materials remove. No further action required

Evaluated by: J. Dunkelberg Date: 10/8/12 D. Bassi 10/8/12

Sheet 4 of 5

## Status: YX N U

#### Area Walk-By Checklist (AWC) <u>AWC-1085</u>

Location: Bldg. AB Floor El. 114 Room, Area 6205

#### SWEL Components: <u>SWEL1-085</u>

#### Photographs



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Sheet 5 of 5

#### Status: YX N U

#### Area Walk-By Checklist (AWC) <u>AWC-1085</u>

Location: Bldg. AB Floor El. 114 Room, Area 6205

#### SWEL Components: <u>SWEL1-085</u>



Sheet 1 of 4	
Area Walk-By Checklist (AWC) <u>AWC-1086</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <sup>1</sup> <u>6301</u>	
SWEL Components: <u>SWEL1-086</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	ne or more SWEL items. The of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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∏

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<sup>&</sup>lt;sup>1</sup> 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 Chec	cklist (AWC) <u>AWC-108</u>	86		Status. r	
Location: Bldg. <u>AB</u>	Floor El. <u>141</u>	Room, Area	<u>6301</u>		
4. Does it appear spatial interacti and lighting)?	that the area is free of pote ons with other equipment in	entially adverse son the area (e.g., c	eismic ceiling tiles	YX N U	N/A
5. Does it appear interactions that	that the area is free of pote at could cause flooding or s	entially adverse so pray in the area?	eismic	Y⊠ N∏ U∏	N/A
6. Does it appear interactions that	that the area is free of pote at could cause a fire in the a	entially adverse se area?	eismic	Y⊠N⊡U⊡	N/A
7. Does it appear interactions ass portable equipr shielding)?	that the area is free of pote sociated with housekeeping nent, and temporary install	entially adverse so practices, storag ations (e.g., scaff	eismic ge of folding, lead	Y⊠ N∏ U∏	N/A

Engin	eering Report No. RBS-CS-12-00001
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Sheet <b>3</b> of <b>4</b>	
Area Walk-By Checklist (AWC) <u>AWC-1086</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6301</u>	
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□
<u>Comments (</u> Additional pages may be added as necessary) None	
Evaluated by: <u>M. Keeney</u>	_ Date: <u>10/8/12</u>
J. Halsey	10/8/12

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Sheet 4 of 4

# Status: Y N U

#### Area Walk-By Checklist (AWC) <u>AWC-1086</u>

Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6301</u>

#### SWEL Components: SWEL1-086

#### Photographs


Sheet 1 of 4	
Area Walk-By Checklist (AWC) <u>AWC-1087</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <sup>1</sup> <u>6301</u>	
SWEL Components: <u>SWEL1-087</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	ne or more SWEL items. The of judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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.

Area Walk-By Checklist (AWC) <u>AWC-1087</u>									
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6301</u>									
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□								
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□								

Sheet <b>3</b> of <b>4</b>	
Area Walk-By Checklist (AWC) <u>AWC-1087</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6301</u>	
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□
<u>Comments (</u> Additional pages may be added as necessary) None	
Evaluated by: Matt Keeney	Date: 10/8/2012
Brandon Nissing	10/8/2012

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# Status: YX N U

## Area Walk-By Checklist (AWC) <u>AWC-1087</u>

Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6301</u>

#### SWEL Components: SWEL1-087

#### Photographs





Note:

Note:

Sheet 1 of 5	
Area Walk-By Checklist (AWC) <u>AWC-1088</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <sup>1</sup> <u>6207</u>	
SWEL Components: <u>SWEL1-088</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near o space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	ne or more SWEL items. The of judgments and findings. omments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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.

Area Walk-By Checklist (AWC) <u>AWC-1088</u>	
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6207</u>	
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∏
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∏

<u>10/9/12</u>

<u>J. Dunkelberg</u>

Area Walk-By Ch	ecklist (AWC)	AWC-1088				Status: Y⊠ N□ U□
Location: Bldg. <u>AB</u>	B Floor El.	114	Room, A	rea	6207	
8. Have you loc adversely aff	bked for and found n ect the safety function	o other seis ons of the e	mic condit quipment i	ions n the	that could area?	YX NUU
Comments (Addition AB Elev 114' Coil of cable with tie wrap seismic issue	nal pages may be a ', west side of cresc hanging from overh , conduit running N- e	dded as nec ent area. ead conduit S, approx 1	cessary) . Coil is he 5' in overhe	eld tog ead,	gether by ti near panel	p wrap, attached top conduit DER-PNL1. Judged not to be a
Evaluated by: <u>D. Ba</u>	ssi	De Alm	Z		-	Date: 10/9/12

Sheet 4 of 5

# Status: Y N U

# Area Walk-By Checklist (AWC) <u>AWC-1088</u>

Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6207</u>

#### SWEL Components: SWEL1-088

# Photographs



Sheet 5 of 5



## Area Walk-By Checklist (AWC) <u>AWC-1088</u>

Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6207</u>

#### SWEL Components: SWEL1-088



Sheet 1 of 5	
Area Walk-By Checklist (AWC) <u>AWC-1089</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>FB</u> Floor El. <u>113</u> Room, Area <sup>1</sup> <u>5205</u>	
SWEL Components: <u>SWEL1-089</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other co	ne or more SWEL items. The of judgments and findings. 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□

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<sup>&</sup>lt;sup>1</sup> 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.

Area Walk-By Checklist (AWC) <u>AWC-1089</u>	
Location: Bldg. <u>FB</u> Floor El. <u>113</u> Room, Area <u>5205</u>	
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∏
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□

Sheet 3 of 5

# Area Walk-By Checklist (AWC) \_\_\_\_\_AWC-1089\_\_\_\_\_ Location: Bldg. FB Floor El. 113 Room, Area 5205 8. Have you looked for and found no other seismic conditions that could Y 🛛 N 🗌 U 🔄

Have you looked for and found no other seismic conditions that could Y N N
 Adversely affect the safety functions of the equipment in the area?
 See comments

<u>Comments</u> (Additional pages may be added as necessary)

Designated equipment ladder storage areas nearby, OK. Not an issue. Area: FB 113' crecent area north of RB.

Evaluated by: John Dunkelberg Date: 10/9/2012 David Bassi 10/9/2012

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Sheet 4 of 5

# Status: YX N U

# Area Walk-By Checklist (AWC) <u>AWC-1089</u>

Location: Bldg. FB Floor El. 113 Room, Area 5205

#### SWEL Components: SWEL1-089

#### Photographs



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Sheet 5 of 5

## Status: YX N U

# Area Walk-By Checklist (AWC) <u>AWC-1089</u>

Location: Bldg. FB Floor El. <u>113</u> Room, Area <u>5205</u>

#### SWEL Components: SWEL1-089



Area Walk-By Checklist (AWC) <u>AWC-1090</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <sup>1</sup> <u>7200</u>	
SWEL Components: SWEL1-090, SWEL1-009, SWEL1-011, SWEL1-0	013
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other co	ne or more SWEL items. The of judgments and findings. omments.
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□

Sheet 1 of 4

<sup>&</sup>lt;sup>1</sup> 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.

Area Walk-By Checklist (AWC) <u>AWC-1090</u>	
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>	
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□
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□

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Sheet <b>3</b> of <b>4</b>	
Area Walk-By Checklist (AWC) <u>AWC-1090</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>	
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□
<u>Comments (</u> Additional pages may be added as necessary) None	
Matt Kener	-
Evaluated by: <u>Matt Keeney</u>	_ Date: <u>10-9-2012</u>
Jason Halsey	<u>10-9-2012</u>

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Sheet 4 of 4

# Status: Y N U

# Area Walk-By Checklist (AWC) <u>AWC-1090</u>

Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>

#### SWEL Components: SWEL1-090

#### Photographs





Note:

Note:

Locatio	on: B	Bldg.	RB	Floor E	. <u>114</u>	Room, Are	a¹ <u>7200, 7203</u>			
SWEL	. Co	mpo	nents: <u>SV</u>	VEL1-092	, SWEL1-00	6, SWEL1-	008, SWEL1-0	94, SV	VEL1-096	
Instru	ction	s for	Completi	ng Checkli	st					
This cł space Additic	neckli belov mal s	ist ma w eac space	ly be used h of the fol is provide	to docume lowing que d at the end	nt the results stions may be I of this check	of the Area e used to rec dist for docur	Walk-By near on ord the results o menting other co	e or mo f judgm mments	ore SWEL i ents and fi s.	tems. The ndings.
1.	Doe: pote oper	s anc entially ning c	horage of / adverse s abinets)?	equipment seismic cor	in the area ap ditions (if visi	ppear to be fr ble without n	ee of ecessarily	YXI	N U	N/A
2.	Doe: signi	s anc ifican	horage of t degraded	equipment conditions	in the area ap ?	opear to be fr	ee of	Y N	N U U	N/A
3.	Base race seisi conc	ed on eways mic co ditions	a visual ir and HVA0 onditions ( s of cable t	spection fr C ducting a e.g., condit rays appea	om the floor, o opear to be fr ion of support r to be inside	do the cable/ ee of potenti is is adequat acceptable l	conduit ally adverse e and fill imits)?	Y X		N/A

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Area Walk-By Checklist (AWC) <u>AWC-1092</u>

Status: YX N U

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<sup>&</sup>lt;sup>1</sup> 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.

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Area Walk-	By Checklist	(AWC) <u>AWC-10</u>	92			
Location: Blo	dg. <u>RB</u>	Floor El. <u>114</u>	Room, Area	7200, 7203		
4. Does spatia and li	it appear that th I interactions wi ghting)?	ne area is free of pote ith other equipment ir	entially adverse so n the area (e.g., c	eismic ceiling tiles	YX N U	N/A
5. Does intera	it appear that th ctions that could	ne area is free of pote d cause flooding or s	entially adverse so pray in the area?	eismic	Y⊠ N∏ U∏	N/A
6. Does intera	it appear that th ctions that could	ne area is free of pote d cause a fire in the a	entially adverse so area?	eismic	Y⊠ N∏ U∏	N/A
7. Does intera portal shield	it appear that th ctions associate ble equipment, a ling)?	ne area is free of pote ed with housekeeping and temporary install	entially adverse so practices, storag ations (e.g., scaff	eismic ge of olding, lead	Y⊠ N□ U□	N/A

Engir	neering Report No. RBS-CS-12-00001
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Sheet 3 of 4	
Area Walk-By Checklist (AWC) <u>AWC-1092</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200, 7203</u>	
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)	
None	
Matt Keenerg	-
Evaluated by: Matt Keeney	Date: <u>10/9/2012</u>
400	
$($ $\sqrt{7}$	
Jason Halsey	10/9/2012

Sheet 4 of 4

## Status: YX N U

# Area Walk-By Checklist (AWC) AWC-1092

Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200, 7203</u>

#### SWEL Components: SWEL1-092

#### Photographs



Sheet 1 of 3	
	Status: YX NI UI
Area Walk-By Checklist (AWC) <u>AWC-1106</u>	
Location: Bldg. <u>SCT</u> Floor El. <u>118</u> Room, Area <sup>1</sup> <u>0104</u>	
SWEL Components: SWEL1-106, SWEL1-047, SWEL1-108	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	one or more SWEL items. The of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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.

Sheet 2 of 3

Area Walk-By Checklist (AWC) <u>AWC-1106</u>	
Location: Bldg. <u>SCT</u> Floor El. <u>118</u> Room, Area <u>0104</u>	
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∏
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∏

Sheet 3 of 3 Status: Y N U Area Walk-By Checklist (AWC) AWC-1106 Location: Bldg. SCT Room, Area 0104 Floor El. <u>118</u>  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) None Evaluated by: John Dunkelberg Date: 10-2-2012 Jason Halsey 10-2-2012

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Sheet 1 of 5	
Area Walk-By Checklist (AWC) <u>AWC-1107</u>	Status: Y⊠ N□ U□
Location: Bldg. <u>GT</u> Floor El. <u>067</u> Room, Area <sup>1</sup> <u>0000</u>	
SWEL Components: <u>SWEL1-107, SWEL1-099, SWEL1-111</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	one or more SWEL items. The of judgments and findings. 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∏

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<sup>&</sup>lt;sup>1</sup> 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.

Sheet 2 of 5

\_\_\_\_

Area Walk-By Checklist (AWC) <u>AWC-1107</u>	
Location: Bldg. <u>GT</u> Floor El. <u>067</u> Room, Area <u>0000</u>	
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∏
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∏

Sheet 3 of 5

Area Walk-By Checklist (AWC) <u>AWC-1107</u>
Location: Bldg. <u>GT</u> Floor El. <u>067</u> Room, Area <u>0000</u>
<ol> <li>Have you looked for and found no other seismic conditions that could Y N U□ U□ adversely affect the safety functions of the equipment in the area?</li> </ol>
See Comments
Comments (Additional pages may be added as necessary)
Carbon steel surfaces of pipe & supports show signs of corrosion (more than mild surface). Not a seismic issue. Recommend touchup/recoating surfaces with paint. See pictures below.
Housekeeping issue.
Evaluated by: John Dunkelberg Date: 10-5-2012

Ø <u>Jose Cardona</u>

10-5-2012

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Sheet 4 of 5

# Status: Y N U

# Area Walk-By Checklist (AWC) <u>AWC-1107</u>

Location: Bldg. <u>GT</u> Floor El. <u>067</u> Room, Area <u>0000</u>

#### SWEL Components: SWEL1-107

#### Photographs



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Sheet 5 of 5



# Area Walk-By Checklist (AWC) AWC-1107

Location: Bldg. GT Floor El. 067 Room, Area 0000

#### SWEL Components: SWEL1-107



Sheet 1 of 5	
Area Walk-By Checklist (AWC) <u>AWC-1112</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <sup>1</sup> <u>6302</u>	
SWEL Components: <u>SWEL1-112, SWEL1-117</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other co	ne or more SWEL items. The of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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∏

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<sup>&</sup>lt;sup>1</sup> 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.

Area Walk-By Checklist (AWC) <u>AWC-1112</u>	
Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6302</u>	
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□
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∏

# Area Walk-By Checklist (AWC) <u>AWC-1112</u>

Status: YX N U

Location: Bldg.	AB	Floor El. <u>1</u> 4	41	Room, Area	<u>6302</u>			
8. Have you adversel	ı looked for ar y affect the sa	nd found no of fety functions	other seism s of the equ	ic conditions upment in the	that core area?	uld Y⊠	] N 🗌 U 🗌	

<u>Comments</u> (Additional pages may be added as necessary)

AB 141' East side, east of LSV compressor skid A HSC-PWRS1B: west side of unit, back panel is dented at bottom approx 1". Not Seismic Issue HTS-PNL2N: In overhead tray support horizontal brace has portion of #9 wire hanging from it approx 10-12' above floor, North side of PNL2N. Not Seismic Issue

Evaluated by: J. Dunkelberg Date: <u>10/9/12</u> D. Bassi 10/9/12

Sheet 4 of 5

# Status: Y N U

# Area Walk-By Checklist (AWC) <u>AWC-1112</u>

Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6302</u>

#### SWEL Components: SWEL1-112

#### Photographs





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Sheet 5 of 5

# Status: YX N U

# Area Walk-By Checklist (AWC) <u>AWC-1112</u>

Location: Bldg. <u>AB</u> Floor El. <u>141</u> Room, Area <u>6302</u>

#### SWEL Components: SWEL1-112

Note:	Note:

Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1113</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <sup>1</sup> <u>7200</u>	
SWEL Components: <u>SWEL1-113</u>	
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□

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<sup>&</sup>lt;sup>1</sup> 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) <u>AWC-1113</u>	
Location: Bldg. <u>RB</u> Floor El. <u>114</u> Room, Area <u>7200</u>	
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□
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□

Attachment D Page 165 of 222 Sheet 3 of 3 Status: Y N U Area Walk-By Checklist (AWC) AWC-1113 Room, Area <u>7200</u> Location: Bldg. RB Floor El. <u>114</u>  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) None Matt Keney Evaluated by: Matt Keeney Date: 10-3-2012 PKD. John Dunkelberg 10-3-2012

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Sheet 1 of 4	
Area Walk-By Checklist (AWC) <u>AWC-1114</u> Status: YX N	] U∏
Location: Bldg. <u>RB</u> Floor El. <u>095</u> Room, Area <sup>1</sup> <u>7100</u>	
SWEL Components: SWEL1-114	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near one or more SWEL items space below each of the following questions may be used to record the results of judgments and finding Additional space is provided at the end of this checklist for documenting other comments.	. The js.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	]
<ol> <li>Does anchorage of equipment in the area appear to be free of Y N U N/A significant degraded conditions?</li> </ol>	]
<ol> <li>Based on a visual inspection from the floor, do the cable/conduit</li> <li>Y⊠ N□ U□ N/A□ 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)?</li> </ol>	]

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<sup>&</sup>lt;sup>1</sup> 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) <u>AWC-1114</u>	
Location: Bldg. <u>RB</u> Floor El. <u>095</u> Room, Area <u>7100</u>	
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□
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∏

Sheet 3 of 4

Area Walk-By Ch	ocklist (		WC-1114			St	atus: Y⊠ N∐ UL
Location: Bldg. <u>RE</u>		Floor El. (	)95	 Room, Area	a <u>7100</u>		
8. Have you loo adversely af	ect the s	nd found no afety functior	other seis	mic condition quipment in t	s that could he area?	Υ⊠	
<u>Comments (</u> Additio	nal pages	s may be add	ded as neo	cessary)			
None							
		A	Ja	2	>		
Evaluated by: <u>Jasor</u>	Halsey	Ą	Ja	2	>	Date:	<u>10-10-2012</u>
Evaluated by: <u>Jasor</u>	Halsey	4	Ja	2	>	Date:	<u>10-10-2012</u>
Evaluated by: <u>Jasor</u>	Halsey	A	Jac De	2		Date:	: <u>10-10-2012</u>

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# Status: Y N U

# Area Walk-By Checklist (AWC) <u>AWC-1114</u>

Location: Bldg. <u>RB</u> Floor El. <u>095</u> Room, Area <u>7100</u>

## SWEL Components: SWEL1-114

# Photographs



Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1115</u>	Status: Y⊠ N∏ U∏
Location: Bldg. <u>RB</u> Floor El. <u>095</u> Room, Area <sup>1</sup> <u>7100</u>	
SWEL Components: <u>SWEL1-115</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other co	e or more SWEL items. The f judgments and findings. omments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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) <u>AWC-1115</u>	
Location: Bldg. <u>RB</u> Floor El. <u>095</u> Room, Area <u>7100</u>	
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□
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□

Sheet 3 of 3 Status: Y N U Area Walk-By Checklist (AWC) AWC-1115 Room, Area 7100 Location: Bldg. RB Floor El. 095  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) None Mat Keney Evaluated by: Matt Keeney Date: 10-3-2012 PKD. John Dunkelberg 10-3-2012

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Sheet 1 of 5	
Area Walk-By Checklist (AWC) <u>AWC-1116</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <sup>1</sup> <u>6306</u>	
SWEL Components: <u>SWEL1-116, SWEL1-119</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other	one or more SWEL items. The of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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  $\boxtimes$  N  $\square$  U  $\square$ 

Area Walk-By Checklist (AWC) <u>AWC-1116</u>	
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6306</u>	
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□
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∏

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Sheet 3 of 5	
Area Walk-By Checklist (AWC) <u>AWC-116</u>	Status: YX N U
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6306</u>	
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□
<b>Comments</b> (Additional pages may be added as necessary)	
AB Crescent area, west side 141' Flev	
1 $ 7 $ $ .$	
Evaluated by: <u>D. Bassi</u>	_ Date: <u>10/8/12</u>
DPIL. Llong	
X c reproved	
J. Dunkelberg	10/8/12

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Status: Y N U

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# Area Walk-By Checklist (AWC) <u>AWC-1116</u>

Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6306</u>

# SWEL Components: SWEL1-116

### Photographs





Note:

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# Status: Y N U

# Area Walk-By Checklist (AWC) AWC-1116

Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6306</u>

## SWEL Components: SWEL1-116



Sheet 1 of 4	
Area Walk-By Checklist (AWC) <u>AWC-1118</u> Status: Y N U	
Location: Bldg. <u>RB</u> Floor El. <u>186</u> Room, Area <sup>1</sup> <u>7500</u>	
SWEL Components: <u>SWEL1-118</u>	
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.	
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> <li>Y ∑ N U N/A </li> </ol>	
<ol> <li>Does anchorage of equipment in the area appear to be free of Y∑ N□ U□ N/A□ significant degraded conditions?</li> </ol>	
3. Based on a visual inspection from the floor, do the cable/conduit Y⊠ N□ U□ N/A□ 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)?	

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<sup>&</sup>lt;sup>1</sup> 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) <u>AWC-1118</u>	
Location: Bldg. <u>RB</u> Floor El. <u>186</u> Room, Area <u>7500</u>	
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□
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□

Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment D Page 180 of 222 Sheet 3 of 4 Status: Y N U Area Walk-By Checklist (AWC) AWC-1118 Location: Bldg. RB Floor El. <u>186</u> Room, Area 7500  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) Refueling floor of the RB Elev. 186. Evaluated by: J. Halsey Date: <u>10/10/12</u> D. Bassi <u>10/10/12</u>

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# Status: YX N U

# Area Walk-By Checklist (AWC) <u>AWC-1118</u>

Location: Bldg. <u>RB</u> Floor El. <u>186</u> Room, Area <u>7500</u>

# SWEL Components: SWEL1-118

# Photographs



Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-1120</u>	Status: Y⊠ N□ U□
Location: Bldg. <u>RB</u> Floor El. <u>141</u> Room, Area <sup>1</sup> <u>9408</u>	
SWEL Components: <u>SWEL1-120</u>	
Instructions for Completing Checklist	
space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other cor	judgments and findings.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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  $\boxtimes$  N  $\square$  U  $\square$ 

Area Walk-By Checklist (AWC) <u>AWC-1120</u>	
Location: Bldg. <u>RB</u> Floor El. <u>141</u> Room, Area <u>9408</u>	
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∏
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⊡

Attachment D Page 184 of 222 Sheet 3 of 3 Status: Y N U Area Walk-By Checklist (AWC) AWC-1120 Room, Area <u>9408</u> Location: Bldg. RB Floor El. <u>141</u>  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) None Mat Keney Evaluated by: Matt Keeney Date: 10-3-2012 PKD. John Dunkelberg 10-3-2012

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Sheet 1 of 3			
Area Walk-By Check	(list (AWC) <u>AWC-20</u>	01_	Status: Y⊠ N⊡ U⊡
Location: Bldg. AB	Floor El. <u>070</u>	Room, Area <sup>1</sup> <u>6008</u>	
SWEL Components	: <u>SWEL2-001, SWEL2</u>	-004	
Instructions for Comp	leting Checklist		
This checklist may be u space below each of the Additional space is prov	sed to document the resules following questions may rided at the end of this ch	Its of the Area Walk-By near be used to record the resu ecklist for documenting oth	ar one or more SWEL items. The ults of judgments and findings. er comments.
<ol> <li>Does anchorage potentially adver opening cabinets</li> </ol>	e of equipment in the area rse seismic conditions (if s)?	a appear to be free of visible without necessarily	Y⊠ N∏ U∏ N/A∏
2. Does anchorage significant degra	of equipment in the area ded conditions?	a appear to be free of	Y⊠ N□ U□ N/A□
<ol> <li>Based on a visure raceways and H seismic condition conditions of call</li> </ol>	al inspection from the floo VAC ducting appear to be ns (e.g., condition of supp ole trays appear to be ins	or, do the cable/conduit e free of potentially adverse ports is adequate and fill ide acceptable limits)?	Y⊠ N∏ U∏ N/A∏ ₽

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<sup>&</sup>lt;sup>1</sup> 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.

Area Walk-By Checklist (AWC) <u>AWC-2001</u>	Status: Y⊠ N□ U□
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <u>6008</u>	
<ul> <li>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)?</li> <li>Lighting has safety covers/cages</li> </ul>	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□
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□

Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment D Page 187 of 222 Sheet 3 of 3 Status: Y N U Area Walk-By Checklist (AWC) AWC-2001 Location: Bldg. AB Floor El. 070 Room, Area 6008  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) Area:CCP Aux bldg, West side Elev. 70 ft. to 100 ft Two valves located on a raised platform accessible by permanent ladder Evaluated by: D. Bassi Date: 10/8/12 PRL. J. Dunkelberg 10/8/12

Sheet 1 of 4	
Area Walk-By Checklist (AWC) <u>AWC-2003</u>	Status: Y N U
Location: Bldg. <u>FB</u> Floor El. <u>070</u> Room, Area <sup>1</sup> <u>5013</u>	
SWEL Components: <u>SWEL2-003</u>	
Instructions for Completing Checklist This checklist may be used to document the results of the Area Walk-By near space below each of the following questions may be used to record the result Additional space is provided at the end of this checklist for documenting othe	one or more SWEL items. The ts of judgments and findings. r comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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.

Sheet 2 of 4

Area Walk-By Checklist (AWC) <u>AWC-2003</u>				Status	: Y⊠ N□ U□			
Location: Bldg	j. <u>FB</u>	Floor El.	070	Room,	Area	<u>5013</u>		
4. Does if spatial and lig	appear that t interactions w nting)?	he area is fr <i>i</i> ith other eq	ee of potenti uipment in th	ally adve ne area (	erse se e.g., c	eismic eiling tiles	Y⊠ N□	U N/A
5. Does it interac	appear that t ions that coul	he area is fr Id cause floo	ee of potenti oding or spra	ally adve ay in the a	erse se area?	eismic	Y⊠N□	U N/A
6. Does it interac	appear that t ions that coul	he area is fr ld cause a fi	ee of potenti re in the area	ally adve a?	erse se	eismic	Y⊠ N□	U N/A
7. Does it interac portabl shieldii	appear that t ions associat e equipment, ng)?	he area is fr ed with hou and tempor	ee of potenti sekeeping pi ary installatio	ally adve ractices, ons (e.g.,	erse se storaç scaff	eismic je of olding, lead	Y⊠N□	U N/A

Attachment D Page 190 of 222 Sheet 3 of 4 Status: Y N U Area Walk-By Checklist (AWC) AWC-2003 Room, Area 5013 Location: Bldg. FB Floor El. 070  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) None Evaluated by: David Bassi Date: 10/9/2012 Prile. John Dunkelberg 10/9/2012

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# Status: YX N U

# Area Walk-By Checklist (AWC) <u>AWC-2003</u>

Location: Bldg. FB Floor El. 070 Room, Area 5013

# SWEL Components: SWEL2-003

# Photographs



Sheet <b>1</b> of <b>6</b>	
Area Walk-By Checklist (AWC) <u>AWC-2005</u>	Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, A	Area <sup>1</sup> <u>6203</u>
SWEL Components: <u>SWEL2-005</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Are space below each of the following questions may be used to Additional space is provided at the end of this checklist for do	a Walk-By near one or more SWEL items. The record the results of judgments and findings. cumenting other comments.
<ol> <li>Does anchorage of equipment in the area appear to b potentially adverse seismic conditions (if visible withou opening cabinets)?</li> </ol>	e free of Y⊠ N⊡ U⊡ N/A⊡ .t necessarily
2. Does anchorage of equipment in the area appear to b significant degraded conditions?	e free of Y⊠ N⊡ U⊡ N/A⊡
<ol> <li>Based on a visual inspection from the floor, do the cal raceways and HVAC ducting appear to be free of pote seismic conditions (e.g., condition of supports is adeq conditions of cable trays appear to be inside acceptab</li> </ol>	ole/conduit Y⊠ N⊡ U⊡ N/A⊡ entially adverse uate and fill le limits)?

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<sup>&</sup>lt;sup>1</sup> 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: YX N U Area Walk-By Checklist (AWC) AWC-2005 Location: Bldg. AB Floor El. <u>114</u> Room, Area 6203 YX N UN/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)? See Comments $Y \boxtimes N \square U \square N/A \square$ 5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? $Y \boxtimes N \square U \square N/A \square$ 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? $Y \boxtimes N \square U \square N/A \square$ 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)? See Comments

Area Walk-By Checklist (AWC)

## Status: Y⊠ N⊡ U⊡

Location: Bldg. <u>AB</u> Floor El. <u>114</u>	Room, Area <u>6203</u>	
<ol> <li>Have you looked for and found no other s adversely affect the safety functions of th See Comments</li> </ol>	seismic conditions that could ne equipment in the area?	Y N U

AWC-2005

<u>Comments</u> (Additional pages may be added as necessary)

NHS-MCC2C & NHS-MCC2D: Cabinets are in close proximity to each other (approx 1") but not connected (bolted together). MCC2C has 3 sections, MCC2D has 5 sections. Both welded to sills, potential seismic interaction is side to side.

Observation: At PW123-04, hoist in the overhead with chain that extends from 123' to 114' floor. Rigid conduits nearby touching conduit. Not a seismic concern due to length of chain

See LB-17

Evaluated by: <u>D. Bassi</u>	Date: <u>10/12/12</u>
& RAfunderg	
J. Dunkelberg	10/12/12

Sheet 4 of 6

# Status: Y N U

# Area Walk-By Checklist (AWC) <u>AWC-2005</u>

Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6203</u>

## SWEL Components: SWEL2-005

### Photographs





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# Area Walk-By Checklist (AWC) <u>AWC-2005</u>

Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6203</u>

## SWEL Components: SWEL2-005





Note:

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# Area Walk-By Checklist (AWC) <u>AWC-2005</u>

Location: Bldg. <u>AB</u> Floor El. <u>114</u> Room, Area <u>6203</u>

#### SWEL Components: SWEL2-005



Note:



Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-2006</u>	
Location: Bldg. <u>CB</u> Floor El. <u>098</u> Room, Area <sup>1</sup> <u>1114</u>	
SWEL Components: <u>SWEL2-006</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results of Additional space is provided at the end of this checklist for documenting other co	ne or more SWEL items. The of judgments and findings. 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)? No missing HVAC, cable tray, or raceway hardware.	Y⊠ N□ U□ N/A□

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<sup>&</sup>lt;sup>1</sup> 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

Sheet 2 of 3

# Area Walk-By Checklist (AWC) <u>AWC-2006</u>

Location: Bldg, CB Floor El, 098 Room, Area 1114	
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)?	YX N UNA
The "S" hooks supporting the lights behind EHS-MCC8B and ENB- SWG01B are open and need to be closed. However, the location of the fixtures cannot create a seismic interaction with any safety related components.	
One light behind EHS-MCC8B is installed in a tilted or out of level position. The light is secure (not a seismic issue)	
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? Conduits approximately 1" diameter penetrating fire wall appears that the conduit does not have fire stop or seal. Located on CL "CA" about 10' north of door CB098-09, approximately 11' above finished floor	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) AWC-2006

Location: Bldg.	<u>CB</u>	Floor El. <u>098</u>	Room, Area	<u>1114</u>		
8. Have you adversely	I looked for a affect the sa	nd found no other s afety functions of the	eismic conditions e equipment in the	that could e area?	Y□ N⊠ U□	
See com	ments below.					

Comments

- 1. Seal is off a 4" conduit above EHS-MCC14B (Conduit 1CK002DG)-not seismic issue
- 2. Seal loose on 1CK003BM above EHS-MCC14B --not seismic issue
- 3. Missing seal on 1CC047B4 above ENB-INV01B --not seismic issue
- 4. Fastener in not tight on ENB-INV01B1, north face bottom right fastener
- 5. 3" conduit "LB" in a vertical orientation approximately 10' off floor between door CB098-30 and ENB-SWG01B is missing a washer on 1 bolt (table label 2J) --not seismic issue
- 6. Vent grills appear to be missing bolts (6 to 12 each). The vent is located above ENB-INV01B1
- 7. Loose thumb screw on ENS-SWG1B cubical 1 lower right
- 8. Inconsistent style of bolt head used on back of EHS-MCC14B -not seismic issue
- 9. Inconsistent use of washer on the back of ENB-INV01B1 -not seismic issue
- 10. Loose LB cover bolt loose (1 of approx. 4) located above EHS-MCC14B, north most cubicle viewed from front of MCC (conduit 1CK047B4) -not seismic issue
- 11. Grounding cable behind ENB-INV01B1 cable hold downs are loose, approximately 4'. -not seismic issue

Also see Q4, Q6

Ref. CR-RBS-2012-06957 and LB-16

7.	Natt Keeney		
Evaluated by: <u><i>M. Keeney</i></u>	$\sim$	_ Date:	<u>10/11/2012</u>
	& RAfundlong		
<u>J. Dunkelberg</u>	V	_	10/11/2012

Sheet 1 of 4	
Area Walk-By Checklist (AWC) <u>AWC-2008</u>	Status: Y N U
Location: Bldg. FB Floor El. 070 Room, Area <sup>1</sup> 5018	
SWEL Components: <u>SWEL2-008</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near or space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	ne or more SWEL items. The of judgments and findings. omments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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.

Sheet 2 of 4

Area Walk-By Checklis	st (AWC) <u>AWC-200</u>	08		Status: Y⊠ N□	U
Location: Bldg. FB	Floor El. <u>070</u>	Room, Area	5018		
4. Does it appear that spatial interactions and lighting)?	the area is free of pote with other equipment in	ntially adverse sentially adverse sentially adverse sentine area (e.g., c	ismic eiling tiles	Y⊠ N□ U□ N/A□	
5. Does it appear that interactions that co	the area is free of pote uld cause flooding or s	entially adverse se oray in the area?	ismic	Y⊠ N□ U□ N/A□	
6. Does it appear that interactions that co	the area is free of pote uld cause a fire in the a	entially adverse se irea?	ismic	Y⊠ N□ U□ N/A□	
<ol> <li>Does it appear that interactions associa portable equipment shielding)?</li> </ol>	the area is free of pote ated with housekeeping t, and temporary installa	entially adverse se practices, storag ations (e.g., scaffo	ismic e of olding, lead	Y⊠ N□ U□ N/A□	

Sheet 3 of 4 Status: Y N U Area Walk-By Checklist (AWC) AWC-2008 Room, Area 5018 Location: Bldg. FB Floor El. 070  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) Area: FB 85' valve room (north room) Evaluated by: John Dunkelberg Date: 10/9/2012 David Bassi 10/9/2012

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# Status: YX N U

## Area Walk-By Checklist (AWC) <u>AWC-2008</u>

Location: Bldg. FB Floor El. 070 Room, Area 5018

#### SWEL Components: SWEL2-008

## Photographs



Sheet 1 of 4	
Area Walk-By Checklist (AWC) <u>AWC-2009</u>	Status: Y N U
Location: Bldg. <u>FB</u> Floor El. <u>070</u> Room, Area <sup>1</sup>	5021
SWEL Components: <u>SWEL2-009</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Wal space below each of the following questions may be used to record Additional space is provided at the end of this checklist for documen	k-By near one or more SWEL items. The the results of judgments and findings. hting other comments.
<ol> <li>Does anchorage of equipment in the area appear to be free potentially adverse seismic conditions (if visible without nece opening cabinets)?</li> </ol>	of Y⊠ N⊡ U⊡ N/A⊡ ≫ssarily
2. Does anchorage of equipment in the area appear to be free significant degraded conditions?	of Y⊠ N⊡ U⊡ N/A⊡
<ol> <li>Based on a visual inspection from the floor, do the cable/cor raceways and HVAC ducting appear to be free of potentially seismic conditions (e.g., condition of supports is adequate a conditions of cable trays appear to be inside acceptable limit</li> </ol>	ıduit Y⊠ N⊡ U⊡ N/A⊡ adverse nd fill ts)?

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<sup>&</sup>lt;sup>1</sup> 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.

Sheet 2 of 4

Area Walk-By Checkli	Status: Y⊠ N∏ U∏		
Location: Bldg. FB	Floor El. <u>070</u>	Room, Area 5021	
4. Does it appear tha spatial interactions and lighting)?	It the area is free of pote s with other equipment ir	ntially adverse seismic n the area (e.g., ceiling tiles	Y⊠ N□ U□ N/A□
5. Does it appear that interactions that co	It the area is free of pote ould cause flooding or s	ntially adverse seismic oray in the area?	Y⊠ N□ U□ N/A□
6. Does it appear tha interactions that co	It the area is free of pote ould cause a fire in the a	ntially adverse seismic rea?	Y⊠ N□ U□ N/A□
<ol> <li>Does it appear than interactions assocred portable equipmer shielding)?</li> </ol>	It the area is free of pote iated with housekeeping It, and temporary installa	ntially adverse seismic practices, storage of ations (e.g., scaffolding, leac	Y⊠ N□ U□ N/A□

10/9/12

Sheet 3 of 4

<u>D. Bas</u>si

# Area Walk-By Checklist (AWC) <u>AWC-2009</u> Status: Y

Location: Bldg. FB Floor El. 070 Room, Area 5021					
8. Have you looked for and found no other seismic conditions that could Y N∑ U adversely affect the safety functions of the equipment in the area?					
See comments					
Comments (Additional pages may be added as necessary)					
Hand lever of valve SFC-V356 (Temporary tag by GSU) is within ¾" of adjacent 4" pipe – Potential interaction					
Ref. LB-13 & CR-RBS-2012-06687					
Evaluated by: J. Dunkelberg Date: 10/9/12					
D. B.					

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# Status: Y N U

## Area Walk-By Checklist (AWC) <u>AWC-2009</u>

Location: Bldg. FB Floor El. 070 Room, Area 5021

### SWEL Components: SWEL2-009

Photographs



Sheet 1 of 4				
Area Walk-By Checklist (	AWC)	AWC-2012	_	Status: Y⊠ N∏ U∏
Location: Bldg. <u>FB</u>	Floor El.	070	Room, Area <sup>1</sup> <u>5000</u>	
SWEL Components: <u>SWE</u>	L2-012			
Instructions for Completing This checklist may be used to space below each of the follow Additional space is provided a	Checklis documen wing quest t the end o	<b>t</b> t the results tions may be of this check	of the Area Walk-By near of used to record the results of list for documenting other co	ne or more SWEL items. The of judgments and findings. omments.
<ol> <li>Does anchorage of eq potentially adverse sei opening cabinets)?</li> </ol>	uipment in smic cond	the area ap litions (if visil	pear to be free of ble without necessarily	Y⊠ N∏ U∏ N/A∏
2. Does anchorage of eq significant degraded co	uipment in onditions?	n the area ap	pear to be free of	Y⊠ N□ U□ N/A□
<ol> <li>Based on a visual insp raceways and HVAC d seismic conditions (e.g conditions of cable trag</li> </ol>	ection from lucting app g., condition ys appear	m the floor, c pear to be fro on of support to be inside	to the cable/conduit ee of potentially adverse s is adequate and fill acceptable limits)?	Y⊠ N□ U□ N/A□

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<sup>&</sup>lt;sup>1</sup> 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.

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Area Walk-By (	Checklist (AWC)	AWC-2012	_			Status:	Y⊠ N∏ U∏
Location: Bldg.	FB Floor El.	070	Room, Ar	rea	5000		
4. Does it ap spatial inte and lightin	pear that the area is free area	ee of potenti uipment in th	ally advers ie area (e.ç	se se g., c	eiling tiles	Y⊠ N□	U[] N/A[]
5. Does it ap interaction	pear that the area is fr is that could cause floo	ree of potenti oding or spra	ally advers y in the are	se se ea?	eismic	Y⊠ N□	U N/A
6. Does it ap interaction	pear that the area is fr ns that could cause a f	ee of potenti re in the area	ally advers a?	se se	eismic	Y⊠N□	U N/A
7. Does it ap interaction portable e shielding)?	pear that the area is fr ns associated with hou quipment, and tempor ?	ee of potenti sekeeping pr ary installatic	ally advers actices, sto ons (e.g., so	se se orag caffo	eismic le of olding, lead	Y⊠ N□	U N/A

Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment D Page 211 of 222 Sheet 3 of 4 Status: Y N U Area Walk-By Checklist (AWC) AWC-2012 Location: Bldg. FB Room, Area 5000 Floor El. 070  $Y \boxtimes N \square U \square$ 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? <u>Comments</u> (Additional pages may be added as necessary) FB 70' CRD pump room area Evaluated by: David Bassi Date: 10/9/2012 PRE John Dunkelberg 10/9/2012

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# Status: Y N U

## Area Walk-By Checklist (AWC) <u>AWC-2012</u>

Location: Bldg. FB Floor El. 070 Room, Area 5000

#### SWEL Components: SWEL2-012

#### Photographs



Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-2013</u>	Status: Y⊠ N∏ U∏
Location: Bldg. FB Floor El. 095 Room, Area <sup>1</sup> 5100	
SWEL Components: <u>SWEL2-013</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other	one or more SWEL items. The s of judgments and findings. 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□

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<sup>&</sup>lt;sup>1</sup> 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

Sheet 2 of 3

Area Walk-By Checklist (AWC) <u>AWC-2013</u>	
Location: Bldg. <u>FB</u> Floor El. <u>095</u> Room, Area <u>5100</u>	
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□
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□

Sheet 3 of 3

		Status:	Y⊠ N□ U□
Area Walk-By Checklist (AWC) _	AWC-2013		

Location: Bldg.	FB	Floor El.	095	Room, Area	5100		
8. Have you adversely	I looked for a a affect the sa	nd found no afety functio	o other seis ons of the eo	mic conditions quipment in the	that could e area?	YX N U	

#### Comments (Additional pages may be added as necessary)

None

Evaluated by: John Dunkelberg	_ Date: <u>10-5-2012</u>	
Jose Cardona	<u> </u>	

Sheet 1 of 3	
Area Walk-By Checklist (AWC) <u>AWC-2014</u>	Status: Y⊠ N□ U□
Location: Bldg. <u>FB</u> Floor El. <u>070</u> Room, Area <sup>1</sup> <u>5011</u>	
SWEL Components: SWEL2-014, SWEL2-015	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near of space below each of the following questions may be used to record the results Additional space is provided at the end of this checklist for documenting other of	ne or more SWEL items. The of judgments and findings. 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∏

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<sup>&</sup>lt;sup>1</sup> 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) <u>AWC-2014</u>	
Location: Bldg. <u>FB</u> Floor El. <u>070</u> Room, Area <u>5011</u>	
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□
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∏

Sheet 3 of 3

		S	Status: YX	ΝΠ	υΠ
Area Walk-By Checklist (AWC)	AWC-2014		_	_	

Location: Bldg.	FB	Floor El.	070	Room, Area	<u>5011</u>	
	Lookod for or	ad found no	othor opion	aia aanditiana	that aguid	

8. Have you looked for and found no other seismic conditions that could Y N U

#### <u>**Comments**</u> (Additional pages may be added as necessary)

None

Evaluated by: John Dunkelberg	_ Date: <u>10-5-2012</u>
Jose Cardona	<u>10-5-2012</u>

Sheet 1 of 4	
	Status: Y⊠ N□ U□
Area Walk-By Checklist (AWC) <u>AWC-2016</u>	
Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <sup>1</sup> <u>6001</u>	
SWEL Components: <u>SWEL2-016, SWEL1-025, SWEL2-017</u>	
Instructions for Completing Checklist	
This checklist may be used to document the results of the Area Walk-By near space below each of the following questions may be used to record the result Additional space is provided at the end of this checklist for documenting other	one or more SWEL items. The s of judgments and findings. comments.
<ol> <li>Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)?</li> </ol>	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□

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<sup>&</sup>lt;sup>1</sup> 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.

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Area Walk-B	/ Checklist (	(AWC)	AWC-2016	_			Status	: Y⊠ N□ U□
Location: Bldg	AB	Floor El.	070	Room,	Area	6001		
4. Does it spatial i and ligh	appear that th nteractions wit ting)?	e area is fr th other eq	ee of potenti uipment in th	ally adve ne area (	erse se e.g., c	eismic eiling tiles	Y⊠ N□	U N/A
5. Does it interacti	appear that th ons that could	e area is fr I cause floo	ee of potenti oding or spra	ally adve y in the a	erse se area?	eismic	Y⊠N□	U[] N/A[]
6. Does it interacti	appear that th ons that could	e area is fr I cause a fi	ee of potenti re in the area	ally adve a?	erse se	eismic	Y⊠ N□	U[] N/A[]
7. Does it interacti portable shieldin	appear that th ons associate equipment, a g)?	e area is fr d with hou nd tempor	ee of potenti sekeeping pr ary installatic	ally adve actices, ons (e.g.,	erse se stora <u>c</u> scaff	eismic je of olding, lead	Y⊠N□	U N/A

Sheet 3 of 4

Area Walk-By Checklist (AW	/C) <u>AWC-201</u>	<u>6</u>		Status: Y⊠ N⊡ U⊡
Location: Bldg. <u>AB</u> Fl	oor El. <u>070</u>	_ Room, Area	<u>6001</u>	
8. Have you looked for and t adversely affect the safet	found no other se y functions of the	smic conditions equipment in the	that could area?	Y⊠ N∏ U∏
Comments (Additional pages ma	ay be added as ne	ecessary)		
None				
77	Nat X	ener		
Evaluated by: <u>Matt Keeney</u>				Date: <u>10/8/2012</u>
		-/.		
Brandon Nissing	hard			10/8/2012

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# Status: YX N U

## Area Walk-By Checklist (AWC) <u>AWC-2016</u>

Location: Bldg. <u>AB</u> Floor El. <u>070</u> Room, Area <u>6001</u>

#### SWEL Components: SWEL2-016

## Photographs

Note:	Note:

# Attachment E

# Potentially Adverse Seismic Conditions

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STATUS	CR-RBS-2012- 06242 is closed.	CR-RBS-2012- 06241 is closed.
RESOLUTION	CR-RBS-2012-06242 determined that the existing condition is acceptable. CR-RBS-2012-06230 CA-00011 has been initiated to identify the best way to electronically link the information contained in calculation G13.18.10.5*003 and CR-RBS-2012-06242 to HVK-TK1A OPERABILITY EVALUATION SUMMARY The operability evaluation considered a worst case loading of 5,000 lbs/bolt. Nut shear capacity is conservatively calculated to be 5,988 lbs, and therefore the structural integrity of the tank is maintained during a seismic event.	CR-RBS-2012-06241 determined that the existing condition was previously evaluated in design calculation NP-Z-781- 7204 and found to be acceptable. OPERABILITY EVALUATION SUMMARY Review of stress report for 6" line & support for % inch line, and deflection of %" line indicate that total relative deflection between the components will be less than 0.2 inches. Therefore the distance of 0.5 inches between these 2 components is judged to be acceptable.
LICENSING BASIS EVALUATION CONCLUSION	Condition does not meet the Licensing Basis. Need full nut engagement on anchor bolt.	Condition does not meet the Licensing Basis. Reduced clearance between pipe and pipe support does not meet piping specification requirements for clearance requirements between items.
IDENTIFIED CONDITION	Reduced Nut Engagement for Tank Base Bolts Condition: Nuts on two (2) out of eight (8) 5/8" diameter bolts for anchorage of HVK-TK1A "Control Building Chilled Water Surge Tank 1A" base to the concrete pedestal are not fully engaged. Review indicates at least 90% of the threads on both the nuts are engaged with the anchor bolts.	Reduced Clearance between Pipe / Strut The clearance between the strut installed 10" above valve assembly [HVK-MOV20C] on line [HVK- 006-002-003] and the horizontal SAS pipeline SAS-750-563 (approximate elevation 109 ft) near valve SAS-V836 is 1/2". The required minimum distance between the safety related component and safety related small bore piping of 1" is not met.
SWC/AWC #	SWEL1-078	AWC-1075
LB #	LB-01	LB-02

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STATUS	CR-RBS-2012- 06238 is closed.	Closed	CR-RBS-2012- 06311 closed to WR 0028620
RESOLUTION	CR-RBS-2012-06238 determined that drawings 0242.414-000-031, 0242.414-000- 032 and 0242.414-000-033 are available and show the panel fasteners, which match the observed condition in the field. Therefore there is no nonconformance. OPERABILITY EVALUATION SUMMARY Based on visual walkdown by RE the seismic qualification or the structural integrity of the panel is not in question.	N/A	CR-RBS-2012-06311. Suggest installing missing fasteners and reworking hinge. WR 286202 initiated to correct condition. OPERABILITY EVALUATION SUMMARY Evaluation of these conditions have determined that the seismic qualification of EHS-MCC16A is unaffected by the unengaged hinge at one end of the door leafs and the seismic qualification of control transformers is also unaffected by the installation of three (3) screws instead of four (4) screws used during seismic testing effort. Also EN-OP-104, Rev 6 Attach. 9.1 for degraded or nonconforming conditions states that as
LICENSING BASIS EVALUATION CONCLUSION	Condition does not meet the Licensing Basis. Panel anchorage drawings are not available to verify number of fasteners required for the attachment of the panel to the support structure.	Condition meets the Licensing Basis. Evaluation concludes that the identified loose items in the main control room area are in conformance with licensing basis documents.	Condition does not meet the Licensing Basis. Missing fasteners are required to be installed in the panel and doors need to be secured in place per design.
IDENTIFIED CONDITION	Panel H13-P693 anchorage drawing not available for verification The anchorage drawing and/or calculation showing the analysis of the mounting pattern at the anchorage location could not be located.	Loose Items / Main Control Room: I&C work tables for work in progress Stick files for drawings Frisker stand next to cabinet See photos in AWC-1063.	<ul> <li>EHS-MCCI6A, Bucket 5B, appears to be a missing screw at the bottom left hand corner of the transformer.</li> <li>EHS-MCC16A, Bucket 2A, transformer has three screws installed. The top right screw location was not drilled (no hole) and no screw installed. [Pan head not drilled].</li> <li>EHS-MCC16A, Bucket 4D, door top hinge (mounted on the left side) is off the swivel pin (pin is completely outside of the hinge tube)</li> </ul>
SWC/AWC #	SWEL1-063	AWC-1063	SWEL1-047
LB #	LB-03	LB-04	LB-05

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STATUS		CR-RBS-2012- 06312 closed to WR 00286203
RESOLUTION	long as no more than two missing or loose fasteners AND no FME concern exists then the equipment would be considered Operable. In this case only one screw is missing from bucket 2A of four screws. EHS-MCC16A will perform its design function.	CR-RBS-2012-06312 initiated to track hinge pins rework. WR 286203 initiated to correct condition. OPERABILITY EVALUATION SUMMARY As stated in the CR initiation the 1/4" protrusion of the hinge pin does not adversely impact the ability of the door to remain in place during all operating conditions including seismic events as there is adequate connection to fully support the weight of the door, and as the load is distributed over all door connection points. As a result, this condition has no adverse impact on the proper operation of the doors or of the panel.
LICENSING BASIS EVALUATION CONCLUSION		Condition does not meet the Licensing Basis. Evaluation concludes the pins raised out of the hinge by approx. <i>X</i> " continue to provide adequate anchorage of the door panels and will remain in place during a seismic event.
IDENTIFIED CONDITION		ENS-SWG1A, door lower hinge pin raised at ACB08 Door upper hinge pin raised at ACB06 Door middle hinge pin raised at ACB06
SWC/AWC #		SWEL1-062
LB #		P-06

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STATUS		CR-RBS-2012- 06326 closed to WR 00286244.
RESOLUTION	N/A	CR-RBS-2012-06326 initiated. WR 00286244 initiated to correct the condition. OPERABILITY EVALUATION SUMMARY The attached evaluation has determined that the missing screws would not result in unacceptable vibration of the electrical boards mounted in the vicinity of the missing screws and that the boards will be fully capable of performing their safety function. The screws currently installed in the panel are structurally adequate to resist all loads. Also EN-OP- 104, Rev 6 Attach. 9.1 for degraded or nonconforming conditions states that as long as no more than two missing or long as no more than two und be considered Operable. In this case only two screws are missing from ENB- considered Operable. In this case only two screws will not adversely impact ENB-CHGR1A charger to perform its design function.
LICENSING BASIS EVALUATION CONCLUSION	Condition does meet the Licensing Basis. Evaluation concludes the condition is acceptable, missing welds are acceptable per E&DCR C- 20908A.	Condition does not meet the Licensing Basis. Evaluation concludes the missing fasteners are not acceptable.
IDENTIFIED CONDITION	ENB-BAT01A, battery rack angle attachment to the imbedded sill is missing one weld of two (on either side of angle) at two locations. The first location is at cell 38 and the second location is at cell 42. [These are the lower racks (shorter). They are approximately 60 such welds on the lower rack.]	EMB-CHGR1A, interior mounting panel is missing two attachment screws. The missing screws are on the lower edge at the center portion of the plate. [Estimated number of screws are 4 on top 4 on bottom (B total). Panel is approx. <i>3' x 2'</i> with " 30 pounds of material mounted on the plate. The locations missing screws were intended locations to install screws. (Holes were threaded) ]
SWC/AWC #	SWEL1-056	SWEL1-057
LB #	LB-07	Г. Р

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STATUS	CR-RBS-2012- 06323 closed to WR 00286229.	CR-RBS-2012- 06483 closed to WR 00287298.
RESOLUTION	CR-RBS-2012-06323 initiated. WR 00286229 initiated to correct condition. OPERABILITY EVALUATION SUMMARY The Operability evaluation has concluded the missing screws and the substantial unseating of the door hinge pins do not affect the seismic qualification of the panel and that the identified condition does not adversely impact the ability of the transformers or the panel as an assembly to perform their design and licensing basis functions.	CR-RBS-2012-06483 initiated. WR 00287298 initiated to correct condition. OPERABILITY EVALUATION SUMMARY The operability evaluation has concluded that the missing power transformer screw is identical to the same condition evaluated for EHS-MCC14A, and that evaluation was attached to the CR. The evaluation also concluded that the missing screw on the back plate of a breaker for EHS-MCC2L does not adversely affect operability of the MCC.
LICENSING BASIS EVALUATION CONCLUSION	Condition does not meet the Licensing Basis. Evaluation concludes the missing fasteners and hinge conditions are not acceptable.	Condition does not meet the Licensing Basis. Missing fasteners are required to be installed in the panel per design. Condition does not meet the Licensing Basis. Missing fasteners are required to be installed in the panel per design.
WC IDENTIFIED CONDITION	<ul> <li>BHS-MCC14A, STANDBY SWGR RM 1A 480V MCC14A</li> <li>Need a work request to adjust latch on cubicle 1C so the door can open with the safety latch.</li> <li>Front door at breaker 2AT the top hinge was not attached completely (pin out of hinge significantly)</li> <li>Door is approximately 12" x 12" with 2 hinges and two latches.</li> <li>Front door at breaker 2AB, the top hinge was not attached completely (pin out of hinge significantly)</li> <li>Door is approximately 12" x 12 with 2 hinges and two latches.</li> <li>Mounting for control power transformers are missing one mounting screw of 4. Bottom Right Screw Missing - Cubicle 2C, 4A, 4C, 4D, 4E, 4F; Bottom Left Screw Missing - Cubicle 2C, 4A, 4C, 4D, 4E, 4F; Bottom Left Screw Missing - Cubicle 2C, 4A, 4C, 4D, 4E, 4F; Bottom Left Screw Missing - Cubicle 2C, 4A, 4C, 4D, 4E, 4F; Bottom Left Screw Missing - Cubicle 2C, 4A, 4C, 4D, 4E, 4F; Bottom Left Screw Missing - Cubicle 2C, 4A, 4C, 4D, 4E, 4F; Bottom Left Screw Missing - Cubicle 2C, 4A, 4C, 4D, 4E, 4F; Bottom Left Screw Missing - Cubicle 2C, 4A, 4C, 4D, 4E, 4F; Bottom Left Screw Missing - Cubicle 4B</li> </ul>	<ul> <li>EHS-MCC2L, Auxiliary Building MCC2L</li> <li>Cubicle 1C - transformer has three screws installed rather than four. Upper right screw missing.</li> <li>Cubicle 2B - Missing 1 screw on back plate of breaker, upper right corner, 1 of 4 screw locations.</li> </ul>
LB # SWC/#	LB-09 SWEL:	LB-10 SWEL:

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STATUS	CR-RBSD-2012- 07090 initiated. WR-290719, 290720,290721 and 290723 initiated to correct	CR-RBS-2012- 06352 is closed. The missing bolt has been installed under WO-329161.
RESOLUTION	CR-RBSD-2012-07090 has been written to address the condition. WR-290719, 290720,290721 and 290723 have been initiated to correct the condition. OPERABILITY EVALUATION SUMMARY This CR describes a condition of an SSC that is not within the scope of the	Operability Determination Process. CR-RBS-2012-06352 initiated. The missing bolt has been installed under WO-329161. OPERABILITY EVALUATION SUMMARY Review of seismic qualification 4228.241- 092-016C (pdf page 133) for this valve shows that the actuator (operator) to bracket bolts (dwg. 0228.241-092-014 items 32 & 33) have an interaction ratio of 0.47, with all 8 bolts installed. This indicated that the bolted joint is robust, and has approximately 50% margin in the bolts. Based on this robust condition, it is reasonable to conclude that the connection will perform its intended function with only 7 of the 8 bolts installed during all design conditions."
LICENSING BASIS EVALUATION CONCLUSION	Condition does not meet the Licensing Basis. Evaluation concludes that open S hooks do not meet the licensing basis.	Condition does not meet the Licensing Basis. Evaluation concludes the condition of one missing actuator mounting bolt does not meet the licensing basis.
IDENTIFIED CONDITION	S hook on lighting fixtures. Florescent lighting fixtures in the plant are suspended by chains. The chain is attached to the fixtures with "S" hooks, which might become unattached via the open "S".	HVR-ADV165 is missing 1 bolt of the 8 mounting the actuator to the mounting bracket.
SWC/AWC #	AWC-1070	SWEL1-119
LB #	LB-11	LB-12

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STATUS	CR-RBS-2012- 06687 is open.	CR-RBS-2012- 06847 is closed to Work Order# WO 00332318.
RESOLUTION	CR-RBS-2012-06687 has been initiated. DE has been assigned an action to accept as is the described condition. OPERABILITY E VALUATION SUMMARY This condition report describes unacceptable clearance between the hand wheel of abandoned in place SFC valve and non-safety related drain piping. Neither of the components described are SSCs that fall within the Operability Determination Process. The abandoned in place SFC system and cannot impact SFC.	CR-RBS-2012-06847 was initiated. Work Order# 00332318 has been initiated to correct the condition. OPERABIUTY EVALUATION SUMMARY Based on the evaluation performed, none of these conditions represents an adverse impact on the ability of the active components in the panel to perform their design and licensing basis functions. The seismic qualification of the panel is not adversely affected and the seismic qualification of the active components in the panel is not adversely affected
LICENSING BASIS EVALUATION CONCLUSION	Condition does not meet the Licensing Basis. Clearance between valve and pipe violates specification requirements. Further evaluation required.	Condition does not meet the Licensing Basis. Evaluation concludes the loose bolt should be fully tight. The condition is not acceptable Condition does not meet the Licensing Basis. Evaluation concludes the screw should be fully engaged, condition is not acceptable Condition is not acceptable Licensing Basis. Evaluation concludes the condition of loose screw is not acceptable
IDENTIFIED CONDITION	Hand lever of valve SFC-V356 is within ¾" of 4" pipe – clearance violation.	EHS-MCC8B, Standby SWGR RM 1B MCC8B On right of 3B in cable way bolt is slightly loose. 3B is a spare breaker. Cubicle 3B – top left screw in bucket to upper plate appears to not be fully engaged (tight). NOTE: 3B is a spare breaker. Cubicle 5B – loose MCC screw on bottom right between cubicle and cable way.
swc/awc #	AWC-2009	SWEL2-006
LB #	LB-13	LB-014

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STATUS	CR-RBS-2012- 06391 has been closed to CR-RBS-2012- 6446. CR-RBS-2012- 06399 has been closed. Missing bucket mounting screws were replaced per vWO 329262.	CR-RBS-2012- 06957 closed to WR 00290023 screw on ENS- SWG1B; WR 00290028 (conduit elbows); WR 00290030 (HVAC grill)
RESOLUTION	CR-RBS-2012-06391 and CR-RBS-2012- 06399 initiated. Missing screws installed. OPERABILITY EVALUATION SUMMARY The missing screws were installed and the condition was corrected. Operability Evaluation to determine impact of this condition on the EHS-MCC2H panel was performed and the panel was found to be operable.	CR-RBS-2012-06957 initiated. The following WRs were generated to address these conditions: WR 00290023 screw on ENS-SWG1B, WR 00290030 (conduit elbows); WR 00290030 OPERABILITY EVALUATION SUMMARY Based upon the Engineering Evaluations attached in this Condition Report, it can be concluded that all equipment is fully capable of performing its safety function, and remains Operable. The existing vent bolting has been determined to be meet the design requirements. The loose thumb screw on ENS-SWG1B does not adversely affect the ability of the latch to fully engage and therefore there is no adverse impact on the structural integrity of the door or seismic
LICENSING BASIS EVALUATION CONCLUSION	Condition does not meet the Licensing Basis. Evaluation determined the missing screws in 4D & 7D do not meet the licensing basis documentation. Further evaluation is required.	Condition does meet the Licensing Basis. Evaluation concludes acceptability of attachment of HVAC grill requires further evaluation. Condition does not meet the Licensing Basis. Evaluation concludes the condition of a loose thumb screw on a cubicle is not acceptable. Condition does not meet the Licensing Basis. Evaluation concludes on e loose crew on the panel is not acceptable.
IDENTIFIED CONDITION	During inspection of EHS-MCC2H bucket 4D (B21-F098D Main Steam Shutoff Valve) found 2 missing bucket mounting screws for the breaker. This same condition exists for bucket 7D (B21-F027D MS Isol Valve Stem Leak-off Conn).	Area walkdown of 98 Control Building HVAC vent grills above ENB-INV01B1 appears to be missing bolts. Grill is 2-piece, each piece has six fasteners installed. Need to investigate to determine how many fasteners need to be installed. Loose thumb screw on ENS-SWG1B cubicle 1 lower right. Fastener is not tight on ENB-INV01B1 north face (side) , bottom right fastener, on outside of panel
SWC/AWC #	SWEL2-005	AWC-2006
LB #	LB-015	LB-016

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LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
				qualification of the panel. The loose fastener on ENB-INV01B does not adversely affect the attachment of the cover plate.	
LB-017	AWC-2005	NHS-MCC2C and NHS-MCC2D – both cabinets are in close proximity to each other (Approximately 1" apart side to side) but not connected to each other. Potential interactions side to side.) Additional information: MCC2C has 3 sections, MCC2D has 5 sections. Both MCC's welded to sills. (well anchored)	Condition meets the Licensing Basis Potential for interaction between 2 MCCs, however the components are non safety related panels. No potential for seismic interaction with safety related equipment.	No action required.	
LB-018	AWC-1048	EHS-MCC2D On rear side of cubicle 2D, the lower right hand door screw is not fully engaged (approximately <i>¼</i> " sticking out). Door is solidly in cubicle and screw may be cross-threaded. Door has two hinges and two screws.	Condition does not meet the Licensing Basis. Evaluation concludes that loose door screw is not acceptable.	CR-RBS-2012-06446 Door screw immediately tightened, and corrected the condition. OPERABILITY EVALUATION SUMMARY Screw tightened which corrected the condition.	Screw tightened, condition corrected.
LB-019	SWEL1-117	EHS-MCC2K 6D, 5A, 4D, 3D, 7D – missing screw in top right corner of cubicle. 2' cubicle 6A – missing a screw on the transformer - lower right screw, red material directly behind fastener hole	Condition does not meet the Licensing Basis. Evaluation concludes that missing fasteners are required to be installed. Further evaluation required. Condition does not meet the Licensing Basis. Evaluation concludes that the missing fastener is required. Further evaluation is required.	CR-RBS-2012-06869 initiated and Work Order# 332326 initiated to correct the issues. OPERABILITY EVALUATION SUMMARY Based on engineering evaluations of the conditions described in this CR, EHS- MCC2K is capable of performing all its design functions and satisfying all requirements of Tech Spec 3.8.9 Distribution Systems Operating.	CR-RBS-2012- 06869 has been closed to WO 332326.

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION	RESOLUTION	STATUS
LB-020	SWEL1-048	EHS-MCC2B - EHS-MCC2B AUX BLDG Cubicle 7A – Missing a bolt on transformer, upper right, 1 of 4 bolts (screws) Cubicle 5A – one screw is missing on the rear wall of the cubicle on the upper right side of the plate Cubicle 1CB – missing lower right back panel screw.	Condition does not meet the Licensing Basis. Evaluation concludes that the missing fastener is required. Further evaluation is required. Condition does not meet the Licensing Basis. Evaluation concludes that the missing fastener is required. Further evaluation required	CR-RBS-2012-06866 initiated and Work Order# 332324 and Work Order# 33097 initiated to correct the issues. OPERABILITY EVALUATION SUMMARY Based upon the Engineering evaluations, it can be concluded that all EHS-MCC2B equipment is fully capable of performing its safety function, and remains Operable.	CR-RBS-2012- 06866 has been closed to WO 332324 and WO 33097.
			that the missing fastener is required. Further evaluation required		

JRAfunde John Dunkelberg Prepared by: BEN KOSBAB Reviewed by:

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Peer Review Team Member

Date: <u>10/25/12</u>

Date: 11/14/12

# Attachment F

# **Licensing Basis Evaluations**

# Licensing Basis (LB) Evaluation Form

LB Evaluation No.		LB-01	_ Origir	nating SWC/AV	VC	SWEL1-078	
Equipment ID No.	HVK	<u>-TK1A</u> Equi	p. Class	s <u>21</u>			 
Equipment Descri	ption _	CNTRL BL	DG CHIL	LED WTR SU	RGE 1	ΓK 1Α	
Location: Bldg.	СВ	Floor El	98 ft	_Room, Area		1110	

## **Condition**

Nuts on two (2) out of eight (8) 5/8" diameter bolts for anchorage of the tank base to the concrete pedestal are not fully engaged. Review indicates at least 90% of the threads on both the nuts are engaged with the anchor bolts.

# **Documents Reviewed**

0237.500-096-014, Rev. 300, 201.130-186 Rev. 002

# Licensing Basis

The design of the anchor bolts require nuts to be fully engaged with few threads to spare.

# **Evaluation**

Nuts are not fully engaged, further evaluation required.

Ref. CR-RBS-2012-06242

<u>Conclusion</u>	Condition Meets the Licensing Basis:	Yes	🖂 No				
Prepared by:	Amar Dalawari Amar Dalawari Licensing Basis Reviewer	_ Date _	10/02/12				
Reviewed by	: John Dunkelberg Plandlung Peer Reviewer	_ Date _	10/3/12				
LB Evaluation No.		LB-02	Origin	ating SWC/AV	VC <u>AW</u>	C-1075	
-------------------	-------	------------	-----------	--------------	--------------	----------	-------------
Equipment ID No.	HVK-	CHL1C Equ	ip. Class	11			
Equipment Descrip	otion	HVKC01 C	ONTROL	BLDG CHILL	ED WATE	R COMPRE	<u>SSOR</u>
Location: Bldg.	СВ	_ Floor El	098 ft	Room, Area	112	24	

#### **Condition**

The clearance between the strut installed 10" above valve assembly HVK-MOV20C and the horizontal SAS pipeline (approximate elevation 109 ft) near valve SAS-V836 is 1/2".

#### **Documents Reviewed**

EP-40G Rev. 005, EP-310A Rev. 003, BZ-350AM Sheet 1, Rev. 003, Specification 228.160

### Licensing Basis

Specification 228.160 requires min. of 1" clearance between pipe and other components.

#### **Evaluation**

Clearance between items does not meet specification requirements of 1" min. This issue needs further evaluation

Ref. CR-RBS-2012-06241

<u>Conclusion</u>	Condition Meets the Licensing Basis:	Yes	🖂 No
Prepared by:	Amar Dalawari Licensing Basis Reviewer	_ Date _	<u>10/02/12</u>
Reviewed by	John Dunkelberg Peer Reviewer	Date _	10/3/12

LB Evaluation No	LB-03	Originating SWC/A	WC: <u>SWEL1-063</u>	
Equipment ID No	. <u>H13-P693</u> Equip	o. Class <u>20</u>		
Equipment Descr	iption <u>RPS LOGIC</u>	DIV C		
Location: Bldg.	Control Bldg Floor E	l. <u>136</u> Room	, Area <u>1310</u>	

#### **Condition**

Seismic qualification report 8224.600-000-048A indicates the cabinet is bolted per GE mounting pattern with 5/8" bolts. The drawing or calculation depicting /performing analysis of the mounting pattern at the anchorage location could not be located. Seismic qualification report for panel H13-P693 panel does not explicitly show the configuration or the number of the bolts used to mount the test panel to the seismic shake table.

#### **Documents Reviewed**

8224.600-000-048A, Rev. 300, GE-914E522, sheet 1 & sheet 2.

### Licensing Basis

Seismic qualification must be demonstrated by documentation which justifies the acceptability of the as-built anchorage.

#### **Evaluation**

There is no licensing basis document to confirm the number of bolts required to attach the panel to the support structure. This is a documentation issue. Condition Report initiated to locate the GE bolt pattern drawing. CR-RBS-2012-06238 has been initiated.

<u>Conclusion</u>	Condition Meets the Licensing Basis:	Yes	🖂 No
Prepared by:	Amar Dalawari Add Januari Licensing Basis Reviewer	Date	<u>10/02/12</u>
Reviewed by:	John Dunkelberg Peer Reviewer	Date	<u>10-02-12</u>

LB Evaluation No.	LB-04		Origir	nating SW0	C/AWC	AWC-1063	
Equipment ID No.	H13-	P693	Equip	. Class	20	_	
Equipment Descrip	tion	RPS LOGIO	C DIV C				
Location: Bldg.	СВ	_ Floor El	136'	_Room, A	rea	1310	

#### **Condition**

Loose items in Main Control Room. Temp I&C work table set up adjacent to panel H13-P693, with loose equipment on table.

Several loose items – P&ID chart, stick files on wheels, several office supply cabinets not attached to floor or adjacent panels.

#### **Documents Reviewed**

EDS-ME-002, Rev 2, Control of Loose Items provides general guidelines for adding loose items in the Main Control Room.

#### Licensing Basis

EDS-MD-002 provides guidance for temporary work items in the MCR.

#### **Evaluation**

I&C contacted to verify temporary work tables meet intent of EDS-MD-002, or remove/relocate. Other items at north end of Main Control Room may be in accordance with EDS-MD-002 guidelines. Further evaluation needed.

A CR is required.

<u>Conclusion</u>	Condition Meets the Licensing Basis:	Yes	🛛 No
Prepared by:	John Dunkelberg Licensing Basis Reviewer	_ Date	<u>10-04-12</u>
Reviewed by:	Amar Dalawari Aga Jawawi Peer Reviewer	_ Date _	10/4/12

LB Evaluation No.		LB-04	_ Origin	ating SWC	AWC	AWC-1063	
Equipment ID No.	H13-F	<b>2</b> 693	Equip	. Class	20	_	
Equipment Descrip	tion	RPS LOGIC	DIV C				
Location: Bldg.	СВ	_ Floor El	136'	Room, Are	ea	1310	

#### **Condition**

Loose items in Main Control Room. Temp I&C work table set up adjacent to panel H13-P693, with loose equipment on table.

Several loose items – P&ID chart, stick files on wheels, several office supply cabinets not attached to floor or adjacent panels.

#### **Documents Reviewed**

EDS-ME-002, Rev 2, Control of Loose Items provides general guidelines for adding loose items in the Main Control Room.

#### Licensing Basis

EDS-MD-002 provides guidance for temporary work items in the MCR.

#### **Evaluation**

RBS Design Engineering contacted I&C, asked them to verify temporary work tables meet intent of EDS-MD-002, or remove/relocate.

RBS Design Engineering reviewed the condition and provided the following disposition:

"EDS-ME-002 "Control of Loose Items" provides instructions for storing loose items in the plant, including the control room. Additional information is found in ER-RB-1996-0504-000 and ER-RB-2003-0326-004. It was determined that the described conditions satisfy the requirements of the above documents and therefore there is no seismic interaction issue."

Based on the above evaluation, RBS Engineering did not initiate a CR.

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<u>Conclusion</u>	Condition Meets the Licensing Basis:	🛛 Yes 🗌 No
Prepared by: _	John Dunkelberg Jedduckburg Licensing Basis Reviewer	Date <u>10-04-12</u>
Reviewed by: _	Amar Dalawari An Jamar Peer Reviewer	Date <u>10/4/12</u>

 LB Evaluation No.
 LB-05
 Originating SWC/AWC
 SWEL1-047

 Equipment ID No.
 EHS-MCC16A
 Equip. Class
 1

 Equipment Description
 STANDBY CLG TOWER 1 MTR CNTRL CENTER 16A

Location: Bldg. <u>SCT</u> Floor El. <u>118 ft</u> Room, Area <u>0104</u>

## **Condition**

The following three issues were identified:

- 1) Panel / Bucket 4D: Top hinge is off the swivel pin. The pin is not inside the stationary hinge. Does not appear to cause an operation problem.
- 2) Panel / Bucket 5B: The screw appears to be missing at bottom left hand corner of transformer.
- 3) Panel / Bucket 2A: Transformer has three screws installed. The top right screw was not installed. The panel does not appear to be drilled for the fourth hole.

## **Documents Reviewed**

0242.562-082-291 Rev. 301 0242.562-082-292 Rev. 301 G13.18.15.2\*010 Rev. 0 4244.566-801-001B, Rev. 300 4242.562-082-002E, Rev. 300 4242.562-082-008, Rev. 00

## Licensing Basis

Documentation requires that the panel have all hinges and fasteners installed to demonstrate seismic qualification.

## **Evaluation**

There are no documents and/or seismic qualification reports; and review of the condition indicates that there is no licensing basis to justify qualification of the panel with two (2) hinges out of three (3) hinges engaged or to seismically accept the transformers installed with three (3) screws instead of qualified four (4) screws. Further evaluation is required.

CR-RBS-2012-06311 has been written.

<u>Conclusion</u>	Condition Meets the Licensing Basis:	Yes	🖂 No
Prepared by:	Amar Dalawari Albu Jawar Licensing Basis Reviewer	_ Date _	10/05/12
Reviewed by:	John Dunkelberg Peer Reviewer	_ Date _	10/5/12

LB Evaluation No.		LB-06	Orig	inating SWC/AWC	SWEL1-062	
Equipment ID No.	ENS	SWG1A E	quip. Cl	ass <u>3</u>		
Equipment Descri	ption	4160 Stand	lby SW	GR Bus1A		
Location: Bldg.	СВ	– Floor El.	98	Room, Area	1117	

#### **Condition**

The door lower hinge pin raised approximately 1/4 inch at ACB08. The door upper hinge pin raised approximately 1/4" at ACB04;

The door middle hinge pin is raised at ACB06.

Tie wrap (FME) is on right sided of cubicle ACB07. Upper wire tie to cabinet at door is broken on ACB08 hinge side.

#### **Documents Reviewed**

0242.521-102-002 Specification 248.000

## Licensing Basis

Hinge pins should be completely engaged in hinge leaf(s).

## **Evaluation**

The raised hinge pins is not in conformance with the licensing basis. However, the 1/4" protrusion of the hinge pins do not adversely impact the ability of the door to remain in place during all operating conditions including seismic events as there is adequate connection to fully support the weight of the door, and as the load is distributed over all door connection points. As a result, this condition has no adverse impact on the proper operation of the doors or of the panel.

Tie wrap (FME) is on right sided of cubicle ACB07. Upper wire tie to cabinet at door is broken on ACB08 hinge side. Not seismic issue. Tie wrap & wire bundles not reqd. by 248.000, installed for convenience of Maintenance, not seismic issue.

Ref: CR-RBS-2012-06312

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<u>Conclusion</u>	Condition Meets the Licensing Basis:	Yes	🖂 No
Prepared by:	John Dunkelberg	_ Date _	<u>10-25-2012</u>
Reviewed by:	Amar Dalawari Agu Jamau Peer Reviewer	_ Date _	10/25/12

LB Evaluation No.		LB-07	Origin	ating SWC/A	WC	<u>SWEL1-056</u>	3
Equipment ID No.	ENB-	BAT01A	Equip	. Class <u>15 –</u>	Battery	Racks	
Equipment Descrip	otion 1A	STANDBY	<u>BUS A 1</u>	25 VOLTS D	IRECT	CURRENT S	<u>SYS</u>
Location: Bldg.	СВ	_ Floor El	116	_Room, Area	I	N/A	

#### **Condition**

ENB-BAT01A, battery rack angle attachment to the imbedded sill is missing one weld of two (on either side of angle) at two locations. The first location is at cell 38 and the second location is at cell 42. These are the lower racks (shorter ones). There are approximately 60 such welds on the lower rack.

#### **Documents Reviewed**

EE-038C EE-038AA E&DCR C-20908A

### Licensing Basis

Welds are shown at each support point

## **Evaluation**

E&DCR C-20908A approved the deletion of these welds. Condition is in compliance with design/licensing basis.

<u>Conclusion</u>	Condition Meets the Licensing Basis:	🛛 Yes 🗌 No	
Prepared by:	John Dunkelberg Je Lucensing Basis Reviewer	Date	
Reviewed by: _	Amar Dalawari And Amari Peer Reviewer	Date <u>10/5/12</u>	

LB Evaluation No.	LB-08	_ Originating SWC/AW	C <u>SWEL1-057</u>
Equipment ID No.	ENB-CHRG1A	_ Equip. Class1	6
Equipment Description	on <u>STDBY BUS</u> <u>R 1A</u>	A 125 VOLTS DIREC	T CURRENT SYS BATRY
Location: Bldg.	<u>CB</u> Floor El	<u>116 ft</u> Room, Area	1214

#### **Condition**

Two tapping screws (#10-32) on the Terminal Panel depicted on drawing 0244.523-072-021 are missing. Terminal board sized 38" x 27" requires to be mounted on the structural steel channel of the charger using twelve (12) #10-32 screws.

#### **Documents Reviewed**

0244.523-072-021 Rev. 300

#### Licensing Basis

There is no licensing basis document to justify mounting the terminal panel to the structural steel members of the charger using ten (10) screws instead of twelve (12) screws as identified in drawing 0244.523-072-021.

#### **Evaluation**

Missing fasteners are required per 0244.523-072-021. CR-RBS-2012-06326 has been initiated.

<u>Conclusion</u>	Condition Meets the Licensing Basis:	🗌 Yes 🛛 No
Prepared by:	Amar Dalawari	Date <u>10/06/12</u>
Reviewed by	r: John Dunkelberg	Date <u>10/6/12</u>

LB Evaluation No.	LB-09	)	Origin	ating SWC/AWC	;	SWEL 1-045	
Equipment ID No.		EHS-MCC14	A	Equip. Class		1	
Equipment Descrip	tion	STANDBY S	WGR R	<u>8M 1A 480V MCC</u>	C14	<u>A</u>	
Location: Bldg.	СВ	_ Floor El	98	Room, Area			

#### **Condition**

Front door at breaker 2AT the top hinge was not attached completely (pin out of hinge significantly) Door is approximately 12" x 12" with 2 hinges and two latches.

Front door at breaker 2AB, the top hinge was not attached completely (pin out of hinge significantly) Door is approximately 12" x 12 with 2 hinges and two latches.

Mounting for control power transformers are missing one mounting screw of 4. Bottom Right Screw Missing - Cubicle 2C, 4A, 4C, 4D, 4E, 4F; Bottom Left Screw Missing - Cubicle 4B

#### **Documents Reviewed**

0242.562-082-006 0242.562-082-007

#### Licensing Basis

Documentation requires that the panel have all hinges and fasteners installed to demonstrate seismic qualification.

## **Evaluation**

There is no licensing basis for loose fasteners and items as described above. Further evaluation is required. See CR-RBS-2012-06323.

<u>Conclusion</u>	Condition Meets the Licensing Basis:	Yes	🛛 No
Prepared by:	Amar Dalawari A Jawan Licensing Basis Reviewer		Date <u>10-06-12</u>
Reviewed by:	John Dunkelberg Peer Reviewer		Date <u>10/6/12</u>

LB Evaluation No. <u> </u>	.B-10 Originating SWC/AWC <u>SWEL1-049</u>
Equipment ID No	EHS-MCC2L Equip. Class 1
Equipment Description	n <u>AUXILIARY BUILDING MCC2L</u>
Location: Bldg.	<u>AB</u> Floor El. <u>141 ft</u> Room, Area <u>6306</u>

#### **Condition**

Panel / Bucket 2B: The screw that attaches the back plate of the breaker to the bucket is missing in the upper right corner

Panel / Bucket 1C: Transformer is missing upper right attachment screw (3 screws of 4 are installed)

#### **Documents Reviewed**

0242.562-082-111 Rev. 301 0242.562-082-112 Rev. 301 G13.18.15.2\*010 Rev. 0 4244.566-801-001B, Rev. 300 4242.562-082-002E, Rev. 300 4242.562-082-003A, Rev. 300 4242.562-082-008, Rev. 300 201.130-168, Rev. 01

#### Licensing Basis

Documentation requires that the back plate and transformer have all fasteners installed to demonstrate seismic qualification.

#### **Evaluation**

There are no documents and/or seismic qualification reports; and review of the condition indicates that there is no licensing basis to justify qualification of the circuit breaker where the back plate is attached to the bucket with three (3) screws instead of the four (4) screws required by the design documents, or missing transformer screw.

CR RBS-2012-06483 has been initiated for this condition.

<u>Conclusion</u>	Condition Meets the Licensing Basis:	🗌 Yes	🖂 No
Prepared by:	Amar Dalawari Amar Dalawari Licensing Basis Reviewer	_ Date _	<u>10/08/12</u>
Reviewed by:	John Dunkelberg Peer Reviewer	_ Date _	10/8/12

LB Evaluation No.	LB	<u>-11</u> Oriç	jinating SWC/A	AWC	AWC-1070	
Equipment ID No.	HVC-AOE	<u>D6A</u> Equi	p. Class	7		
Equipment Descrip	tion <u>HV</u>	C*ACU1A AIR	OUTLET (CD-	-1-1		
Location: Bldg.	<u>CB</u> Flo	oor El. <u>115</u>	Room, Area	а	1200	

## **Condition**

S hooks on light fixtures are open at various locations. There is a potential for light fixtures to become unhooked from support chains during a seismic event, and potentially become a missile that might adversely interact with plant soft targets. Specific cases noted in Control Bldg El 115 ft. north end of bldg, HVC room:

Overhead hanging light fixture above HVC-PDI23A has open S hook on fixture north end chain support. South end fixture support chain S hook is closed. NOTE: there are no safety related soft targets in the area of this fixture, and therefore not a seismic issue if the chain were to fail.

North end of room, light fixture north of HVC-FN1A, east end fixture support chain S hook is open. West side support chain S hook closed.

NOTE: intervening 4x4TS structure will not allow contact of fixture with nearby safety related components, if the chain were to fail. Therefore not a seismic issue.

South end of room, light fixture north of SCI-XRC10B1, light fixture north side support chain S hook is not properly attached to the fixture. South support chain S hook is closed. Note: There are no safety related soft targets in the area, and therefore not a seismic issue.

## Elevation 98 ft CB:

The "S" hooks supporting the lights behind EHS-MCC8B and ENB-SWG01B are open and need to be closed. However, the location of the fixtures cannot create a seismic interaction with any safety related components.

One light behind EHS-MCC8B is installed in a tilted or out of level position. The light is secure (not a seismic issue)

#### Documents Reviewed EE-073 series drawings

### **Licensing Basis**

Non safety related items are to be supported such that there is no interaction with plant equipment.

## **Evaluation**

The 2 bulb florescent fixtures are generally supported from chains attached to overhead structures. The fixture connects to the chain with an "S" hook. The "S" hook on fluorescent lighting chains in seismic areas is controlled by EE-073 series drawings. Drawing EE-073A, detail AT require the "S" hook to be closed.

CR RBS-2012-07090 has been initiated.

<u>Conclusion</u>	Condition Meets the Licensing Basis:	□ Y	es 🛛 No
Prepared by:	John Dunkelberg	_ Date	<u>10-25-2012</u>
Reviewed by:	Amar Dalawari Agu Jaman Peer Reviewer		Date <u>10/25/12</u>

LB Evaluation No.	LB-12	Originating SWC/AWC	SWEL1-119
Equipment ID No.	<u>HVR-AOV165</u> Equ	ip. Class <u>7</u>	
Equipment Description	on <u>CONTMT SF</u>	PLY OUTBD ISOL (AL-2-15	<u>2')</u>
Location: Bldg.	AB Floor El.	<u>141 ft</u> Room, Area <u>6307</u>	_

#### **Condition**

One (1) of the eight (8) bolts that mount the actuator to the mounting bracket installed between the valve and the actuator is missing. Per drawing 0228.241-092-014, the bolts are A193 Grade B7 material. Seismic walk down team also confirmed that all four (4) bolts between the mounting bracket and the valve are installed.

#### **Documents Reviewed**

0228.241-092-014 Rev. 300 SQE 1903, Rev. 002 4228.241-092-004F, Rev. 300

#### Licensing Basis

Documentation requires that the actuator mounting bracket have all fasteners installed to demonstrate seismic qualification.

#### **Evaluation**

There are no documents and/or seismic qualification reports; and review of the condition indicates that there is no licensing basis to justify qualification of the valve assembly where operator is attached to the bracket with seven (7) bolts instead of the eight (8) bolts required by the design documents. The missing bolt is required to be installed per the design drawing and seismic report.

CR-RBS-2012-06352 initiated.

<u>Conclusion</u>	Condition Meets the Licensing Basis:	Yes	🛛 No
Prepared by:	Amar Dalawari Licensing Basis Reviewer	_ Date _	10/10/12
Reviewed by:	John Dunkelberg Peer Reviewer	_ Date _	10/10/12

LB Evaluation No.	LB-13	Originating SWC/AWC AWC -	<u>2009</u>
Equipment ID No.	SPF-AOV32B	Equip. Class <u>7</u>	
Equipment Descrip	tion <u>F POOL PR</u>	RFCN FLT1B INLST FD-9-87	
Location: Bldg.	FB Floor El.	<u>070</u> Room, Area <u>5021</u>	

## **Condition**

Hand lever of valve SFC-V356 is within <sup>3</sup>/<sub>4</sub>" of 4" pipe – clearance violation

#### **Documents Reviewed**

228.160

## Licensing Basis

Documentation requires that these components have a minimum 1" clearance to demonstr	ate
seismic qualification.	

### **Evaluation**

Further evaluation is required. See CR-RBS-2012-06687

<u>Conclusion</u>	Condition Meets the Licensing Basis:	🗌 Yes	🖂 No
Prepared by:	John Dunkelberg	Date	10-10-12
Reviewed by:	Amar Dalawari Peer Reviewer	Date	10/10/12

LB Evaluation No.	LB-14		Origin	ating SWC/AW	C <u>SWEL2-006</u>	
Equipment ID No		EHS-MCC8B	Equi	p. Class <u>1</u>		
Equipment Descrip	tion	STAN	DBY SI	VGR RM 1B M	CC8B	
Location: Bldg.	СВ	Floor El.	98	Room, Area	1114	

#### **Condition**

Cubicle 2AT – The breaker is missing the washer behind the rivet head, near the panel cover catch

Cubicle 2B - Split block cover is not fully engaged at bottom

Cubicle 1B, Right side of cubicle, temp tag in cableway

Cubicle 2D, Right side of cubicle, power cable appears to be tight to bottom of MCC, touching steel.

Cubicle 3AB, missing grommet with power cable through back wall.

Cubicle 3B, cable way on right of cubicle, loose bolt. Bolt is between cable way and cubicle is installed, but not tight.

Cubicle 3B – top left screw in bucket to upper plate may not be fully engaged (tight)

Cubicle 4C, cableway on right, grommet is not fully engaged.

Cubicle 5E, at bottom of cubicle, bottom of door, catch plate appears out of alignment

Cubicles 4A, 5C, 7C - Control wire needs to be taped

Cubicle 4D – On mounting plate, not all the mounting screws have washers.

Cubicle 5A – Center fuse terminal screw on bottom is not seated (no cable installed at this location.

Cubicle 5B – Loose MCC screw on bottom right between cubicle and cable way

Cubicle 7A – Loose door latch thumb screw on top right side "door latch"

Cubicle 7F – a piece of foreign material approximately 3" long x  $\frac{1}{2}$ " wide x 1/8" thick is between breaker cubicle and outside panel on the left side of bottom.

#### **Documents Reviewed**

0242.562-082-004 0242.562-082-005 MR 94-0048 E&DCR C26399B

#### Licensing Basis

There is no licensing basis for loose fasteners.

#### **Evaluation**

- Cubicle 2AT The breaker is missing the washer behind the rivet head, near the panel cover catch. (not a seismic issue, Refer to MR 94-0048 for discussion of breaker handle issues).
- Cubicle 2B Split block cover is not fully engaged at bottom---Control power split block covers were added under E&DCR C26399B and are not required for seismic or EQ and their failure has no impact with respect to operation of the associated components based on EQIS C-320, not seismic issue.
- Cubicle 1B, Right side of cubicle, temp tag in cableway, FME/ housekeeping item, not seismic issue.
- Cubicle 2D, Right side of cubicle, power cable appears to be tight to bottom of MCC, touching bottom edge of panel. Not seismic issue.

Cubicle 3AB, missing grommet with power cable through back wall. Not seismic issue.

Cubicle 3B, cable way on right of cubicle, loose bolt. Bolt is between cable way and cubicle is installed, but not tight. Per drawing 0242.562-082-004, cubicle 3B is a spare cubicle and breaker installed in the cabinet is not taking any electrical load. Further evaluation is required.

Cubicle 3B – top left screw in bucket to upper plate may not be fully engaged (tight). Per drawing 0242.562-082-004, cubicle 3B is a spare cubicle and breaker installed in the cabinet is not taking any electrical load. Further evaluation is required.

Cubicle 4C, cableway on right, grommet is not fully engaged. Not seismic issue.

- Cable way to right of Cubicle 5E, at bottom of cubicle, bottom of door, catch plate appears out of alignment. Door closes and latches per design. Not seismic issue.
- Cubicles 4A, 5C, 7C Control wire needs to be taped. Wires are not terminated and do not appear to be an electrical issue. Not a seismic issue.
- Cubicle 4D On mounting plate, not all the mounting screws have washers (not lock washers). Use of non locking washers with mounting screws does not adversely affect the ability of the screw to make up a adequate connection. Not seismic issue.
- Cubicle 5A Center fuse terminal screw on bottom is not seated (no cable installed at this location, not a seismic issue)

Cubicle 5B – loose MCC screw on bottom right between cubicle and cable way. Response: Per drawing 0242.562-082-004, cubicle 5B is a spare cubicle and no components are installed in this cubicle. Further evaluation is required.

- Cubicle 7A Loose door latch thumb screw on top right side "door latch". This cubicle is a spare (Future). It is approximately 18 inches tall, and has 2 hinges and 2 door latch thumb screws to secure it to the cabinet. Review of the drawing and inspection of the Training Department spare MCC shows that the loose door latch may allow the door to move slightly in and out of the plane of the cubicle. However, the door cannot move towards the bucket as the door stops are in place thereby not allowing movement towards the bucket. Any small increase in loading on the door due to the movement of the loose screw would be distributed to the other three attachment points, and this potential loading would beb well within the capacities of these attachment points. Since there is not active electrical component in the cubicle, there is no potential adverse reaction due to the loose door latch. Based on the above, there is no seismic issue.
- Cubicle 7F a piece of foreign material approximately 3" long x ½" wide x 1/8" thick is between breaker cubicle and outside panel on the left side of bottom (house keeping, not a seismic issue)

<u>Conclusion</u>	Condition Meets the Licensing Basis:	Yes	🖂 No
Prepared by:	John Dunkelberg	Date	10-29-12
	Licensing Basis Reviewer	-	
	AA aleman		
Reviewed by:	Amar Dalawari	_ Date	10-29-12
	Peer Reviewer		

LB Evaluation No. <u>LB-15</u> Originating SWC/AWC <u>SWEL2-005</u>

Equipment ID No. <u>EHS-MCC2H</u> Equip. Class <u>1</u>

Equipment Description <u>AUXILIARY BUILDING MCC2H</u>

Location: Bldg. <u>AB</u> Floor El. <u>114 ft</u> Room, Area <u>6203</u>

## **Condition**

Cubicle 1E – May need edge guard at lower right side of bucket.

Cubicle 3C – The Split block cover is not fully engaged at top.

Cubicles 4D, 7D – Appears to be missing 2 mounting screws for breaker mounting plate. Top right and Middle right.

Cubicle 5B – Split block cover is not installed and is loose in the bottom of bucket.

Ref. CR-RBS-2012-06391; CR-RBS-2012-06399

#### **Documents Reviewed**

0242.562-082-087 Rev. 301 8224.160-000-048A, Rev. 300 4244.566-801-001B, Rev. 300 4242.562-082-002E, Rev. 300 4242.562-082-003A, Rev. 300 4242.562-082-008, Rev. 300 201.130-168, Rev. 01

## Licensing Basis

Documentation requires that the mounting plate have all fasteners installed to demonstrate seismic qualification.

#### **Evaluation**

- Cubicle 1E May need edge guard at lower right side of bucket. Not a seismic issue
- Cubicle 3C The Split block cover is not fully engaged at top. Not a seismic issue
- Cubicles 4D, 7D Appears to be missing 2 mounting screws for breaker mounting plate. Top right and Middle right. This condition requires further evaluation.
- Cubicle 5B Split block cover is not installed and is loose in the bottom of bucket. Not a seismic issue.

CR-RBS-2012-06391 & CR-RBS-2012-06399 initiated.

<u>Conclusion</u>	Condition Meets the Licensing Basis:	Yes	🖂 No
Prepared by:	Amar Dalawari Licensing Basis Reviewer	Date _	<u>10/10/12</u>
Reviewed by:	John Dunkelberg Peer Reviewer	Date _	10/10/12

LB Evaluation No. <u>LB-16</u>	_ Originating SWC/AWC <u>AWC-2006</u>
Equipment ID No. <u>EHS-N</u>	MCC8B Equip. Class <u>1</u>
Equipment Description	STANDBY SWGR RM 1B MCC8B
Location: Bldg. <u>CB</u>	_ Floor El <u>098 ft_</u> Room, Area <u>_1114</u>

### **Condition**

Several mounting bolts on the vent grills on the HVAC ductwork installed overhead just east of component ENB-INV01B1 appear to missing. On each of these two (2) 24" x 30" vent grilles six (6) of the twelve (12) pre-drilled holes in the frame of the vent grilles have the mounting bolts.

Loose thumb screw on ENS-SWG1B cubicle 1, lower right.

Loose screw on ENB-INV01B1 north face, bottom right is not tight.

### **Documents Reviewed**

0216.110-996-066 0216.110-996-074 0216.110-996-076 0244.514-000-021 0244.514-000-022

## Licensing Basis

Documentation requires that the vent grill have all fasteners installed, and ENS-SWG1B thumb screw be installed (and tight) to demonstrate seismic qualification.

## **Evaluation**

No documents could be located that define exactly how many bolts or screws are needed to attach the vent grilles to the ductwork framing. No documents exist to accept loose thumb screw on ENS-SWG1B cubicle 1, lower right.

Further evaluation is required to determine the acceptability of the attachment of the HVAC grill, and loose thumb screw on ENS-SWG1B, cubicle1.

CR-RBS-2012-06957 has been initiated.

Conclusion Condi	tion Meets the Licensing Basis:	Yes	🛛 No
Prepared by: Licens	Amar Dalawari	Date <u>10/12</u>	2/12
Reviewed by:	John Dunkelberg Peer Reviewer	Date <u>10/12</u>	2/12

LB Evaluation No.	LB-17	Originating SWC/AWC _	AWC-2005
Equipment ID No.	EHS-MCC2H	Equip. Class1	
Equipment Descrip	tion <u>AUXILIARY E</u>	BUILDING MCC2H	
Location: Bldg.	CB Floor El.	<u>98</u> Room, Area	1114

### **Condition**

NHS-MCC2C & NHS-MCC2D: Cabinets are in close proximity to each other (approx 1") but not connected (bolted together). MCC2C has 3 sections, MCC2D has 5 sections. Both welded to sills, potential seismic interaction is side to side.

Observation: At door PW-123-04, hoist in the overhead with chain that extends from 123' to 114' floor, touching nearby rigid conduits.

### **Documents Reviewed**

Asset Suites 242.561 0242.561-081-080

## Licensing Basis

These panels are not required to function during and after a seismic event, as they are not safety related.

## **Evaluation**

Based on review Asset Suites & specification 242.561, NHS-MCC2C & NHS-MCC2D are classified as non-safety related panels. The panels are mounted adjacent to each other, side to side. Each panel is welded to embedded floor sill plates. The panels may interact with each other during a seismic event, since they are separated by a small space, less than 1". However, due to the location of the panels in the room, there will be no adverse seismic interaction with any safety related equipment in the room.

Hoist chain in overhead that extends from 123' to 114' floor, touches nearby rigid conduits. Not a seismic concern due to length of chain (it will just sway, without hard impact on conduits) and the conduits are not soft targets.

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<b>Conclusion</b>	Condition Meets the Licensing Basis:	
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🛛 Yes

) Priles 6

Date <u>10-25-2012</u>

] No

John Dunkelberg / \_\_\_\_\_ Licensing Basis Reviewer

Reviewed by: <u>Amar Dalawari</u> Peer Reviewer

Prepared by: \_

Date 10/25/12

LB Evaluation No.	LB-18	Originating SWC/AWC _	AWC-1048
Equipment ID No.	EHS-MCC2D Equip	. Class 1	
Equipment Descrip	otion <u>AUXILIARY E</u>	BUILDING MCC2D	
Location: Bldg.	Aux Floor El. <u>141</u>	Room, Area	6302

#### Condition

- 1. EHS-MCC2D behind cubicle 2D, lower right hand door screw is not fully engaged, approx 1/2" sticking out.
- 2. EHS-MCC2D behind cubicle 4A door hinge needs readjustment. Door is currently secure with tight fit.
- 3. Near vert. cable tray 1TL803B, behind EHS-MCC2B, sprinkler head about 20 ft in overhead is very close (almost touching) to cable tray.
- 4. Above COP-H230 (EJS-SWG2B area) there is a length of rope in the overhead.

## **Documents Reviewed**

EEAR-E0420

## **Licensing Basis**

All fasteners must be installed per design to satisfy seismic requirements

## Evaluation

- 1. EHS-MCC2D behind 2D, screw not fully engaged. Nonconforming condition, WR 287016 written to rework. CR-RBS-2012-06446 initiated to track issue.
- 2. EHS-MCC2D behind cubicle 4. Door is securely attached to panel, and therefore there is no seismic issue. Rework door hinge.
- 3. Sprinkler head clearance has been evaluated by EEAR-E0420, acceptable.
- 4. Rope in the overhead is a housekeeping issue, not a seismic issue.

**Conclusion** Condition Meets the Licensing Basis:

NoPrepared Yes

John Dunkelberg by:

Date 10-12-12

Licensing Basis Reviewer

Amar Dalawa

Reviewed by:

Peer Reviewer

Date 10/12/12

LB Evaluation No.	LB-19	Originating S	WC/AWC	SWEL1-117	<b>,</b>
Equipment ID No.	EHS-MCC2K	Equip. Class	1		
Equipment Descrip	otion <u>Auxiliary</u>	/ Building MCC2K			
Location: Bldg.	<u>AB</u>	-loor El. <u>141</u>	Room, Area	6302	

#### **Condition**

Cubicle 6B, 6C, 3B, 2C – split block cover may not be fully engaged on bottom.

6D, 5A, 4D, 3D, 7D – missing screw in top right corner of cubicle.

6A – missing a screw on the transformer - lower right screw, red material directly behind fastener hole.

#### **Documents Reviewed**

0242.562-082-113, Rev. 300 0242.562-082-114, Rev.301 G13.18.15.2\*010, Rev. 0 4244.566-801-001B, Rev. 300 4244.566-801-002E, Rev. 300 EQIS C-320 & E7DCR C26399B

#### Licensing Basis

Documentation requires cubicles to have all internal fasteners installed to demonstrate seismic qualification.

#### **Evaluation**

Cubicle 6B, 6C, 3B, 2C – split block cover may not be fully engaged on bottom. Control power split block covers were added under E&DCR C26399B and are not required for seismic or EQ and their failure has no impact with respect to operation of the associated components based on EQIS C-320.

6D, 5A, 4D, 3D, 7D – missing screw in top right corner of cubicle. 2' cubicle – Further evaluation is required.

6A – missing a screw on the transformer – Further evaluation is required.

CR-RBS-2012-06869 has been initiated

<u>Conclusion</u>	Condition Meets the Licensing Basis:	Yes	🖂 No
Prepared by:	John Dunkelberg Licensing Basis Reviewer	_ Date	10-25-2012
Reviewed by:	Amar Dalawari AR Jawari Peer Reviewer	_ Date _	10/25/12

LB Evaluation No.	LB-20	Originating SWC/AWC	SWEL1-048
Equipment ID No.	EHS-MCC2B	_Equip. Class1	
Equipment Description	EHS-MCC2B		
Location: Bldg. <u>AB</u>	_ Floor El	<u>141</u> Room, Area	6303

#### <u>Condition</u>

Cubicle 7A – Missing a bolt on transformer, upper right, 1 of 4 bolts (screws)

- Cubicle 5A one screw is missing on the rear wall of the cubicle on the upper right side of the plate
- Cubicle 4A no cover on split term block (spare cubicle) Not a seismic issue
- Cubicle 1CT missing grommet on right side (power entering cubicle)- Not seismic issue.
- Cubicle 1CB missing lower right back panel screw
- Cubicle 1D, grommet is not engaged on right side of cubicle.

#### **Documents Reviewed**

MR 94-0048 E&DCR C26399B

## Licensing Basis

Documentation requires that the cubicle internal components have all fasteners installed to demonstrate seismic qualification.

## **Evaluation**

Cubicle 7A – Missing a bolt on transformer, upper right, 1 of 4 bolts (screws). This MCC is located in the Auxiliary Building. Building acceleration values are lower in this building than the Standby Cooling Tower (SBCT). LB-06 & CR-RBS-2012-6311, which evaluates missing transformer screws in the SBCT, envelops this condition of only 3 of 4 transformer screws installed in cubicle 6A. Therefore a missing screw in cubicle 7A is acceptable.

Cubicle 5A – one screw is missing on the rear wall of the cubicle on the upper right side of the plate. This is the same condition observed in SWEL1-117. Further evaluation is required.

Cubicle 4A – no cover on split term block (spare cubicle) – Control power split block covers were added under E&DCR C26399B and are not required for seismic or EQ and their failure has no impact with respect to operation of the associated components based on EQIS C-320.

Cubicle 1CT – missing grommet on right side (power entering cubicle)- Not seismic issue.

Cubicle 1CB – missing lower right back panel screw. The missing screw is not installed due to interference with insulation (red) behind the panel. Further evaluation is required.

Cubicle 1D, grommet is not engaged on right side of cubicle. Not a seismic issue.

CR-RBS-2012-06866 is initiated.

<b>Conclusion</b> C	condition Meets the Licensing Basis:	Yes	🖂 No
Prepared by: _	John Dunkelberg Licensing Basis Reviewer	Date	<u>10-25-2012</u>
Reviewed by: _	Amar Dalawari AB Jamar Peer Reviewer	Date	10/25/12

# Attachment G

# **Peer Review Checklist for SWEL**

#### Instructions for Completing Checklist

This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (SWEL) in accordance with EPRI 1025286, 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.

4	Mana the first estate for the second environment of the OM/EL 4 coloration O	
١.	were the live safety functions adequately represented in the SWEL 1 selection?	Y 🖂 IN
	The SWEL 1 selection represents all five (5) safety functions. Several components support multiple safety functions. Selected components include both frontline and support systems.	

2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:

 $Y \boxtimes N \square$ a. Various types of systems? Items on SWEL 1 are part of a variety of systems such as Reactor Protection, Standby Liquid Control, Automatic Depressurization, High Pressure Core Spray, Low Pressure Core Spray, Residual Heat Removal, Reactor Core Isolation Cooling, Main Control Room Ventilation and vital A/C and D/C power systems. Critical subsystems include the Main Steam Isolation Valves and the Standby Cooling Towers.  $Y \boxtimes N \square$ b. Major new and replacement equipment? Several major new and replacement equipment installed or upgraded within the past 15 years are included on SWEL 1.

c. Various types of equipment?

SWEL 1 includes at least one example of each of the 21 classes of equipment identified in Appendix B of EPRI 1025286, except class 13 (Motor Generators). RBS has no safety-related motor generators, so none met the screening criteria for inclusion on Base List 1; therefore, class 13 does not require representation. In general, the number of components in each class is approximately proportional to the number of each class represented on Base List 1. All other classes besides class 11 (Chillers) has at least two components.

Sheet 1 of 3

 $Y \boxtimes N \square$ 

Peer Review Checklist for SWEL		Sheet 2 of 3
d.	Various environments? The components selected for SWEL 1 are located in different buildings, rooms, and/or are on different building elevations. These environments include hot and/or humid areas, inside and outside areas, mild and harsh (i.e., containment).	Y⊠ N□
e.	Equipment enhanced based on the findings of the IPEEE (or equivalent) program? <i>N/A - No equipment enhancements were associated with Seismic IPEEE for RBS.</i>	Y□ N⊠
f.	Were risk insights considered in the development of SWEL 1? The success path equipment list from the IPEEE program was used as a starting point for SWEL 1, which considers equipment importance for safe shutdown. Additionally, risk insights from the plant's Probabilistic Risk Assessment (PRA) model were considered during equipment selection, specifically the Risk Achievement Worth (RAW) values.	Y⊠ N□
3. For	SWEL 2:	
a.	Were spent fuel pool related items considered, and if applicable included in SWEL 2? SWEL 2 includes components associated with spent fuel pool cooling, which are Seismic Category I systems or equipment.	Y⊠ N□
b.	Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2? Justification was documented for selection of SWEL 2 components. Based on a review of plant drawings, there are no spent fuel pool penetrations below 10' above the top of the spent fuel racks. Additionally, a review of licensing documents indicate that passive anti-siphon devices ensure that a pipe break will not cause siphon of water below this level. Therefore, there were no components identified that could contribute to rapid drain-down of the spent fuel pool.	Y⊠ N□

\_\_\_\_\_
#### Peer Review Checklist for SWEL

Sheet 3 of 3

4. Provide any other comments related to the peer review of the SWELs.

The peer review team evaluated the initial SWEL 1 and SWEL 2 to ensure that they met the requirements of EPRI 1025286, and provided comments and clarifying questions. Comments and clarifying questions included requests for additional documentation of the component selection process (i.e.: Why was class 13 not represented? Where is there confirmation that the IPEEE program did not identify any vulnerability? Why is rapid drain-down not a concern?)

Changes to the initial SWEL deemed necessary during the walkdown due to inaccessibility were reviewed by the peer reviewers to ensure that the changes did not compromise the overall integrity of the SWEL with respect to these requirements.

The peer reviewers conclude that the components selected are reasonable and diverse, and that the final SWEL meets the intent and specific requirements of EPRI 1025286.

5. Have all peer review comments t	been adequately a	addressed in the final SW	'EL?	Y⊠ N□
Peer Reviewer #1: <u>Bivins Calhoun</u>	- TACU	W.	Date:	10/24/2012
Peer Reviewer #2: <u>Ben Kosbab</u>	VE.	Thele	Date:	10/24/2012

#### Attachment H

#### **Peer Review Comment Forms**

<u>Comment Form</u>	<u>Page</u>
SWEL Peer Review	2
Walkdowns/Checklists Review	7
Licensing Basis Evaluations Review	14

	Entergy			Seismi Review C	ic Walkdown Comments an	Submittal Report Id Resolutions Form	
Engineerin( Report Nun	g nber	S-CS-12-	00001	Rev. Tit 000 Riv Fu	ile ver Bend Stati Ikushima NTTI	ion Seismic Walkdown Report for Resolu F 2.3: Seismic	ution of
Quality Re	lated: 🗍 Y	es	No	Special No	tes or Instructi	ions: Comments apply to SWEL review	
Comment Number	Section/P	age No.	Review Col	omment		Response/Resolution	Reviewer's Accept Initials
~	BL	<del>, -</del>	Define what the asterisk (*) der legend would be a good way to	notes under { o accomplish	Screen 3. A this.	The asterisk indicates that the item supports a <i>secondary</i> safety function. A footnote to the table has been provided.	BDK
2	BL	<del>.</del>	All items under Screen 2 are st configuration inspections. Is th inspections then all will screen	hown to unde nis true? If al out of the SV	ergo regular II undergo NEL 1 list.	No, this is not true and has been corrected.	BDK
с	BL	<del>.</del>	Screen 3 answers should be "Y currently listed under this colun in the "Five Safety Functions" c	Yes" or "No". mn should be columns.	Functions summarized	Noted. The column was updated to Y/N responses and the "Five Safety Functions" updated.	BDK
4	BL	<del></del>	Screen 4 does not identify any enhanced as a result of the IPE confirm that the RBS IPEEE pr seismic vulnerabilities.	· BL1 items a EEE program rogram did no	s having been 1. Please ot identify any	Confirmed, based on the RBS IPEEE submittal and NUREG-1742.	BDK
2	BL	<b>~</b>	No equipment is listed as High under Screen 4. Please confirr inside containment and those c climate? – hot & humid are not	Temp or Hig m (seems lik outside would t defined by E	jh Humidity e SSCs d be due to EPRI).	Draft reviewed was incomplete. That column has been populated as needed.	BDK
9	BL	£	Valve C11-SOVF182 should be Control, not DHR, under "Five (	e listed as Re Safety Funct	eactivity ions".	Corrected.	BDK
7	BL	~	Numerous items checked "Y" fi Screen 5 (no category indicate maintain one of the 5 functions or possibly "Y" with an addition	or Screen 3 a ed). If these c s Screen 3 sh nal clarifying r	are blank for do not nould be "N" note.	Clarification was made that those items that do not have a safety function specified support a secondary one that ultimately maintains at least one of the safety functions	BDK

	Intergy		Seismic Walkdown Review Comments ar	Submittal Report Id Resolutions Form	
Engineering Report Nurr	J RBS-CS-12- her	00001	Rev. Title 000 River Bend Stat Fukushima NTT	ion Seismic Walkdown Report for Resol F 2.3: Seismic	ution of
Quality Rel	lated: 🗌 Yes 🛛	No	Special Notes or Instruct	ions: Comments apply to SWEL review	
Comment Number	Section/Page No.	Review Co	omment	Response/Resolution	Reviewer's Accept Initials
8	SWEL 1	System Type column should ir frontline systems that these ar EPRI Table B-2 in Appendix E function).	nclude reference to the e a part of as listed in : (not just the safety	There was some confusion as to how to fill this column out. RBS Engineering interpreted it to be the way it is populated. This was confirmed as acceptable from Entergy corporate, and consistent with other Entergy sites. No change required.	BDK
ര	SWEL 1	There is no equipment represe generator). Please confirm if a	ənting category 13 (motor any apply.	There were no motor generators on the original list provided by the client that began from the IPEEE evaluations done previously. RBS does not have any safety related Motor Generators.	BDK
10	RDD	Need to confirm basis for dete impact rapid drain-down (i.e. n below about 10 ft above the to USAR section 9.1.2.3.3 states devices are present to prevent siphoned below 10 ft above th not say there are no penetratic EPRI guidance we must either penetrations below this level, j can be removed from SWEL 2 SWFL 2 (reference EPRI FAD	rmining that no items to SFP penetrations exist of the fuel assemblies). It that anti-siphoning t pool water from being e top of the fuel, but does ons below this level. Per r confirm that there are no utstify why these devices to or add them to RDD &	After further document review, Figure 9.1-7 of the RBS USAR identified the elevation of the top of the spent fuel racks is at Elev. 85'. Using that elevation, drawings EC-062U, V, W, EP-077 Series, and EV-003A Series show no penetrations in the pool below Elev. 95'.	BDK

	slution of		Reviewer's Accept Initials	BDK		
ort Form	kdown Report for Resc	apply to SWEL review	nse/Resolution	onsidered and planning s is being done based sess to allow us to on the list.	David Bassi	10/4/2012
Submittal Rep nd Resolutions	ion Seismic Wal F 2.3: Seismic	ions: Comments	Respo	This has been or of the walkdown on divisional acc inspect all items	Resolved By:	Date:
Seismic Walkdown view Comments ar	. Title D River Bend Stat Fukushima NTT	cial Notes or Instruct	nt	liminating duplicates valkdowns.	Date 10/02/12	(770)590-2179
Revi	Re Re		Review Comme	lucing items on list by e own availability during v	de	-ha
	2-00001	⊿ No		Consider red based on kno	njamin D. Kosba	IERCON/Civil
tergy	RBS-CS-1	d: 🗌 Yes 🛛	ection/Page No.	SWEL 1 & 2	viewed By: Be	spartment: EN
${}_{En}$	Engineering Report Numbe	Quality Relate	Comment S <sup>I</sup> Number	11	Rev	Site/D

	on 2.3: Seismic		Reviewer's Accept Initials	7358
i Submittal Report nd Resolutions Form	ation Seismic Walkdown Report of Fukushima Near-Term Task Force Recommendati	ions: OPs Review of SWEL	Response/Resolution	Since designs were similar, it was an arbitrary decision to select only 2 scram accumulators. This was considered sufficient per consensus at the SWEL selection meeting on Sept.6. (if anyone really wants to, we can add additional accumulators to the SWEL, although 10% is probably overkill; two of each type of accumulator would be reasonable) Also, to clarify, there will not be just one of each of the accumulators. We plan on walking down one from each side of the RB.
Seismic Walkdown Review Comments ar	Rev. Title River Bend Sta for Resolution	Special Notes or Instruct		ly I see only 2 scram water side, one for N2 o inspect a percentage,
	CS-12-00001	No No	Review Comment	If I am looking at the equip list correct accumulators are on the list. One for v side. Would it not be more appropriate to do say 10%?
Intergy	) RBS-C	lated: 🗌 Yes	Section/Page No.	
	Engineerin( Report Nun	Quality Re	Comme nt Number	<b>~</b>

2	In Section 3 page 3-2 under Containment Penetrations it states that containment isolations may be considered for inclusion on SWEL 1. I do not see all the CTMT Isol valves on the list. What was the justification for not inspecting all the ctmt isol valves?	I had prov isolation v were select containme largest im We did the base S table in Se would be o Note tha the base S support a water to un Inventory of Because requireme SWEL. I s on that list remember valves whi inclusion in We looked was here a added the best appro included th	ided comm alves to the cted since b ent atmosph pact on the not explicit SWEL, altho ection 6.2 of of interest for at there are SWEL, but ti Containmer nit coolers, Control funct e we are sta not to put all suggest mal , with a foot number) we ch support in Base SWE at the table and chose two ones that h- ach would the table from	ents to add some e list. The HVR co based upon their s nere their failure wa Containment Integ y list all the contai bugh I did review th f the SAR to try to bor the Walkdowns. a number of contai hese usually are on the Decay Heat Ren RHR suppression ction (e.g., ECCS if arting with the IPEI containment isolar king sure we have mote that the SAR as reviewed to ide the Containment In EL. e in section 6.2 of the wo valves. After re- e suggested that wo be to say in the rep in the SAR just like	of the HVR cont intainment isolation as judged to have grity safety function the containment identify isolation the containment identify isolation on the SWEL be moval function (in pool cooling val injection line val EE SSEL, there tion valves on the the HVR valves a Table (6.2-40 if entify containment integrity safety function the SAR when the eceiving Paul's containment second be better. port that the base a Paul suggested	tainment tion valves nication with ve the tion. valves on isolation ns which n valves on cause they e.g., service lves) or a ves). is not a ne Base s I identified f I nt isolation unction for Dunkelberg comments, I I think the se list also d.	
Reviewed By:	Jefe Reynold S	Date	10-2-12	Resolved By:	P. Sicard/ D. F	Bassi	
Sile/Department:	V OP5 Ph. 6185			Date:	9/26/12	2	

	Entergy		Se Revie	ismic Walkdown w Comments ar	n Submittal Report nd Resolutions Form	
Engineerin Report Nur	g RBS-CS-12-0000 mber	01	Rev. 000	River Bend Stat for Resolution o Recommendatio	tion Seismic Walkdown Report f Fukushima Near-Term Task Force on 2.3: Seismic	
Quality Re	elated: 🗌 Yes 🛛 No		Specia	I Notes or Instruct	tions: Comments apply to Walkdowns and Cl	necklists
Comment Number	Section/Page No.	Review Comment			Response/Resolution	Reviewer's Accept Initials
SMM1	SWC-General	Question 2: Need to descri anchorage to satisfy proce Currently the forms are abo not this requirement is sati	ibe the e dural rec out 50/50 sfied.	quipment quirements. ) as to whether or	Forms now describe equipment anchorage condition	W. S.
SMM2	SWC-General	Question 2: This question I observed anchorage. Stati configuration is slightly con anchorage as to whether o condition is acceptable. A g anchorage is not loose, mis provide clarification. This is potential improvement only author's discretion.	has a rec ng only t nfusing fo or not the generic s ssing, or s an obse y. Incorpo	quirement to state he anchorage or bolted observed statement stating bent would ervation of a bration is at the	Forms now describe anchorage condition	W.s
SMM3	SWC-General	Question 5: A number of th list the drawings used for v anchorage. Procedure EN- description of the evaluatio	ne checkl rerificatio DC-168 on results	ists reviewed only n of the requires a brief	Forms now describe anchorage inspection results	W.S.

	Enter	gy		Se Revie	ismic Walkdown w Comments ar	n Submittal Report nd Resolutions Form	
Engineerin Report Nur	g mber	RBS-CS-12-0000	1	Rev. 000	River Bend Stat for Resolution o Recommendatio	ion Seismic Walkdown Report f Fukushima Near-Term Task Force on 2.3: Seismic	
Quality Re	lated:	Yes 🛛 No		Specia	I Notes or Instruct	tions: Comments apply to Walkdowns and Cl	necklists
Comment Number	Section	n/Page No.	Review Comment			Response/Resolution	Reviewer's Accept Initials
SMM4	SWC-0	General	General Comment: Consid to the SWC/AWC for cond identified. This is not direc procedure but would provid Incorporation of this comm an observation of a potent	ler addin itions wh tly requir de clarific ient is no ial improv	g CR/LB numbers ich were ed in the cation for readers. it required. This is vement only.	CR & LB numbers have been added to SWEL & AWCs as required.	W. S.
WS1	Review AWC fo (CH-AC	of SWC and or SWEL1-009 OVF011)	This valve is an in-line con Questions 2 and 3 are man Question 4 is marked "N/A stating, "mounted to steel" or this statement should be valve.	nponent ( rked "Y". " and inc . Clarific e remove	(not anchored) yet cludes a note ation is needed, ed for the in-line	This component is anchored to the pipe, therefore inspection is still required. Question #4 is marked "N/A", as the valve is not attached to concrete. Clarified statement to read "In-line-valve, mounted to process pipe".	W. S.
WS2	Review AWC fo	of SWC and or SWEL1-018	This valve is an in-line con Questions 2 and 3 are man The valve yoke and motor grading. Based on review very little clearance at the regarding the clearance or included.	operator operator of the pio grating, b spatial in	(not anchored) yet penetrates floor ctures, there is out no statement nteraction is	See comment WS1 Opening in grating is covered with 2 piece collar, welded in place above grating opening. Approximately 3" clear around valve, so there are no interaction concerns.	W. S.

			Se	ismic Walkdowr	n Submittal Report	
- <del>-</del>	Entergy		Revie	ew Comments a	nd Resolutions Form	
Engineerin Report Nur	ng RBS-CS-12-0000 mber	1	Rev. 000	River Bend Stat for Resolution o Recommendatio	tion Seismic Walkdown Report f Fukushima Near-Term Task Force on 2.3: Seismic	
Quality Re	elated: 🗌 Yes 🛛 No		Specia	I Notes or Instruct	tions: Comments apply to Walkdowns and C	hecklists
Comment Number	Section/Page No.	Review Comment			Response/Resolution	Reviewer's Accept Initials
WS3	Review of SWC and AWC for SWEL1-047 (EHS-MCC16A)	The SWC is completed with Comments include the foll Out of alignment door hing Screw appears to be missed transformers. This statement should be p Question 11 (Other Adverse note if this is a seismic com not).	th status owing sta ge on bud ing in bud provided se Condi ncern and	"Y", but the atement: <i>cket 4D.</i> <i>ckets 5B &amp; 2A on</i> in response to tions), and should d why (or why	"Y" is marked as the status because the walkdown is complete. Q11 and comments were updated to include LB and CR for this seismic concern	W. S.
WS4	Review of SWC and AWC for SWEL1-051 (EJS-LDC2A)	The SWC is completed wit questions are marked "Y". the following statement: On the left hand side of cu and small screw loose (res the rails. This statement should be p Question 11 (Other Advers note if this is a seismic cor not).	th status The Co bical 36, sting on s provided se Condit acern and	"U", but all of the mments include there is a tie rap shelf) outside of in response to tions), and should d why (or why	"U" was used as a placeholder and has been changed to "Y" See resolution for comment WS3	W. S.

	Entergy		Se Revie	eismic Walkdown ew Comments ar	n Submittal Report nd Resolutions Form	
Engineerin Report Nur	g RBS-CS-12-0000	1	Rev. 000	River Bend Stat for Resolution o Recommendatio	tion Seismic Walkdown Report f Fukushima Near-Term Task Force on 2.3: Seismic	
Quality Re	elated: 🗌 Yes 🛛 No		Specia	al Notes or Instruct	tions: Comments apply to Walkdowns and	Checklists
Comment Number	Section/Page No.	Review Comment			Response/Resolution	Reviewer's Accept Initials
WS5	Review of SWC and AWC for SWEL1-057 (ENB-CHGR1A)	The SWC is completed wi questions are marked "Y". the following statement: <i>Missing 2 screws on interi</i> This statement should be Question 11 (Other Adver- note if this is a seismic con not).	th status The Co or moun provided se Cond ncern an	"U", but all of omments include <i>ting panel.</i> I in response to itions), and should d why (or why	See resolution for comment WS4	W.S.
WS6	Review of SWC and AWC for SWEL1-061 (ENB-SWG01A)	The SWC is completed wir questions are marked "Y". status "U".	th status Include	"U", but all of the the reason for	See resolution for comment WS4	W. S.

	Entergy		Se Revie	ismic Walkdown w Comments ar	Submittal Report nd Resolutions Form	
Engineerin Report Nur	g RBS-CS-12-0000	1	Rev. 000	River Bend Stat for Resolution o Recommendatio	ion Seismic Walkdown Report f Fukushima Near-Term Task Force on 2.3: Seismic	
Quality Re	lated: 🗌 Yes 🛛 No		Specia	Notes or Instruct	tions: Comments apply to Walkdowns and C	hecklists
Comment Number	Section/Page No.	Review Comment			Response/Resolution	Reviewer's Accept Initials
WS7	Review of SWC and AWC for SWEL1-075 (HVK-CHL1C)	Question 7 of the SWC is but the comments include There are two lights in the that is properly shielded fro impact unprotected small-li- chlic-cond. Add discussion why the po- bore pipe is acceptable. The AWC is completed wit 4 is marked "N" with the fo- Strut to pipe small interfere Strut area HVK-MOV20C All of the other questions a the overall status should b	complete the follow area; on om impace bore pipe otential in th status llowing s ence ISA are marke e "N".	d with status "Y", wing statement: e fixture has gage ct, the other could e attached to HVK- npact to the small "U", but Question tatement: S-V836 Valve and ed "Y". Therefore,	Discussion was added. Q4 has been updated from "N" to "Y" because it was found to be an acceptable condition. Includes reference to CR. Also, this would not influence the overall status because the walkdown has been completed therefore the status is "Y".	W. S.
WS8	Review of SWC and AWC for SWEL1-076 (HVK-MOV20C)	This valve is an in-line con Questions 2 and 3 are man	nponent ( rked "Y".	not anchored) yet	See resolution for comment WS1	W. S.

Entergy				Seismic Walkdown Submittal Report Review Comments and Resolutions Form			
Engineerin Report Nur	g RBS-CS-12-0000	1	Rev. 000River Bend Station Seismic Walkdown Report000for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic				
Quality Re	lated: 🗌 Yes 🛛 No		Specia	I Notes or Instruct	tions: Comments apply to Walkdowns and Cl	necklists	
Comment Number	Section/Page No.	Review Comment			Response/Resolution	Reviewer's Accept Initials	
WS9	Review of SWC and AWC for SWEL1-081 (HVP-FN2A)	Questions 2, 3, 5 and 6 of "U" instead of "Y" based or	2, 3, 5 and 6 of SWC should be marked of "Y" based on inaccessible anchors.		The responses for the mentioned Qs were changed to "U" since we could not confirm the condition of 2 of the 10 bolts. We verified this was the right way to handle this issue with Richard Drake of Entergy	W. 5.	
WS10	Review of SWC and AWC for SWEL1-057 (CMS-RTD4C)	The SWC answers to questions 2 and 3 should be "N/A" for inline component.		See resolution for comment WS1	W. S.		
WS11	Review of SWC and AWC for SWEL2-008 (SFC-AOV31A)	The SWC answers to questions 2 and 3 should be "N/A" for inline component.		See resolution for comment WS1	W. S.		
WS12	Review of SWC and AWC for SWEL2-0016 (SWP-MOV504B)	The SWC answers to ques "N/A" for inline component	stions 2 a	and 3 should be	See resolution for comment WS1	W.S.	

Entergy					Se Revie	eismic V ew Cor	Walkdown mments ar	Submittal Rep nd Resolutions	ort Form		
Engineerin Report Nur	g mber	RBS-C	S-12-00001		Rev.   River Bend Station Seismic Walkdown Report     000   for Resolution of Fukushima Near-Term Task Force     Recommendation 2.3:   Seismic						
Quality Related: 🗌 Yes 🛛 No					Specia	al Notes	or Instruct	ions: Comments a	apply to	Walkdowns and C	hecklists
Comment Number	: Section/Page No. Review Comment						Response/Resol	ution		Reviewer's Accept Initials	
WS13	All AWCs Verify that AWCs which as components correctly lists form.			sociated all comp	d with m ponents	ultiple on the	Completed			W. S.	
Reviewed By: 6/105 um Site/Department:		Stewart / Wet Att Ph.	- [	Date	11/14/2012	Resolved By: Date:10/16/12	J. Dur	nkelberg/D. Bassi			

	ution of		Reviewer's Accept Initials	BDK	BDK	BDK
Submittal Report d Resolutions Form	on Seismic Walkdown Report for Resol F 2.3: Seismic	ions: Comments apply to LBE review	Response/Resolution	LBEs have been modified to meet the intent described in the EPRI Guidance, and to make greater use of the CAP process for disposition and tracking.	LBE conclusions have been reviewed in conjunction with resolution of comment 1, and now follow the supplemental guidance of this comment.	SWCs and AWCs have been reviewed to ensure that each potentially adverse seismic condition identified during the NTTF 2.3: Seismic program is properly documented on the checklist and has a corresponding LBE where appropriate.
Seismic Walkdown Review Comments an	Rev. Tritle 0000 River Bend Stati Fukushima NTTF	Special Notes or Instructi		o compare an observed itation to determine ent with the seismic en a CAP entry is the condition (including condition, root cause he plant CAP (not the ny of the LBEs performed an intended by the LBE, condition identified is ggest that this more in- om the LBE and sss CR resolutions.	es whether a CAP entry dverse seismic conditions he context of licensing nent 1) should be marked ssociated CR generated.	never an SWC/AWC the condition is sent <i>is</i> e, an LBE is not an c" conditions identified ould be sent directly to fic for the NTTF 2.3:
	0001	0	Review Comment	Recall that an LBE is intended t condition with existing documer whether the condition is consist licensing basis or not. If not, th required. Further evaluation of operability evaluation, extent of analysis, etc.) is treated within t LBE). Here, it appears that ma evaluate the condition further the to ultimately judge whether the deficient technically or not. Sug depth evaluation be removed fn incorporated into the CAP proce	The LBE "Conclusion" determin is required or not. Potentially a which do not "pass" an LBE in t basis documentation (see comr with "No" with reference to an a	An LBE should be initiated whe question is marked "N", unless i directly to the plant CAP. Likew appropriate tool for "non-seismi during the walkdowns which sh the CAP – the LBE tool is speci Seismic program.
ntergy	er RBS-CS-12-0	ted: 🗌 Yes 🛛 N	section/Page No.	3eneral, LBE 10/31/12)	eneral, LBE 10/31/12)	eeneral, LBE 10/31/12)
${}^{\textcircled{B}}_{E}$	Engineering Report Numb	Quality Rela	Comment { Number	F	2	е е

4	General, LBE	The first step o	of an LBE, per EPRI G	uidance (	Section 5,	LBE "Licensing Ba:	sis" summaries have	BDK
	(11/12/12)	is to determine	the current licensing	basis for	the plant	been revised for cla	arity where possible,	
		as it relates to	the seismic adequacy	of the eq	quipment.	concisely stating th	ne contextual licensing	
		Specifically, the	is should be done in the	ne contex	tt of the	basis to allow the "	Evaluation" to	
		identified poter	ntially adverse seismic	condition	n being	transparently concl	lude whether the	
		evaluated. In §	several cases, this sur	nmarized	I "Licensing	licensing basis is n	net or not.	
		Basis" in the LI	BEs could be improve	d for clari	ity of intent.			
Reviewed B	y:	Benjamin D. Kosbab		Date	10/31/12	Resolved By: J	John Dunkelberg	
Site/Departn	nent:	ENERCON/Civil	Ph. 770-590-2179		& 11/12/12	Date:	11/14/12	

#### Attachment I

#### Seismic Walkdown Engineer Training Certificates

#### **List of Certificates**

SWE	Capacity	Page
John Dunkelberg	Walkdown Engineer	2
Jose Cardona	Walkdown Engineer	3
Brandon Nissing	Walkdown Engineer	4
David Bassi	Walkdown Engineer	5
Jason Halsey	Walkdown Engineer	6
Matt Keeney	Walkdown Engineer	7
Amar Dalawari	LB Reviewer	8
Benjamin Kosbab	Walkdown Peer Reviewer	9
Winston Stewart	Walkdown Peer Reviewer	10
Shawn McFarland	Walkdown Peer Reviewer	11
Alex Smerch	Trainer	12
Kenneth Whitmore	Trainer	13
Kevin Bessell	Trainer	14
Kursat Kinali	Trainer	15

Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment I Page 2 of 15

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**Certificate of Completion** 

is hereby granted to

# John Dunkelberg

for successful completion of

### TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3 PLANT SEISMIC WALKDOWNS

Awarded: 9/13/2012 in Mt. Arlington, NJ

Kevin Bessell

Certified Seismic Walkdown Engineer Palo Alto, CA – 6/13/2012

Alex Smerch Certified Seismic Walkdown Engineer Palo Alto, CA – 6/13/2012

**EPEI** ELECTRIC POWER RESEARCH INSTITUTE

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## Jose Cardona

## Training on Near Term Task Force Recommendation 2.3 - Plant Seismic Walkdowns

July 19, 2012

R.P. Kassanana

EPE

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# **Brandon Nissing**

## Training on Near Term Task Force Recommendation 2.3 - Plant Seismic Walkdowns

July 19, 2012

Date

R.P. Kassawana

Robert K. Kassawara EPRI Manager, Structural Reliability & Integrity

Engineering Report No. RBS-CS-12-00001 Rev. 000 Attachment I Page 5 of 15



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David Bassi

for successful completion of

TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3 PLANT SEISMIC WALKDOWNS

August 22, 2012 - Kennesaw, GA

Date - Location

Kursat Kinali, Ph.D., P.E. EPRI Certified Seismic Walkdown Engineer Alexandria, VA – 7/27/2012

	July 27, 2012 R.R. Kasawara   Date Robert K. Kasawara   EPRI Manager, Structural Reliability & Integrity
--	----------------------------------------------------------------------------------------------------------

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Keviń Bessell Certified Seismic Walkdown Engineer Palo Alto, CA – 6/13/2012

Kenneth Whitmore Certified Seismic Walkdown Engineer Alexandria, VA – 6/20/2012

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Alex Smerch Certified Seismic Walkdown Engineer Palo Alto, CA – 6/13/2012



is hereby granted to

Benjamin Kosbab

for successful completion of

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Awarded: 7/11/2012 in Kennesaw, GA

Kevin Bessell Certified Seismic Walkdown Engineer Palo Alto, CA – 6/13/2012

Kenneth Whitmore Certified Seismic Walkdown Engineer Alexandria, VA – 6/20/2012

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## **Winston Stewart**

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June 21, 2012

Date

R.P. Kassawana

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# **Shawn McFarland**

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July 27, 2012

R.P. Kassawana

Robert K. Kassawara EPRI Manager, Structural Reliability & Integrity

Date

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## **Alex Smerch**

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June 13, 2012

R.P. Kassawana

EP ELECTRIC PD-922 TV LLANCH RM FLIDER

# **Kenneth Whitmore**

## Training on Near Term Task Force Recommendation 2.3 - Plant Seismic Walkdowns

June 21, 2012

Date

R P. Kassawana

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June 13, 2012

Date

R.P. Kassawana

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# **Kursat Kinali**

## Training on Near Term Task Force Recommendation 2.3 - Plant Seismic Walkdowns

July 27, 2012

R.P. Kassawana

Robert K. Kassawara EPRI Manager, Structural Reliability & Integrity

Date