

Attachment G

PEER Review Checklist for SWEL

Sheet 1 of 3

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.

1. Were the five safety functions adequately represented in the SWEL 1 selection? Y ☒ N ☐

The SWEL1 contains 94 components and addresses all five safety functions. Many components provide safety functions for multiple systems, and/or are part of frontline support systems consistent with the guidelines provided in EPRI Report 1025286, Section 6.2.

2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:

- a. Various types of systems?

Y ☒ N ☐

Components included in the SWEL1 comprise a variety of systems such as Reactivity Control System, Reactor Pressure Control, Reactor Inventory Control, Decay Heat Removal System, Emergency Diesel Generator, Vital A/C and D/C systems.

- b. Major new and replacement equipment?

Y ☒ N ☐

Some New and/or replacement components are included in SWEL 1.

- c. Various types of equipment?

Y ☒ N ☐

SWEL1 includes at least one example of each of the 21 classes of equipment with the exception of class 13 (Motor Generators). WF3 does not have any Class 13 equipment that is seismic class 1. All classes of equipment are well represented. In general, the number of components in each class is proportional to the number of safety-related components of that class in the plant as a whole.

Sheet 2 of 3

Peer Review Checklist for SWEL

- d. Various environments?

Y ☒ N ☐

The SWEL1 contains components in mild, harsh, indoor, and outdoor environments. The components are located in different buildings, rooms, and/or on different building elevations. The SWEL1 also includes components located inside Reactor Building.

- e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program?

Y ☒ N ☐

The SWEL1 includes components that were identified during the IPEEE as being potentially vulnerable to a seismic event. This includes adding component 4KVESWGR3B to the SWEL1 walkdown list since a modification was done to a station air pipe to avoid an interference. For the control room cabinets, all of the bookcases, filing cabinets, etc, in the control room were walked down as part of the area walk-by for other components.

- f. Were risk insights considered in the development of SWEL 1?

Y ☒ N ☐

SWEL 1 includes high risk components based on risk significance in the plant Probabilistic Risk Assessment (PRA) models.

3. For SWEL 2:

- a. Were spent fuel pool related items considered, and if applicable included in SWEL 2?

Y ☒ N ☐

SWEL 2 includes components for maintaining cooling of the SFP, which are Seismic Category I components.

- b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2?

Y ☒ N ☐

Justification was provided in the Process used to determine the SWEL 2 listing for WF3

Sheet 3 of 3

Peer Review Checklist for SWEL

4. Provide any other comments (Attachment 9.11) related to the peer review of the SWELs.

The peer review team reviewed the initial SWEL1 and SWEL 2 and provided comments and suggestions for modification of the SWELs. Comments included suggestion to add components associated with the CRs that were identified in WF3 IPEEE Reduced scope Seismic Margins Assessment Report, should be included in the SWEL1 so that a walk down can be conducted on these equipment to confirm that modifications have been completed to resolve these concerns.

5. Have all peer review comments been adequately addressed in the final SWEL?

Y ☒ N ☐

Peer Reviewer #1: Heidi Graf

Heidi Graf

Date: 11/1/12

Peer Reviewer #2: Seda Dhinra

Seda Dhinra

Date: 11/1/2012

Attachment H

Peer Review Comment Form

Table 1 – SWEL Review

Table 2 – SWC/AWC Review

Table 3 – LBE Review

Table 1 – SWEL Review


|  Seismic Walkdown Submittal Report Review Comments and Resolutions Form | | | | |
|---|----------------------------|--|---|----------------------------|
| Engineering Report Number | | WF3-CS-12-00003 | | Rev. |
| Quality Related: | | Title: WF3 SWEL 1 and SWEL 2 | | |
| <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | Special Notes or Instructions: | | |
| Comment Number | Section/Page No. | Review Comment SWEL1 COMMENTS | Response/Resolution | Reviewer's Accept Initials |
| 1 | S.R equipment spread sheet | How did you determine whether or not the component is "Undergoes Regular Configuration Inspections" under column Screen 2? The BL indicates the all components are NOT Undergo Regular Configuration Inspections with the exception of 2 that are (those are SI MPOL0001 and CMUMPOL0001). Is this true? I looked in Asset Suite, under PMID for these two components; it indicates that the PM tasks for these two components have been RETIRED? | The two items described in the Review Comment #1 are both pools inside our RAB. These are considered structures, not equipment. However, they are inspected as part of our Maintenance Rule for Structures in procedure EN-DC-150. If you look at this procedure and look at the equipment for WF3, the RWSP and the CSP are both listed separately in the list. The PM tasks were RETIRED, but new tasks are being created now. The creation of these tasks is being tracked in CR-WF3-2011-08140 CA 25. | HG 10-23-12 |
| 2 | S.R equipment spread sheet | Screen 1 Column should be filled in either "Yes" or "No" for whether the component is Seismic Cat. 1 or not. | Corrected. | HG 10-23-12 |
| 3 | S.R equipment spread sheet | Screen 4, under Temperature and Humidity column should be filled in either "T" for High Temp. or "H" for Hi Humidity of "T, H" for both conditions. | Corrected. | HG 10-23-12 |
| 4 | S.R equipment spread sheet | Please refer to procedure EN-DC-168, Rev. 0, Attachment 9.4, Table 9.4.1 for format and instructions to fill out Base List 1. | Corrected. | HG 10-23-12 |
| 5 | Table 9.4.2 | Column titles do not match Attachment 9.4 of procedure EN-DC-168, Rev. 0, Table 9.4.2. Additional columns are ok for additional information but should be hidden or moved such that the final table will have all columns match the Table in the procedure. (i.e. The Table should only | Corrected. | HG 10-23-12 |

Table 1 – SWEL Review

| | | | | |
|----|-------------|---|--|--|
| | | have one Environment column, and the two untitled columns to the right of Equipment ID do not need to be part of this Table). | | |
| 6 | Table 9.4.2 | Drawings for each component need to be provided in the appropriate column. | Drawings provided. | HG 10-23-12 |
| 7 | Table 9.4.2 | The first column, the SWEL number should be "SWEL1-001". The "1" after SWEL was missing. | Corrected. | HG 10-23-12 |
| 8 | Table 9.4.2 | Under System Type column, it would be helpful if the systems identified Asset Suite is provided for the associated components in the SWEL 1. | Corrected. | HG 10-23-12 |
| 9 | Table 9.4.2 | Are there reasons for not including two classes of Equipment (class 12 – Air Compressor and 13 – Motor Generators)? Need to add class 12 to items SWEL1-095 and 096. | This has been corrected. Class 12 was added to the list. WF3 does not have any Class 13 equipment that is seismic class 1. Incorporated. | See additional comment. HG 10-24-12 |
| 10 | Table 9.4.2 | Does the SWEL 1 include any equipment enhanced based on the findings of the IPEEE. Page 3-45 of the WF3 IPEEE Reduced scope Seismic Margins Assessment Report, Section 3.1.6 identifies some CRs for resolution of outlier concerns (CR-94-1019 and CR-94-1111), the components associated with these CRs should be included in the SWEL1 so that a walk down can be conducted on these equipment to confirm that modifications have been completed to resolve these concerns. | No. WF3 did not have to do any equipment modifications due to IPEEE. Added 4KVESWGR3B to the SWEL1 walkdown list since a modification was done to a station air pipe to avoid an interference. For the control room cabinets, all of the bookcases, filing cabinets, etc, in the control room were walked down as part of the area walk-by for other components. This would be all of the items from our IPEEE. | See additional comment. HG 10-23-12 |
| 11 | Table 9.4-2 | Under Column "ROOM/COL" several column lines are missing, e.g. SWEL-002, 212/10A-? SWEL-018 "421/?", SWEL-019 "420/?", SWEL-061 "?/9A-I, SWEL-084 "304/9A-? etc. Complete the missing information. | Corrected. The location identifications came directly from Asset Suite as shown. However, the column lines were removed. Some items do not have any rooms or columns identified as they are not identified in Asset Suite. | SD 10-23-12 |
| 12 | Table 9.4-2 | The anchorage configuration verification is not provided in | Corrected. | SD 10-23-12 |

Table 1 – SWEL Review

| | | | | |
|----|----------------------------|---|---|-------------|
| | | Column "ANC" for any of the equipment. Enter "Yes" or "No" as applicable. | | |
| 13 | S.R equipment spread sheet | Item # 14 requires "X" in the applicable safety function supported by the equipment in lieu of "Yes" or "No". | The spread sheet is no longer being used. The Word file is now being used for the full table. | SD 10-23-12 |
| 14 | S.R equipment spread sheet | What column "None" after "Support" column stands for? | The spread sheet is no longer being used. The Word file is now being used for the full table. However, the column "None" was being used to show equipment that did not meet any of the 5 system functions. This has now been changed and the function in the 5 system functions is not checked. | SD 10-23-12 |
| 15 | S.R equipment spread sheet | What is the title of column for abbreviations GE, JJ, DC, DM etc? | These are the initials of the team members that helped document the 5 safety functions. If one of the individuals stated that they believed that piece of equipment met one of the functions, then their initials were added to that list. However, the spread sheet is no longer being used. The Word file is now being used for the full table. | SD 10-23-12 |
| | | | | |
| | | SWEL 2 COMMENTS | | |
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Table 1 – SWEL Review

| | | | | |
|----|------------------------|--|---|---|
| 16 | Table 9.4.4 | <ul style="list-style-type: none"> Inclusion of pipe on the RDD list is different than other plants in the industry. We (ENERCON) are awaiting a response to a question posed to the NEI Seismic Task Force. Periodic inspection on piping should be confirmed. Keep the documentation of walkdowns completed of the piping system. <p>Final decision for inclusion on the RDD will be made pending resolution of the above.</p> | Because of the way the piping is connected to the fuel pool at WF3, the lines that are included could result in a rapid drain down. The water in the pool could get to right at the top of the fuel assemblies in the pool. | HG 10-23-12 |
| 17 | Tables 9.4.3 and 9.4.4 | <p>Per procedure EN-DC-168, page 48 of 80 item 34 states: "Format the corresponding BS2 and RDD line item to be selected for SWEL2 as bold in Tables 9.4.3 and 9.4.4".</p> <p>Please bold the items that were selected for SWEL2 in Tables 9.4.3 and 9.4.4. The same should apply for SWEL1 as well (items selected for SWEL1 should be bolded in Table 9.4.1).</p> | Corrected. | HG 10-23-12 |
| 18 | Table 9.4.3 | Need to add components for SWEL2-012, 013 and 014 (FS EMTR314A 5M, FS EMTR314B 5M, and FS EMTR314B 6F respectively) to the Base List 2 (Table 9.4.3). | Corrected. | HG 10-23-12 |
| 19 | Table 9.4.3 | Please fill in the "TRAIN" column for components that have train specific based on Equipment ID (i.e. items 2006, 2007, 2010, 2019-2029....) | These items do not have the train defined in Asset Suite. The ones that are completed are directly from Asset Suite. | HG 10-23-12 |
| 20 | Table 9.4.5 | Last column "RDD", should replace "N/A" with "N" and the last 5 items should be "Y". | No changes are required. | I withdraw this comment. The column is OK as is. HG 10-23-12 |

Table 1 – SWEL Review

| | | | | | | |
|------------------|-------------|---|---|-------------|--------------|------------------|
| 21 | Table 9.4.5 | All SWEL Numbers SWEL2-001 thru SWEL2-005 are identified as CKTBRK under Equipment ID Column. SWEL Numbers SWEL2-004 and SWEL2-005 are listed as Class 14 while SWEL2-001 thru SWEL001 thru SWEL2-003 and several other are listed as Class 1. Clarify the distinction. | The three FS breakers are 100 amp frame breakers and are located inside a motor control center. The two CC breakers are both 5 amp breakers and are located inside a power distribution panel. | SD 10-23-12 | | |
| 22 | Table 9.4.5 | Under Equipment Column, Equipment IDs are listed which are consistent with AS. What are the additional subsets, i.e. 5D, 5M, 6F and CKTBRK etc.? Provide subtitles for these two columns. | This is the way our IDs are presented in Asset Suite. There are no subtitles for these two columns. Having them in 3 columns makes it easier to find the equipment, plus makes it easier to enter and read. This is a presentation preference and the grid lines will not be visible in the final document. | SD 10-23-12 | | |
| 23 | Table 9.4.3 | Under Equipment Column, Equipment IDs are listed which are consistent with AS. What are the additional subsets, i.e. 10F, 5D, 5M, 6F and CKTBRK etc.? Provide subtitles for these two columns. | See response to comment 22. | SD 10-23-12 | | |
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| Reviewed By: | | Heidi Graf / Sada Dhingra | Date | 10/24/12 | Resolved By: | G. N. Ferguson |
| Site/Department: | | ENERCON/MECH | Ph.770-792-6936 /916-293-9801 | | Date: | Ph. 504-739-6538 |

Table 2 – SWC/AWC Review


|  Seismic Walkdown Submittal Report Review Comments and Resolutions Form | | | | |
|---|------------------|--|---|----------------------------|
| Engineering Report Number | | WF3-CS-12-00003 | | Rev. |
| Quality Related: | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | |
| | | Special Notes or Instructions: | | |
| Comment Number | Section/Page No. | Review Comment | Response/Resolution | Reviewer's Accept Initials |
| 1 | General, SWC+AWC | Where potential conditions are identified, it would be highly beneficial to include CR numbers generated (as available). This assists with cross-referencing. | CRs and WRs written have been included in all SWCs and AWCs. | BDK |
| 2 | General, SWC+AWC | If comments include miscellaneous issues (i.e., missing clips, housekeeping issues, etc.), the "other seismic condition" question should be marked "N" unless disposition of conditions are included. This is true for any identified condition – either mark "N" or provide justification/disposition that identified condition is seismically insignificant. | If the condition was deemed seismically insignificant, the question was marked "Y" it was clearly stated that there was no seismic concern. | BDK |
| 3 | General, SWC+AWC | Anytime "N/A" is marked, a brief explanation/justification should be provided. (For line-mounted items with common justification for anchorage questions, can be provided once on SWC). This includes anchorage, flexibility of lines, etc. | All N/A items now have an explanation of why it has been marked that way. | BDK |
| 4 | General, SWC | SWC Questions 2-4 require response, even if answer is "Y" to include brief description (see EN-DC-168 Att. 9.6 p. 7). This could include general description of hardware condition, overall configuration, corrosion, etc. (including for line-mounted items), specific to each question. | All SWCs now have a response in questions 2-4. | BDK |
| 5 | General, SWC | SWC Question 5 should include the document number used to evaluate the configuration (if Q. 1 is "Y"), and | Document number has been included along with brief discussion. | BDK |

Table 2 – SWC/AWC Review

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|----|--------------|---|---|-----|
| 6 | General, SWC | should include a brief description of the results of that evaluation (see. EN-DC-168 Att. 9.6 p. 7) Question 6 should be answered, regardless of the responses to Questions 1-5. If an inline component without anchorage, can indicate "Y" and add note of "Inline component – N/A" or similar. | Question 6 has been answered for all SWCs. | BDK |
| 7 | SWEL1-003 | Question 3 is marked "N" due to "mild corrosion" although the Question 6 is marked "Y". Question 6 is asking for an aggregate response to all anchorage questions (i.e., mark "N" if at least one of 2-5 is marked "N"). If the "mild corrosion" is judged insignificant, that should be explained in Question 2, and should be marked as "Y". If the "mild corrosion" is not insignificant, then Question 6 should be "N". | If question 1-5 has been checked "No," question 6 will be checked "No" for all SWCs. | BDK |
| 8 | General, SWC | Please confirm that all cabinet/panel doors were opened (i.e., MCC cubicles). If not, the SWC should include justification for how the goals of the inspection are still <i>being met without opening the cabinet (see FAQ 4.20)</i> , or should be marked as incomplete pending deferral to when the cabinets will be able to be opened (i.e., outage). | In all cases, if a SWEL item involving a panel or cabinet could not have all of its doors opened, then it was deferred until the next available time that all doors could be opened. If the SWEL item was not deferred then, all doors were opened unless otherwise explicitly stated on the SWC. | BDK |
| 9 | AWC-014 | Adding notes/comments to reference photos to identified conditions would be helpful, especially since multiple conditions are identified. | Comment Incorporated. | BDK |
| 10 | SWEL1-008 | Questions 7 and 8 are marked "N" but include no explanation. Add explanation of conditions. Include photo of each condition identified. | Comment Incorporated. | BDK |

Table 2 – SWC/AWC Review

| | | | | | | | |
|------------------|-----------|---|---|------------------|---------|--------------|------------|
| 11 | SWEL1-010 | Is oil/fluid leak under pump not an "other seismic condition" for answering Question 11 with "N"? How was the leak addressed when identified? | This was previously identified in CR-WF3-2011-05119 and WR-243506 and has been stated in the comments section of the SWC. | BDK | | | |
| 12 | SWEL1-012 | Photo shows pump foundation anchor very close to column baseplate anchor. Is this anchor spacing acceptable? | Yes it is acceptable. | BDK | | | |
| 13 | AWC-002 | Photo of "tubes lying around" would be helpful. Is this flex tube, or something more substantial? | These were only flex tubes. They posed no seismic concern and have been stated as such on the SWC. | BDK | | | |
| 14 | AWC-042 | Area walk-by identified water pooling at base of pipe support. Is this strut support baseplate intended to be recessed below slab surface? | This was discussed with site engineers and determined to be acceptable. | BDK | | | |
| Reviewed By: | | | Benjamin D. Kosbab | Date | 10/8/12 | Resolved By: | Brian Pace |
| Site/Department: | | | ENERCON/Civil | Ph. 770-590-2179 | | Date: | 11-09-2012 |

Table 2 – SWC/AWC Review


|  | | Seismic Walkdown Submittal Report Review Comments and Resolutions Form | | |
|--|------------------|---|--|----------------------------|
| Engineering Report Number | WF3-CS-12-00003 | Rev. | Title WF3 Seismic Walkdown Submittal Report – SWCs and AWCs | |
| Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | Special Notes or Instructions: | | |
| Comment Number | Section/Page No. | Review Comment | Response/Resolution | Reviewer's Accept Initials |
| 1 | SWEL1-082 | Question 5: Provide the document number used to confirm anchorage configuration (dwg G574S05?) | Comment Incorporated. | MPW |
| 2 | SWEL1-082 | Question 9: Add note as to why flexibility of attached lines is N/A. | A drawing that specifies the use of rigid connections has been identified and referenced on the SWCs that identified rigid connections. | MPW |
| 3 | SWEL1-087 | Provide justification for N/A items. Please confirm cabinet was opened to inspect internals and weld conditions; from N/A responses and photo, it is not evident that the intent of NRC Guidance 4.20 for opening cabinets. Welds (including internal) still need to be checked as "anchorage" for adverse conditions, corrosion, etc. Need to answer question 6 especially to come to a firm conclusion. | Comment Incorporated. | MPW |
| 4 | SWEL1-087 | Question 8: Answer says yes, but statement about fluorescent lights is open ended. Need to have firm conclusion for 'Y' that cages are not needed or marked as 'U' until verification is complete, at which point 'Y' or 'N' could be firmly justified. | All fluorescent lights have been changed to non-seismic concerns. It was determined after extensive conversation with site personnel that falling bulbs could not impact equipment in the area. No bulbs were present over sensitive relays for example. SWCs or AWCs that identified florescent lights still have discussion about them on its respective checklist, but include a statement saying | MPW |

Table 2 – SWC/AWC Review

| | | | | |
|----|--------------------------------|---|--|-----|
| 5 | SWEL1-087 | Question 9: Add note as to why flexibility of attached lines is N/A. Photo appears to show vertical conduits entering panel. | that falling bulbs pose no seismic concern for the equipment in the area. See resolution to comment #2 above. | MPW |
| 6 | SWEL1-089 | Provide justification for N/A items. See comments regarding SWEL1-087. Justify N/A for attached lines. | See resolution to comment #2 above. | MPW |
| 7 | SWEL1-089 | Question 11 and general: If you conclude that there are no other seismic conditions, then you need to make it clear that the missing insulation cover bolt, missing insulation clips, and mild corrosion are not a seismic concern. | Comment Incorporated. | MPW |
| 8 | SWEL1-016 | See generic comment regarding question 6. Make a firm conclusion in the 'Comments' section that there is no seismic impact with the corrosion noted. | Comment Incorporated. | MPW |
| 9 | AWC-005 (SWEL-016, -040, -089) | What is the overall conclusion regarding all the comments identified (i.e., seismic concerns)? See Kosbab general comments. | These are not seismic concerns. They have been identified however with CRs and WRs as well. | MPW |
| 10 | AWC-023 (SWEL-090) | Make a firm conclusion regarding comments. | Comment Incorporated. | MPW |
| 11 | SWEL1-092 | Add reference document to Question 5. | Comment Incorporated. | MPW |
| 12 | SWEL1-092 | Explain N/A for Question 7 (either conclude 'Y' or explain there are no soft targets with 'N/A'). | Comment Incorporated. | MPW |
| 13 | SWEL1-092 | Explain reasoning for N/A for flexibility of attached lines (piping connections only, or piping is per design) | Comment Incorporated. | MPW |
| 14 | AWC-006 | See generic comments regarding 'Comments'. | Comment Incorporated. | MPW |


Table 2 – SWC/AWC Review

| | | | | |
|----|--------------------------|--|--|-----|
| 15 | (SWEL1-092) SWEL1-094 | See generic comments regarding N/A's for welded connections (Q2 and Q3), no answer for Q6, and open question related to fluorescent light (Q8). | Welded connection questions have been answered with either "Y" or "N" on all checklists. See comment resolution #4 above for fluorescent lights. | MPW |
| 16 | AWC-021 (SWEL1-094) | See general comment (SWEL1-087 comments on question 8) regarding fluorescent light. | Comment Incorporated. | MPW |
| 17 | SWEL1-044 | For valves and in-line components, it would be helpful to mention in Q5 and/or Q6 that the item is line-mounted to support your N/As. It is also valuable to apply the guidance in EN-DC-168, "Anchorage" and "Other Adverse Conditions" to a general inspection of flange bolts, exposed connections, etc. and note the condition found. See general comments regarding mild corrosion statement. | Comment Incorporated. | MPW |
| 18 | SWEL1-044 | See comment above regarding N/As for valves and various connections of valve components. Need firm conclusion on corrosion issue. | Comment Incorporated. | MPW |
| 19 | SWEL1-060 | Was the entire fan assembly inspected? Give justification for N/A responses...components appear to be bolted to structure. Photo shows flexible cables coming into fan motor, so please review N/A response to Q9. | Comment Incorporated. | MPW |
| 20 | AWC-010 | Is the identified "moderate-severe corrosion" a problem? | Identified as no seismic concern and a WR has been initiated. | MPW |
| 21 | SWEL1-066 | Check the status box on first page. Explain any N/A responses, specifically attached line flexibility question.. Were connections of AHU to support steel evaluated from ladder or platform? | Comment Incorporated. Conditions were observed from the floor. | MPW |

Table 2 – SWC/AWC Review

| | | | | |
|------------------|------------------------|---|---|---------|
| 22 | AWC-004 (SWEL1-066) | Large displacement of lights during seismic event still needs to be verified, but all answers are 'Y'. Need to change to a 'U' or have a firm conclusion. | See comment resolution #4 above. | MPW |
| 23 | SWEL1-069 | What is the conclusion with the bolts that were not completely visually inspected? | Comment resolved. | MPW |
| 24 | SWEL1-070 | Wraparound bracing and spacers need to exist for individual batteries to ensure they fit snugly in their position. | Comment resolved. | MPW |
| 25 | SWEL1-070 | Are the area block walls seismically qualified (IE Bulletin 80-11)? | Yes. This has been confirmed with site documentation. | MPW |
| 26 | SWEL1-071 | Provide reference for Question 5. What is the conclusion with lights in vicinity (Q8)? | See comment resolution #4 above. | MPW |
| 27 | SWEL1-072 | Provide reference for Question 5. What is the conclusion with fluorescent lights (Q8)? | See comment resolution #4 above. | MPW |
| | | | | |
| Reviewed By: | | Matt Wilkinson | Date | 10/8/12 |
| Site/Department: | | ENERCON | Ph. | |
| Resolved By: | | Brian Pace | | |
| Date: | | 11-09-2012 | | |

Table 3 – LBE Review

|  Entergy | | Seismic Walkdown Submittal Report Review Comments and Resolutions Form | | |
|--|------------------|--|---|----------------------------|
| Engineering Report Number | WF3-CS-12-00003 | | Rev. 0 | Title: WF3 LBEs |
| Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | Special Notes or Instructions: | |
| Comment Number | Section/Page No. | Review Comment | Response/Resolution | Reviewer's Accept Initials |
| 1 | General, LBE | The first step of an LBE, per EPRI Guidance Section 5, is to determine the current licensing basis for the plant as it relates to the seismic adequacy of the equipment. Specifically, this should be done in the context of the identified potentially adverse seismic condition being evaluated. In several cases, this summarized "Licensing Basis" in the LBEs could be improved for clarity of intent. | LBE "Licensing Basis" summaries have been revised for clarity where possible, concisely stating the contextual licensing basis to allow the "Evaluation" to transparently conclude whether the licensing basis is met or not. | BK 11-15-12 |
| 2 | General, LBE | Recall that the LBE tool is specific for the NTTF 2.3: Seismic program, and is intended to document whether existing documentation regarding the plant licensing basis provides justification for acceptance of potentially adverse seismic conditions identified in the field. Documentation of SWE judgment about whether a condition is potentially seismically significant or not is not an appropriate use of the LBE tool; rather, use of judgment should be documented on the SWC/AWC forms based on SWE discussion in the field. Disposition and eventual resolution of conditions not justified by an LBE should be done through the plant CAP to ensure appropriate tracking/trending and extent-of-condition evaluations (where necessary). | Use of the LBE tool has been adjusted to better align with EPRI Guidance Section 5. Formal LBEs are documented for those conditions which do not require CAP entry. | BK 11-15-12 |
| | | | | |
| Reviewed By: | | Ben Kosbab | Date: | 10/30/12 |
| Site/Department: | | ENERCON/CIVIL | Ph.770-590-2179 | |
| Resolved By: | | Dinesh Patel | Date: | 11/12/12 |
| | | | Ph. 770-792-6975 | |

Attachment J

Seismic Walkdown Engineering Training Certificates

Seismic Walkdown Engineers

Dinesh Patel

Brian Pace

Chu-Chieh (Jay) Lin

Natalie George

Greg Ferguson

Stephen Picard



Certificate of Completion

is hereby granted to

Dinesh Patel

for successful completion of

TRAINING ON NEAR TERM TASK FORCE
RECOMMENDATION 2.3
PLANT SEISMIC WALKDOWNS

Awarded: 7/11/2012 in Kennesaw, GA

A handwritten signature in black ink, appearing to read "Kevin Bessell", is written over a horizontal line.

Kevin Bessell
Certified Seismic Walkdown Engineer
Palo Alto, CA – 6/13/2012

A handwritten signature in black ink, appearing to read "Kenneth Whitmore", is written over a horizontal line.

Kenneth Whitmore
Certified Seismic Walkdown Engineer
Alexandria, VA – 6/20/2012



Excellence—Every project. Every day.

Certificate of Completion

is hereby granted to

Brian Pace

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



Certificate of Completion

CHU-CHIEH LIN

**Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns**

July 27, 2012

Date

A handwritten signature in black ink, reading "R.P. Kassawara", is positioned above the printed name and title.

Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity



Excellence—Every project. Every day.

Certificate of Completion

is hereby granted to

Natalie George

for successful completion of

**TRAINING ON NEAR TERM TASK FORCE
RECOMMENDATION 2.3
PLANT SEISMIC WALKDOWNS**

August 22, 2012 – Kennesaw, GA

Date – Location

A handwritten signature in black ink, reading "Kursat Kinali", written over a horizontal line.

Kursat Kinali, Ph.D., P.E.
EPRI Certified Seismic Walkdown Engineer
Alexandria, VA – 7/27/2012



Certificate of Completion

Greg Ferguson

**Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns**

June 21, 2012

Date

A handwritten signature in black ink, reading "R. P. Kassawara", is positioned above the printed name and title.

Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity



Certificate of Completion

Stephen Picard

**Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns**

July 27, 2012

Date

A handwritten signature in black ink, reading "R. P. Kassawara", is positioned above the printed name and title.

Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity

Seismic Walkdown Peer Reviewers

Ben Kosbab

Matthew Wilkinson



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Certificate of Completion

is hereby granted to

Benjamin Kosbab

for successful completion of

**TRAINING ON NEAR TERM TASK FORCE
RECOMMENDATION 2.3
*PLANT SEISMIC WALKDOWNS***

Awarded: 7/11/2012 in Kennesaw, GA

A handwritten signature in blue ink, appearing to read "Kevin Bessell", written over a horizontal line.

Kevin Bessell
Certified Seismic Walkdown Engineer
Palo Alto, CA – 6/13/2012

A handwritten signature in blue ink, appearing to read "Kenneth Whitmore", written over a horizontal line.

Kenneth Whitmore
Certified Seismic Walkdown Engineer
Alexandria, VA – 6/20/2012



Excellence—Every project. Every day.

Certificate of Completion

is hereby granted to

Matt Wilkinson

for successful completion of

TRAINING ON NEAR TERM TASK FORCE

RECOMMENDATION 2.3

PLANT SEISMIC WALKDOWNS

Awarded: 7/26/2012 in Mt. Arlington, NJ

Kenneth Whitmore

Certified Seismic Walkdown Engineer

Alexandria, VA – 6/20/2012

EPRI-Qualified SWE Trainers

Kevin Bessell

Kursat Kinali

Ken Whitmore



Certificate of Completion

Kevin Bessell

**Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns**

June 13, 2012

Date

A handwritten signature in black ink, reading "R. P. Kassawara", is positioned above the printed name and title.

Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity



Certificate of Completion

Kursat Kinali

**Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns**

July 27, 2012

Date

R.P. Kassawara

Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity



Certificate of Completion

Kenneth Whitmore

**Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns**

June 21, 2012

Date

R.P. Kassawara

Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity

Attachment K

Seismic Walkdown Checklists (SWCs)

Revision 1

See Attachment C for Revision 0 SWCs

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-002

Equipment ID No. SSDEMCC311B Equip. Class: Motor Control Centers and Wall-Mounted Contactors

Equipment Description Motor Control Center 311B

Location: Bldg. RAB Floor El. +21 Room, Area 212

Manufacturer, Model, Etc. (optional but recommended) ITE / Gould Model 5640V4

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☒ N ☐
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐
 - *MCC is connected by welds to embedded plate. Drawings 1564-3187 and G344 S02 show the weld details.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐
 - *There is no corrosion visible on the bottom of the MCC or on the welds and embedded plates.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐
 - *There are no visible cracks in the concrete around the embedded plates.*

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-002

Equipment ID No. SSDEMCC311B Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description Motor Control Center 311B

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- *MCC is connected by welds to embedded plate. Drawings 1564-3187 and G344 S02 show the weld details.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐
- *Questions 2 – 4 satisfied.*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐
 - *Two conduits were found to be ~1/4" from the west end of the SSDEMCC311B. It was determined that the MCC will not move enough to strike the conduits so there is no interaction concern. See page 5 of 5 of this Seismic Walkdown Checklist for the determination of the movement for the MCC.*
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 ☐
 - *Conduits are rigidly attached to the top of SSDEMCC311B in accordance with drawing B288, Sheet 19-1.*
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐
 - *Questions 7 – 9 satisfied.*

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-002

Equipment ID No. SSDEMCC311B Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description Motor Control Center 311B

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)

- For area walk-by checklist, see AWC-018.
- One of two knurled knobs on a metal cover between cubicles 5 and 6 of SSDEMCC311B could not be tightened. This metal cover is hinged on one side with two knobs to hold it in place. The cover is a narrow strip going almost the entire height of the MCC and covers wires. CR-WF3-2012-06180 written to document this condition. This will not impact the seismic qualification of the MCC or any of the components inside it.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date: 3/5/13

Stephen Picard

Stephen Picard

3/11/13

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

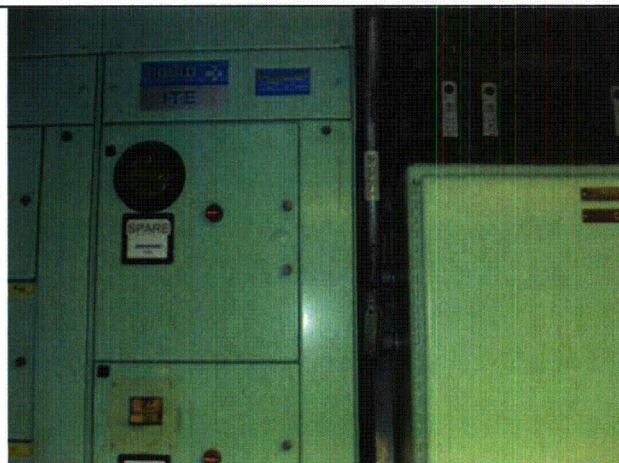
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-002

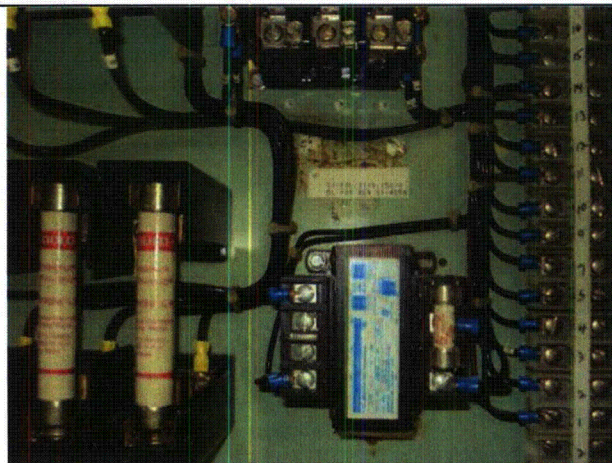
Equipment ID No. SSDEMCC311B Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description Motor Control Center 311B

Photographs



Note: Conduits adjacent to west end of SSDEMCC311B.



Note: View of internals of SI EBKR311B 15C inside SSDEMCC311B.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-002

Equipment ID No. SSDEMCC311B Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description Motor Control Center 311B

Discussion of Seismic Displacement of SSDEMCC311B

Conduits 32563B5-NB and 32563B6-NB were found to be approximately 1/4 inch from SSDEMCC311B (see attached photo). According to EPRI Seismic walkdown guidance this is a seismic proximity interaction concern because of the potential impact on the panel due to relative motion during seismic excitation. The relays/contactors/starters located in the panel are prone to 'chatter,' and could potentially be impacted.

The information below comes from EPRI NTTF 2.3 Seismic Walkdown Training Course and justifies the acceptability of the condition by showing the conduit and panel will not contact each other during a seismic event.

$$S_s = RS_d + \Delta_s$$

Where

S_s = Seismic displacement

R = Participation factor

S_d = Spectral displacement $\frac{S_{as}(386.4)}{(2\pi f_s)^2}$ (in)

Δ_s = Support displacement

f_s = Natural frequency of support (Hz)

S_{as} = Spectral acceleration at support frequency (in/s^2)

Deflection of the panel

$R = 1.57$ (For a cantilever beam, which is what the panel acts like)

$\Delta_s = 0$ in

$S_{as} = 0.4$ g (Design Basis Earthquake acceleration for +21 Reactor Auxiliary Building)

$f_s = 8$ Hz (Natural Frequency of Panel per SQ-E-2)

$$S_d = \frac{(0.4 \text{ g} (386.4))}{(2 \times \pi \times 8)^2}$$

$$S_s = 1.57 \times \frac{(0.4 \text{ g} (386.4))}{(2 \times \pi \times 8)^2}$$

$S_s = 0.096$ in

Deflection of the conduit

Conservatively assume the conduits have similar deflection. This is conservative because the panel that the conduits are attached to has more rigid mounting with 4 inch steel channels, which are welded to the floor, restraining the panel on both sides.

So, conservatively assume both the panel and conduits deflect 0.096 in.

$0.096 \times 2 = 0.192$ in < 0.250 in

Therefore, there is no contact between the panel and conduits and this condition is satisfied.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-004

Equipment ID No. CEDEBKR3918-B Equip. Class¹ Low Voltage Switchgears and Breaker Panels

Equipment Description REACTOR TRIP SWGR BREAKER TCB-2 COMPARTMENT 2C

Location: Bldg. RAB Floor El. +21 Room, Area Room 212, Col. 8A, Line K

Manufacturer, Model, Etc. (optional but recommended) General Electric Co., AK2-25-2

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

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
The anchorage was looked at underneath the one cubicle for this breaker and found to be satisfactory. However, not every cubicle on this panel was able or needed to be opened for this inspection.
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐
No corrosion was seen.
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-004

Equipment ID No. CEDEBKR3918-B Equip. Class Low Voltage Switchgears and Breaker Panels

Equipment Description REACTOR TRIP SWGR BREAKER TCB-2 COMPARTMENT 2C

5. Is the anchorage configuration consistent 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 ☐
*All overhead and adjacent equipment was securely supported. The
masonry block wall behind the CED breaker panel is an engineered
wall, is reinforced, and shows no signs of degradation.*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
*Conduits do not have flexible connections on top of the panel.
However, this is the design installation for Waterford 3 as shown on
drawing B288, sheet 19-1.*
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-004

Equipment ID No. CEDEBKR3918-B Equip. Class Low Voltage Switchgears and Breaker Panels

Equipment Description REACTOR TRIP SWGR BREAKER TCB-2 COMPARMENT 2C

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)

*AWC-019 applies to the area walk-by for this particular component.
No issues were found in this component.*

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

11/15/12

Stephen Picard

Stephen Picard

11/15/12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-004

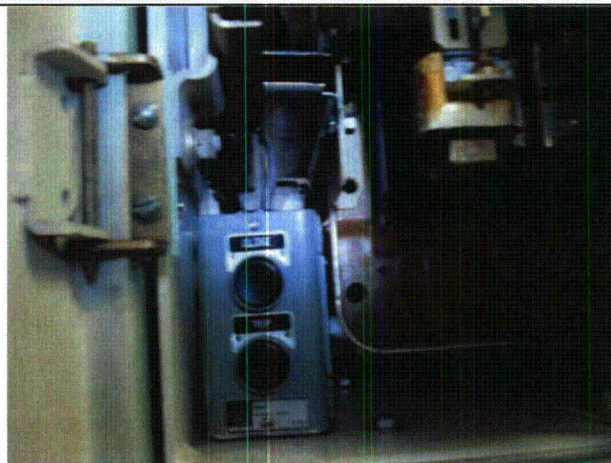
Equipment ID No. CEDEBKR3918-B Equip. Class Low Voltage Switchgears and Breaker Panels

Equipment Description REACTOR TRIP SWGR BREAKER TCB-2 COMPARTMENT 2C

Photographs



Note: View inside front of breaker cubicle.



Note: View in lower left of breaker cubicle.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 6

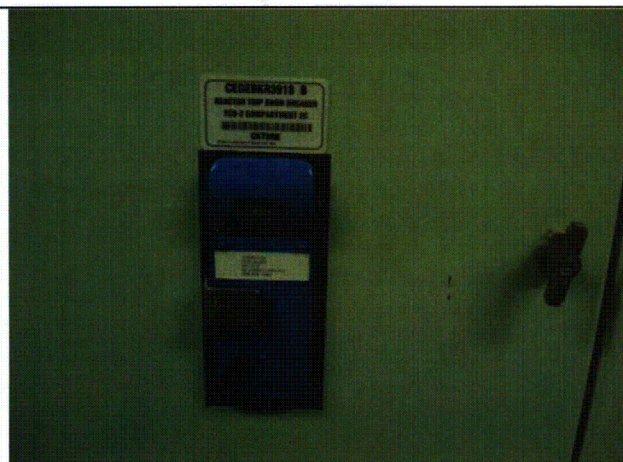
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-004

Equipment ID No. CEDEBK3918-B Equip. Class Low Voltage Switchgears and Breaker Panels

Equipment Description REACTOR TRIP SWGR BREAKER TCB-2 COMPARTMENT 2C

Photographs



Note: View of outside of front of breaker cubicle with equipment label.



Note: View in rear of full cubicle.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 6 of 6

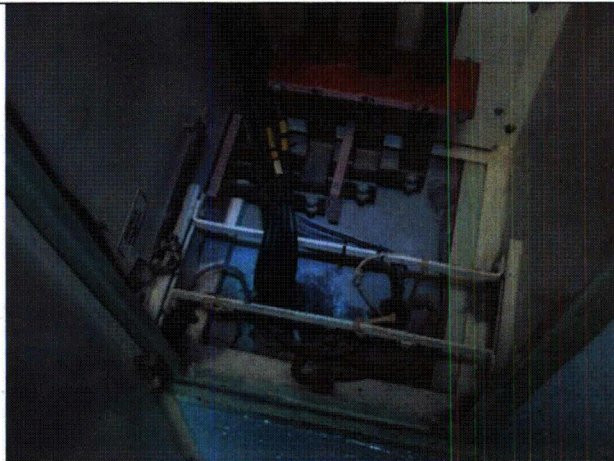
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-004

Equipment ID No. CEDEBKR3918-B Equip. Class Low Voltage Switchgears and Breaker Panels

Equipment Description REACTOR TRIP SWGR BREAKER TCB-2 COMPARMENT 2C

Photographs



Note: *View on floor of rear of breaker cubicle.*

Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-006

Equipment ID No. 4KVESWGR3A Equip. Class¹ Medium Voltage, Metal-Clad Switchgear

-OR- SWGR-3A3S

Equipment Description Switchgear 3A

Location: Bldg. RAB Floor El. +21 Room, Area 212A, Column 9A

Manufacturer, Model, Etc. (optional but recommended) General Electric, Co., AM4163502H

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

ATTACHMENT 9.6**SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 6Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-006**Equipment ID No. 4KVESWGR3A Equip. Class Medium Voltage, Metal-Clad Switchgear-OR- SWGR-3A3SEquipment Description Switchgear 3A

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

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

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 ☐

Lighting is in walk path. It is not over equipment. No equipment around the Switchgear 3A equipment is likely to collapse onto this equipment.

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

Rigid conduits are attached, but are acceptable per B288, S19 1.

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

Questions 7 – 9 verified.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-006

Equipment ID No. 4KVESWGR3A Equip. Class Medium Voltage, Metal-Clad Switchgear

-OR- SWGR-3A3S

Equipment Description Switchgear 3A

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 for description of missing and/or loose screws inside the Switchgear 3A. These were determined to NOT be a seismic concern.

Comments (Additional pages may be added as necessary)

- Anchorage is in good condition. All internals were well mounted.
- A screw was found missing on an overhead plate in cubicles 1, 3, and 7. Another screw was found to be loose on an overhead plate in cubicle 14. These screws are not a seismic concern since there are several other screws in place on each section of sheet metal. In addition, there is a cross-brace angle directly under the sheet metal that will keep it from being able to fall down inside the cubicle. CR-WF3-2012-06915 was written for these conditions.
- See AWC-016 for the area walk-by.
- No other seismic concerns were found.

Evaluated by: Stephen Picard

Stephen Picard

Date:

11/22/12

Gregory N. Ferguson

Gregory N. Ferguson

Date:

11/22/12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-006

Equipment ID No. 4KVESWGR3A Equip. Class Medium Voltage, Metal-Clad Switchgear

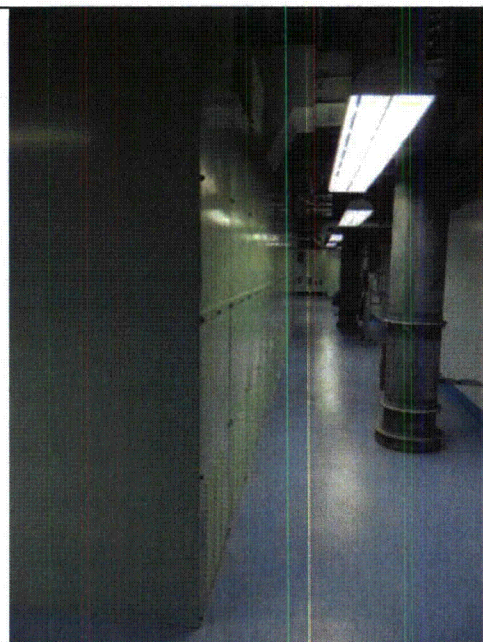
-OR- SWGR-3A3S

Equipment Description Switchgear 3A

Photographs



Note: View from front of 4KVESWGR3A panel.



Note: View from rear of 4KVESWGR3A panel.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-006

Equipment ID No. 4KVESWGR3A Equip. Class Medium Voltage, Metal-Clad Switchgear

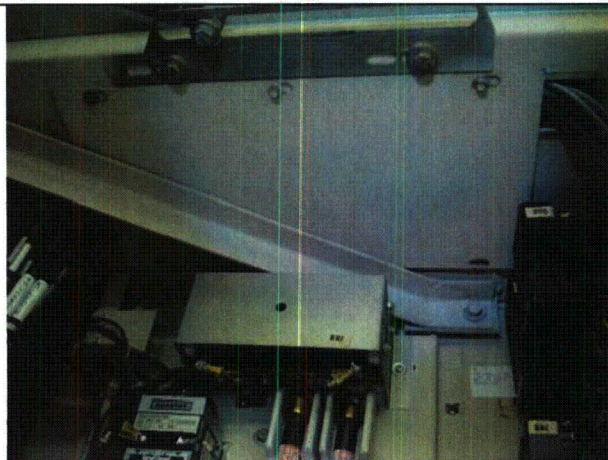
-OR- SWGR-3A3S

Equipment Description Switchgear 3A

Photographs



Note: View inside SI EBKR3A 4 cubicle.
Typical of most of the other breaker cubicles.



Note: Missing screw location inside
ACCEBKR3A 3 cubicle.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 6 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-006

Equipment ID No. 4KVESWGR3A Equip. Class Medium Voltage, Metal-Clad Switchgear

-OR- SWGR-3A3S

Equipment Description Switchgear 3A

Photographs



Note: Missing screw location inside HVREBKR3A 7 cubicle.



Note: Loose screw inside EG EBKR3A 14 cubicle.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-018

Equipment ID No. BM MVAAA109 Equip. Class¹ Pneumatic Operated Valves
Or 2BM-F108A/B

Equipment Description Reactor Drain Tank Outlet Inside Containment Isolation

Location: Bldg. RCB Floor El. -11 Room, Area Room 421

Manufacturer, Model, Etc. (optional but recommended) ITT Grinnell, 3225

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
In-Line component. No anchorage installed.
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☐ N ☐ U ☐ N/A ☒
In-Line component. No anchorage installed.
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒
In-Line component. No anchorage installed.
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒
In-Line component. No anchorage installed.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-018

Equipment ID No. BM MVAAA109 Equip. Class Pneumatic-Operated Valves
Or 2BM-F108A/B

Equipment Description Reactor Drain Tank Outlet Inside Containment Isolation

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.)
In-Line component. No anchorage installed. Y ☐ N ☐ U ☐ N/A ☒
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions?
In-Line component. No anchorage installed. Y ☒ N ☐ U ☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures?
*Valve is under grating on -11 elevation. No nearby equipment or
structures would be liable to impact this valve.* 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?
*All items have flexible lines or installation has bends that will allow
flexibility.* 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 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-018

Equipment ID No. BM MVAAA109

Equip. Class Pneumatic Operated Valves

Or 2BM-F108A/B

Equipment Description Reactor Drain Tank Outlet Inside Containment Isolation

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)

See AWC-54 for area walk-by checklist.

Evaluated by: Gregory N. Ferguson Gregory N. Ferguson Date: 3/5/13
Stephen Picard Stephen Picard 3/11/13

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-018

Equipment ID No. BM MVA AAA109

Equip. Class Pneumatic Operated Valves

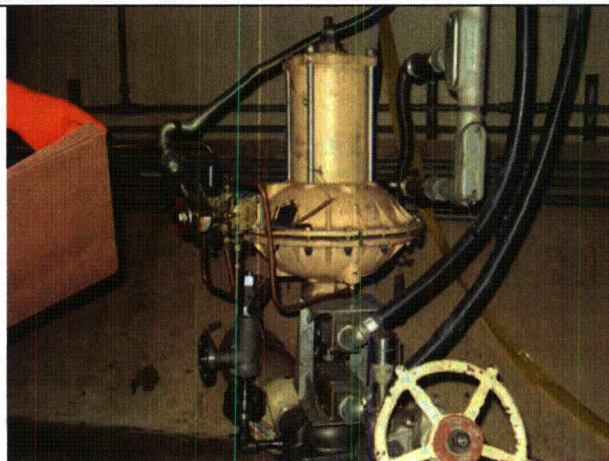
Or 2BM-F108A/B

Equipment Description Reactor Drain Tank Outlet Inside Containment Isolation

Photographs



Note: View of valve ID tag.



Note: View of valve and valve operator.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 6

Status: Y ☒ N ☐ U ☐

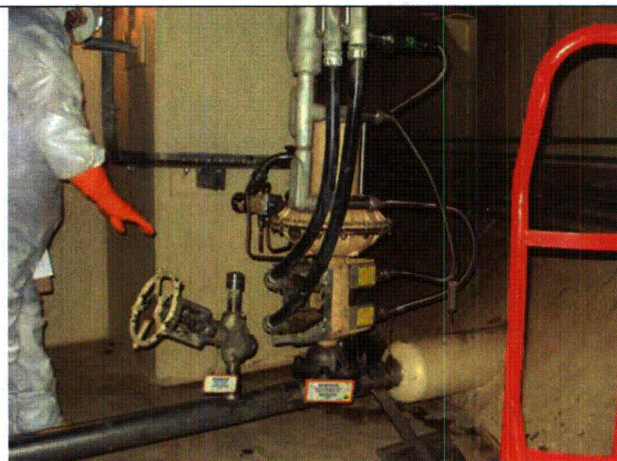
Seismic Walkdown Checklist (SWC) SWEL1-018

Equipment ID No. BM MVAAA109

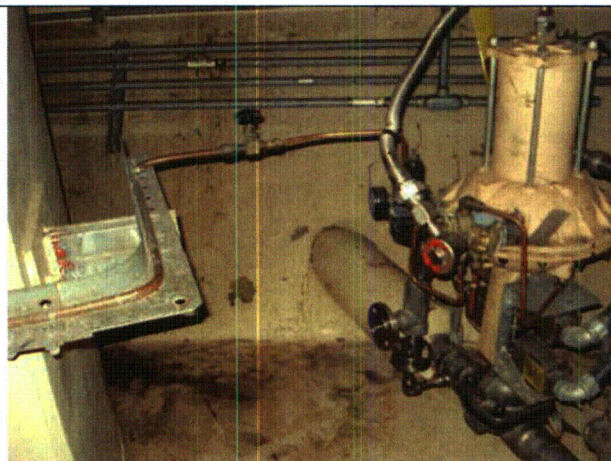
Equip. Class Pneumatic Operated Valves

Or 2BM-F108A/B

Equipment Description Reactor Drain Tank Outlet Inside Containment Isolation



Note: View from side of valve and valve operator. Handtruck in foreground was in place for work in progress in the area. Valve was out of service at time of walkdown due to steam generator replacement project.



Note: View showing flexible connections on air lines to valve operator. Bends in air lines will provide movement for line. Valve location at lowest elevation of containment, plus line solidly embedded in concrete will assure very little movement of valve and valve operator.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 6 of 6

Status: Y ☒ N ☐ U ☐

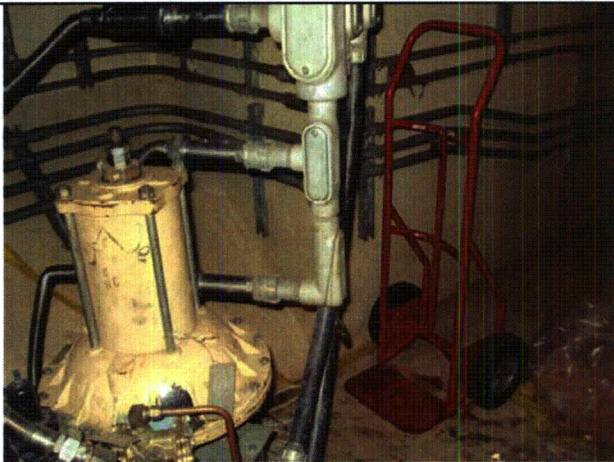
Seismic Walkdown Checklist (SWC) SWEL1-018

Equipment ID No. BM MVA AAA109

Equip. Class Pneumatic Operated Valves

Or 2BM-F108A/B

Equipment Description Reactor Drain Tank Outlet Inside Containment Isolation



Note: View showing flexible connections to valve operator. Handtruck in background was in place for work in progress in the area. Valve was out of service at time of walkdown due to steam generator replacement project.

Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 3

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-019

Equipment ID No. CAPMVAAA103 Equip. Class: Pneumatic-Operated Valves
-OR- 2HV-B151A

Equipment Description Containment Purge Inlet Inside Annulus

Location: Bldg. ANN Floor El. +21 Room, Area Room 420

Manufacturer, Model, Etc. (optional but recommended) Fisher Controls Company, Inc., 9220-48IN

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
In-Line component. No anchorage on assembly.
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☐ N ☐ U ☐ N/A ☒
In-Line component. No anchorage on assembly.
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒
In-Line component. No anchorage on assembly.
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒
In-Line component. No anchorage on assembly.

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

ATTACHMENT 9.6**SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 3Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-019**Equipment ID No. CAPMVAAA103 Equip. Class Pneumatic-Operated Valves-OR- 2HV-B151AEquipment Description Containment Purge Inlet Inside Annulus

5. Is the anchorage configuration consistent with plant documentation? Y ☐ N ☐ U ☐ N/A ☒
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.)
In-Line component. No anchorage on assembly.
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 ☐
*The annulus is mostly empty space. There are no other seismic
hazards around the valve or valve operator.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,
and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
*The only items that are overhead are some piping and conduits. The
annulus is mostly empty. The items overhead are securely in place and
present no seismic hazard.*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
There is adequate flex connections on the lines.
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 3

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-019

Equipment ID No. CAPMVAAA103 Equip. Class Pneumatic-Operated Valves
-OR- 2HV-B151A

Equipment Description Containment Purge Inlet Inside Annulus

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)

- Walkdown showed that solenoid valve CAPISV0103 for this valve only had 3 of 4 mounting bolts installed. One of these 3 mounting bolts did not have full thread engagement. A review of SQRT File SQ-MN-211 showed that Farwell & Hendricks test report 50089.2 seismically tested this model solenoid valve, and it was found to meet all seismic qualification requirements with only two mounting bolts installed. This is an acceptable condition.
- No seismic hazards were found in the area around the valve.
- Photos of this valve were not able to be obtained.
- See AWC-059 for the Area Walk-By documentation.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

3/5/13

Stephen Picard

Stephen Picard

3/11/13

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-026

Equipment ID No. CVCMVAAA209

Equip. Class: PNEUMATIC-OPERATED VALVES

-OR-

2CH-F1529A/B

Equipment Description CHARGING HEADER ISOLATION

Location: Bldg. RB

Floor El. +21

Room, Area ROOM 225B, COL 10A, LINE M

Manufacturer, Model, Etc. (optional but recommended) WKM DIV/ACF IND INC, M1

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
Line-Mounted Valve
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☐ N ☐ U ☐ N/A ☒
No anchorage on this valve. It is line-mounted.
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒
No anchorage on this valve. It is line-mounted. No corrosion seen on valve.
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒
No anchorage on this valve. It is line-mounted. There were no cracks found in the concrete near the valve.

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

ATTACHMENT 9.6**SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 6Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-026**Equipment ID No. CVCMVAAA209Equip. Class² PNEUMATIC-OPERATED VALVES-OR-2CH-F1529A/BEquipment Description CHARGING HEADER ISOLATION

5. Is the anchorage configuration consistent 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?
*Valve is located in the pipe chase beneath the "B" Switchgear room in
RAB +21. There is no equipment nearby that could impact this valve.* 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?
There is no equipment overhead of this valve inside the pipe chase. 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 ☐

² Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-026

Equipment ID No. CVCMVAAA209

Equip. Class³ PNEUMATIC-OPERATED VALVES

-OR-

2CH-F1529A/B

Equipment Description CHARGING HEADER ISOLATION

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)

See AWC-031 for the area walk-by checklist.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

11-15-12

Stephen Picard

Stephen Picard

11/15/12

³ Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-026

Equipment ID No. CVCMVAAA209

Equip. Class⁴ PNEUMATIC-OPERATED VALVES

-OR-

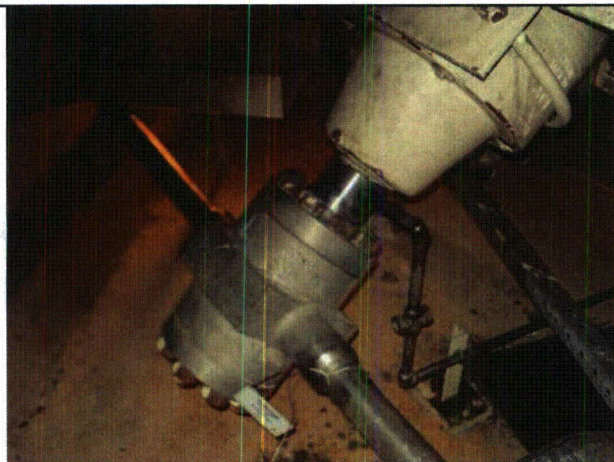
2CH-F1529A/B

Equipment Description CHARGING HEADER ISOLATION

Photographs



Note: UNID Tag for CVCMVAAA209



Note: Looking down at valve body

⁴ Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-026

Equipment ID No. CVCMVAAA209

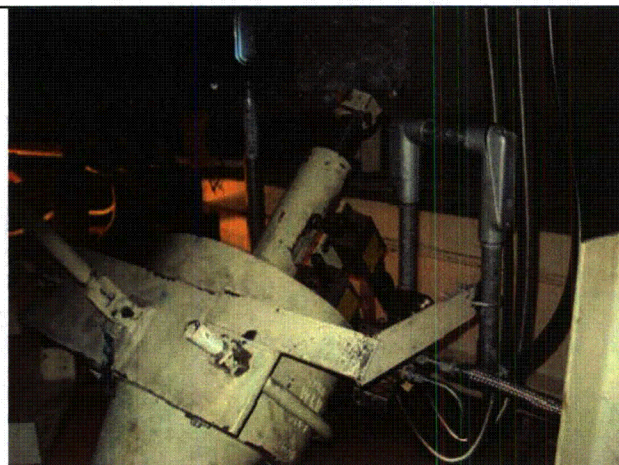
Equip. Class⁵ PNEUMATIC-OPERATED VALVES

-OR-

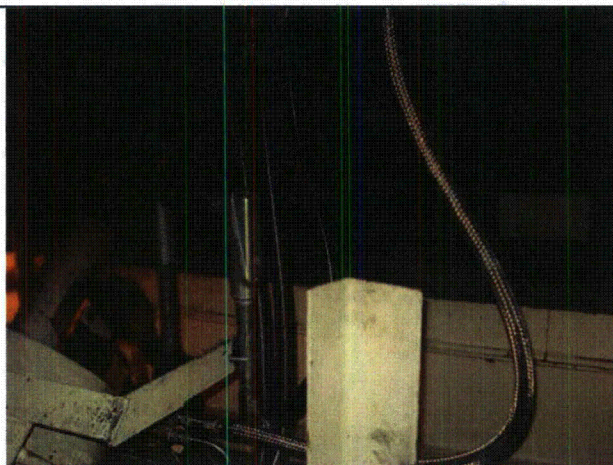
2CH-F1529A/B

Equipment Description CHARGING HEADER ISOLATION

Photographs



Note: Top of CVCMVAAA209 VALVOP



Note: Top of CVCMVAAA209 VALVOP

⁵ Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 6 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-026

Equipment ID No. CVCMVAAA209

Equip. Class⁶ PNEUMATIC-OPERATED VALVES

-OR-

2CH-F1529A/B

Equipment Description CHARGING HEADER ISOLATION

Photographs



Note: Support strut for CVCMVAAA209

Note:

⁶ Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-037

Equipment ID No. SI MVA307-A Equip. Class¹ Pneumatic-Operated Valves

-OR- 2SI-F1564TK1A

Equipment Description Safety Injection Tank 1A Fill/Drain

Location: Bldg. RCB Floor El. +35 Room, Area Room 421, Col. 17

Manufacturer, Model, Etc. (optional but recommended) Fisher Controls Company, Inc., DBQ

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

ATTACHMENT 9.6**SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 6Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-037**Equipment ID No. SI MVA307-A Equip. Class Pneumatic-Operated Valves-OR- 2SI-F1564TK1AEquipment Description Safety Injection Tank 1A Fill/Drain

5. Is the anchorage configuration consistent 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 ☐
In-Line component.
-

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐
*All nearby equipment and structures are properly mounted. Temporary
shielding request 2012-0100 is placed near the valve, but it is properly
installed in accordance with Waterford and Entergy procedures.*
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 ☐
*Any overhead or adjacent equipment is properly installed and is not
likely to collapse onto this valve and/or operator.*
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 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-037

Equipment ID No. SI MVA307-A Equip. Class Pneumatic-Operated Valves

-OR- 2SI-F1564TK1A

Equipment Description Safety Injection Tank 1A Fill/Drain

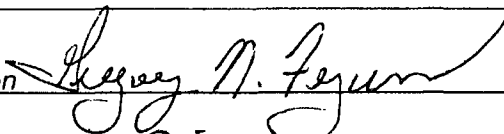
Other Adverse Conditions

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)

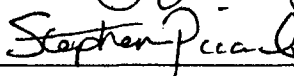
- See AWC-060 for the Area Walk-By checklist.

Evaluated by: Gregory N. Ferguson



Date: 12/17/12

Stephen Picard



12/19/12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 6

Status: Y ☒ N ☐ U ☐

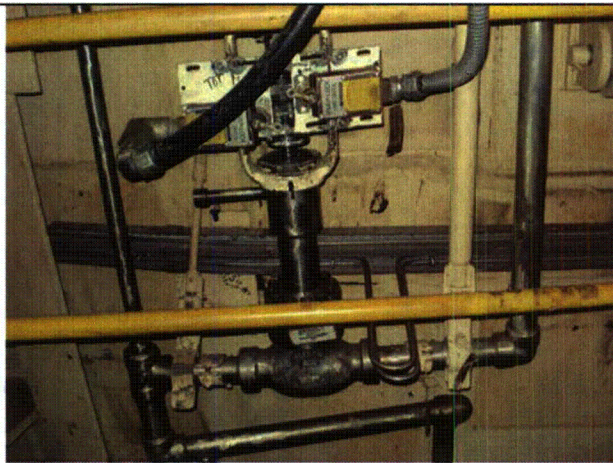
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Equipment ID No. SI MVA307-A Equip. Class Pneumatic-Operated Valves

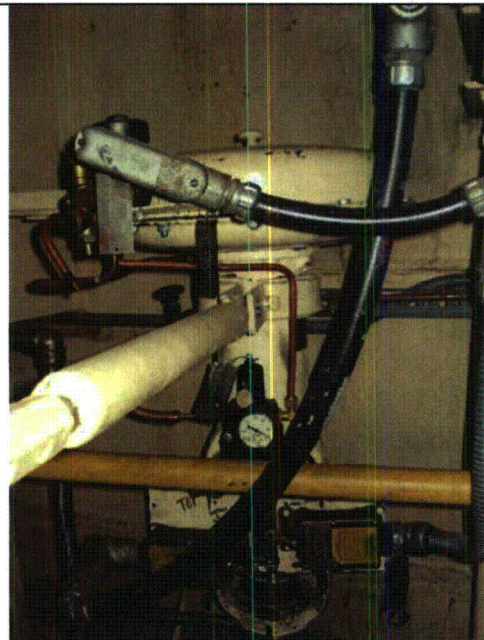
-OR- 2SI-F1564TK1A

Equipment Description Safety Injection Tank 1A Fill/Drain

Photographs



Note: View of valve and operator.



Note: View of valve and operator from different angle.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 6

Status: Y ☒ N ☐ U ☐

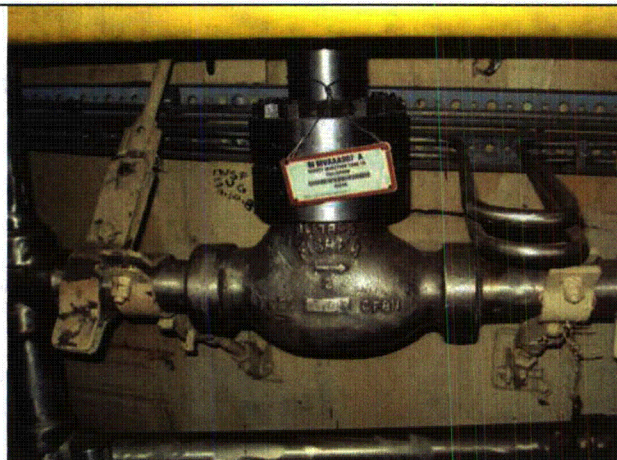
Seismic Walkdown Checklist (SWC) SWEL1-037

Equipment ID No. SI MVAAA307-A Equip. Class Pneumatic-Operated Valves

-OR- 2SI-F1564TK1A

Equipment Description Safety Injection Tank 1A Fill/Drain

Photographs



Note: View of valve only.



Note: View of valve and operator.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 6 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-037

Equipment ID No. SI MVA307-A Equip. Class Pneumatic-Operated Valves

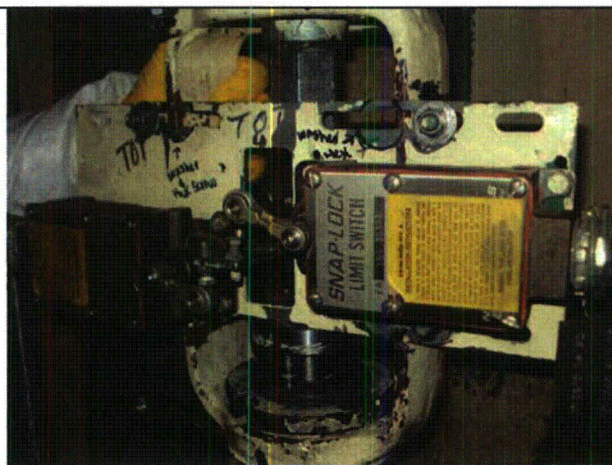
-OR- 2SI-F1564TK1A

Equipment Description Safety Injection Tank 1A Fill/Drain

Photographs



Note: View of limit switch mounting plate on operator.



Note: View of limit switch mounting plate on operator.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-038

Equipment ID No. SI MVA405B Or Equip. Class: Pneumatic Operated Valves
1SI-V1501B

Equipment Description RC Loop 1 SDC Suction Inside Containment Isolation

Location: Bldg. RCB Floor El. +21 Room, Area Room 421, Col. 17

Manufacturer, Model, Etc. (optional but recommended) Lunkenheimer / Condec 2490X47

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
In-Line mounting.
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☐ N ☐ U ☐ N/A ☒
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-038

Equipment ID No. SI MVAAA405B or Equip. Class Pneumatic Operated Valves
1SI-V1501B

Equipment Description RC Loop 1 SDC Suction Inside Containment Isolation

5. Is the anchorage configuration consistent 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 ☐
In-Line mounting.

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 ☐
*There is lead shielding installed near this valve as shown in the
attached pictures. However, the lead shielding is installed per plant
procedures and engineering requirements. This will not present any
seismic concerns.*

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-038

Equipment ID No. SI MVA405B or 1SI-V1501B Equip. Class Pneumatic Operated Valves

Equipment Description RC Loop 1 SDC Suction Inside Containment Isolation

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

1. The upper end of conduit 30590M-NB, which feeds a computer point for SI ISV0405 B1, can be moved several inches. The lower conduit fitting appears to be loose. This will not affect the seismic ability of SI-405B to perform it's safety function since the cable in the conduit only performs an indication function.
2. The label on T30590M2-NB is loose and needs to be repaired. This loose material could become dislodged during an accident and reach the SI Sump strainers, causing additional flow blockage. This label will not have any effect on the seismic qualification of the SI-405B valve or operator.
3. Some of the buckles and strike plates on the insulation underneath this valve are broken or missing. This is on line 1SI14-146B. This will not have any impact on the seismic qualification of the valve.

CR-WF3-2012-07133 has been written to describe these conditions.
See AWC-056 for the area walk-by checklist.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date: 3/5/13

Stephen Picard

Stephen Picard

3/11/13

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

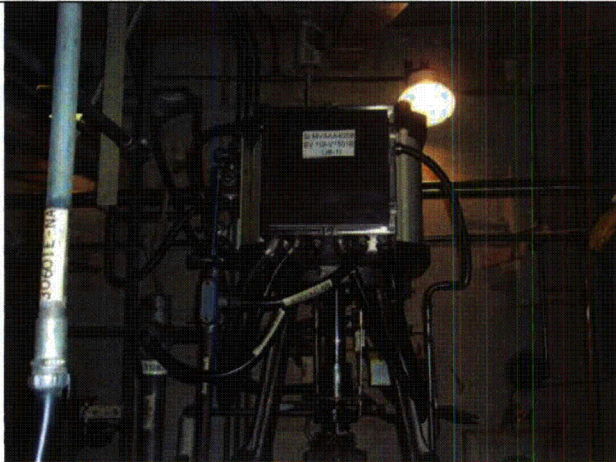
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-038

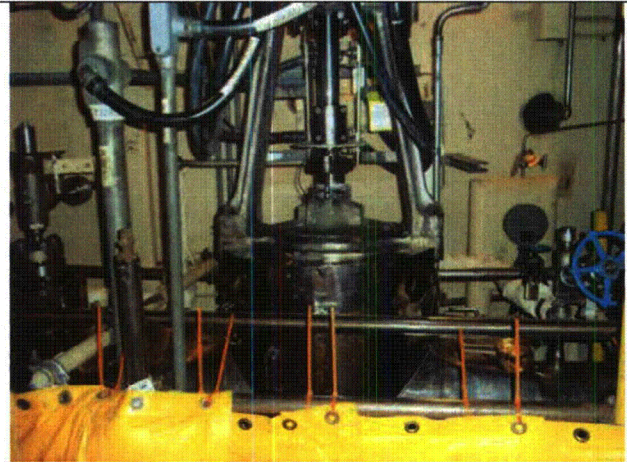
Equipment ID No. SI MVA4405B or Equip. Class Pneumatic Operated Valves
1SI-V1501B

Equipment Description RC Loop 1 SDC Suction Inside Containment Isolation

Photographs



Note: View of SI 405B operator.



Note: View of SI-405B.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

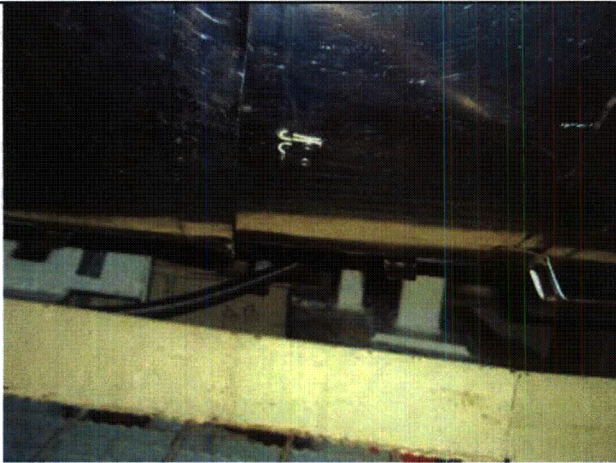
Sheet 5 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-038

Equipment ID No. SI MVA4405B or Equip. Class Pneumatic Operated Valves
1SI-V1501B

Equipment Description RC Loop 1 SDC Suction Inside Containment Isolation



Note: View of underside of insulation on 1SI14-146B showing missing insulation buckles.



Note: View of tilted conduit 30590M-NB and tape on T30590M2-MB that is loose.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-047

Equipment ID No. RC ISV1014 Equip. Class¹ Motor Operated and Solenoid Operated Valves
Or 2RC-E2560B

Equipment Description Reactor Vessel Vent to Quench Tank Isolation

Location: Bldg. RCB Floor El. +46 Room, Area 421, South End of Reactor Cavity

Manufacturer, Model, Etc. (optional but recommended) Target Rock Corporation, 96Q-001

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
In-line mounting.
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☐ N ☐ U ☐ N/A ☒
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-047

Equipment ID No. RC ISV1014 or Equip. Class Motor Operated and Solenoid Operated Valves
2RC-E2560B

Equipment Description Reactor Vessel Vent to Quench Tank Isolation

5. Is the anchorage configuration consistent 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 ☐

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-047

Equipment ID No. RC ISV1014 or Equip. Class Motor Operated and Solenoid Operated Valves
2RC-E2560B

Equipment Description Reactor Vessel Vent to Quench Tank Isolation

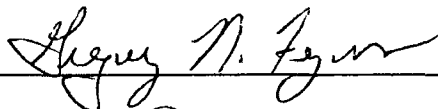
Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

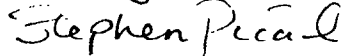
1. Evidence of boric acid was found on the valve. It was apparent that this had come from above RC ISV1014. Research showed that CR-WF3-2012-05209 was previously written for this boric acid leak.
2. No other issues found on this SWEL walkdown.
3. See AWC-057 for the area walk-by checklist.

Evaluated by: Gregory N. Ferguson



Date: 12/1/12

Stephen Picard



12/5/12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

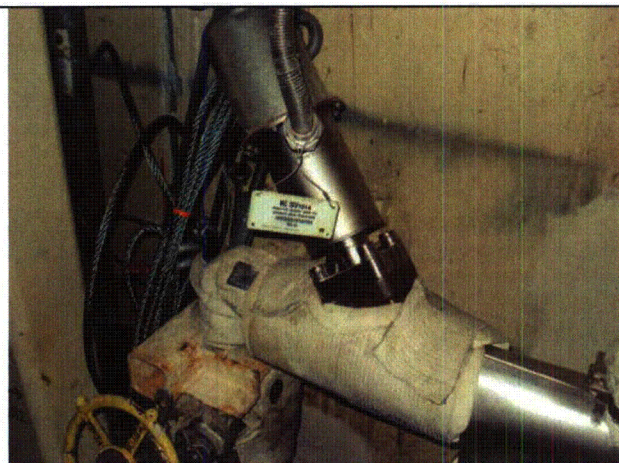
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-047

Equipment ID No. RC ISV1014 or Equip. Class Motor Operated and Solenoid Operated Valves
2RC-E2560B

Equipment Description Reactor Vessel Vent to Quench Tank Isolation

Photographs



Note: *View of RC ISV1014 VALVE.*

Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-048

Equipment ID No. RC ISV3184 Equip. Class¹ Motor Operated and Solenoid Operated Valves
Or 2RC-E2557A

Equipment Description Pressurizer Vent to Quench Tank

Location: Bldg. RCB Floor El. +46 Room, Area 421, South End of Reactor Cavity

Manufacturer, Model, Etc. (optional but recommended) Target Rock Corporation, 96Q-001

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-048

Equipment ID No. RC ISV3184 or Equip. Class Motor Operated and Solenoid Operated Valves
2RC-E2557A

Equipment Description Pressurizer Vent to Quench Tank

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

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

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 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-048

Equipment ID No. RC ISV3184 or Equip. Class Motor Operated and Solenoid Operated Valves
2RC-E2557A

Equipment Description Pressurizer Vent to Quench Tank

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

1. Evidence of boric acid was found on the valve. It was apparent that this had come from above RC ISV1014. Research showed that CR-WF3-2012-05209 was previously written for this boric acid leak.
2. No other issues found on this SWEL walkdown.
3. See AWC-057 for the area walk-by checklist.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date: 12/1/12

Stephen Picard

Stephen Picard

12/5/12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-048

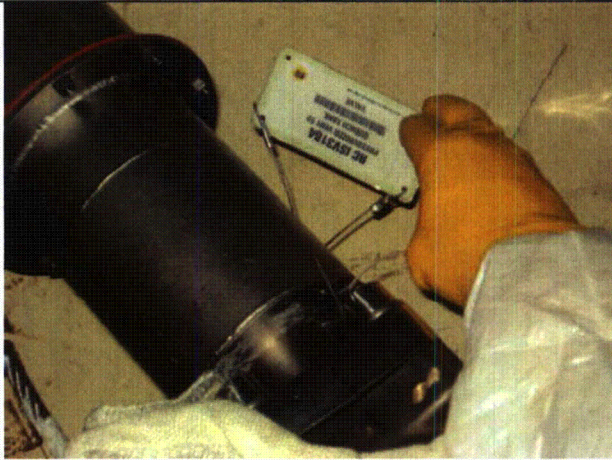
Equipment ID No. RC ISV3184 or

Equip. Class Motor Operated and Solenoid Operated Valves

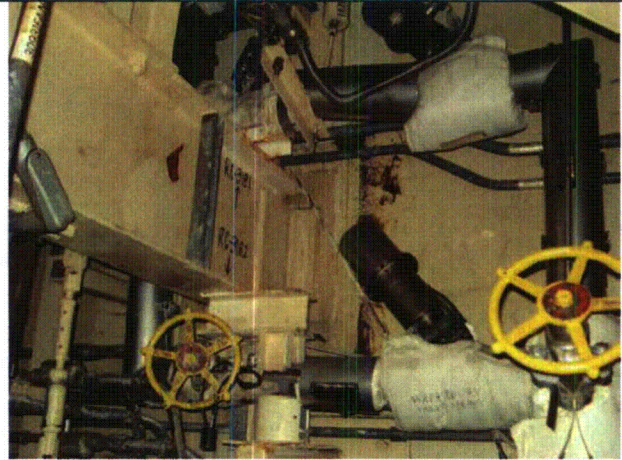
2RC-E2557A

Equipment Description Pressurizer Vent to Quench Tank

Photographs



Note: View of RC ISV3184 VALVE.



Note: View of RC ISV3184 VALVE.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 7

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-059

Equipment ID No. ACCMFAN0002-B Equip. Class: Fans
-OR- FAN 10

Equipment Description WET COOLING TOWER B FAN 2-SB

Location: Bldg. CTB Floor El. +30 Room, Area ROOM B60A COL 12A LINE Q1 AZ DEG

Manufacturer, Model, Etc. (optional but recommended) AEROVENT INC, Model W, SR; FAN, COOLING

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
 - *Item not one of the 50% of SWEL items requiring anchorage configuration verification.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐
 - *There were no cracks visible in the concrete near the ACCMFAN0002B.*

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 7

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-059

Equipment ID No. ACCMFAN0002-B Equip. Class Fans
-OR- FAN 10

Equipment Description WET COOLING TOWER B FAN 2-SB

5. Is the anchorage configuration consistent 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 ☒
• *Item not one of the 50% of SWEL items requiring anchorage
configuration verification.*
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 is no equipment mounted above or near this fan. The fan is
located on the top elevation of the cooling tower area.* 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?
*There is no equipment mounted above or near this fan. The fan is
located on the top elevation of the cooling tower area.* 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 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 7

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-059

Equipment ID No. ACCMFAN0002-B Equip. Class Fans
-OR- FAN 10

Equipment Description WET COOLING TOWER B FAN 2-SB

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 ☐

- Spalled concrete was found around the edges of the embedded plates for the wet cooling tower fan support structure. This condition was previously identified and evaluated in CR-WF3-2002-00337 for the WCT B fans 1 - 4. This condition was determined to NOT be a seismic concern. CR-WF3-2001-00748 also identified spalled concrete around the embedded plates for WCT B fans 5 - 8.

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-061.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date: 12/23/12

Stephen Picard

Stephen Picard

12/24/12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 7

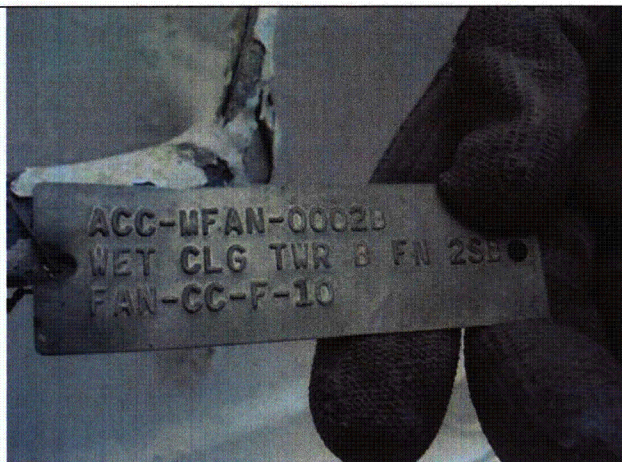
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-059

Equipment ID No. ACCMFAN0002-B Equip. Class Fans
-OR- FAN 10

Equipment Description WET COOLING TOWER B FAN 2-SB

Photographs



Note: *Equipment ID tag.*



Note: *Overall view of exterior of shroud and fan support.*

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

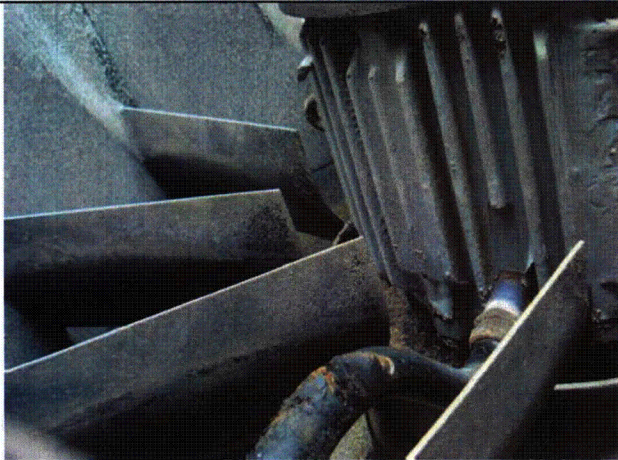
Sheet 5 of 7

Status: Y ☒ N ☐ U ☐

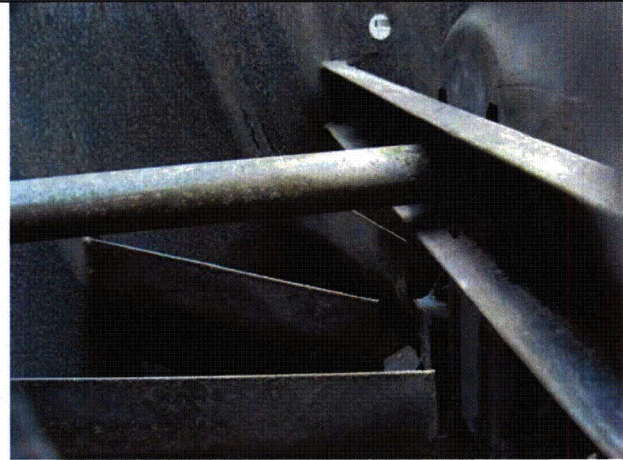
Seismic Walkdown Checklist (SWC) SWEL1-059

Equipment ID No. ACCMFAN0002-B Equip. Class Fans
-OR- FAN 10

Equipment Description WET COOLING TOWER B FAN 2-SB



Note: *View of motor and fan supports.*



Note: *View of motor and fan supports.*

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 6 of 7

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-059

Equipment ID No. ACCMFAN0002-B Equip. Class Fans
-OR- FAN 10

Equipment Description WET COOLING TOWER B FAN 2-SB



Note: View looking at fan support and part of motor.



Note: View showing bolts used to mount shroud and fans.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 7 of 7

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-059

Equipment ID No. ACCMFAN0002-B Equip. Class Fans
-OR- FAN 10

Equipment Description WET COOLING TOWER B FAN 2-SB



Note: View showing bolts used to mount fan and shroud.



Note: View looking up on fan shroud showing peeling paint. Material underneath is galvanized.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 7

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. IC ICDC1-C Equip. Class¹ Instrument Racks

Equipment Description Instrument Cabinet C-1C

Location: Bldg. RCB Floor El. +21 Room, Area 421, Column 16

Manufacturer, Model, Etc. (optional but recommended) Mercury Instruments (no model number)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☒ N ☐
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒
Anchorage consists of bolts connected to structural steel.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 7

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. IC ICDC1-C Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-1C

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

The seismic qualification files for this component (SQ-IC-61) calls for eight (8) ½" diameter bolts. This SQRT File was prepared for the Three Mile Island plant. However, vendor drawing 1564-9155, which is specifically prepared for this component, calls for six (6) bolts. In the field, there are seven bolts installed. Three (3) in the front, three (3) in the rear, and one (1) on the right end of the panel. CR-WF3-2012-07132 has been written for this condition.

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

The issue of the number of bolts identified in question 5 above does not result in a concern over the adequacy of the mounting of the panel. The extra bolt above that called out in 1564-9155 will not impact the seismic qualification of the panel. The base of this panel is made of stiff channels and will act as one assembly. EC 41374 was prepared and issued to address the issues on this panel.

Interaction Effects

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

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

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
Rigid conduits are attached, but are acceptable per B288, S19 1.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 7

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. IC ICDC1-C Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-1C

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 ☐

Some issues were found internal to the panel and are described in the comments section below.

Comments (Additional pages may be added as necessary)

1. Conduits 39752-NA and 36323-NA are mounted to the outside panel on the left end of IC ICDC1-C. The fittings attaching these conduits to the panel need to be tightened. No seismic concerns with this condition.
2. An electrical plug underneath the panel on the left end of IC ICDC1-C is loose and needs to be tightened. No seismic concerns with this condition.
3. A panel cover on the lower left inside of IC ICDC1-C is missing one bolt out of four. Panel cover will remain in place during seismic event.
4. A shield cover on the lower right inside of IC ICDC1-C is missing the nut on one of the hold-down bolts. Three are properly installed. Shield cover will remain in place during seismic event.
5. IC ITS3001 C2 on the upper right inside of IC ICDC1-C is loose. The nut for the hold down assembly is missing. This instrument was abandoned in place per DC-3382 according to Asset Suite. However, it still needs to be properly mounted to prevent potential danger to other equipment. Instrument cannot come free of bracket screw during seismic event since it would have to move upwards at least 1" more than the panel. No seismic II / I concerns.
6. CR-WF3-2012-07132 has been written to describe these conditions.

See AWC-056 for Area Walk-By Checklist.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date: 3/5/13

Stephen Picard

Stephen Picard

3/11/13

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 7

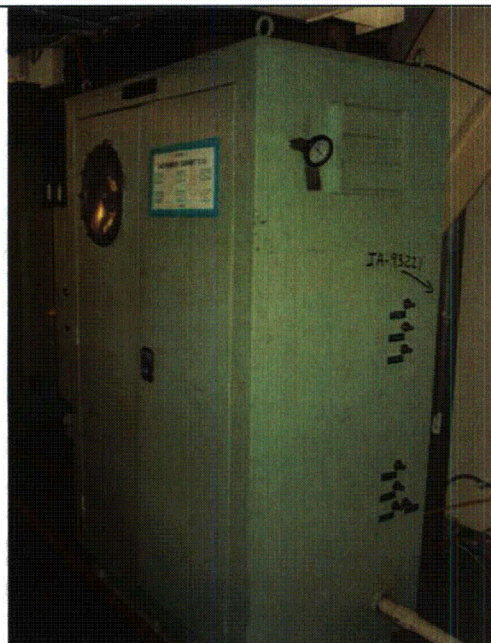
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Seismic Walkdown Checklist (SWC) SWEL1-075

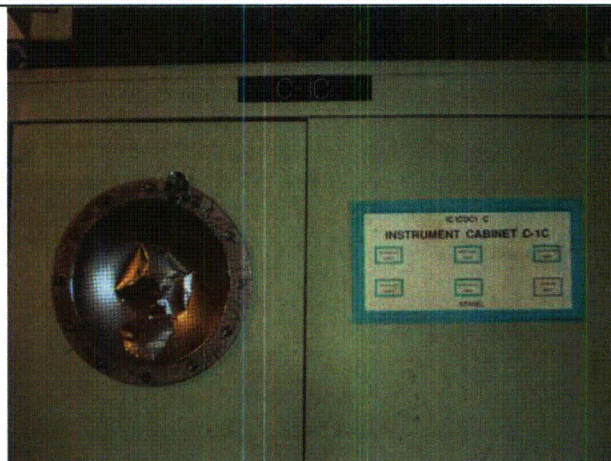
Equipment ID No. IC ICDC1-C Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-1C

Photographs



Note: Side view of panel.



Note: View of front of panel.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

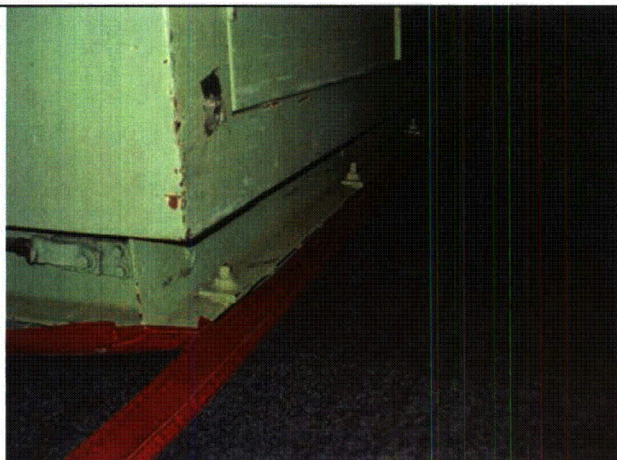
Sheet 5 of 7

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. IC ICDC1-C Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-1C



Note: View of front of panel showing structural bolting. Fabric material is FME material placed over floor grating during the outage. The red tape is used to hold down the material. This is removed during plant operation.



Note: Electrical plug underneath panel on left exterior of IC ICDC1-C. Plug connection to panel is loose.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

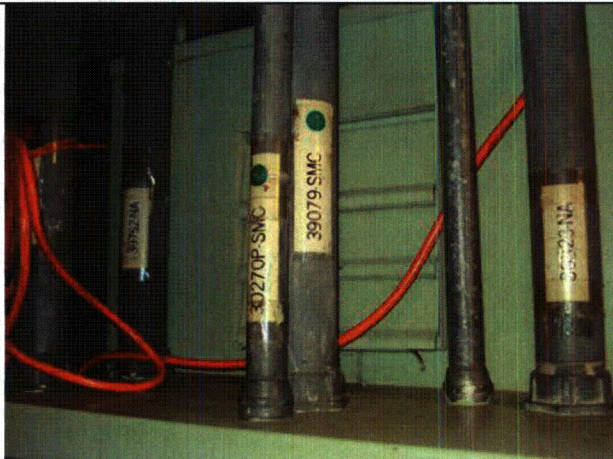
Sheet 6 of 7

Status: Y ☒ N ☐ U ☐

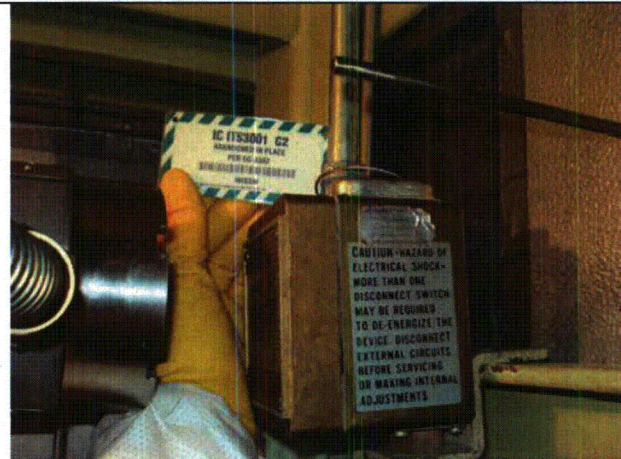
Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. IC ICDC1-C Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-1C



Note: Location of conduits 39752-NA and 36323-NA that need to have the fittings tightened.



Note: IC ITS3001 C2 on upper right inside of panel. Note missing nut on holddown bracket for instrument.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 7 of 7

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. IC ICDC1-C Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-1C



Note: Panel cover on lower right inside of panel with missing screw on upper right location on cover.



Note: Shield cover on lower right inside of panel with missing nut on lower right bolt.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. IC ICDC9 Equip. Class¹ Instrument Racks

Equipment Description Reactor Drain Tank Outlet Inside Containment Isolation

Location: Bldg. RCB Floor El. +21 Room, Area Room 421, Column 6

Manufacturer, Model, Etc. (optional but recommended) Mercury Company (no model number)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☒ N ☐
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒
Panel is bolted to structural steel supports, not concrete.

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

ATTACHMENT 9.6**SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 6Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-077**Equipment ID No. IC ICDC9 Equip. Class Instrument RacksEquipment Description Instrument Cabinet C-9

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
The seismic qualification documentation for this panel called for eight (8) 1/2" bolts. Drawing 1564-9158 calls for ten (10) bolts to be installed. There are actually ten (10) installed. Four (4) are installed in the rear, four in the front, and one on each end. CR-WF3-2012-07219 was written to address this documentation discrepancy.
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 ☐
Rigid conduits are attached, but are acceptable per B288, S19 1.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. IC ICDC9 Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-9

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

The interior of this cabinet was clean and had no loose equipment. No hazards were seen around this cabinet.

CR-WF3-2012-07219 was written to document that there are 10 bolts used to mount the panel to the steel, while the SQRT file SQ-IC-61 only calls for 8 bolts. However, drawing 1564-9158, which was prepared specifically for Waterford 3, does call for 10 bolts.

See AWC-055 for the area walk-by for this equipment.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

12/5/12

Stephen Picard

Stephen Picard

12/5/12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 6

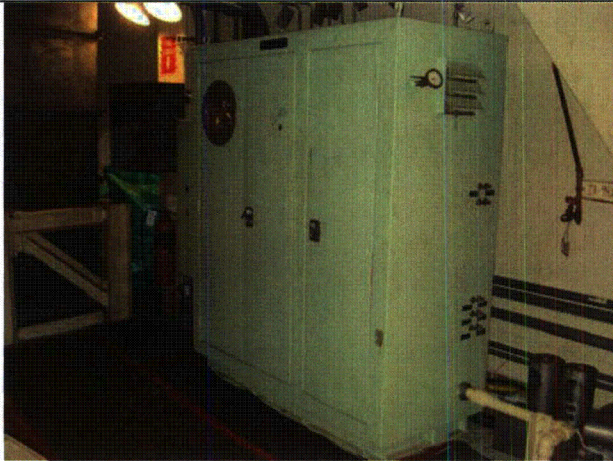
Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-077

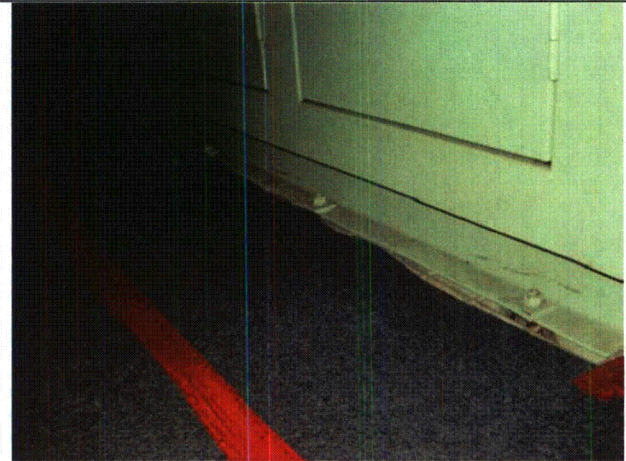
Equipment ID No. IC ICDC9 Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-9

Photographs



Note: View of panel.



Note: View of front of panel showing structural bolting. Fabric material is FME material placed over floor grating during the outage. The red tape is used to hold down the material. This is removed during plant operation.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. IC ICDC9 Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-9



Note: View of right end of panel showing structural bolt. Fabric material is FME material placed over floor grating during the outage. The red tape is used to hold down the material. This is removed during plant operation.



Note: View inside right portion of panel.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

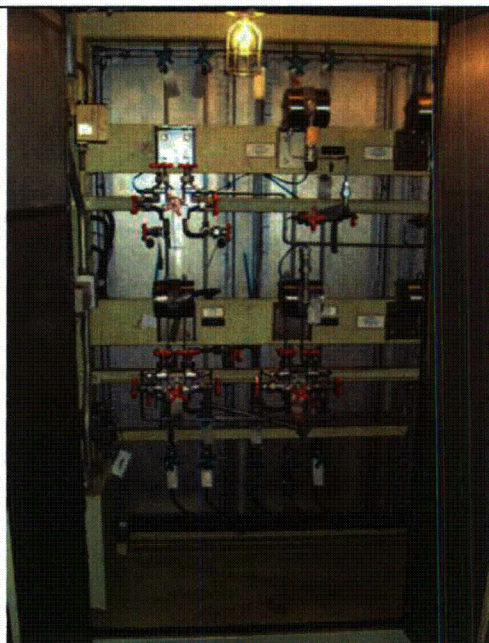
Sheet 6 of 6

Status: Y ☒ N ☐ U ☐

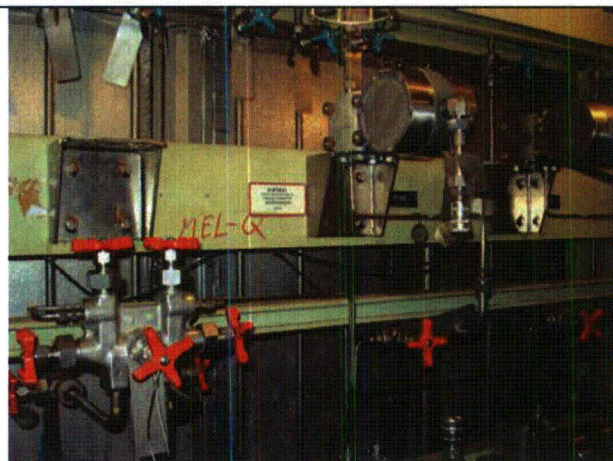
Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. IC ICDC9 Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-9



Note: View inside left portion of panel.



Note: View of inside of panel.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. SG ILT1115A Equip. Class¹ Instrument Racks

Or LT-FW-1115AS

Equipment Description Steam Generator 1 Level IXMITR (Wide Range)

Location: Bldg. RCB Floor El. -4 Room, Area 421, column 18

Manufacturer, Model, Etc. (optional but recommended) ITT Barton Instruments, 764

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. SG ILT1115A or Equip. Class Instrument Racks
LT-FW-1115AS

Equipment Description Steam Generator 1 Level IXMITR (Wide Range)

5. Is the anchorage configuration consistent 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 ☐
*A lead shielding stand called a "Smitty Shield" has been placed directly
up against this instrument. According to EC 40686 (TSR 2012-117),
this shielding is not supposed to be placed where it could fall over and
hit any safety related equipment. CR-WF3-2012-07217 has been
written for this issue. The lead shielding was installed after the
instrument was taken out of service and was removed before the
instrument was required to be back in service.*

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. SG ILT1115A or Equip. Class Instrument Racks

LT-FW-1115AS

Equipment Description Steam Generator Level 1 IXMITR (Wide Range)

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)

See AWC-058 for Area Walk-By Checklist.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

3/6/13

Stephen Picard

Stephen Picard

3/11/13

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-079

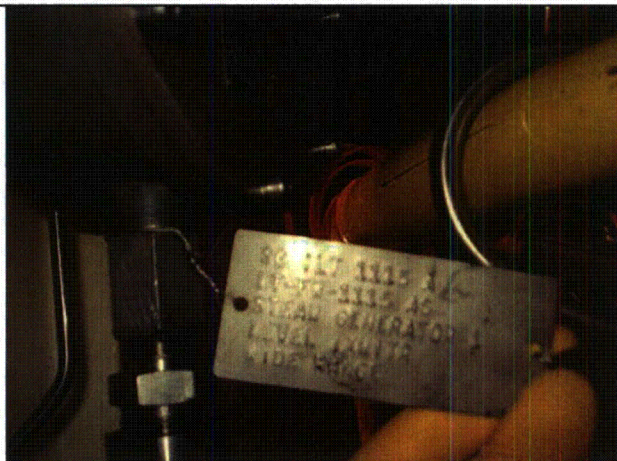
Equipment ID No. SG ILT1115A

Equip. Class Instrument Racks

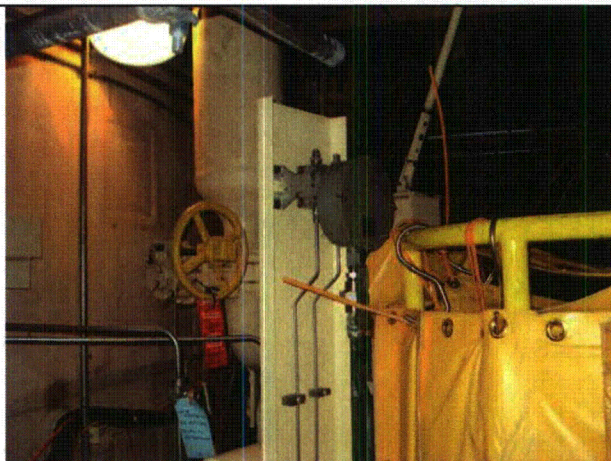
Or LT-FW-1115AS

Equipment Description Steam Generator 1 Level IXMITR (Wide Range)

Photographs



Note: Instrument ID tag.



Note: Instrument stand. Also shows "Smitty Shield" adjacent to instrument. CR-WF3-2012-07217 was initiated for the shielding.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-079

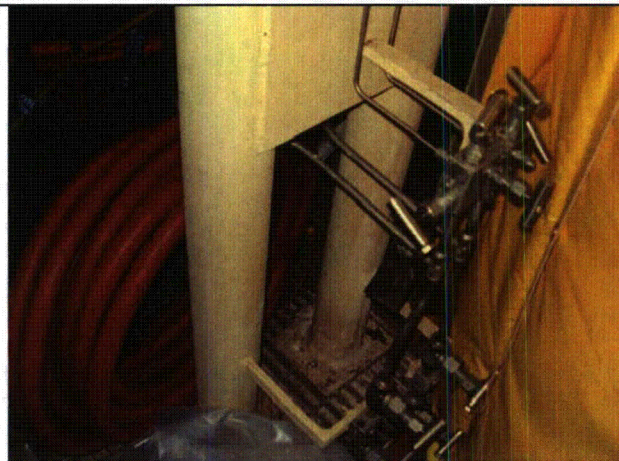
Equipment ID No. SG ILT1115A

Equip. Class Instrument Racks

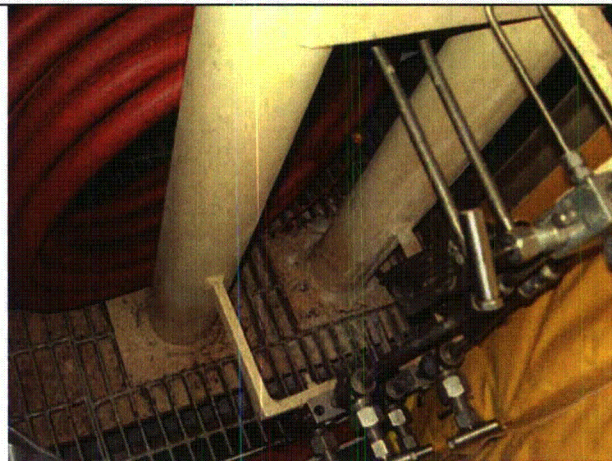
Or LT-FW-1115AS

Equipment Description Steam Generator 1 Level IXMITR (Wide Range)

Photographs



Note: Lower part of instrument stand. CR-WF3-2012-07217 was written for the lead shielding up against the instruments.



Note: Instrument stand mounting. CR-WF3-2012-07217 was written for the lead shielding up against the instruments.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 6 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-079

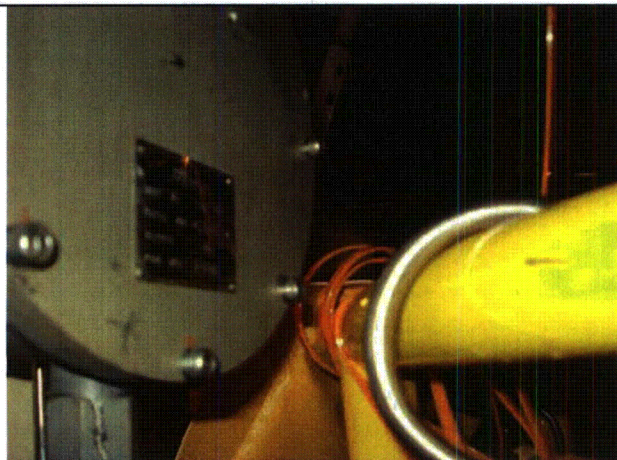
Equipment ID No. SG ILT1115A

Equip. Class Instrument Racks

Or LT-FW-1115AS

Equipment Description Steam Generator 1 Level IXMITR (Wide Range)

Photographs



Note: "Smitty Shield" directly up against instrument. CR-WF3-2012-07217 was written for the lead shielding up against the instrument.



Note: "Smitty Shield" up against instruments on lower part of stand. CR-WF3-2012-07217 was written for the lead shielding up against the instrument.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-080

Equipment ID No. RC ITE0122-HA1 Equip. Class¹ Temperature Sensors

-OR- TE-RC-0122HA

Equipment Description Reactor Coolant Loop 2 Hot Leg Temperature

Location: Bldg. RCB Floor El. -4 Room, Area Room 423

Manufacturer, Model, Etc. (optional but recommended) Weed Instrument Company, Inc., N9004E2B

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
Line mounted equipment.
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☐ N ☐ U ☐ N/A ☒
Line mounted equipment.
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒
Line mounted equipment.
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒
Line mounted equipment.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-080

Equipment ID No. RC ITE0122-HA1 Equip. Class Temperature Sensors

-OR- TE-RC-0122HA

Equipment Description Reactor Coolant Loop 2 Hot Leg Temperature

5. Is the anchorage configuration consistent 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 ☒
Line mounted equipment.
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y ☒ N ☐ U ☐
Line mounted equipment.
-

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐
All equipment above and adjacent to RTD is mounted properly.
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 ☐
*All equipment above and adjacent to RTD that could fall onto RTD is
mounted properly.*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
There is flexible conduit attached to the RTD.
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐
No adverse seismic interaction effects were found.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-080

Equipment ID No. RC ITE0122-HA1 Equip. Class Temperature Sensors

-OR- TE-RC-0122HA

Equipment Description Reactor Coolant Loop 2 Hot Leg Temperature

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 ☐

No conditions were found that could adversely affect the safety function of the RTD during or after a seismic event.

Comments (Additional pages may be added as necessary)

For Area Walk-By see AWC-062.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

12/23/12

Stephen Picard

Stephen Picard

12/24/12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐

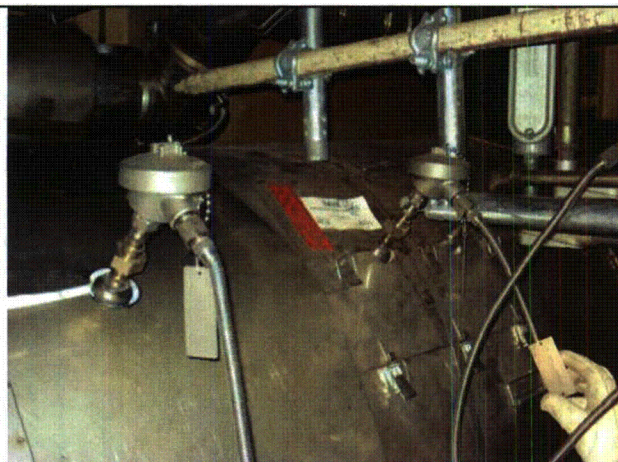
Seismic Walkdown Checklist (SWC) SWEL1-080

Equipment ID No. RC ITE0122-HA1 Equip. Class Temperature Sensors

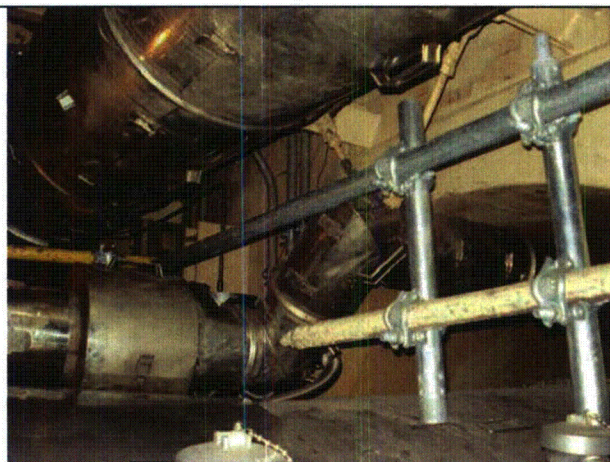
-OR- TE-RC-0122HA

Equipment Description Reactor Coolant Loop 2 Hot Leg Temperature

Photographs



Note: *View of RTD.*



Note: *View of area above RTD.*

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐

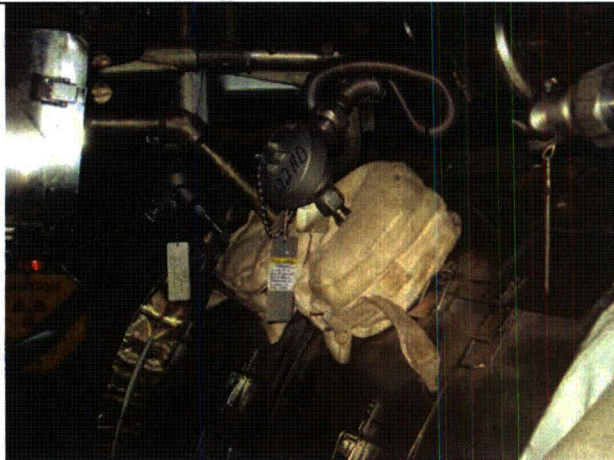
Seismic Walkdown Checklist (SWC) SWEL1-080

Equipment ID No. RC ITE0122-HA1 Equip. Class Temperature Sensors

-OR- TE-RC-0122HA

Equipment Description Reactor Coolant Loop 2 Hot Leg Temperature

Photographs



Note: *View of similar RTD.*

Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-084

Equipment ID No. IC ECP08 Equip. Class¹ Instrumentation and Control Panels
-OR- CP-08

Equipment Description Engineered Safeguard Control Panel CP8

Location: Bldg. RAB Floor El. +46 Room, Area Room 304, Col. 9A, Line J

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

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐
While this anchorage is not part of the 50% of SWEL items requiring anchorage verification, it was looked at during the opening of the panel. Welds could be seen attaching the panel to the floor as shown in SQRT File SQ-IC-32. No damage to the anchorage was seen.
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐
No corrosion was seen.
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-084

Equipment ID No. IC ECP08 Equip. Class Instrumentation and Control Panels
-OR- CP-08

Equipment Description Engineered Safeguard Control Panel CP8

5. Is the anchorage configuration consistent 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?
*The interaction identified in the IPEEE report has been corrected. All
equipment over this panel is seismically installed and will not impact it.* 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?
*All equipment such as ceiling tiles and lights are seismically installed.
No other items around or overhead are likely to collapse onto the
equipment.* Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage?
*All cables enter through the floor or through adjacent panels. There is
adequate flexibility in the attached cables.* 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 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-084

Equipment ID No. IC ECP08

Equip. Class Instrumentation and Control Panels

-OR- CP-08

Equipment Description Engineered Safeguard Control Panel CP8

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)

See AWC-032 for area walk-by.

- *A sheet metal cover plate in the upper part of the panel was found with only 3 of 5 screws installed.*
- *Sections of plastic wire tray covers were found loose on the bottom part of the panel.*
- *CR-WF3-2012-06688 was written for these two findings.*

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date: 11/15/12

Stephen Picard

Stephen Picard

11/15/12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-084

Equipment ID No. IC ECP08

Equip. Class Instrumentation and Control Panels

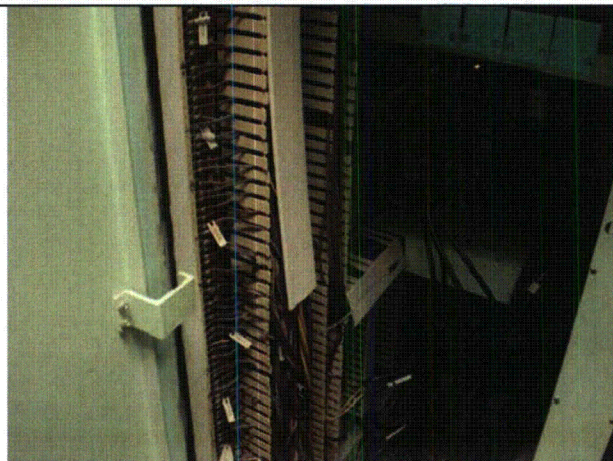
-OR- CP-08

Equipment Description Engineered Safeguard Control Panel CP8

Photographs



Note: Sheet metal cover plate with 3 of 5 screws installed.



Note: Loose section of plastic wire tray cover.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-084

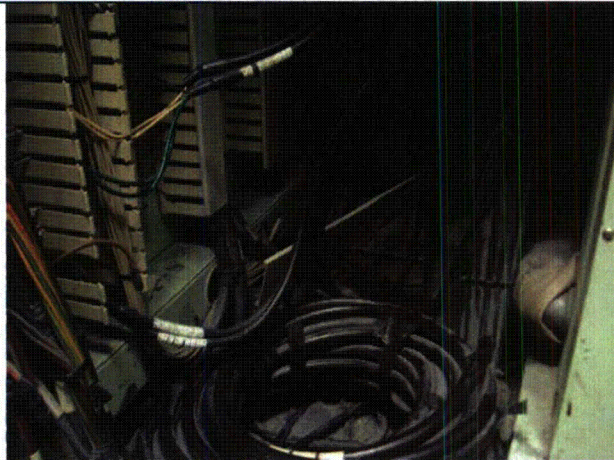
Equipment ID No. IC ECP08

Equip. Class Instrumentation and Control Panels

-OR- CP-08

Equipment Description Engineered Safeguard Control Panel CP8

Photographs



Note: Loose section of plastic wire tray cover.



Note: Loose section of plastic wire tray cover.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-097

Equipment ID No. 4KVESWGR3B Equip. Class: Medium Voltage, Metal-Clad Switchgear
-OR- SWGR-3B3S

Equipment Description Switchgear 3B

Location: Bldg. RAB Floor El. +21 Room, Area Room 212, Col. 10A

Manufacturer, Model, Etc. (optional but recommended) General Electric Company, AM4163502H

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☐ N ☒
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐
No anchorage damage was seen.
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-097

Equipment ID No. 4KVESWGR3B Equip. Class Medium Voltage, Metal-Clad Switchgear

-OR- SWGR-3B3S

Equipment Description Switchgear 3B

5. Is the anchorage configuration consistent 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?
*Lighting is in walk path. It is not over equipment. No equipment around
the Switchgear 3B equipment is likely to collapse onto this equipment.* Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage?
Rigid conduits are attached, but are acceptable per B288, S19-1. Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects?
Questions 7-9 verified. Y ☒ N ☐ U ☐

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-097

Equipment ID No. 4KVESWGR3B Equip. Class Medium Voltage, Metal-Clad Switchgear

-OR- SWGR-3B3S

Equipment Description Switchgear 3B

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 for description of missing and/or loose screws inside the Switchgear 3B. These were determined to NOT be a seismic concern.

Comments (Additional pages may be added as necessary)

- Anchorage in panels that were opened is in good condition. All internals were well mounted.
- One loose screw and one missing screw were found in cubicles 7 and 11 on overhead plates. These screws are not a concern since there are several other screws in place on the sheet metal. CR-WF3-2012-06179 was written for this condition.
- Clips were found missing on the relay panel inside cubicle 14. CR-WF3-2012-06179 was written for this condition. A second walkdown of this cubicle showed that there are supposed to be two machine screws in place to hold the relay panel in place (along with the hinge on the opposite side). Only one machine screw was installed. This condition was documented in CR-WF3-2012-06634. The one remaining machine screw will easily keep this relay panel in place and there is no seismic concern.
- Holes in brackets for this switchgear were seen during the walkdown. These holes were determined to be locations for cables to pass through with grommets. The holes were empty where no cables or grommets were installed.
- See AWC-018 for the area walk-by.
- No other seismic concerns were found.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date: 11/17/12

Stephen Picard

Stephen Picard

11/18/12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 6

Status: Y ☒ N ☐ U ☐

Seismic Walkdown Checklist (SWC) SWEL1-097

Equipment ID No. 4KVESWGR3B Equip. Class Medium Voltage, Metal-Clad Switchgear

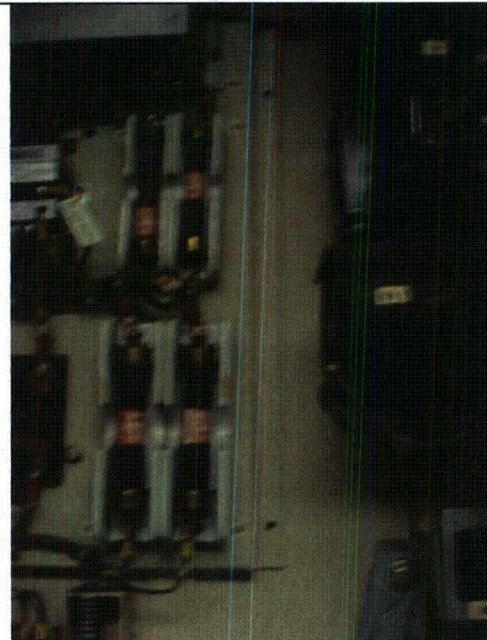
-OR- SWGR-3B3S

Equipment Description Switchgear 3B

Photographs



Note: Locations where grommets and cables could be installed.



Note: Clips missing from edge of relay panel inside cubicle 14. CR-WF3-2012-06179 was written for this condition. Machine screw can be seen in center of relay panel, with missing machine screw hole towards top. CR-WF3-2012-06634 written for this missing machine screws.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 6

Status: Y ☒ N ☐ U ☐

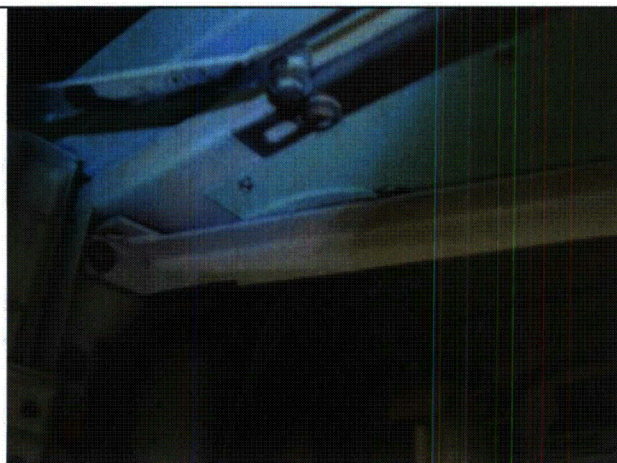
Seismic Walkdown Checklist (SWC) SWEL1-097

Equipment ID No. 4KVESWGR3B Equip. Class Medium Voltage, Metal-Clad Switchgear

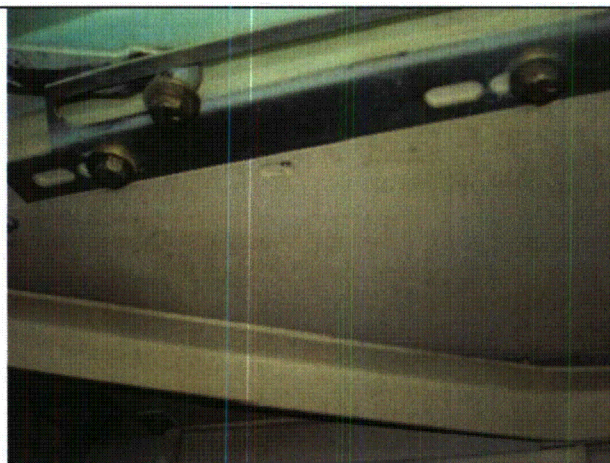
-OR- SWGR-3B3S

Equipment Description Switchgear 3B

Photographs



Note: Loose screw on sheet metal plate on top of Switchgear 3B cubicle.



Note: Screw missing from sheet metal plate on top of Switchgear 3B cubicle.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 6 of 6

Status: Y ☒ N ☐ U ☐

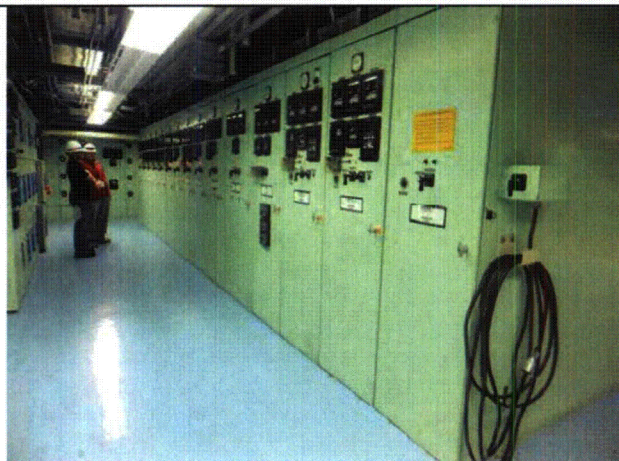
Seismic Walkdown Checklist (SWC) SWEL1-097

Equipment ID No. 4KVESWGR3B Equip. Class Medium Voltage, Metal-Clad Switchgear

-OR- SWGR-3B3S

Equipment Description Switchgear 3B

Photographs



Note: *View along front of Switchgear 3B.*

Note:

Attachment L

Area Walk-by Checklists (AWCs)

Revision 1

See Attachment D for Revision 0 AWCs

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 019

Location: Bldg. RAB Floor El. +21 Room, Area¹ Switchgear Room B West Side

SWEL Components: SWEL1- 004

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

-
1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y ☒ N ☐ U ☐ N/A ☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y ☒ N ☐ U ☐ N/A ☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y ☒ N ☐ U ☐ N/A ☐

The amount of fill inside the cable trays could not be seen as they were all in the overhead. However, the cable trays, conduit runs, and HVAC ducting are all well supported in this area with structural steel engineered supports.

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 019

Location: Bldg. RAB Floor El. +21 Room, Area Switchgear Room B West Side

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y ☒ N ☐ U ☐ N/A ☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y ☒ N ☐ U ☐ N/A ☐
There is some fire protection sprinkler piping in the overhead area. However, this piping is well supported and no interactions were seen that could cause a failure of the piping during a seismic event.

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 ☐
Some work was in progress in the area on some panels adjacent to the CED breaker panel. The work carts for this in-progress work were all held in place with clamps on the wheels. The work was proceeding in accordance with the housekeeping procedure for WF3.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 019

Location: Bldg. RAB Floor El. +21 Room, Area Switchgear Room B West Side

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)

The area walk-by did not uncover any areas of seismic concern.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

11/15/12

Stephen Picard

Stephen Picard

11/15/12

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 4

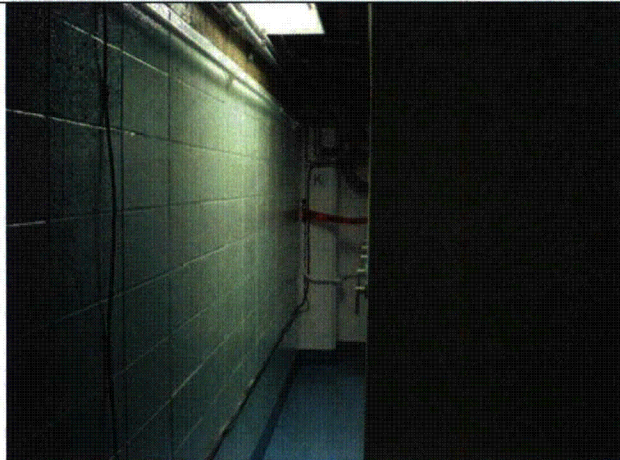
Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 019

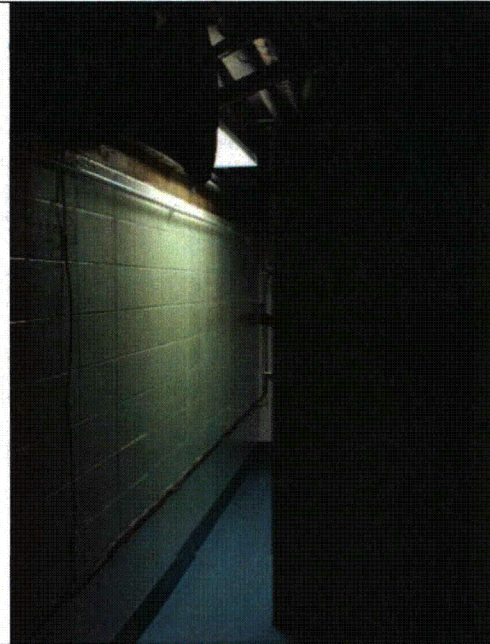
Location: Bldg. RAB Floor El. +21 Room, Area Switchgear Room B West Side

SWEL Components: SWEL1- 004

Photographs



Note: Photograph of the area behind the CED breaker panel. No pictures were taken of the other side of the panel due to electronically sensitive equipment across from the CED breaker panel.



Note: Additional photo of the area behind the CED breaker panel.

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 031

Location: Bldg. RB Floor El. +21 Room, Area¹ 225B / 10A - M

SWEL Components: SWEL1- 026

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 ☐

This area is inside of the pipe chase below the +21 elevation inside the B Switchgear area.

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 ☐

This area is inside of the pipe chase below the +21 elevation inside the B Switchgear area. There is no cable tray or HVAC ducting in this area. There are some conduits and tubing. These are all free of potentially adverse seismic conditions.

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 2 of 4Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC- 031**

Location: Bldg. RB Floor El. +21 Room, Area² 225B / 10A - M

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 ☐

This area is inside of the pipe chase below the +21 elevation inside the B Switchgear area. There is no other equipment above this 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)? Y ☒ N ☐ U ☐ N/A ☐
-

² 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.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 031

Location: Bldg. RB Floor El. +21 Room, Area³ 225B / 10A - M

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

Y ☒ N ☐ U ☐

A strut for support CHSR237 was found attached to line 2CH2-53A/B. The snubber for this support was removed from service in 1986 using SMP-1713. The strut should have been removed per drawing E3029LW3CH13, but was left in place. One end of the strut was attached to the pipe, and the other was left on a concrete ledge inside the pipe chase. This abandoned strut was removed under work order 333109.

Comments (Additional pages may be added as necessary)

CR-WF3-2012-06445 was written for the strut left in place on CHSR-237.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

11/26/12

Stephen Picard

Stephen Picard

11/26/12

³ 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.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 4

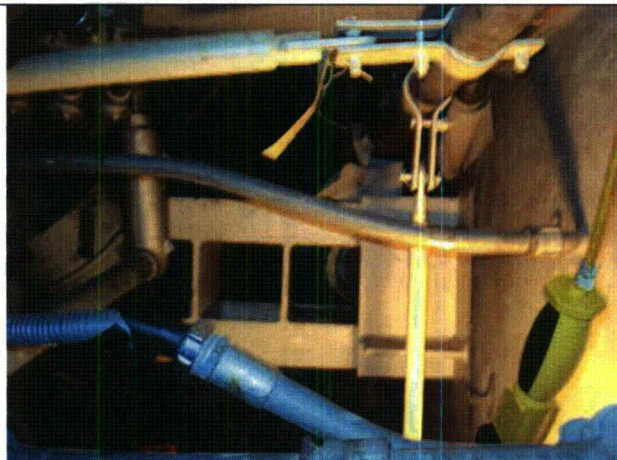
Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 031

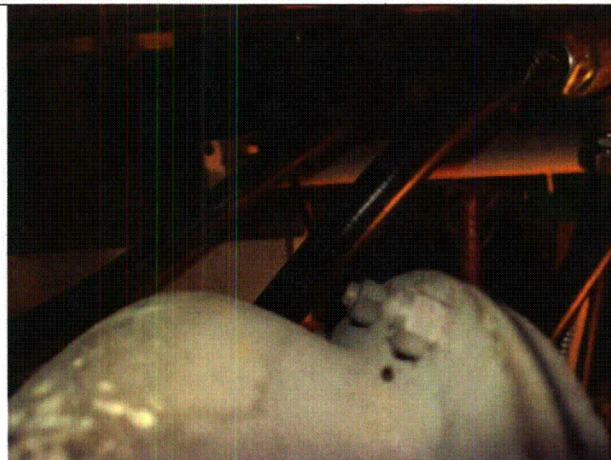
Location: Bldg. RB Floor El. +21 Room, Area⁴ 225B / 10A - M

SWEL Components: SWEL1- 026

Photographs



Note: CHSR-237 strut attached to pipe at top of picture.



Note: Strut from CHSR-237 can be seen on top of concrete ledge in center of picture.

⁴ 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.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 6

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 054

Location: Bldg. RCB Floor El. -11 Room, Area¹ Between Column Lines 13 - 15

SWEL Components: SWEL1-018, BM MVAAA109

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 ☐

This area is on the -11 basement level of containment and is below floor grating. The grating is well supported and prevents any hazards above from reaching this area.

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 6

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 054

Location: Bldg. RCB Floor El. -11 Room, Area Between Column Lines 13 - 15

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 ☐
This area is below the flood zone inside containment during a LOCA. However, this is a known and designed flooding event. No other surrounding sources of flooding or spray were found in this area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y ☒ N ☐ U ☐ N/A ☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y ☒ N ☐ U ☐ N/A ☐
There is work in progress on-going in the area. However, this equipment was restrained properly and well away from the safety related equipment. Similarly, there is significant lead shielding temporarily installed near this area. However, it is installed in accordance with Temporary Shielding Requests that were documented in Engineering Changes. Note that the equipment in this area is out of service due to the steam generator replacement project.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 6

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 054

Location: Bldg. RCB Floor El. -11 Room, Area Between Column Lines 13 - 15

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)

Boric acid crystals were found in the general area a few feet away from BM MVAAA109. Corrosion was found on BM IPT0601 IXMITR where the boric acid had fallen. This is documented in CR-WF3-2012-07125. None of this corrosion presents any seismic or structural concerns for surrounding equipment at this time.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

12/1/12

Stephen Picard

Stephen Picard

12/5/12

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 6

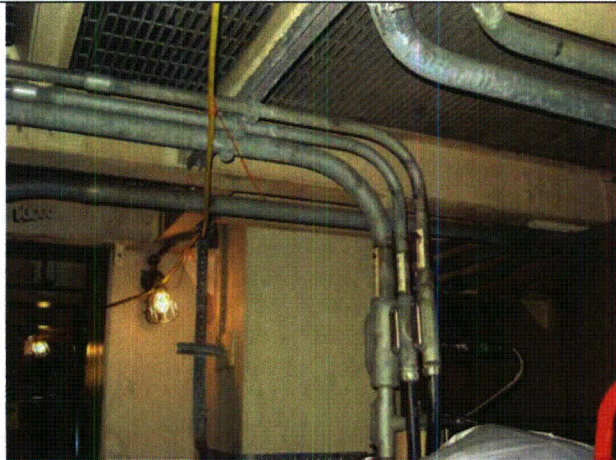
Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 054

Location: Bldg. RCB Floor El. -11 Room, Area Between Column Lines 13 - 15

SWEL Components: SWEL1-018, BM MVAAA109

Photographs



Note: Overhead area near BM MVAAA109.



Note: Some boric acid crystals seen on floor in area. Instrument in picture is BM IPT0601 IXMITR. See CR-WF3-2012-07125.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 5 of 6

Status: Y ☒ N ☐ U ☐

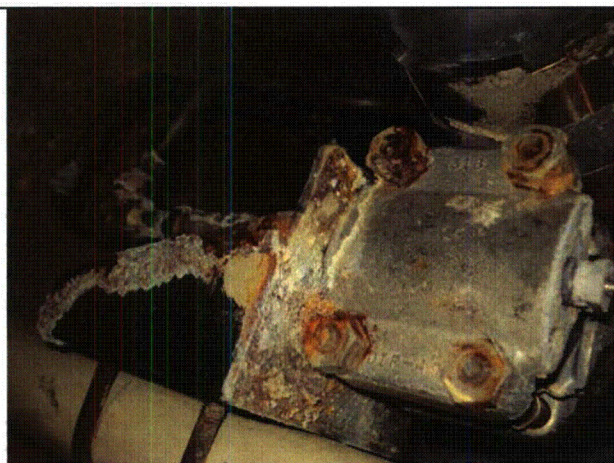
Area Walk-By Checklist (AWC) AWC- 054

Location: Bldg. RCB Floor El. -11 Room, Area Between Column Lines 13 - 15

SWEL Components: SWEL1-018, BM MVAAA109



Note: Corrosion from boric acid on BM
IPT0601 IXMITR. See CR-WF3-2012-07125.



Note: Corrosion from boric acid on BM
IPT0601 IXMITR. See CR-WF3-2012-07125.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

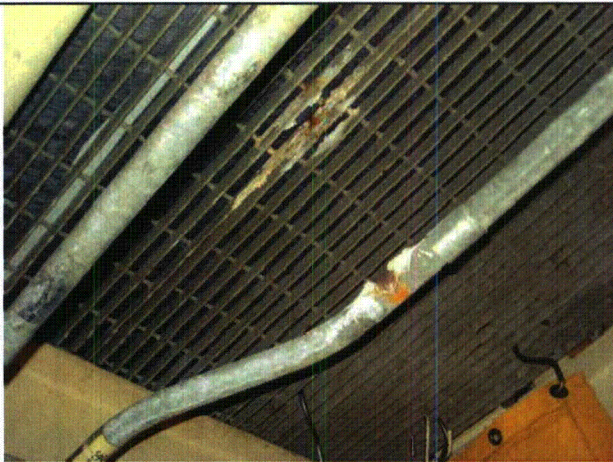
Sheet 6 of 6

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 054

Location: Bldg. RCB Floor El. -11 Room, Area Between Column Lines 13 - 15

SWEL Components: SWEL1-018, BM MVAAA109



Note: Corrosion from boric acid on conduit and grating overhead. See CR-WF3-2012-07125.

Note:

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 1 of 4Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC- 055**

Location: Bldg. RCB Floor El. +21 Room, Area¹ 421, Col. 5 to Col. 9, Outside D-Rings

SWEL Components: SWEL1-077 (IC ICDC9)

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 <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |
| | |
| 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? | Y <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |
| | |
| 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 <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 055

Location: Bldg. RCB Floor El. +21 Room, Area 421, Col. 5 to Col. 9, Outside D-Rings

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y ☒ N ☐ U ☐ N/A ☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y ☒ N ☐ U ☐ N/A ☐

There are fire lines in the area. However, these are well supported and do not introduce any additional danger of flooding. Since this component is located inside containment, there is always the potential for containment spray to fall down onto it during an accident. However, equipment is designed to meet these requirements.

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 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 055

Location: Bldg. RCB Floor El. +21 Room, Area 421, Col. 5 to Col. 9, Outside D-Rings

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)

No adverse seismic conditions were found during this Area Walk-By.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson
Stephen Picard

Date:

12/5/12
12/5/12

Stephen Picard

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 4

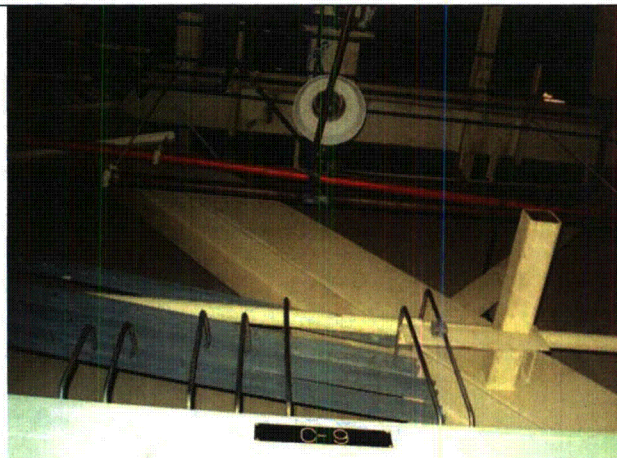
Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 055

Location: Bldg. RCB Floor El. +21 Room, Area 421, Col. 5 to Col. 9, Outside D-Rings

SWEL Components: SWEL1-077 (IC ICDC9)

Photographs



Note: *View over the top of IC ICDC9.*

Note:

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 1 of 4Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC- 056**Location: Bldg. RCB Floor El. +21 Room, Area¹ 421, Col. 14 to Col. 19 Outside D-Rings**SWEL Components: SWEL1-038, SWEL1-075**

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 <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |
| | |
| 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? | Y <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |
| | |
| 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 <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 056

Location: Bldg. RCB Floor El. +21 Room, Area 421, Col. 14 to Col. 19, Outside D-Rings

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 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 056

Location: Bldg. RCB Floor El. +21 Room, Area 421, Col. 14 to Col. 19, Outside D-Rings

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)

1. An unnumbered electrical box with conduit 32851B1-NB in it is missing 6 of 12 bolts on the front cover.
2. Electrical box B30860-NA is missing 1 out of 12 bolts on the front cover.

CR-WF3-2012-07135 written to describe these two conditions.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

12/1/12

Stephen Picard

Stephen Picard

12/5/12

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 056

Location: Bldg. RCB Floor El. +21 Room, Area 421, Col. 14 to Col. 19, Outside D-Rings

SWEL Components: SWEL1-038, SWEL1-075

Photographs



Note: *Unnumbered electrical box with conduit 32851B1-NB. Front cover is missing 6 of 12 bolts.*



Note: *Electrical box B30860-NA is missing 1 of 12 bolts on front cover.*

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 1 of 4Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC- 057**Location: Bldg. RCB Floor El. +46 Room, Area¹ South End of Reactor Cavity**SWEL Components: SWEL1-047, SWEL1-048**

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 <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |
| | |
| 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? | Y <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |
| | |
| 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 <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 2 of 4Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC- 057**

Location: Bldg. RCB Floor El. +46 Room, Area South End of Reactor Cavity

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 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 057

Location: Bldg. RCB Floor El. +46 Room, Area South End of Reactor Cavity

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 ☐

1. Spring hanger support RCSH-4162 was found to have the angle under the pipe off-center. This condition is documented in CR-WF3-2012-07129. EC 41521 was processed to evaluate the as-found condition for this support. This EC determined that the stresses in the pipe are acceptable with the support off-center. This is not an adverse condition.

Comments (Additional pages may be added as necessary)

1. There is evidence of boric acid leakage above the valves RC ISV3184 and RC ISV1014. It was found that the boric acid leakage was documented in CR-WF3-2012-05209 near the beginning of RF18.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date: 12/13/12

Stephen Picard

Stephen Picard

12/14/12

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 057

Location: Bldg. RCB Floor El. +46 Room, Area South End of Reactor Cavity

SWEL Components: SWEL1-047, SWEL1-048

Photographs



Note: View of evidence of boric acid leakage above RC ISV3184 and RC ISV1014.



Note: View of RCSH-4162 off-center. CR-WF3-2012-07129 covers this condition.

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 1 of 6Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC-058**Location: Bldg. RCB Floor El. -4 Room, Area¹ 421, Column 18

SWEL Components: SWEL1-079

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 <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |
| | |
| 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? | Y <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |
| | |
| 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 <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 2 of 6Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC-058**

Location: Bldg. RCB Floor El. -4 Room, Area 421, column 18

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 ☐

A cart was found that did not have the wheels chocked. This cart was for work in progress, but the storage did not meet Waterford 3 standards for housekeeping. The group responsible for the cart was notified and they removed the cart from the area and stored it properly prior to fuel being moved into the RCB.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 6

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-058

Location: Bldg. RCB Floor El. -4 Room, Area 421, column 18

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

Y ☒ N ☐ U ☐

The front panel for boxes B3080-NA and B3948-NA were missing screws. The door for B3080-NA is able to freely move. The door for B3948-NA could not be opened with minimal pulling. CR-WF3-2012-07517 and WR 293611 were initiated for these conditions. The loose front covers for these two boxes will not have any adverse impact on any safety related equipment in the area.

Comments (Additional pages may be added as necessary)

- In addition to the conditions described in the response to question 7, corrosion was found on valve CC MVAAA661A. This is not extensive corrosion but CR-WF3-2012-07519 was written to track this condition.*

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

12/19/12

Stephen Picard

Stephen Picard

12/17/12

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 6

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-058

Location: Bldg. RCB Floor El. -4 Room, Area 421, column 18

SWEL Components: SWEL1-079

Photographs



Note: Area above SG ILT1115A



Note: Box located above SG ILT1115A

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 5 of 6

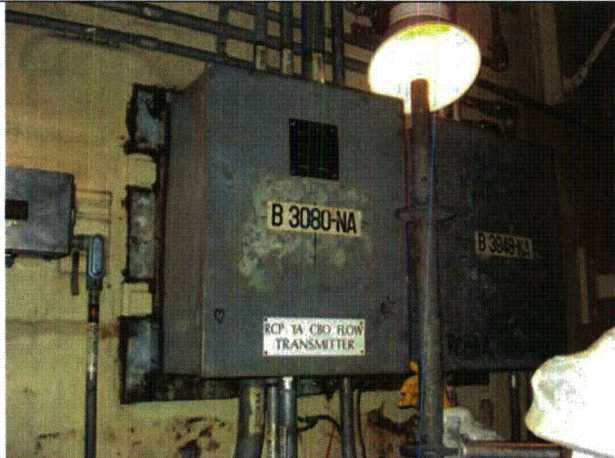
Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-058

Location: Bldg. RCB Floor El. -4 Room, Area 421, column 18

SWEL Components: SWEL1-079

Photographs



Note: Boxes B3080-NA and B3948-NA that are both missing screws on the right side of the front door. The left side has a hinge. CR-WF3-2012-07517 was initiated for this condition.



Note: Missing screw locations on box B3080-NA. The missing screws on box B3948-NA are in a similar location.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 6 of 6

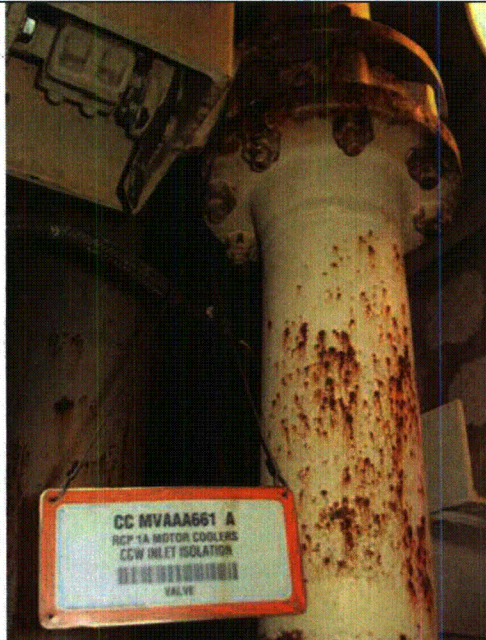
Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-058

Location: Bldg. RCB Floor El. -4 Room, Area 421, column 18

SWEL Components: SWEL1-079

Photographs



Note: Valve CC MVAAA661A that has corrosion.



Note: Unchocked cart near SG ILT1115A. After notification, cart was removed and properly stored elsewhere.

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 1 of 3Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC-059**Location: Bldg. ANN Floor El. +21 Room, Area Room 420

SWEL Components: SWEL1- 019

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

-
1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y ☒ N ☐ U ☐ N/A ☐

The equipment in this area is either mounted directly to the concrete wall of the shield building using anchor bolts, or it is line-mounted on piping that penetrates through the containment vessel.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y ☒ N ☐ U ☐ N/A ☐

Anchorage did not show any signs of corrosion. The anchor plates and anchors showed no signs of any degradation.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y ☒ N ☐ U ☐ N/A ☐

There is no HVAC ducting above this valve or operator. The conduits that are above the valve are all mounted properly and meet seismic mounting requirements.

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 2 of 3Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC-059**

Location: Bldg. ANN Floor El. +21 Room, Area Room 420

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y ☒ N ☐ U ☐ N/A ☐

There are no items directly above or adjacent to the valve and operator that will create any spatial interaction concerns.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y ☒ N ☐ U ☐ N/A ☐

There are no lines directly above this valve and operator that could cause any flooding or spray. The valve is at elevation +52'-6", while the floor in the annulus is at elevation -1'-6". No flooding could occur that would affect this valve.

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 ☐

The annulus area is basically an empty area. No flammable materials were found around this valve and operator.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y ☒ N ☐ U ☐ N/A ☐

There were no housekeeping issues found around or above this valve and operator.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-059

Location: Bldg. ANN Floor El. +21 Room, Area Room 420

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)

Photos of this area were not able to be obtained.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

12/19/12

Stephen Picard

Stephen Picard

12/19/12

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-060

Location: Bldg. RCB Floor El. +35 Room, Area¹ Room 421, Column 17

SWEL Components: SWEL1-037

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 ☐

All equipment in the area is mounted and anchored securely.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y ☒ N ☐ U ☐ N/A ☐

No anchorage degradation was found.

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 ☐

While there was no HVAC ducting in the general area, there were conduits mounted overhead and/or nearby. These were mounted securely and do not cause any adverse seismic conditions.

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-060

Location: Bldg. RCB Floor El. +35 Room, Area Room 421, Column 17

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 ☐

There is some material placed within the Area Walk-By zone for this area. The contractor in charge of the area has processed storage permits for this equipment so that it meets the site procedure requirements for housekeeping. This equipment will be removed from Containment prior to the completion of RF18.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y ☒ N ☐ U ☐ N/A ☐

There is some material placed within the Area Walk-By zone for this area. The contractor in charge of the area has processed storage permits for this equipment so that it meets the site procedure requirements for housekeeping. This equipment will be removed from Containment prior to the completion of RF18.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-060

Location: Bldg. RCB Floor El. +35 Room, Area Room 421, Column 17

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area?

Y ☒ N ☐ U ☐

Comments (Additional pages may be added as necessary)

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

12/17/12

Stephen Picard

Stephen Picard

12/19/12

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 5

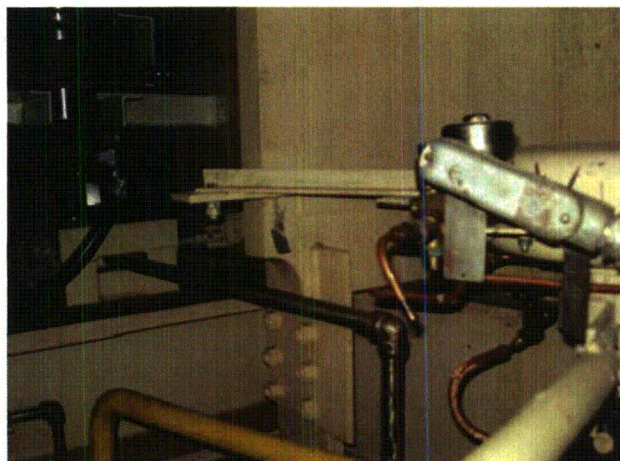
Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-060

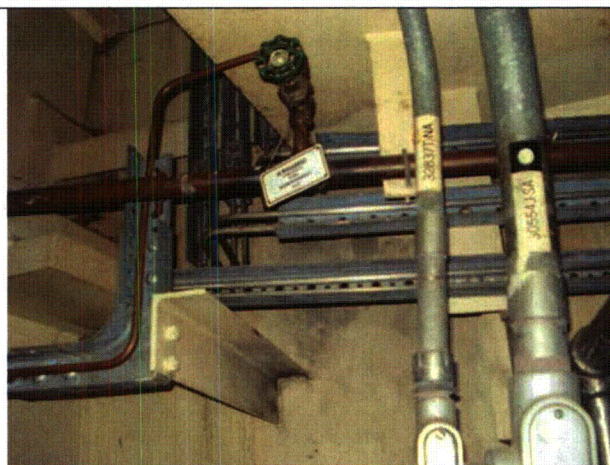
Location: Bldg. RCB Floor El. +35 Room, Area Room 421, Column 17

SWEL Components: SWEL1-037

Photographs



Note: *View to side of valve and operator.*



Note: *View above valve and operator.*

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 5 of 5

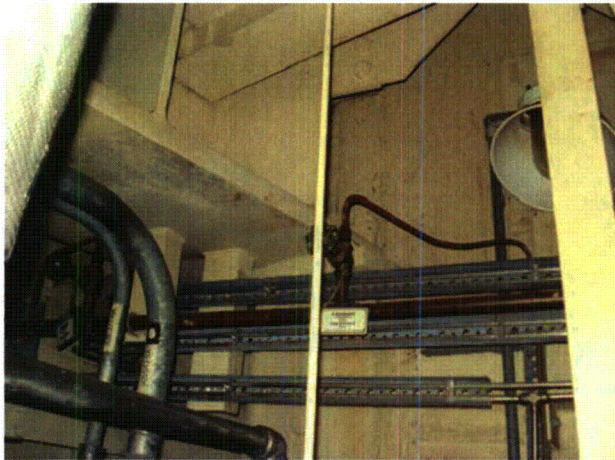
Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-060

Location: Bldg. RCB Floor El. +35 Room, Area Room 421, Column 17

SWEL Components: SWEL1-037

Photographs



Note: View above and to side of valve and operator.



Note: View of work station (plus lead shielding) in area.

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 1 of 5Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC- 061**Location: Bldg. CTB Floor El. +30 Room, Area¹ Room B60A, CL 12A – Q1**SWEL Components: SWEL1-059**

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 ☐

Spalled concrete was found around the edges of the embedded plates for the wet cooling tower fan support structure. This condition was previously identified and evaluated in CR-WF3-2002-0037 for the WCT B fans 1 – 4. CR-WF3-2001-00748 was written to identify the same condition for WCT B fans 5 – 8. These were both evaluated through the corrective action process and determined to be acceptable.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y ☒ N ☐ U ☐ N/A ☐

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 2 of 5Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC- 061**

Location: Bldg. CTB Floor El. +30 Room, Area Room B60A,

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 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-061

Location: Bldg. CTB Floor El. +30 Room, Area Room B60A

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)

The wet cooling tower fans are located on the top elevation of this area of the plant. There is no surrounding or overhead equipment.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date:

12/23/12

Stephen Picard

Stephen Picard

12/24/12

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 5

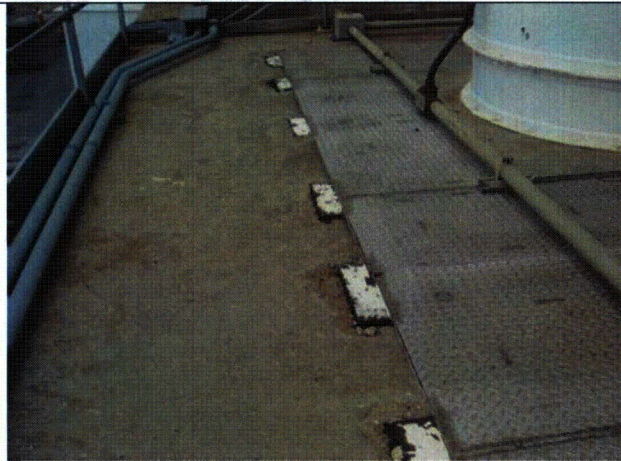
Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-061

Location: Bldg. CTB Floor El. +30 Room, Area Room B60

SWEL Components: SWEL1-059

Photographs



Note: *Spalled concrete around embedded support plates.*



Note: *Spalled concrete around embedded support plates.*

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 061

Location: Bldg. CTB Floor El. +30 Room, Area Room B60

SWEL Components: SWEL1-059



Note: *Spalled concrete around embedded plates.*

Note:

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 1 of 7

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 062

Location: Bldg. RCB Floor El. -4 Room, Area¹ Room 423

SWEL Components: SWEL1-080

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 <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |
| | |
| 2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? | Y <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |
| | |
| 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 <input checked="" type="checkbox"/> N <input type="checkbox"/> U <input type="checkbox"/> N/A <input type="checkbox"/> |

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 2 of 7Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC- 062**

Location: Bldg. RCB Floor El. -4 Room, Area Room 423

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 ☐

A large amount of scaffolding is still installed around this area for the steam generator replacement project. However, all of the scaffolding and temporary platforms meet all plant and Entergy scaffolding installation requirements.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 7

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-062

Location: Bldg. RCB Floor El. -4 Room, Area Room 423

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)

- Corrosion was found on line 3CC1 1/2-35-B2. This line is coming out of the Reactor Coolant 2B pump shroud. CR-WF3-2012-07680 was written for this condition.
- Electrical boxes were found with 1 or 2 missing screws on the front cover of the box. There were several screws installed on the light cover. CR-WF3-2012-07681 was written for this condition.

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date: 3/5/13

Stephen Picard

Stephen Picard

3/11/13

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 7

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC-062

Location: Bldg. RCB Floor El. -4 Room, Area Room 423

SWEL Components: SWEL1-080

Photographs



Note: Corroded line 3CC1 1/2-35-B2. CR-WF3-2012-07680 was written for this condition.



Note: Corroded line 3CC1 1/2-35-B2. CR-WF3-2012-07680 was written for this condition.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 5 of 7

Status: Y ☒ N ☐ U ☐

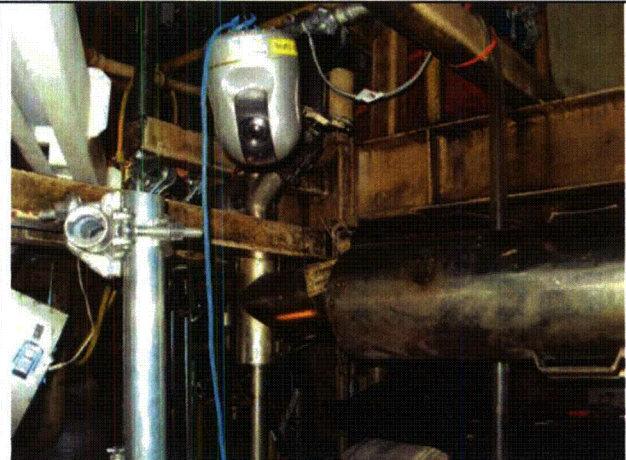
Area Walk-By Checklist (AWC) AWC- 062

Location: Bldg. RCB Floor El. -4 Room, Area Room 423

SWEL Components: SWEL1-080



Note: Line 3CC1 1/2-59-B2. No corrosion was found on this line.



Note: Area near RTD showing scaffolding equipment in place.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

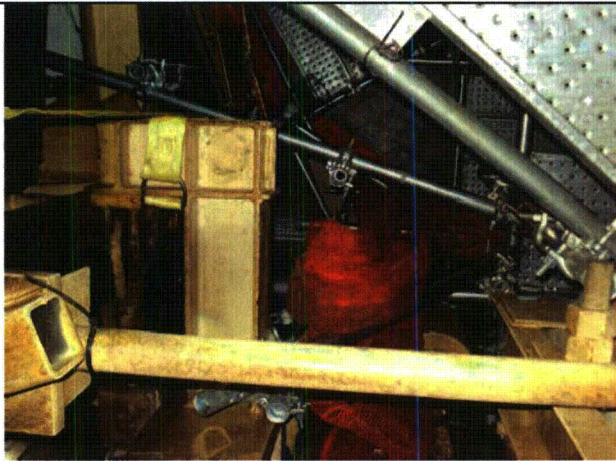
Sheet 6 of 7

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 062

Location: Bldg. RCB Floor El. -4 Room, Area Room 423

SWEL Components: SWEL1-080



Note: Area near RTD showing scaffolding equipment in place.



Note: Box B3344-NA with missing screw on front cover. CR-WF3-2012-07681 was written for this condition.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

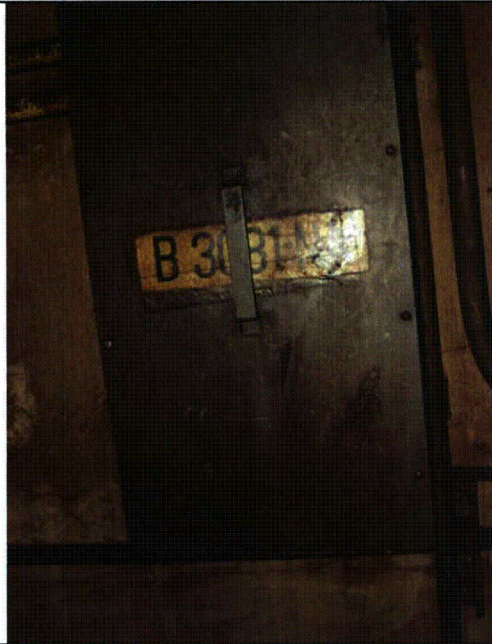
Sheet 7 of 7

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 062

Location: Bldg. RCB Floor El. -4 Room, Area Room 423

SWEL Components: SWEL1-080



Note: Box B3081-NA with missing screw on front cover. CR-WF3-2012-07681 was written for this condition.

Note:

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 7

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 063

Location: Bldg. FHB Floor El. +1 Room, Area: Electrical Equipment Room

SWEL Components: SWEL2- 001, 002, 003, 006, 007, 008, 009

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 ☐

All anchorage appeared to be adequate.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y ☒ N ☐ U ☐ N/A ☐

No degraded conditions were seen on any of the anchorage in this room.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y ☒ N ☐ U ☐ N/A ☐

All conduits are well supported seismically. The amount of fill in the raceway could not be determined as there were covers over the trays. No HVAC ducting is inside this room.

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7**AREA WALK-BY CHECKLIST**

Sheet 2 of 7Status: Y ☒ N ☐ U ☐**Area Walk-By Checklist (AWC) AWC- 063**

Location: Bldg. FHB Floor El. +1 Room, Area Electrical Equipment Room

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y ☒ N ☐ U ☐ N/A ☐

There did not appear to be any spatial interaction issues in this room. The lights are high enough to not be able to hit any sensitive equipment if they did move any during an earthquake. All other equipment in the room is obviously seismically mounted.

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 ☐

No equipment was found in the room that could cause flooding or spray.

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 ☐

No flammable materials were found in this room.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y ☒ N ☐ U ☐ N/A ☐

A tool box is stored in this room, but does have the proper temporary storage permit in place.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 7

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 063

Location: Bldg. FHB Floor El. +1 Room, Area Electrical Equipment Room

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

Comments (Additional pages may be added as necessary)

Evaluated by: Gregory N. Ferguson

Gregory N. Ferguson

Date: 3/4/13

Stephen Picard

Stephen Picard

3/11/13

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 7

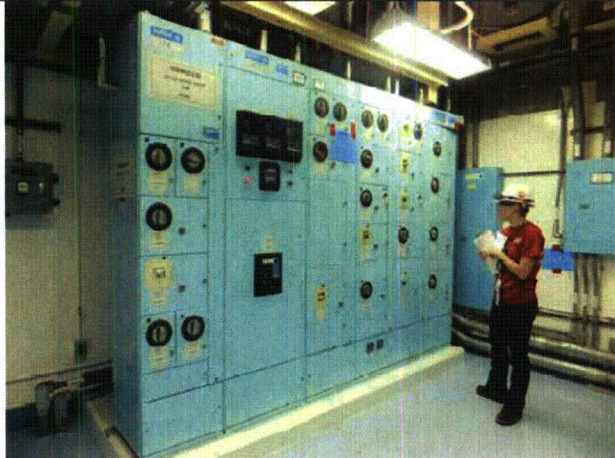
Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 063

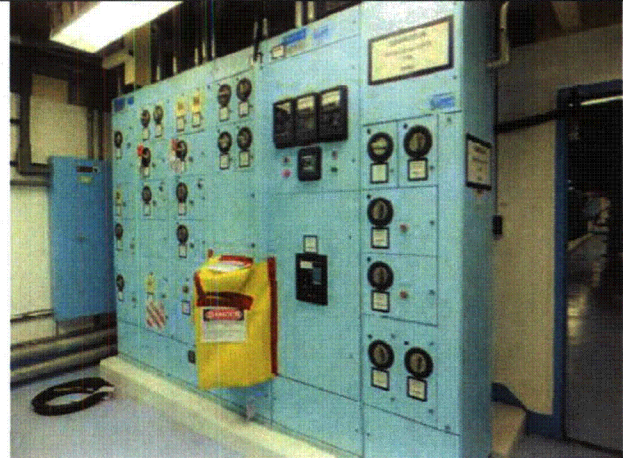
Location: Bldg. FHB Floor El. +1 Room, Area Electrical Equipment Room

SWEL Components: SWEL2- 001, 002, 003, 006, 007, 008, 009

Photographs



Note: View of MCC 314A and a portion of north wall of room.



Note: View of MCC 314B and portion of north wall of room. DANGER tag is on a breaker that had a temporary modification during RF18.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

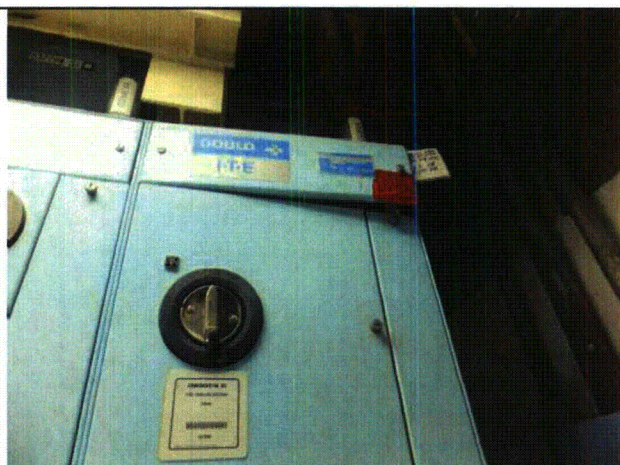
Sheet 5 of 7

Status: Y ☒ N ☐ U ☐

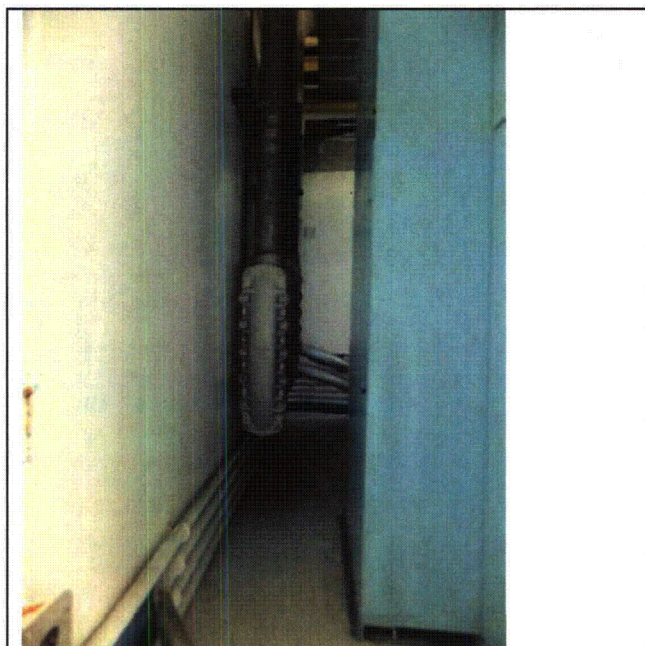
Area Walk-By Checklist (AWC) AWC- 063

Location: Bldg. FHB Floor El. +1 Room, Area Electrical Equipment Room

SWEL Components: SWEL2- 001, 002, 003, 006, 007, 008, 009



Note: Looking into overhead over bay 6 of MCC 314A panel. The open door is for a temporary modification during RF18.



Note: Looking behind MCC 314A panel.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

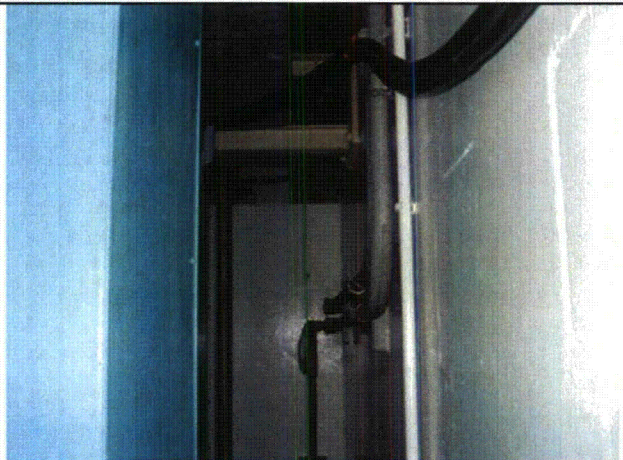
Sheet 6 of 7

Status: Y ☒ N ☐ U ☐

Area Walk-By Checklist (AWC) AWC- 063

Location: Bldg. FHB Floor El. +1 Room, Area Electrical Equipment Room

SWEL Components: SWEL2- 001, 002, 003, 006, 007, 008, 009



Note: Looking behind MCC 314B panel.
Large cable in overhead is for a temporary
modification in place during RF18.



Note: Looking behind MCC 314B panel.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

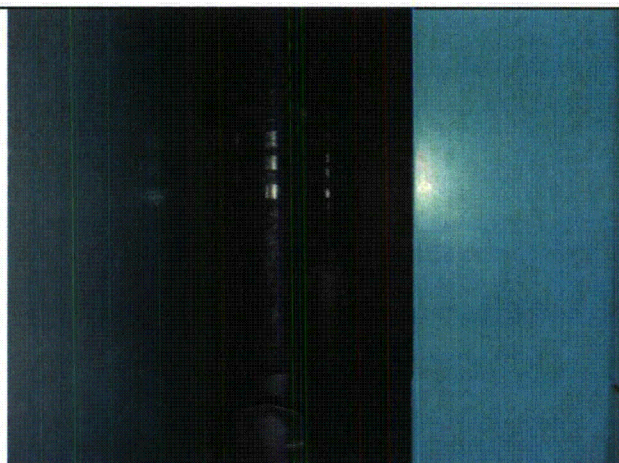
Sheet 7 of 7

Status: Y ☒ N ☐ U ☐

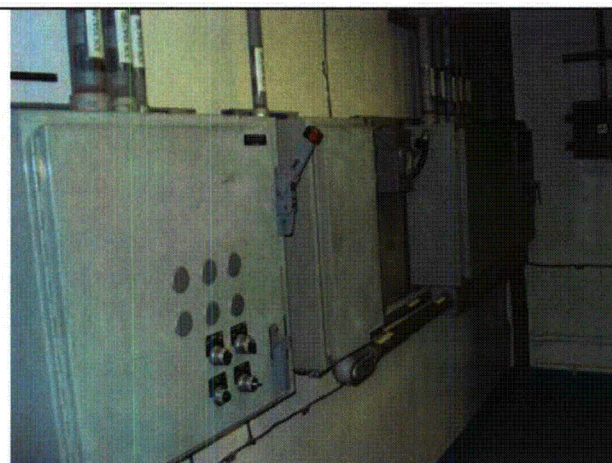
Area Walk-By Checklist (AWC) AWC- 063

Location: Bldg. FHB Floor El. +1 Room, Area Electrical Equipment Room

SWEL Components: SWEL2- 001, 002, 003, 006, 007, 008, 009



Note: *Looking behind the MCC 314A panel.*



Note: *Looking along south wall of room.*

Attachment M
Licensing Basis Evaluation Form
(Revision 1)

See Attachment F for Revision 0 LBE Forms

Licensing Basis (LB) Evaluation Form

LB Evaluation No. LB-08 Originating SWC/AWC SWEL1-002

Equipment ID No. SSDEMCC311B Equip. Class

Equipment Description Motor Control Center 311B

Location: Bldg. RAB Floor El. +21 Room, Area 212

Condition

Two conduits were found to be ~1/4" from the west end of SSDEMCC311B.

Documents Reviewed

1. EPRI report 1025286, "Seismic Walkdown Guidance for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic"
2. SQRT File SQ-E-2

Licensing Basis

Adjacent equipment should not be able to strike safety related SSCs and cause any malfunctions or damage.

Evaluation

The flexibility of the conduits and the MCC panel were determined. This was attached to SWEL1-002 and is located in Appendix K to WF3-CS-12-00003, Revision 1.

Conclusion (8) Condition Meets the Licensing Basis:

☒ Yes ☐ No

Prepared by: Greg Ferguson
Licensing Basis Reviewer

Date 3/5/13

Reviewed by: Nigel Elias
Peer Reviewer

Date 3/21/13

Attachment N
Seismic Walkdown Engineer Training Certificate
(Revision 1)

Certificate of Completion

Nigel Elias

**Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns**

July 11, 2012

Date

R.P. Kassawara

Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity

Attachment O
SWEL vs. AWC Numbers
(Revision 1)

SWEL vs. AWC Number List

| SWEL Number | SWEL in Report Rev. | AWC Number | AWC in Report Rev. |
|----------------|------------------------|---------------|-----------------------|
| 1-001 | 0 | AWC-042 | 0 |
| 1-002 | 1 | AWC-018 | 0 |
| 1-003 | 0 | AWC-014 | 0 |
| 1-004 | 1 | AWC-019 | 1 |
| 1-005 | 2* | AWC-064 | 2* |
| 1-006 | 1 | AWC-016 | 0 |
| 1-007 | 0 | AWC-018 | 0 |
| 1-008 | 0 | AWC-008 | 0 |
| 1-009 | 0 | AWC-020 | 0 |
| 1-010 | 0 | AWC-007 | 0 |
| 1-011 | 0 | AWC-029 | 0 |
| 1-012 | 0 | AWC-001 | 0 |
| 1-013 | 0 | AWC-002 | 0 |
| 1-014 | 0 | AWC-024 | 0 |
| 1-015 | 0 | AWC-013 | 0 |
| 1-016 | 0 | AWC-005 | 0 |
| 1-017 | 0 | AWC-030 | 0 |
| 1-018 | 1 | AWC-054 | 1 |
| 1-019 | 1 | AWC-059 | 1 |
| 1-020 | 0 | AWC-011 | 0 |
| 1-021 | 0 | AWC-024 | 0 |
| 1-022 | 0 | AWC-030 | 0 |
| 1-023 | 0 | AWC-003 | 0 |
| 1-024 | 0 | AWC-009 | 0 |
| 1-025 | 0 | AWC-028 | 0 |
| 1-026 | 1 | AWC-031 | 1 |
| 1-027 | 0 | AWC-044 | 0 |
| 1-028 | 0 | AWC-044 | 0 |
| 1-029 | 2* | AWC-038 | 0 |
| 1-030 | 0 | AWC-003 | 0 |
| 1-031 | 0 | AWC-037 | 0 |
| 1-032 | 0 | AWC-036 | 0 |
| 1-033 | 0 | AWC-030 | 0 |
| 1-034 | 0 | AWC-042 | 0 |
| 1-035 | 0 | AWC-043 | 0 |
| 1-036 | 0 | AWC-001 | 0 |
| 1-037 | 1 | AWC-060 | 1 |
| 1-038 | 1 | AWC-056 | 1 |
| 1-039 | 0 | AWC-015 | 0 |
| 1-040 | 0 | AWC-005 | 0 |
| 1-041 | 0 | AWC-037 | 0 |
| 1-042 | 0 | AWC-039 | 0 |

| SWEL Number | SWEL in Report Rev. | AWC Number | AWC in Report Rev. |
|----------------|------------------------|---------------|-----------------------|
| 1-043 | 0 | AWC-025 | 0 |
| 1-044 | 0 | AWC-042 | 0 |
| 1-045 | 0 | AWC-042 | 0 |
| 1-046 | 0 | AWC-042 | 0 |
| 1-047 | 1 | AWC-057 | 1 |
| 1-048 | 1 | AWC-057 | 1 |
| 1-049 | 0 | AWC-037 | 0 |
| 1-050 | 0 | AWC-037 | 0 |
| 1-051 | 0 | AWC-002 | 0 |
| 1-052 | 0 | AWC-028 | 0 |
| 1-053 | 0 | AWC-028 | 0 |
| 1-054 | 0 | AWC-028 | 0 |
| 1-055 | 0 | AWC-028 | 0 |
| 1-056 | 0 | AWC-004 | 0 |
| 1-057 | 0 | AWC-028 | 0 |
| 1-058 | 0 | AWC-028 | 0 |
| 1-059 | 1 | AWC-061 | 1 |
| 1-060 | 0 | AWC-010 | 0 |
| 1-061 | 0 | AWC-038 | 0 |
| 1-062 | 0 | AWC-038 | 0 |
| 1-063 | 0 | AWC-036 | 0 |
| 1-064 | 0 | AWC-038 | 0 |
| 1-065 | 0 | AWC-022 | 0 |
| 1-066 | 0 | AWC-004 | 0 |
| 1-067 | 0 | AWC-037 | 0 |
| 1-068 | 0 | AWC-018 | 0 |
| 1-069 | 0 | AWC-018 | 0 |
| 1-070 | 0 | AWC-017 | 0 |
| 1-071 | 0 | AWC-016 | 0 |
| 1-072 | 0 | AWC-025 | 0 |
| 1-073 | 0 | AWC-040 | 0 |
| 1-074 | 0 | AWC-035 | 0 |
| 1-075 | 1 | AWC-056 | 1 |
| 1-076 | 0 | AWC-030 | 0 |
| 1-077 | 1 | AWC-055 | 1 |
| 1-078 | 0 | AWC-041 | 0 |
| 1-079 | 1 | AWC-058 | 1 |
| 1-080 | 1 | AWC-062 | 1 |
| 1-081 | 0 | AWC-025 | 0 |
| 1-082 | 0 | AWC-016 | 0 |
| 1-083 | 0 | AWC-053 | 0 |
| 1-084 | 1 | AWC-032 | 0 |
| 1-085 | 0 | AWC-032 | 0 |
| 1-086 | 0 | AWC-032 | 0 |

| SWEL Number | SWEL in Report Rev. | AWC Number | AWC in Report Rev. |
|----------------|------------------------|---------------|-----------------------|
| 1-087 | 0 | AWC-016 | 0 |
| 1-088 | 0 | AWC-037 | 0 |
| 1-089 | 0 | AWC-005 | 0 |
| 1-090 | 0 | AWC-023 | 0 |
| 1-091 | 0 | AWC-040 | 0 |
| 1-092 | 0 | AWC-006 | 0 |
| 1-093 | 0 | AWC-029 | 0 |
| 1-094 | 0 | AWC-021 | 0 |
| 1-095 | 0 | AWC-045 | 0 |
| 1-096 | 0 | AWC-045 | 0 |
| 1-097 | 1 | AWC-018 | 0 |
| 2-001 | 2* | AWC-063 | 1 |
| 2-002 | 2* | AWC-063 | 1 |
| 2-003 | 2* | AWC-063 | 1 |
| 2-004 | 0 | AWC-052 | 0 |
| 2-005 | 0 | AWC-053 | 0 |
| 2-006 | 2* | AWC-063 | 1 |
| 2-007 | 2* | AWC-063 | 1 |
| 2-008 | 2* | AWC-063 | 1 |
| 2-009 | 2* | AWC-063 | 1 |
| 2-010 | 0 | AWC-022 | 0 |
| 2-011 | 0 | AWC-022 | 0 |
| 2-012 | 0 | AWC-048 | 0 |
| 2-013 | 0 | AWC-049 | 0 |
| 2-014 | 0 | AWC-050 | 0 |
| 2-015 | 0 | AWC-048 | 0 |
| 2-016 | 0 | AWC-049 | 0 |
| 2-017 | 0 | AWC-046 | 0 |
| 2-018 | 0 | AWC-046 | 0 |
| 2-019 | 0 | AWC-046 | 0 |
| 2-020 | 0 | AWC-047 | 0 |
| 2-021 | 0 | AWC-051 | 0 |
| 2-022 | 0 | AWC-050 | 0 |
| 2-023 | 0 | AWC-050 | 0 |
| 2-024 | 0 | AWC-050 | 0 |
| 2-025 | 0 | AWC-050 | 0 |
| 2-026 | 0 | AWC-050 | 0 |

* Revision 2 to be issued later

The following AWC numbers were not used in this report:

AWC-012
AWC-026
AWC-027
AWC-033
AWC-034