

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 075**Equipment ID No. M71N026A Equip. Class¹ 19 - Temperature sensorsEquipment Description Temperature Element (Suppression Pool)Location: Bldg. CTMT Floor El. 135 Room, Area 1A311, CTMTManufacturer, Model, Etc. (optional but recommended) Thermo Electric, 27620**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Connected to steel plate

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Welds are in good condition. There is very mild surface oxidation judged to have negligible affects on structural ability

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Connection plate is welded to a base plate.

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 075

Equipment ID No. M71N026A Equip. Class: 19 - Temperature sensors

Equipment Description Temperature Element (Suppression Pool)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Soft targets are protected by steel plating.

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
Steel plates protect the over head.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
A flexible hose attached to the Temperature element with adequate clearance

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

Other Adverse Conditions

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

Comments

None

Evaluated by: Chase Wharton *Ch Wh* Date: 9/27/2012

Fred Hopkins *Fred Hopkins* 9/27/2012

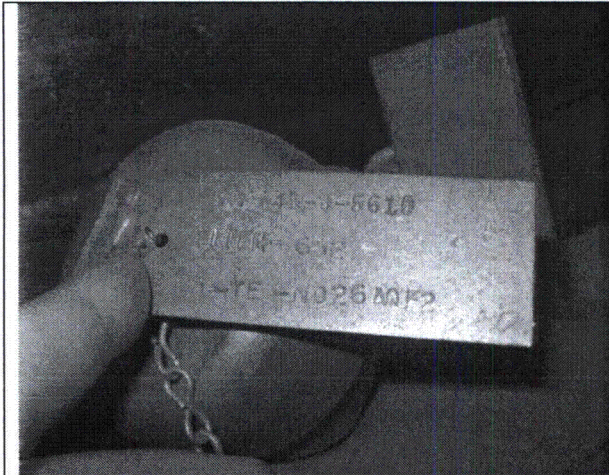
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 075

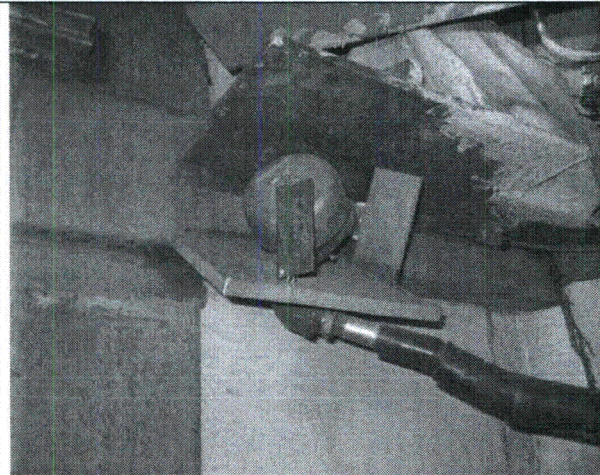
Equipment ID No. M71N026A Equip. Class: 19 - Temperature sensors

Equipment Description Temperature Element (Suppression Pool)

Photographs



Note:



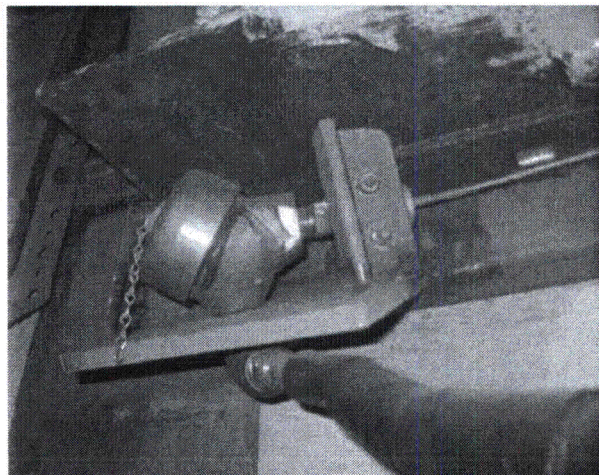
Note:

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 075

Equipment ID No. M71N026A Equip. Class¹ 19 - Temperature sensors

Equipment Description Temperature Element (Suppression Pool)



Note:

Note:

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 076

Equipment ID No. T46N003A Equip. Class¹ 19 - Temperature Sensors

Equipment Description Temperature Element (ESF Elec Switchgear East Room)

Location: Bldg. AB Floor El. 119 Room, Area 1A208, 07

Manufacturer, Model, Etc. (optional but recommended) Thermo Electric, 27620

Instructions for Completing Checklist

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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
*Angle member supporting temperature element is mounted to the wall using (2) 1/2" dia. concrete anchor bolts. See photo.
 No bent, broken, missing or loose hardware found.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Wall is covered with epoxy coating; no visual indication of corrosion found

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Wall is covered with epoxy coating; no visual indication of concrete crack found

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.)
Anchorage was checked against drawing J-0157T Rev. 6, and the configuration shown on the drawing matched the field condition.

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 076

Equipment ID No. T46N003A Equip. Class' 19 - Temperature Sensors

Equipment Description Temperature Element (ESF Elec Switchgear East Room)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
All surrounding equipments/structures are rigidly supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
*All overhead items (cable tray, conduit) are rigidly supported.
Temperature element is supported on masonry block wall, which is seismically qualified per calculation C-H015.2.
Nearby Gai-Tronics speaker is judged to be acceptable based on existing clearance.*

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flex conduit has been used for routing cable to the temperature element, therefore attached line has adequate flexibility.

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

Other Adverse Conditions

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

Comments

None

Evaluated by: Kyong S. (Jason) Pak *Kyong S. Pak* Date: 10/8/2012

Tori Robinson *Tori Robinson* 10/8/2012

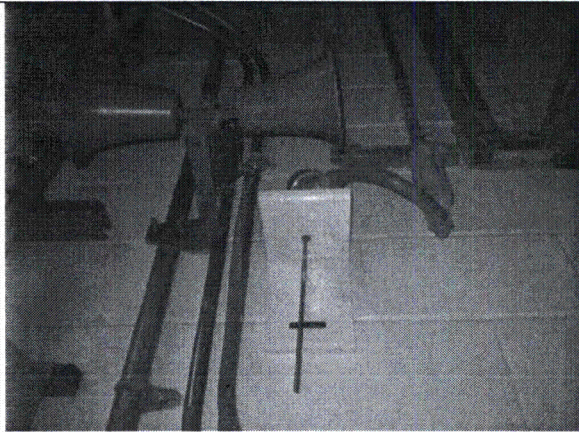
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 076

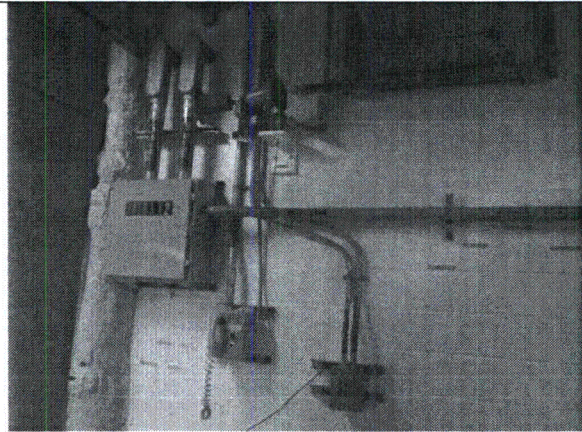
Equipment ID No. T46N003A Equip. Class¹ 19 - Temperature Sensors

Equipment Description Temperature Element (ESF Elec Switchgear East Room)

Photographs



Note: *Temperature Element*



Note: *General view of the area*

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 077**Equipment ID No. Y47N005B Equip. Class¹ 19 - Temperature SensorsEquipment Description Temperature Element (SSW Pump House B Space Temperature Element)Location: Bldg. SSW Floor El. 133 Room, Area 2M110, SSWManufacturer, Model, Etc. (optional but recommended) Thermo Electric, 27620**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
*Angle member supporting temperature element is mounted to the wall using (2) 1/2" dia. concrete anchor bolts. See photo.
 No bent, broken, missing or loose hardware found.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
No visual indication of corrosion found.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No visual indication of concrete crack found.

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.)
Anchorage was checked against drawing J-0157T Rev. 6, and the configuration shown on the drawing matched the field condition.

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 077

Equipment ID No. Y47N005B Equip. Class: 19 - Temperature Sensors

Equipment Description Temperature Element (SSW Pump House B Space Temperature Element)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
All surrounding equipments/structures are rigidly supported.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
All overhead items (mainly cable trays) are rigidly supported.
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flex conduit has been used for routing cable to the temperature element, therefore attached line has adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

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

Comments

Asset Suite shows this equipment is in Room 2M112, but it is in Room 2M110.

Evaluated by: Kyong S. (Jason) Pak  Date: 9/24/2012

Tori Robinson  9/24/2012

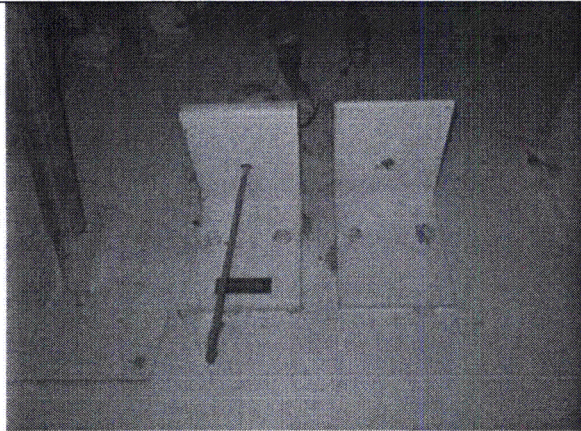
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 077

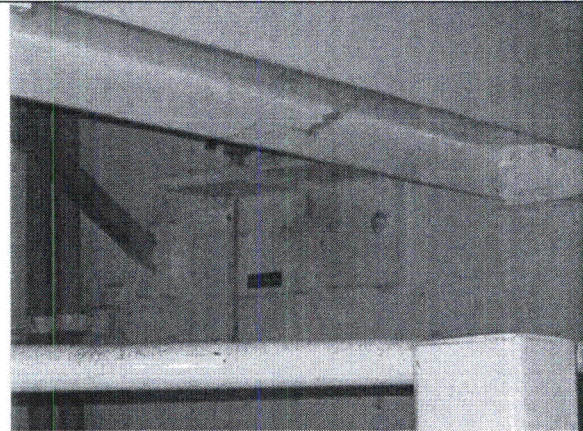
Equipment ID No. Y47N005B Equip. Class¹ 19 - Temperature Sensors

Equipment Description Temperature Element (SSW Pump House B Space Temperature Element)

Photographs



Note: *Temperature Element*



Note: *Temperature Element*

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 078

Equipment ID No. B21N697B Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Trip Unit (REACTOR VESSEL PRESSURE BLOW(ECCS INJ PERM) SWITCH)

Location: Bldg. CB Floor El. 166 Room, Area OC504,CB

Manufacturer, Model, Etc. (optional but recommended) ROSEMOUNT, 710DU0TS

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Item is mounted to panel H13P618, and panel is bolted to structural steel. All anchorage in good condition and existing.

- 3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
There is no apparent oxidation.

- 4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Panel anchored to steel I-Beams

- 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.)
Anchorage verified with 865E715.

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 078

Equipment ID No. B21N697B Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Trip Unit (REACTOR VESSEL PRESSURE BLOW(ECCS INJ PERM) SWITCH)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Adequate clearance is provided

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
Overhead lighting appears to be adequately supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Connecting wires and flex conduit have adequate flexibility

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

Other Adverse Conditions

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

Comments

None

Evaluated by: Chase Wharton  Date: 10/2/2012

Fred Hopkins  10/2/2012

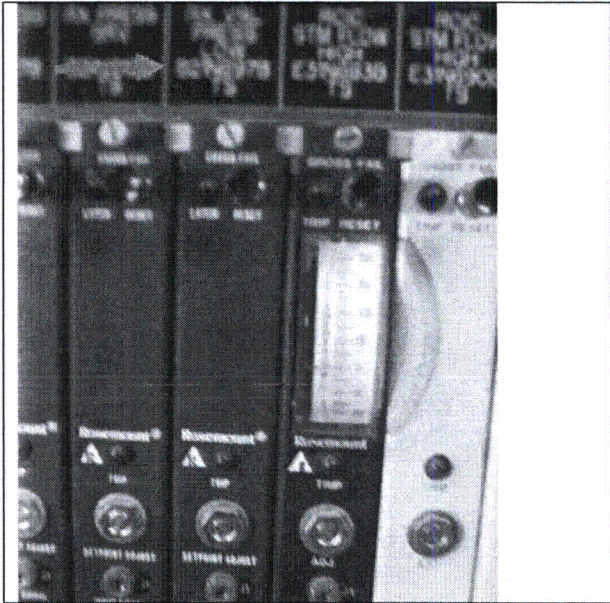
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 078

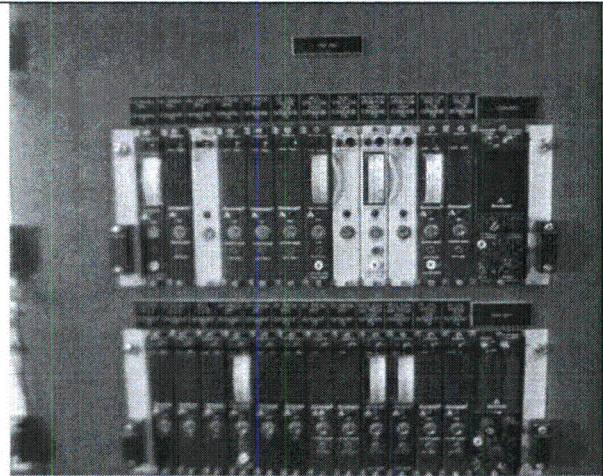
Equipment ID No. B21N697B Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Trip Unit (REACTOR VESSEL PRESSURE BLOW(ECCS INJ PERM) SWITCH)

Photographs



Note:



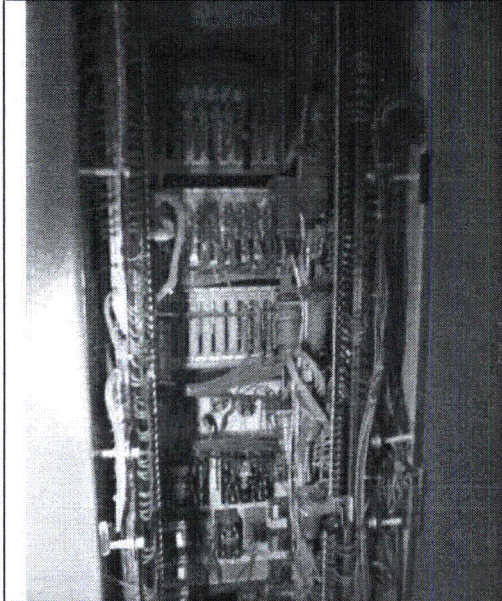
Note:

Status: Y N U

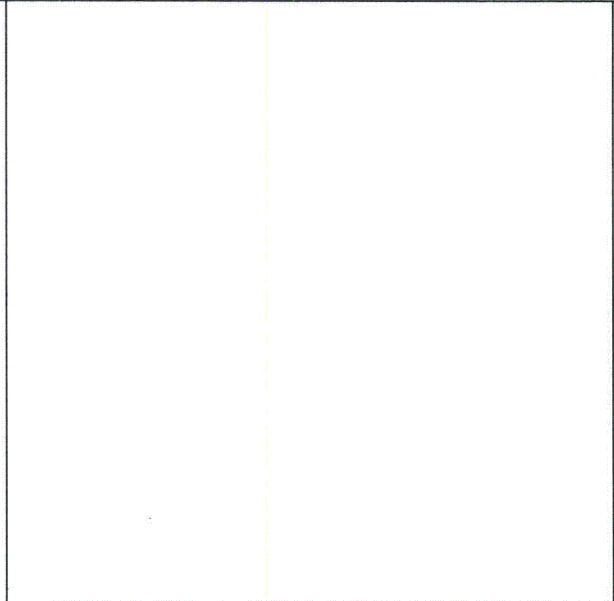
Seismic Walkdown Checklist (SWC) SWEL1- 078

Equipment ID No. B21N697B Equip. Class' 20 - Instrumentation and Control Panels

Equipment Description Trip Unit (REACTOR VESSEL PRESSURE BLOW(ECCS INJ PERM) SWITCH)



Note:



Note:

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 079

Equipment ID No. H13P669 Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Power Range Monitor A (DIV 1 NEUT and Radiation Monitoring Cabinet)

Location: Bldg. CB Floor El. 189 Room, Area OC703, CB

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

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Panel is anchored to the floor beams.
In Bay A & B, four out of eight screws are missing for the mounting plate. See photos. (CR 2012-11465 initiated WR# 00286756)
In Bay B, bolt/nut is missing on one of the flex conduit support clamp. See photo. In Bay B, nut for mounting elec. board to the side of panel is not fully engaged (threaded stud is not long enough). (CR 2012-11461 initiated WR# 00286750)
In Bay C, four out of eight bolts are missing for connecting panel H13P669 to the Halon panel H13P913. Also, one of installed bolt is loose. See photo. Halon panel is anchored to the floor beams. There is no concern for potential seismic interaction between the non-safety related Halon Panel 1H13P913 and the Upper Control Room (UCR) Panels 1H13P669. The halon panels are installed at the end of a series of UCR panels. The halon panels are bolted to the UCR floor. Experience and seismic testing indicated that in the side-to-side direction the UCR panels are rigid. The Halon panels and the UCR panels are butted together with no gaps. With no gap, the displacement experienced would be minimal. During a seismic event the panels would act together as a rigid body and will not adversely affect any of the other panels. Therefore, the impact from the halon panels on the UCR panels would not induce any significant additional loading during a seismic event.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
No visual indication of corrosion found.

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 079

Equipment ID No.: H13P669 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Power Range Monitor A (DIV 1 NEUT and Radiation Monitoring Cabinet)

- 4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No concrete attachment
- 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
This equipment is not a soft target.
- 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 items (HVAC duct, conduit, cable tray) are rigidly supported.
- 9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
All attached lines inside of the panel have sufficient flexibility.
- 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

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

Comments

Evaluated by: Fred Hopkins

Fred Hopkins

Date: 11-14-12

Tori Robinson

Tori Robinson

11-14-12

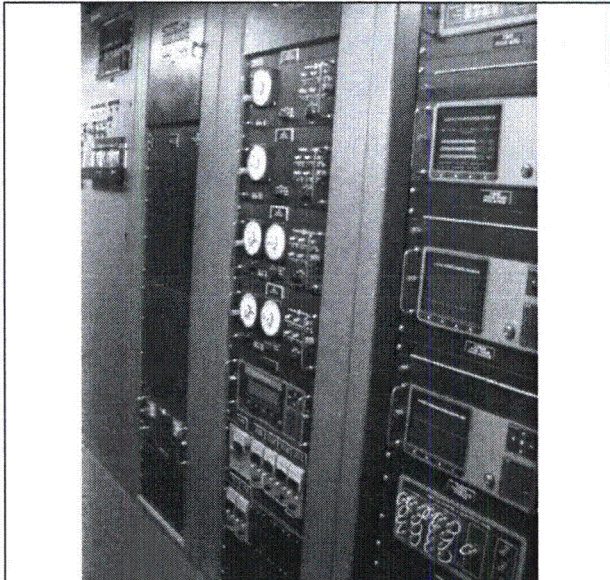
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 079

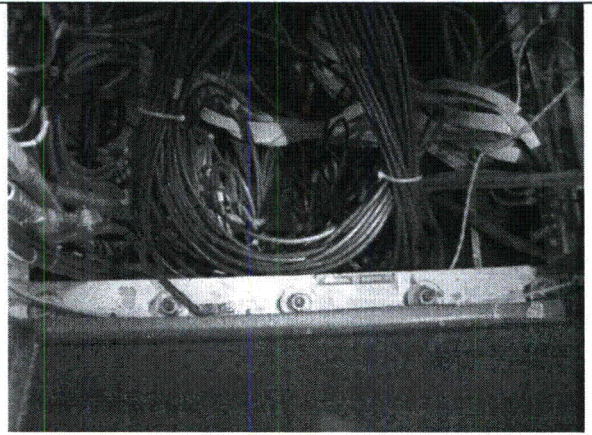
Equipment ID No. H13P669 Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Power Range Monitor A (DIV 1 NEUT and Radiation Monitoring Cabinet)

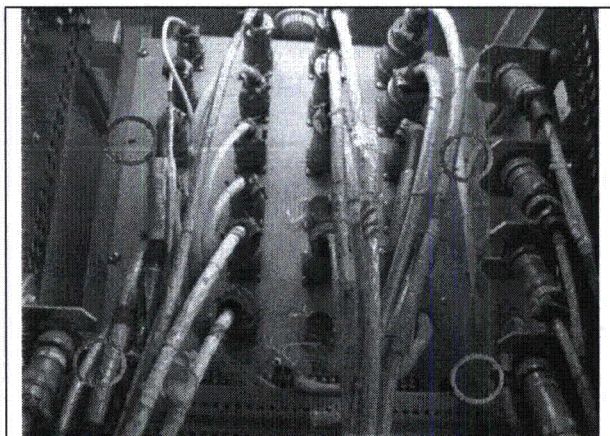
Photographs



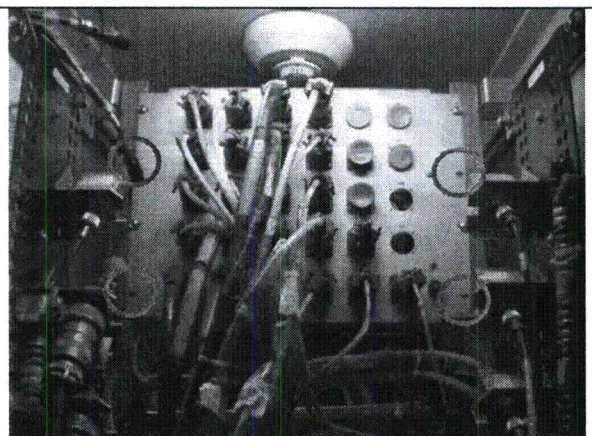
Note: General view, front of the panel



Note: Panel anchorage



Note: Missing screws (Bay A)



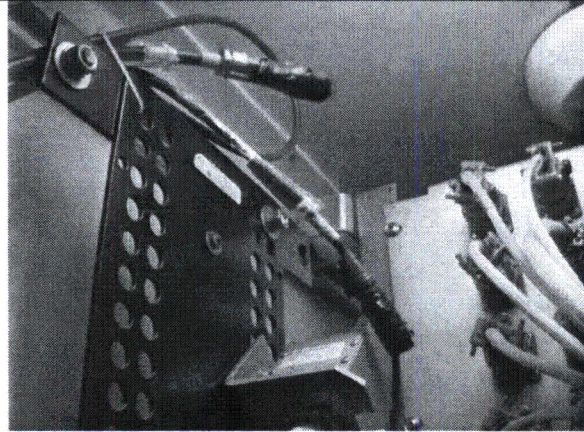
Note: Missing screws (Bay B)

Status: Y N U

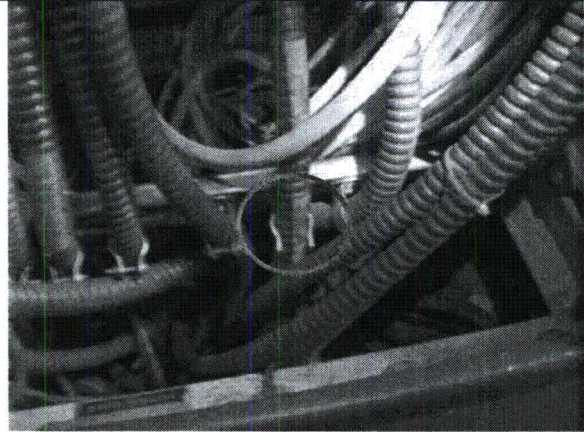
Seismic Walkdown Checklist (SWC) SWEL1- 079

Equipment ID No. H13P669 Equip. Class¹ 20 - Instrumentation and Control Panels

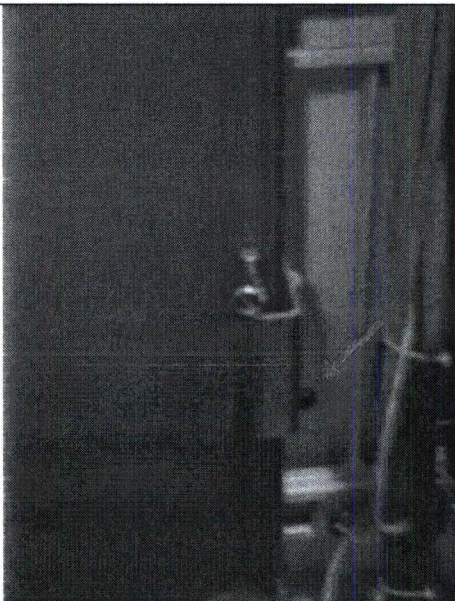
Equipment Description Power Range Monitor A (DIV 1 NEUT and Radiation Monitoring Cabinet)



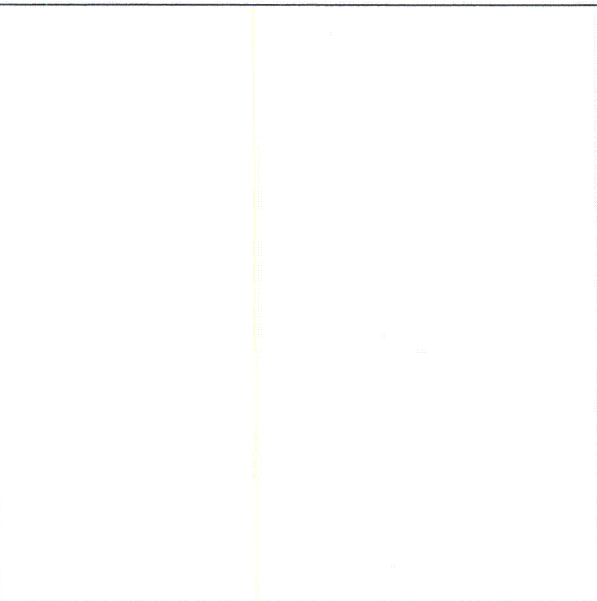
Note: *Nut not fully engaged to the threaded stud*



Note: *Missing bolt and nut on clamp*



Note: *Missing bolt (between two panels)*



Note:

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 080**Equipment ID No. H13P691 Equip. Class¹ 20 - Instrumentation and Control PanelsEquipment Description Pressure Indicating Switch (Division 1 RPS Logic VB)Location: Bldg. CB Floor El. 189 Room, Area OC703, CBManufacturer, Model, Etc. (optional but recommended) General Electric CO**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Panel is anchored to the floor beams.
In Bay A, nut on the bracket that mounts the wire support plate to the unistrut is loose (hand verified by electrician). (CR 2012-11459 initiated WR# 00286749)
In Bay B, nut is missing on the bracket that mounts the wire support plate to the unistrut. (CR 2012-11458 initiated WR# 00286748)
In Bay B, few nuts for mounting elec. board to the side of panel are not fully compressed or not fully engaged (threaded stud is not long enough). (CR 2012-11458 initiated WR# 00286748)

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
No visual indication of corrosion found.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No concrete attachment

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.)
Per drawing 865E712, panel is mounted to the floor beams using welded studs. Studs are welded to the beams every 6" C-C where panel's slotted holes fit in to, and this condition has been verified.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
See question number 2.

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 080

Equipment ID No. H13P691 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Pressure Indicating Switch (Division 1 RPS Logic VB)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
This equipment is not a soft target.

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 items (conduit) are rigidly supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
All attached lines inside of the panel have sufficient flexibility.

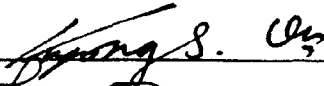

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

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

Comments

Blake Rice (NRC Inspector) came with us to the walkdown, and Troy Pate (Electrician) opened the panel door for SWE.

Evaluated by: Kyong S. (Jason) Pak  Date: 10/9/2012
Tori Robinson  10/9/2012

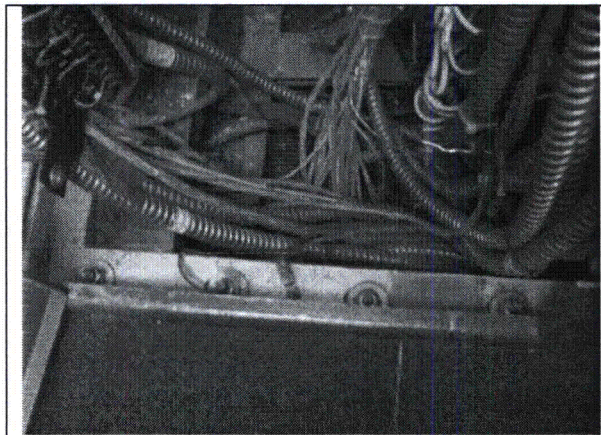
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 080

Equipment ID No. H13P691 Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Pressure Indicating Switch (Division 1 RPS Logic VB)

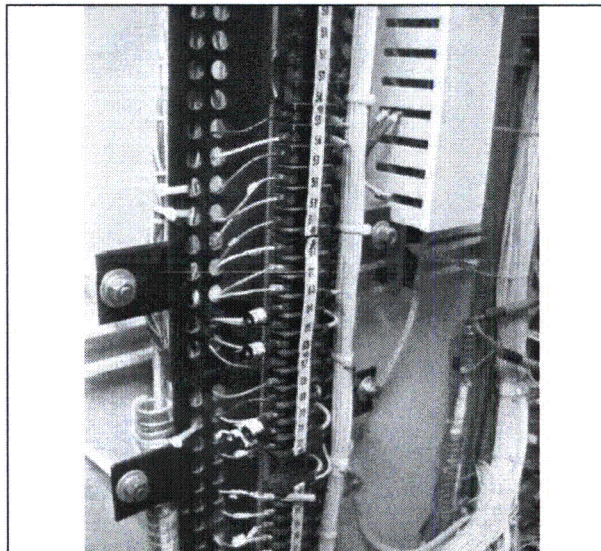
Photographs



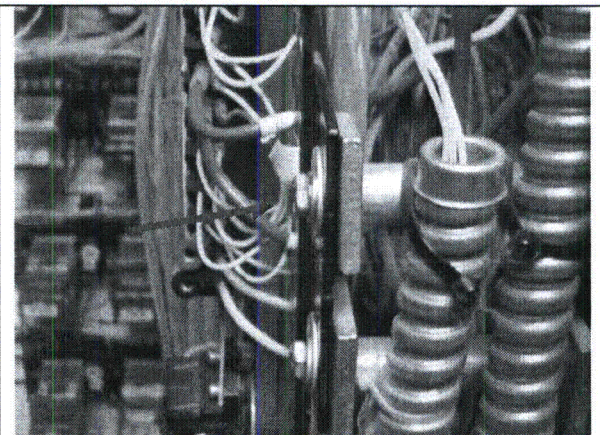
Note: Panel anchorage



Note: Missing nut (not shown) on mounting bracket for cable bundle support



Note: Nut not fully engaged to the threaded stud



Note: Nut not fully compressed

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 081**Equipment ID No. H13P872 Equip. Class¹ 20 - Instrumentation and Control PanelsEquipment Description Level Indicating Switch (Division 2 ESF Logic VB)Location: Bldg. CB Floor El. 166 Room, Area OC504, CBManufacturer, Model, Etc. (optional but recommended) General Electric CO., 1H13P872**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
*Panel is anchored to the floor beams.
 No bent, broken, missing or loose hardware found.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
No visual indication of corrosion found.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No concrete attachment

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.)
Per drawing 865E707, panel is mounted to the floor beams using welded studs. Studs are welded to the beams every 6" C-C where panel's slotted holes fit in to, and this condition has been verified.

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 081

Equipment ID No. H13P872 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Level Indicating Switch (Division 2 ESF Logic VB)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
This equipment is not a soft target.

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 items (air vent is secured to the ceiling with screws) are rigidly supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
All attached lines inside of the panel have sufficient flexibility.

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

Other Adverse Conditions

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

Comments

David Jones (Electrician) opened panel for SWE.

Evaluated by: Kyong S. (Jason) Pak  Date: 10/2/2012

Frederick Hopkins  10/2/2012

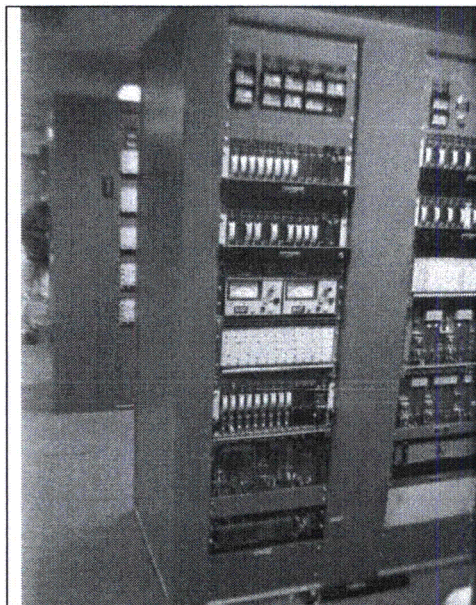
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 081

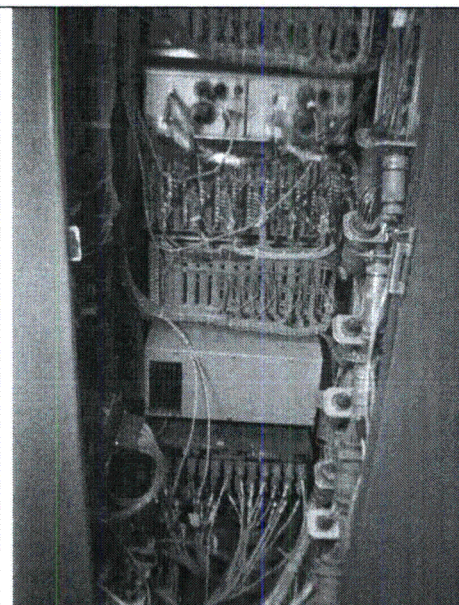
Equipment ID No. H13P872 Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Level Indicating Switch (Division 2 ESF Logic VB)

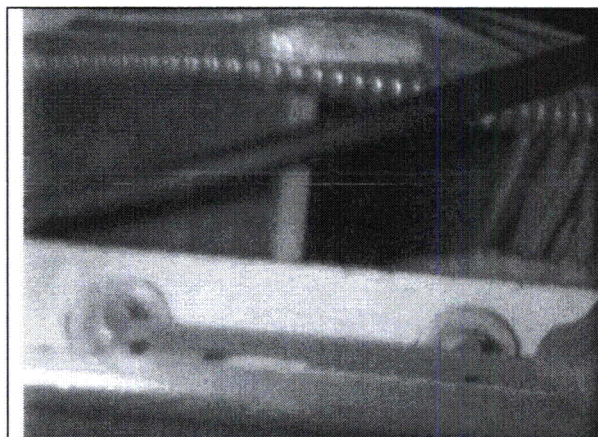
Photographs



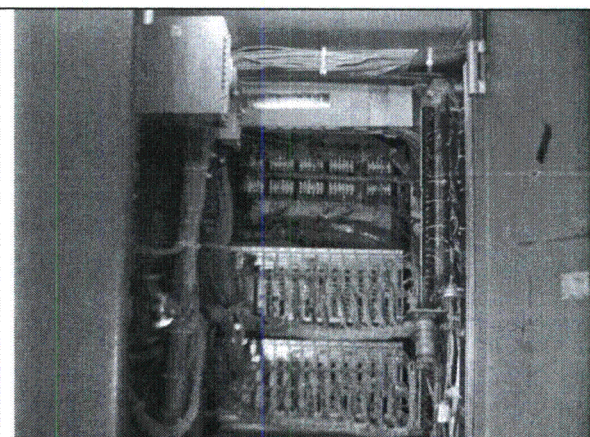
Note: Panel H13P872, Bay A & B



Note: Back of the panel (Opened)



Note: Anchorage of panel to the floor beam (studs), 6" C-C



Note: Back of the panel (Opened)

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 082**Equipment ID No. E31N602A Equip. Class¹ 20 - Instrumentation and Control PanelsEquipment Description Temp Switch (RCIC Equipment Area Temperature Switch)Location: Bldg. CB Floor El. 189 Room, Area OC703, CBManufacturer, Model, Etc. (optional but recommended) Sciencetech Inc./NUS Corp., NUS-A076PA-1 LDTM-T**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Temp switch E31N602A, among with other components, is mounted to the mounting plate. Mounting plate is attached to the panel H13P632 using (4) screws. Panel is anchored to the floor beams.
In Bay B, one of nut/lock washer for mounting elec. board to the side of panel is not fully compressed. (CR 2012-11457 initiated WR# 00286746) See photo.
In Bay C, one of nut for mounting elec. board to the side of panel is not fully engaged (threaded stud is not long enough). (CR 2012-11456 initiated WR# 00286759)

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
No visual indication of corrosion found.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No concrete attachment

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.)
Per drawing 865E712, panel is mounted to the floor beams using welded studs. Studs are welded to the beams every 6" C-C where panel's slotted holes fit in to, and this condition has been verified.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
See question number 2.

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 082

Equipment ID No. E31N602A Equip. Class 20 - Instrumentation and Control Panels

Equipment Description Temp Switch (RCIC Equipment Area Temperature Switch)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
All equipments/structures nearby are rigidly supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
All overhead items (conduit, pipe) are rigidly supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flex cable has been used, therefore attached line has adequate flexibility.



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

Other Adverse Conditions

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

Comments

Blake Rice (NRC Inspector) came with us to the walkdown, and Troy Pate (Electrician) opened the panel door for SWE.

Evaluated by: Kyong S. (Jason) Pak  Date: 10/9/2012
Tori Robinson  10/9/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 082

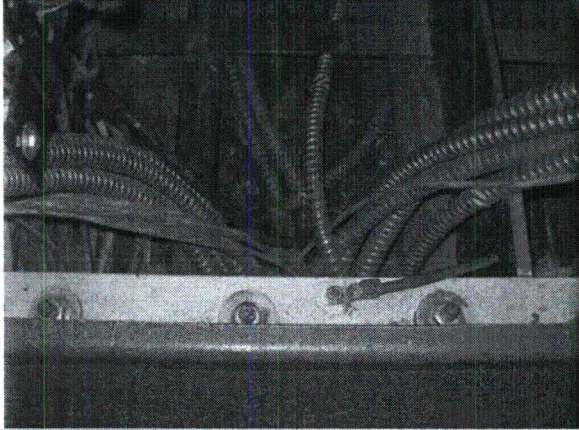
Equipment ID No. E31N602A Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Temp Switch (RCIC Equipment Area Temperature Switch)

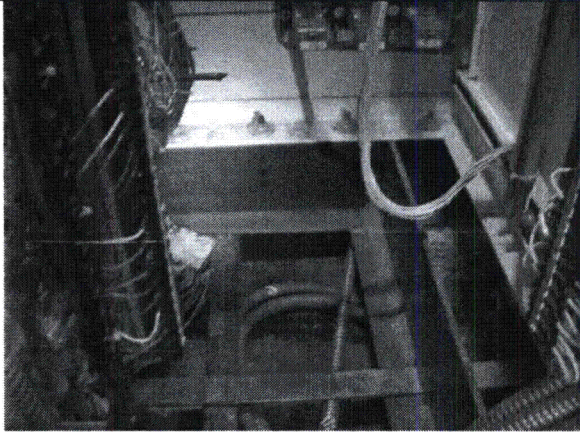
Photographs

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PHOTO REMOVED"

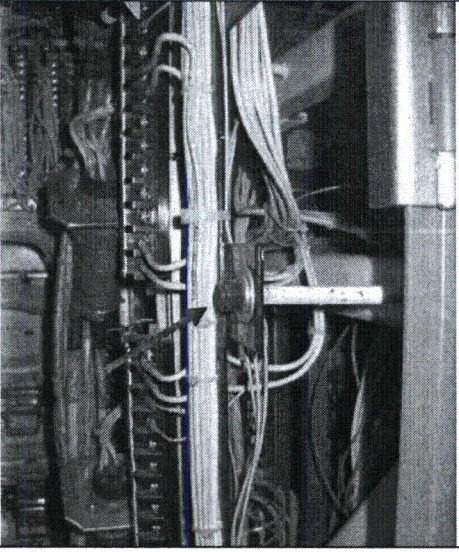
Note: Temp. Switch, E31N602A, on front of the panel H13P632



Note: Panel anchorage



Note: Panel anchorage



Note: Nut not fully compressed

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 083**Equipment ID No. E31N690A Equip. Class¹ 20 - Instrumentation and Control PanelsEquipment Description Pressure Differential Switch (RCIC Steam Line Flow Highswitch)Location: Bldg. CB Floor El. 189 Room, Area OC703, CBManufacturer, Model, Etc. (optional but recommended) Rosemount, 510DU7**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
*Pressure Differential switch E31N690A, among with other components, is mounted to the mounting plate. Mounting plate is attached to the panel H13P629. Panel is anchored to the floor beams.
 In Bay C, five out of eight bolts are missing for connecting panel H13P629 to the Halon panel H13P936. Halon panel is anchored to the floor beams. There is no concern for potential seismic interaction between the non-safety related Halon Panel 1H13P936 and the Upper Control Room (UCR) Panel 1HP629. The halon panels are installed at the end of a series of UCR panels. The halon panels are bolted to the UCR floor. Experience and seismic testing indicated that in the side-to-side direction the UCR panels are rigid. The Halon panels and the UCR panels are butted together with no gaps. With no gap, the displacement experienced would be minimal. During a seismic event the panels would act together as a rigid body and will not adversely affect any of the other panels. Therefore, the impact from the halon panels on the UCR panels would not induce any significant additional loading during a seismic event.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
No visual indication of corrosion found.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No concrete attachment

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 083

Equipment ID No. E31N690A Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Pressure Differential Switch (RCIC Steam Line Flow Highswitch)

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.)

Per drawing 865E711, panel is mounted to the floor beams using welded studs. Studs are welded to the beams every 6" C-C where panel's slotted holes fit in to, and this condition has been verified.

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
All equipments/structures nearby are rigidly supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
All overhead items (HVAC duct, conduit, cable tray, etc.) are rigidly supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flex cable has been used, therefore attached line has adequate flexibility.

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

Other Adverse Conditions

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

Comments

Plastic bag left inside of the panel. See photo.

Evaluated by: Fred Hopkins *Fred Hopkins* Date: 11-14-12

Tori Robinson *Tori Robinson* 11-14-12

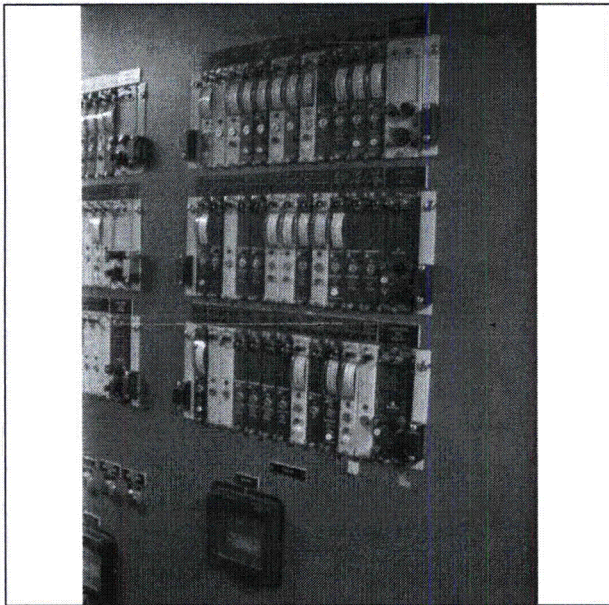
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 083

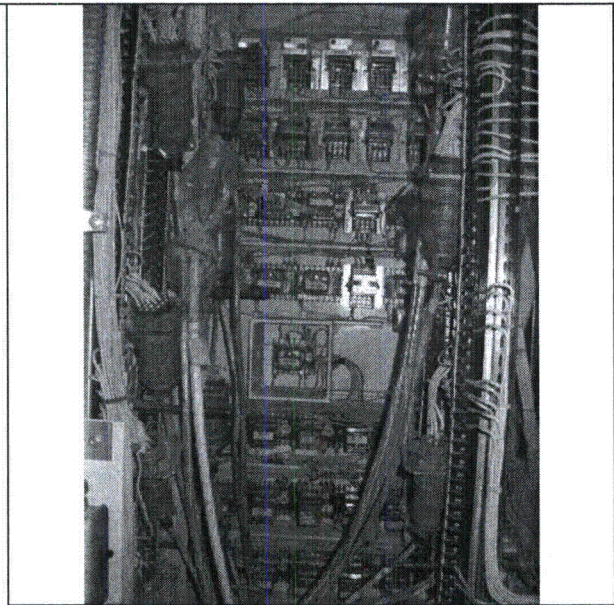
Equipment ID No. E31N690A Equip. Class' 20 - Instrumentation and Control Panels

Equipment Description Pressure Differential Switch (RCIC Steam Line Flow Highswitch)

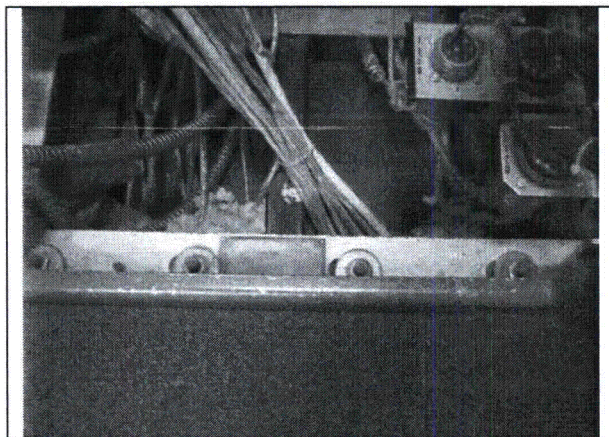
Photographs



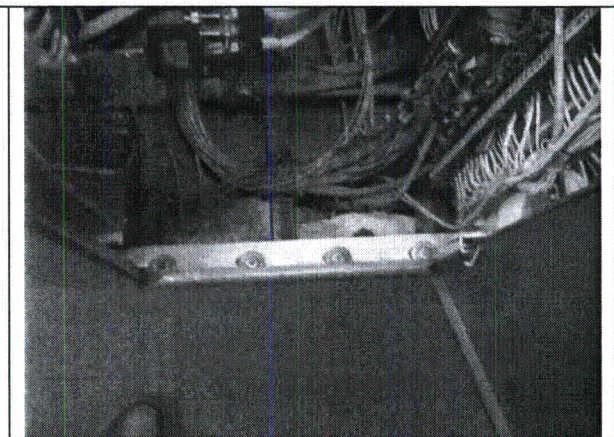
Note: General view, front of the panel



Note: Inside of the panel, plastic bag left inside



Note: Panel anchorage



Note: Panel anchorage

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 084**Equipment ID No. B21N682D Equip. Class¹ 20 - Instrumentation and Control PanelsEquipment Description Level Switch (REACTOR VESSEL LEVEL LOW (PCIS/SCI/RWCU) SWITCH)Location: Bldg. CB Floor El. 166 Room, Area OC504,CBManufacturer, Model, Etc. (optional but recommended) ROSEMOUNT,510DU7**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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 mounted to panel H13P694 with vendor provided mounting slots. 3 slots per side with 1.75" spacing and 3.5" spacing
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
One nut missing on panel stud. CR-GGN-2012-11255
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
There is no apparent oxidation.
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Panel anchored to steel I-Beams
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
Equipment mounts consistent with QP388. Panel anchorage missing one nut and washer. See Question 2
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 084

Equipment ID No. B21N682D Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Level Switch (REACTOR VESSEL LEVEL LOW (PCIS/SCI/RWCU) SWITCH)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Adequate clearance is provided.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
Overhead lighting appears to be adequately supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Connecting wires and flex conduit have adequate flexibility

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

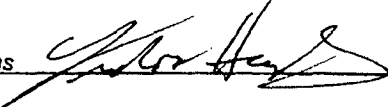
Other Adverse Conditions

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

Comments

None

Evaluated by: Chase Wharton  Date: 10/2/2012

Fred Hopkins  10/2/2012

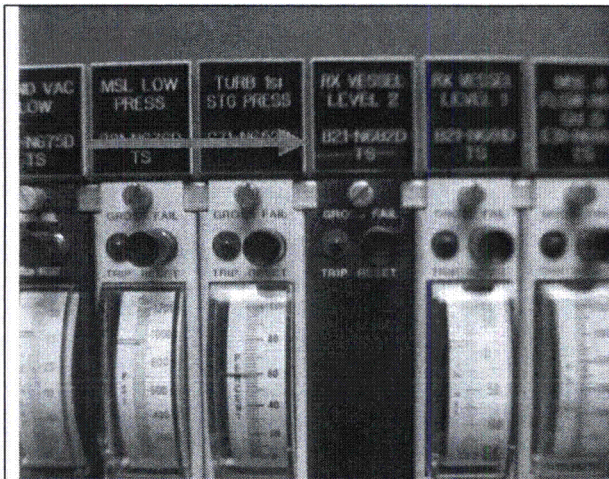
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 084

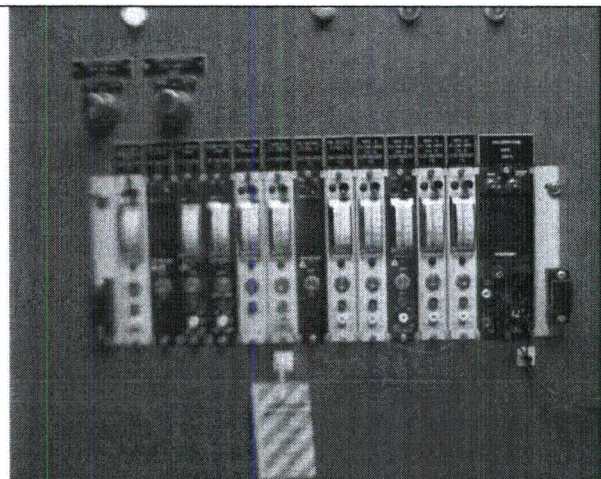
Equipment ID No. B21N682D Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Level Switch (REACTOR VESSEL LEVEL LOW (PCIS/SCI/RWCU) SWITCH)

Photographs



Note:



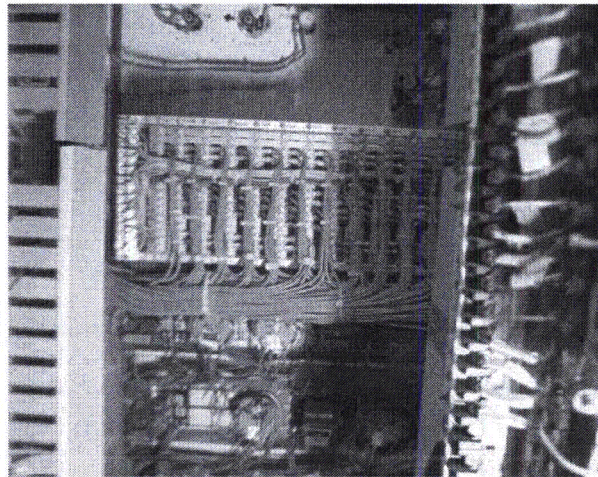
Note: *Front mounts.*

Status: Y N U

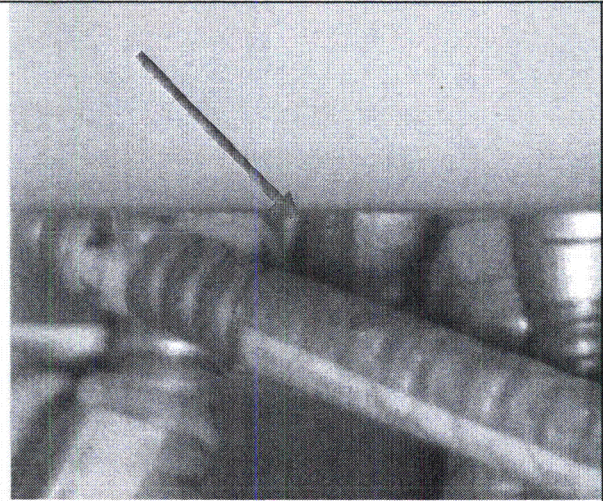
Seismic Walkdown Checklist (SWC) SWEL1- 084

Equipment ID No. B21N682D Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Level Switch (REACTOR VESSEL LEVEL LOW (PCIS/SCI/RWCU) SWITCH)



Note:



Note: *Missing nut and washer.*

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 085**Equipment ID No. E31N608B Equip. Class¹ 20 - Instrumentation and Control PanelsEquipment Description Temp Switch (RHR B EQUIPMENT AREA 1 TEMPERATURE SWITCH)Location: Bldg. CB Floor El. 166 Room, Area OC504,CBManufacturer, Model, Etc. (optional but recommended) NUS INSTRUMENTS.A076PA-1**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
All anchorage in good condition and existing.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
There is no apparent oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Panel anchored to steel I-Beams

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.)
Panel anchorage is consistent with 865E715, and Section 4.3 the Qualification Report in QP 367. Four (4) Screws attach the mounting plate to the panel

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 085

Equipment ID No. E31N608B Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Temp Switch (RHR B EQUIPMENT AREA 1 TEMPERATURE SWITCH)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Adequate clearance is provided.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
Overhead lighting appears to be adequately supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Connecting wires and flex conduit have adequate flexibility

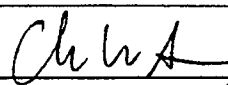
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

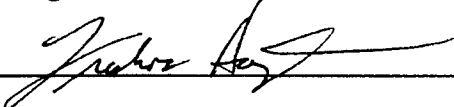
Other Adverse Conditions

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

Comments

None

Evaluated by: Chase Wharton  Date: 10/2/2012

Fred Hopkins  10/2/2012

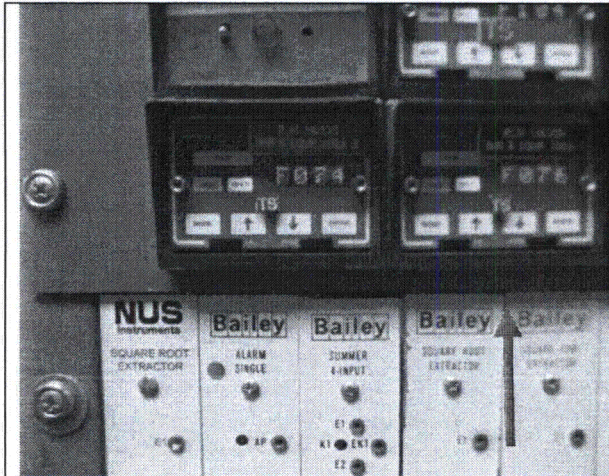
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 085

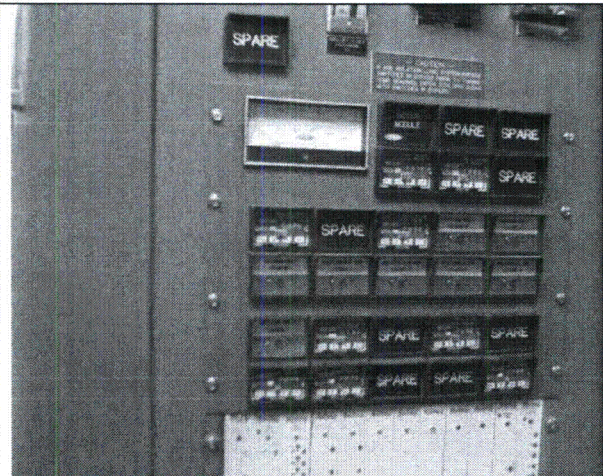
Equipment ID No. E31N608B Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Temp Switch (RHR B EQUIPMENT AREA 1 TEMPERATURE SWITCH)

Photographs



Note:



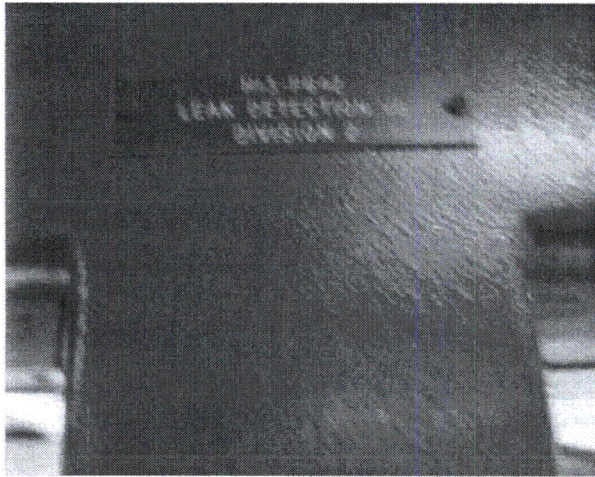
Note:

Status: Y N U

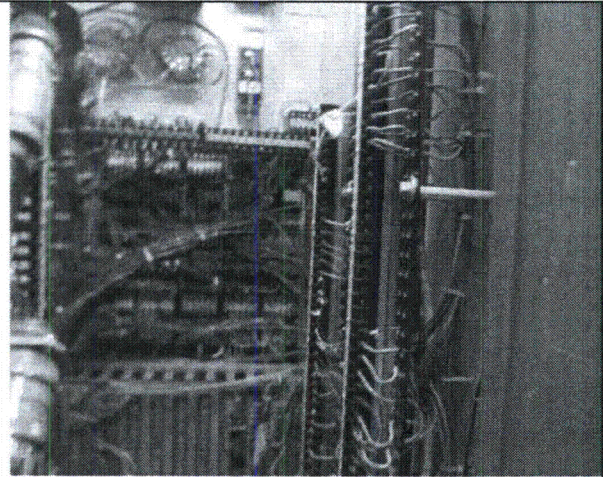
Seismic Walkdown Checklist (SWC) SWEL1- 085

Equipment ID No. E31N608B Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Temp Switch (RHR B EQUIPMENT AREA 1 TEMPERATURE SWITCH)



Note:



Note:

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 086**Equipment ID No. H13P601 Equip. Class¹ 20 - Instrumentation and Control PanelsEquipment Description Level Recorder (Reactor Core Cooling BB)Location: Bldg. CB Floor El. 166 Room, Area OC503, CBManufacturer, Model, Etc. (optional but recommended) General Electric Co.**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
*Panel is anchored to the floor beam's welded studs. Studs are welded to the beams every 6" C-C where panel's slotted holes fit in to.
 No bent, broken, missing or loose hardware found.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
No visual indication of corrosion found.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No concrete attachment

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.)
Per drawing 865E675 & 865E721, panel is mounted to the floor beams using welded studs. Studs are welded to the beams every 6" C-C where panel's slotted holes fit in to, and this condition has been verified.

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 086

Equipment ID No. H13P601 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Level Recorder (Reactor Core Cooling BB)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
This equipment is not a soft target.
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 items (air vent is secured to the ceiling with screws) are rigidly supported.
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
All attached lines inside of the panel have sufficient flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

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

Comments

Gregory Wilson (Electrician) opened panel for SWE.

Evaluated by: Kyong S. (Jason) Pak *Kyong S. Pak* Date: 10/4/2012

Tori Robinson *Tori Robinson* 10/4/2012

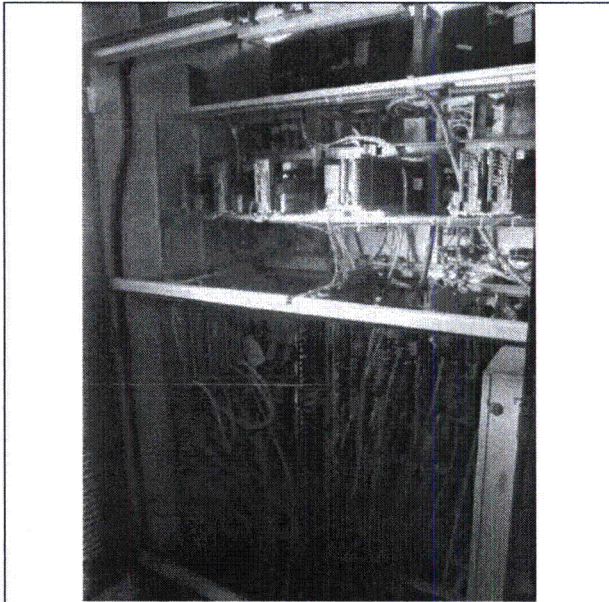
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 086

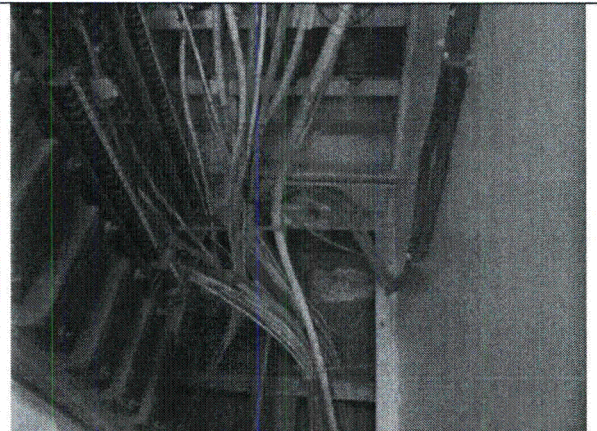
Equipment ID No. H13P601 Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Level Recorder (Reactor Core Cooling BB)

Photographs



Note: *Inside of panel*



Note: *Anchorage of panel to the floor beam*

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 087**Equipment ID No. H22P150 Equip. Class¹ 20 - Instrumentation and Control PanelsEquipment Description Remote Shutdown Panel ALocation: Bldg. CB Floor El. 111 Room, Area OC208,CB

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

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
Panel welded to chanel, chanel welded to tube steel, tube steel welded to plate, plate anchored to concrete.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No visible cracks

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 087

Equipment ID No. H22P150 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Remote Shutdown Panel A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Item has no soft targets

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
Overhead equipment above the Remote Shutdown Panel is seismically restrained and does not create an adverse seismic condition

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flexible conduit is attached to Remote Shutdown Panel with adequate clearance

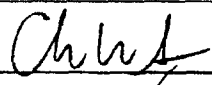
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

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

Comments

None

Evaluated by: Chase Wharton  Date: 10/10/2012

Fred Hopkins  10/10/2012

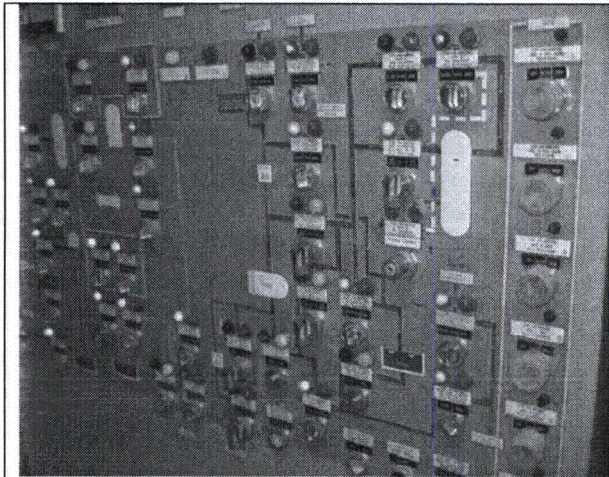
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 087

Equipment ID No. H22P150 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Remote Shutdown Panel A

Photographs



“SECURITY SENSITIVE PHOTO
PHOTO REMOVED”

Note:

Note:

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 087

Equipment ID No. H22P150 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Remote Shutdown Panel A

<p>"SECURITY SENSITIVE PHOTO PHOTO REMOVED"</p>	
<p>Note:</p>	<p>Note:</p>

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 088**Equipment ID No. H22P296 Equip. Class¹ 20 - Instrumentation and Control PanelsEquipment Description Alternate Shutdown PanelsLocation: Bldg. AB Floor El. 119 Room, Area 1A219.09Manufacturer, Model, Etc. (optional but recommended) STUART, IRBY C. CO**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Panel is mounted to the unistrut on support frame, and support frame is anchored to the floor using (4) 5/8" dia. anchor bolts.
Panel is mounted to the unistrut using spring nut. Plate inside unistrut (part of mounting assembly) is misaligned. (CR 2012-11455 initiated WR# 00286745) See photo.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Floor is covered with epoxy coating; no visual indication of corrosion found

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Floor is covered with epoxy coating; no visual indication of concrete crack found

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.)
Anchorage was checked against drawing 1A-209-3026, CSD-14 & CSD-15. The configuration shown on the drawing matched the field condition, but minor discrepancies found on field vs. drawing dimensions. However, these minor differences doesn't pose a seismic concern, therefore acceptable.

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 088

Equipment ID No. H22P296 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Alternate Shutdown Panels

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
This equipment is not a soft target.

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 items (mainly cable trays) are rigidly supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flex conduit has been used for routing cable to the panel, therefore attached lines have adequate flexibility.

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

Other Adverse Conditions

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

Comments

Troy Pate (Electrician) opened the panel for SWE.

Evaluated by: Kyong S. (Jason) Pak  Date: 10/8/2012

Tori Robinson  10/8/2012

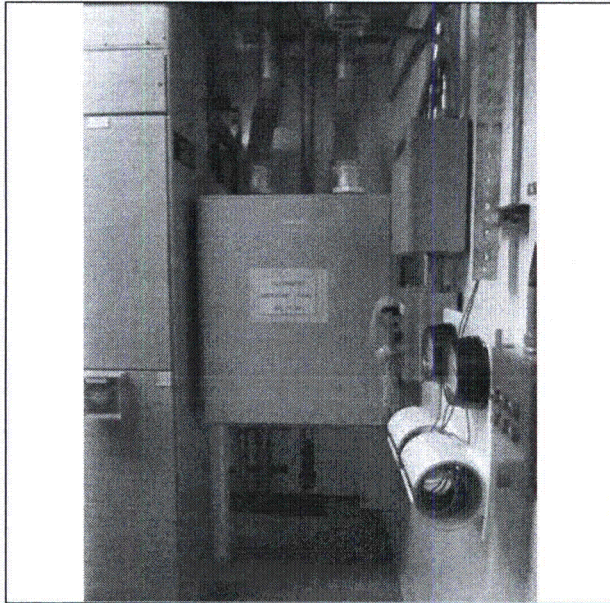
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 088

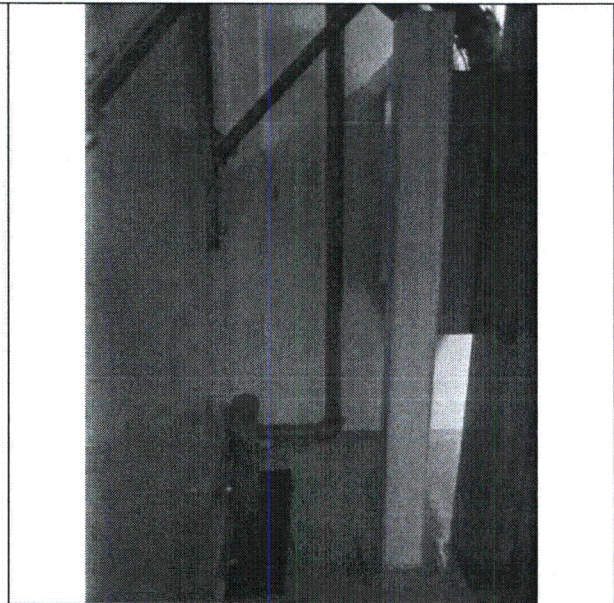
Equipment ID No. H22P296 Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Alternate Shutdown Panels

Photographs



Note: *Front view of the panel*



Note: *Rear view of the panel*

Status: Y N U

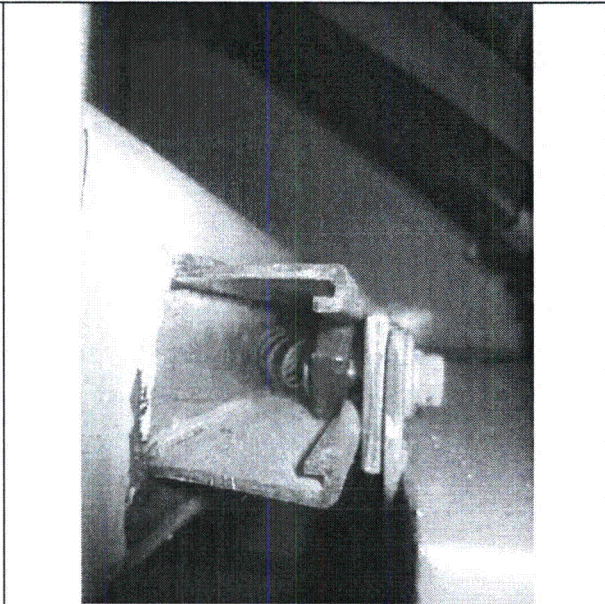
Seismic Walkdown Checklist (SWC) SWEL1- 088

Equipment ID No. H22P296 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Alternate Shutdown Panels

"SECURITY SENSITIVE PHOTO
PHOTO REMOVED"

Note: *Panel's front door opened*



Note: *Misaligned/twisted mounting assembly
for panel mounted on unistrut*

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 089**Equipment ID No. H22P331 Equip. Class¹ 20 - Instrumentation and Control PanelsEquipment Description DIVISION 1 LOAD SHED SEQ PANELLocation: Bldg. CB Floor El. 111 Room, Area OC202, CB

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

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
Panel is mounted to plate, plate is anchored to concrete.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Mild surface oxidation, but does not effect structural ability.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No visible cracks

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

¹ Enter the equipment class name from EPRI I025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 089

Equipment ID No. H22P331 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description DIVISION 1 LOAD SHED SEQ PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Item has no soft targets
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
Overhead equipment is adequately supported
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flexible conduit is attached to Battery Charger with adequate clearance
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

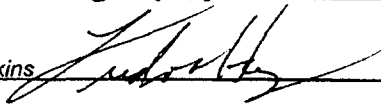
Other Adverse Conditions

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

Comments

None

Evaluated by: Chase Wharton  Date: 10/10/2012

Fred Hopkins  10/10/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 089

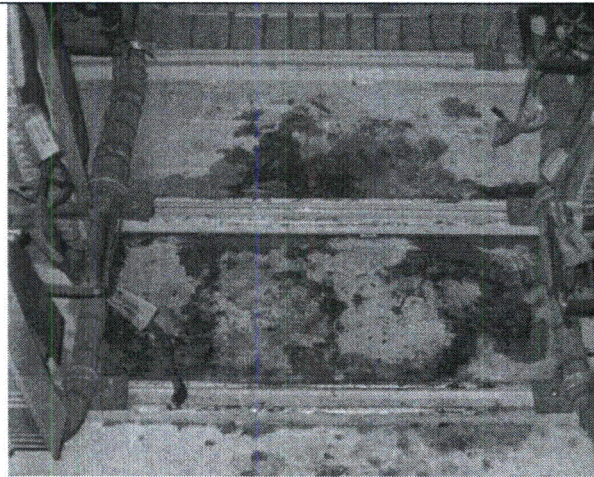
Equipment ID No. H22P331 Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description DIVISION 1 LOAD SHED SEQ PANEL

Photographs



Note:



Note:

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 090**Equipment ID No. H22P401 Equip. Class: 20 - Instrumentation and Control PanelsEquipment Description STBY DG Engine Control Panel (Diesel Generator Instrument Panel Div 2)Location: Bldg. DG Floor El. 133 Room, Area 1D308, DSLManufacturer, Model, Etc. (optional but recommended) Cooper Energy, SVSS 09-500-74033**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Panel is supported by channel frame which is anchored to the floor. See photo.
No bent, broken, missing or loose hardware found.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Floor is covered with epoxy coating; no visual indication of corrosion found.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Floor is covered with epoxy coating; no visual indication of concrete crack found.

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 090

Equipment ID No. H22P401 Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description STBY DG Engine Control Panel (Diesel Generator Instrument Panel Div 2)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
This equipment is not a soft target.

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 items (mainly cable trays) are rigidly supported.
In the vicinity, light fixtures are hung with chain using S-hook.
However, light fixtures are not directly located over any safety related equipment. Therefore, this condition doesn't pose a seismic concern.*

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
All conduits routed to the panel have flex connections, therefore acceptable.

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

Other Adverse Conditions

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

Comments

Blake Rice (NRC Inspector) came with us to the walkdown, and Electrician opened the panel door for SWE.

Evaluated by: Kyong S. (Jason) Pak  Date: 9/27/2012

Tori Robinson  9/27/2012

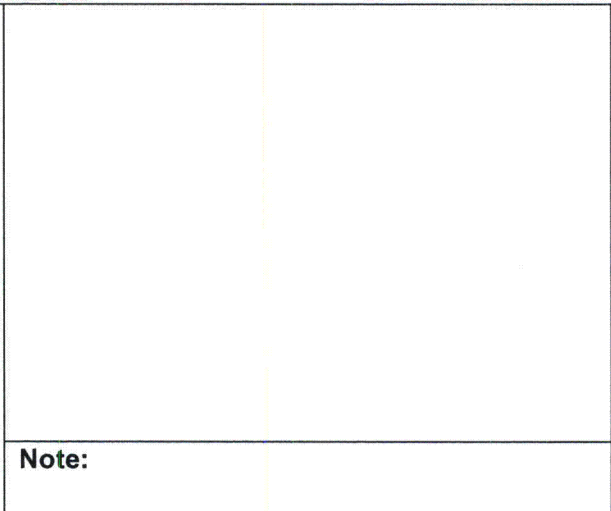
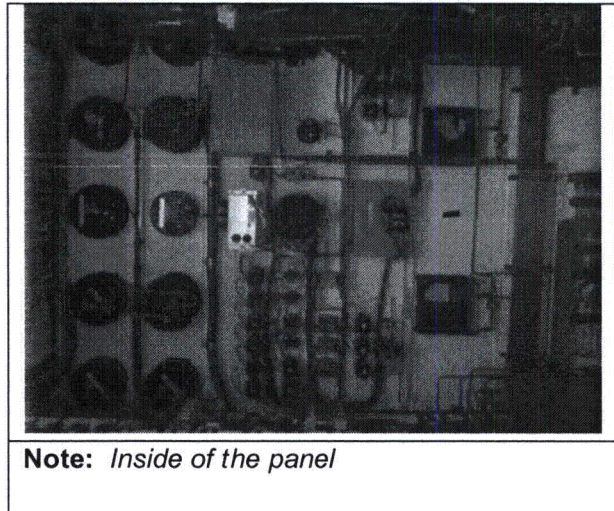
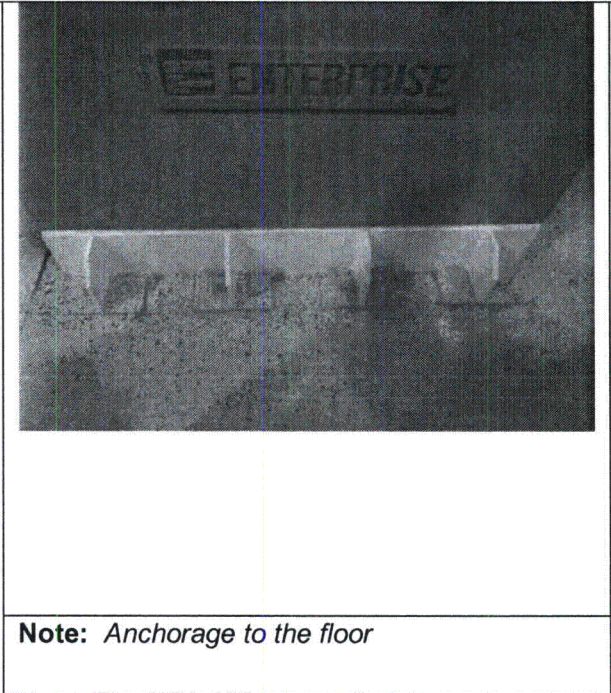
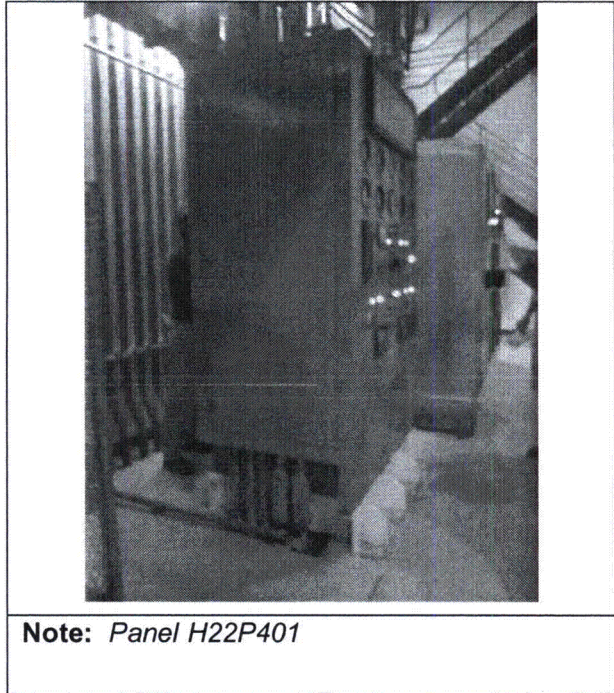
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 090

Equipment ID No. H22P401 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description STBY DG Engine Control Panel (Diesel Generator Instrument Panel Div 2)

Photographs



Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 091**Equipment ID No. M71N602A Equip. Class¹ 20 - Instrumentation and Control PanelsEquipment Description Strip Chart Recorder (RG 1.97) (Containment Pressure Highswitch)Location: Bldg. CB Floor El. 189 Room, Area OC703, CBManufacturer, Model, Etc. (optional but recommended) Rosemount, 510DU237155**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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

Strip chart recorder M71N602A is mounted to the panel H13P871. Panel is anchored to the floor beams.

In Bay A, one screw (out of 12 total) is missing on mounting plate for WAKI-YX-P871. Also, cable bundle on top of the panel is not properly secure to the wire support plate nearby. (CR 2012-11464 initiated WR# 00286754)

In Bay D, bolts/nuts are missing on two of flex conduit support clamps. See photo. Additionally, two flex conduits shown on photo are not properly supported. (CR 2012-11463 initiated WR# 00286753)

In Bay E, one screw (out of four total) is missing on mounting plate/bracket of M71N606A and M71N616A. (CR 2012-11462 initiated WR #00286751) See photo.

In Bay H, Panel H13P871 and Halon panel right next to it are not connected to each other. There are holes on halon panel but not on panel H13P871. Halon panel is anchored to the floor beams. There is no concern for potential seismic interaction between the non-safety related Halon Panel 1H13P915 and the Upper Control Room (UCR) Panels 1H13P871. The halon panels are installed at the end of a series of UCR panels. The halon panels are bolted to the UCR floor. Experience and seismic testing indicated that in the side-to-side direction the UCR panels are rigid. The Halon panels and the UCR panels are butted together with no gaps. With no gap, the displacement experienced would be minimal. During a seismic event the panels would act together as a rigid body and will not adversely affect any of the other panels. Therefore, the impact from the halon panels on the UCR panels would not induce any significant additional loading during a seismic event.

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 091

Equipment ID No. M71N602A Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description Strip Chart Recorder (RG 1.97) (Containment Pressure Highswitch)

- 3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
No visual indication of corrosion found.
- 4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No concrete attachment
- 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
See question number 2.

Interaction Effects


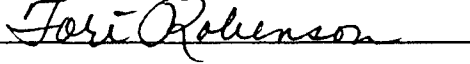
- 7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
All equipments/structures nearby are rigidly supported.
- 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
All overhead items (HVAC duct, conduit, etc.) are rigidly supported.
- 9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flex cable has been used, therefore attached line has adequate flexibility.
- 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

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

Comments

In bay C, three broken tie-wraps found.

Evaluated by: Fred Hopkins  Date: 11-14-12
Tori Robinson  11-14-12

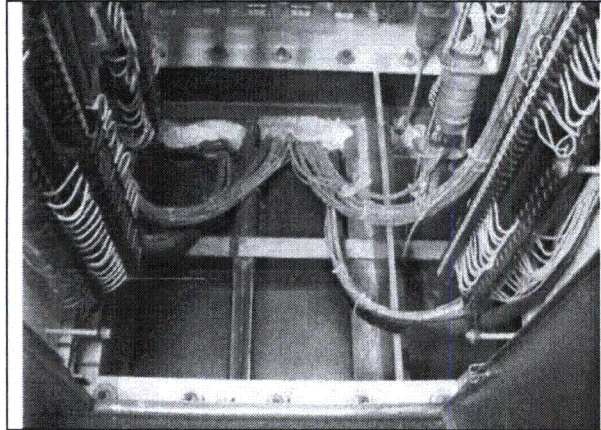
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 091

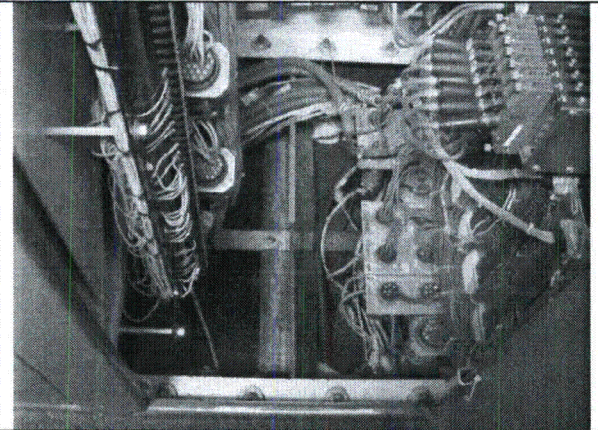
Equipment ID No. M71N602A Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description Strip Chart Recorder (RG 1.97) (Containment Pressure Highswitch)

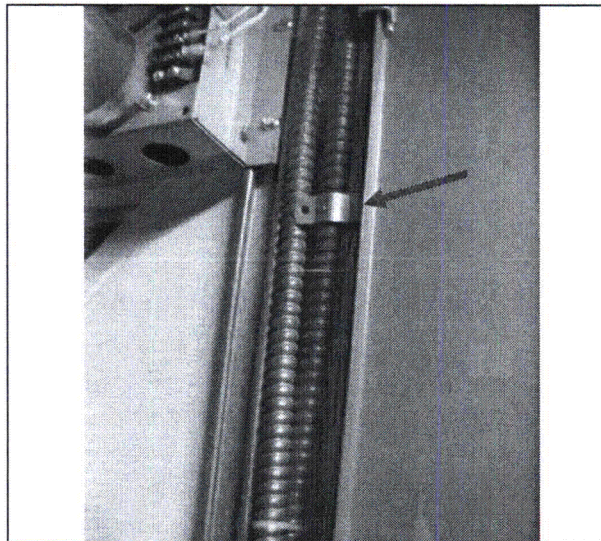
Photographs



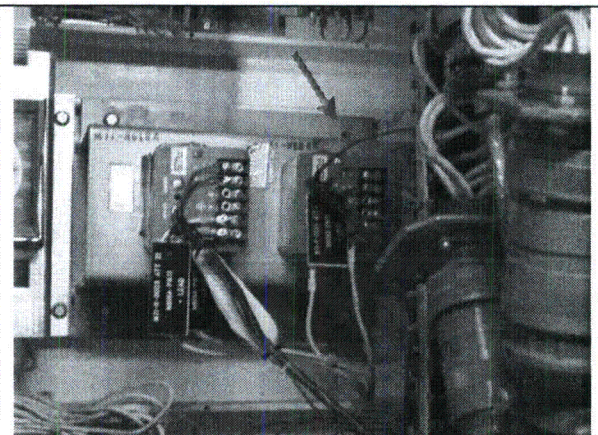
Note: Panel anchorage



Note: Panel anchorage



Note: Missing bolt and nut on clamp



Note: Missing bolt on mounting bracket for M71N606A & M71N616A

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 092**Equipment ID No. E12B002B Equip. Class¹ 21 - Tanks and Heat ExchangersEquipment Description RHR Heat ExchangerLocation: Bldg. AB Floor El. 93 Room, Area 1A106.08Manufacturer, Model, Etc. (optional but recommended) GENERAL ELECTRIC CO. 762E987**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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 anchored to civil structure at the 108' elevation. Structural columns are anchored to concrete at 93' elevation. Horizontal load supports at 119 EL had fire proof coating, but keys and key ways were visible and in compliance with plant documents.
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
Missing second nut on one bolt (CR-GGN-2012-11311). 1/4" gap between bolt head and washer (CR-GGN-2012-11312).
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Anchorage is coated and there is no apparent oxidation.
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Heat exchanger anchored to steel Column. Column anchorage has no visible cracks
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
Drawing indicates 2 nuts for anchor bolts. Documents used for verification are 131C8536, C-1365 E, C-1365D.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 092

Equipment ID No. E12B002B Equip. Class: 21 - Tanks and Heat Exchangers

Equipment Description RHR Heat Exchanger

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Item has no soft targets

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
Structural steel, concrete, grating and lights are installed in the overhead and they do not create any adverse seismic conditions.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
RHR Heat Exchanger B pipe is rigidly supported and no flex pipes are installed on the RHR Heat Exchanger.

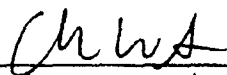
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

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

Comments

Gap in weld on angle iron drawing shoes all around weld CR-GGN-2012-11314. Fire protection was installed on the Key ways identified on elevation 119'. There are no signs of degradation to the fireproofing the connection points were considered intact.

Evaluated by: Chase Wharton  Date: 10/3/2012

Fred Hopkins  10/3/2012



Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 092

Equipment ID No. E12B002B Equip. Class: 21 - Tanks and Heat Exchangers

Equipment Description RHR Heat Exchanger

Photographs

	
<p>Note: <i>Missing second nut</i></p>	<p>Note: <i>Gap between nut and washer</i></p>

Status: Y N U

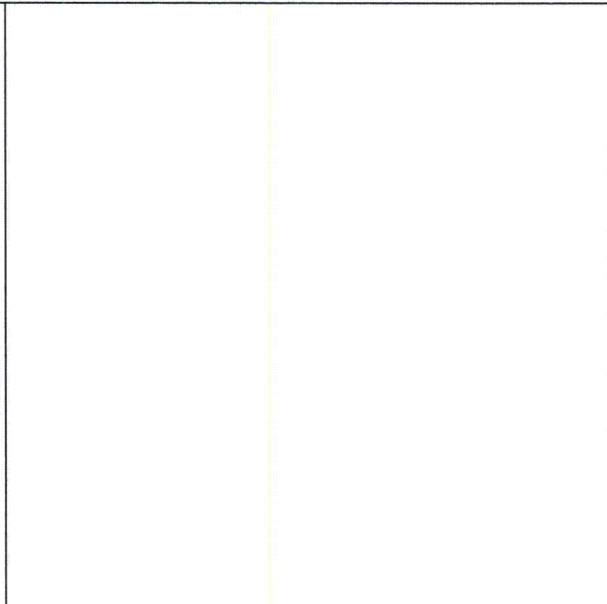
Seismic Walkdown Checklist (SWC) SWEL1- 092

Equipment ID No. E12B002B Equip. Class¹ 21 - Tanks and Heat Exchangers

Equipment Description RHR Heat Exchanger



Note:



Note:

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1- 093**Equipment ID No. P75B006A Equip. Class¹ 21 - Tanks and Heat ExchangersEquipment Description Standby DG Lube Oil CoolerLocation: Bldg. DG Floor El. 133 Room, Area 1D310, DSLManufacturer, Model, Etc. (optional but recommended) Thermxchanger, #2020 Type SP**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Item is welded to saddles, and bolted to steel plates. Steel Plates are bolted to concrete

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
All anchorage is coated, free from oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No visual cracks in concrete

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.)
Anchorage is consistent with E-1052

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 093

Equipment ID No. P75B006A Equip. Class: 21 - Tanks and Heat Exchangers

Equipment Description Standby DG Lube Oil Cooler

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
Item is protected by over head grating.

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

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

Other Adverse Conditions

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

Comments

None

Evaluated by: Chase Wharton  Date: 9/26/2012

Fred Hopkins  9/26/2012

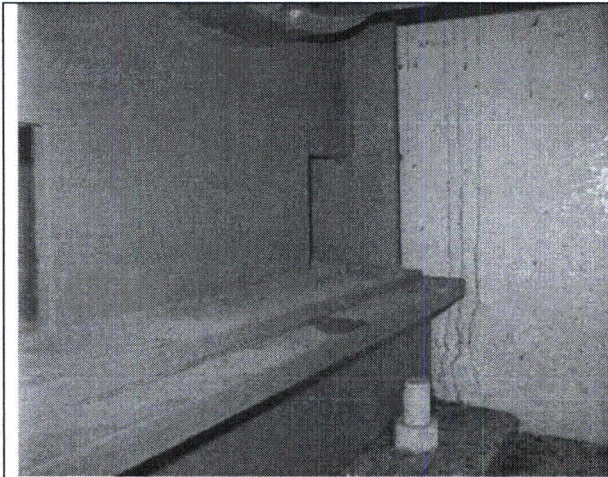
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 093

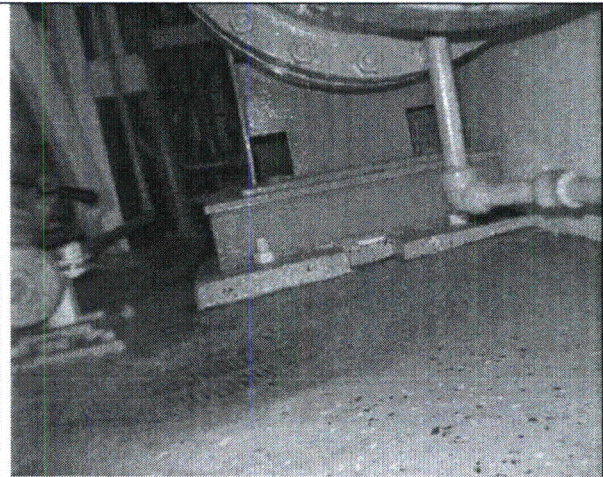
Equipment ID No. P75B006A Equip. Class' 21 - Tanks and Heat Exchangers

Equipment Description Standby DG Lube Oil Cooler

Photographs



Note: *Anchorage*



Note:

Status: Y N U

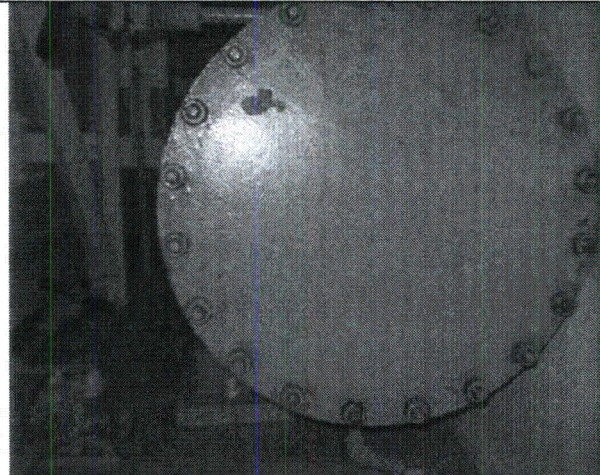
Seismic Walkdown Checklist (SWC) SWEL1- 093

Equipment ID No. P75B006A Equip. Class: 21 - Tanks and Heat Exchangers

Equipment Description Standby DG Lube Oil Cooler



Note:



Note:

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 001

Equipment ID No. G41C001A Equip. Class¹ 5 - Horizontal Pumps

Equipment Description FUEL POOL PUMP/MOTOR

Location: Bldg. AB Floor El. 166 Room, Area 1A432

Manufacturer, Model, Etc. (optional but recommended) Pump: UNION PUMP CO. 6X6X10-1/2 HHM
Motor: GE. SK444EK134

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Item is mounted to pedestal

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
No visible cracks in concrete

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 001

Equipment ID No. G41C001A Equip. Class: 5 - Horizontal Pumps

Equipment Description FUEL POOL PUMP/MOTOR

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Item has no soft targets

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

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


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

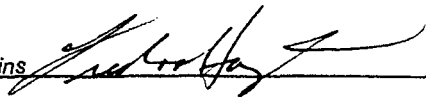
Other Adverse Conditions

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

Comments

None

Evaluated by: Chase Wharton  Date: 10/10/2012

Fred Hopkins  10/10/2012

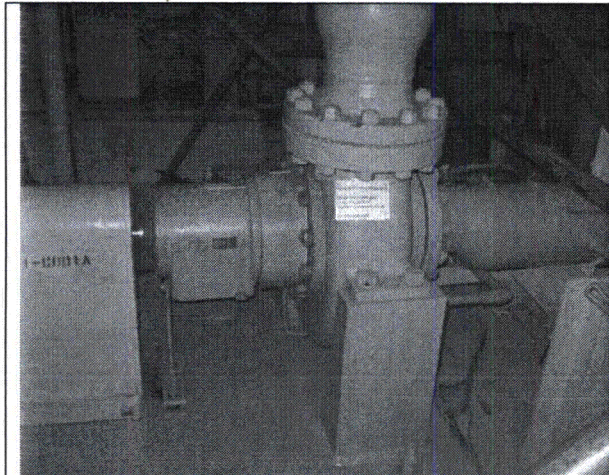
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 001

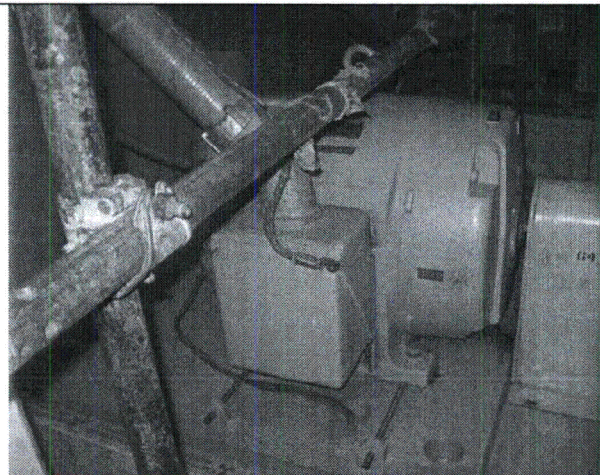
Equipment ID No. G41C001A Equip. Class¹ 5 - Horizontal Pumps

Equipment Description FUEL POOL PUMP/MOTOR

Photographs



Note:



Note:

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL2- 002**Equipment ID No. G41F501 Equip. Class¹ 8 - Motor-Operated and Solenoid-Operated ValvesEquipment Description Fuel Pool CLG SYS ISO VLVF045 SolenoidLocation: Bldg. AB Floor El. 185 Room, Area 1A527Manufacturer, Model, Etc. (optional but recommended) Asco - Automatic Switch C, NP8321A6E**Instructions for Completing Checklist**

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

Anchorage

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 002

Equipment ID No. G41F501 Equip. Class: 8 - Motor-Operated and Solenoid-Operated Valves

Equipment Description Fuel Pool CLG SYS ISO VLVF045 Solenoid

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
All equipments/structures nearby are rigidly supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
All overhead items are rigidly supported.

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

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

Other Adverse Conditions

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

Comments

None

Evaluated by: Kyong S. (Jason) Pak  Date: 10/3/2012

Tori Robinson  10/3/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 002

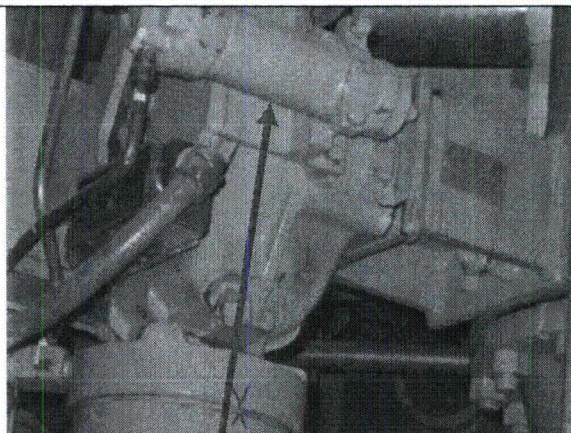
Equipment ID No. G41F501 Equip. Class: 8 - Motor-Operated and Solenoid-Operated Valves

Equipment Description Fuel Pool CLG SYS ISO VLVF045 Solenoid

Photographs



Note: Valve G41F045



Note: Valve G41F501

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL2- 003**Equipment ID No. G41F045 Equip. Class¹ 8 - Motor-Operated and Solenoid-Operated ValvesEquipment Description Filter Demin Inlet ValveLocation: Bldg. AB Floor El. 185 Room, Area 1A527Manufacturer, Model, Etc. (optional but recommended) Valve: Henry Pratt Co., Actuator: Bettis Corp.**Instructions for Completing Checklist**

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

Anchorage

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

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

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

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

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

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
N/A, in-line equipment

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 003

Equipment ID No. G41F045 Equip. Class: 8 - Motor-Operated and Solenoid-Operated Valves

Equipment Description Filter Demin Inlet Valve

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
This equipment is not a soft target.

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 items are rigidly supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Attached lines (tubing, flex conduit) have adequate flexibility.

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

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U
One of the nut on flange connection for the valve G41F045 is missing. See Photo. (CR 2012-11306 initiated WR# 00285926)

Comments

None

Evaluated by: Kyong S. (Jason) Pak  Date: 10/3/2012

Tori Robinson  10/3/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 003

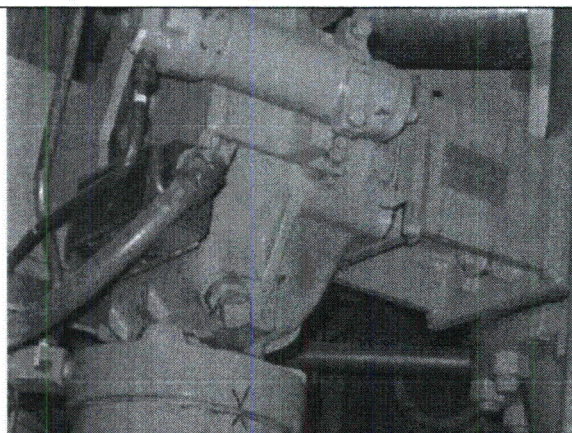
Equipment ID No. G41F045 Equip. Class¹ 8 - Motor-Operated and Solenoid-Operated Valves

Equipment Description Filter Demin Inlet Valve

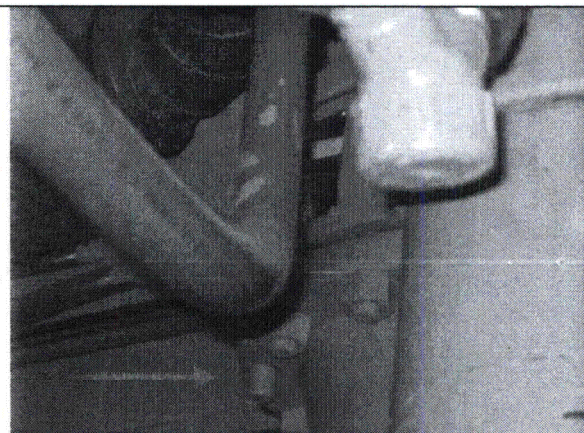
Photographs



Note: Valve G41F045



Note: Valve G41F045



Note: Missing nut on valve G41F045



Note:

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL2- 004**Equipment ID No. G41N012 Equip. Class¹ 18 - Instrument RacksEquipment Description Filter/Demineralizer Bypass Flow TransmitterLocation: Bldg. AB Floor El. 185 Room, Area 1A527Manufacturer, Model, Etc. (optional but recommended) Rosemount, 1151DP5C22T0001PB**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
*Flow Transmitter is mounted to TS 6x6 vertical post which is anchored to the floor using (4) 1/2" dia. anchor bolts.
 No bent, broken, missing or loose hardware found.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Floor is covered with epoxy coating; no visual indication of corrosion found

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Floor is covered with epoxy coating; no visual indication of concrete crack found

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 004

Equipment ID No. G41N012 Equip. Class: 18 - Instrument Racks

Equipment Description Filter/Demineralizer Bypass Flow Transmitter

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
All equipment/structures are rigidly supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
All overhead items (cable tray, light fixture, conduit, etc.) are rigidly supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flex conduit has been used for routing cable to the flow transmitter, and tubing attached to the transmitter has adequate flexibility.

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


Other Adverse Conditions

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

Comments

None

Evaluated by: Kyong S. (Jason) Pak  Date: 10/3/2012

Tori Robinson  10/3/2012

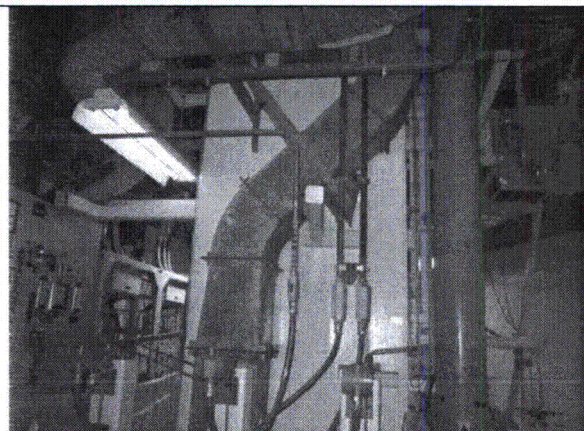
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 004

Equipment ID No. G41N012 Equip. Class¹ 18 - Instrument Racks

Equipment Description Filter/Demineralizer Bypass Flow Transmitter

Photographs



Note: *General view of the overhead area*



Note: *General view of the area*

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 005

Equipment ID No. G41N007B Equip. Class¹ 18 - Instrument Rack

Equipment Description FUEL POOL PUMP C001B DISCH PRESSURE LOW SWITCH

Location: Bldg. AB Floor El. 166 Room, Area 1A428

Manufacturer, Model, Etc. (optional but recommended) BARKSDALE CONTROL DIV.B2T-A12SS

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Item is mounted on floor mounted tube steel. The tube steel is mounted on a base plate.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
No oxidation all anchor bolts are coated

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
All base plates and floor anchorage is coated no visual cracks.

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 005

Equipment ID No. G41N007B Equip. Class: 18 - Instrument Rack

Equipment Description FUEL POOL PUMP C001B DISCH PRESSURE LOW SWITCH

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Item is in open area.

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 raceways are supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flex conduit is connected to item.

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

Other Adverse Conditions

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

Comments

Evaluated by: Chase Wharton  Date: 9/26/2012

Fred Hopkins  9/26/2012

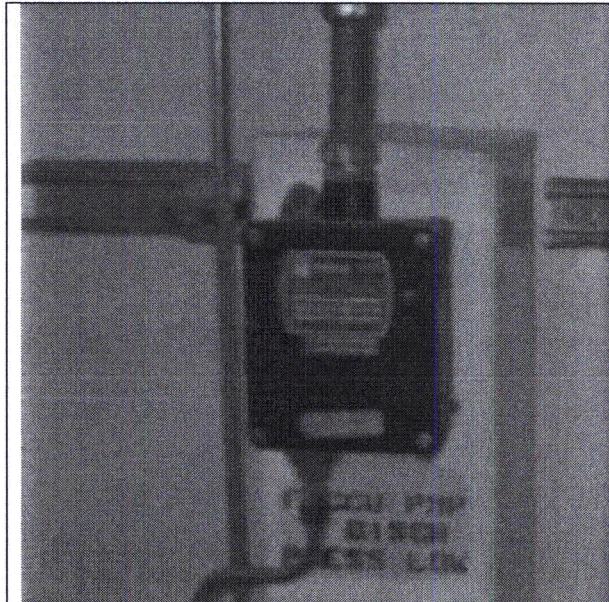
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 005

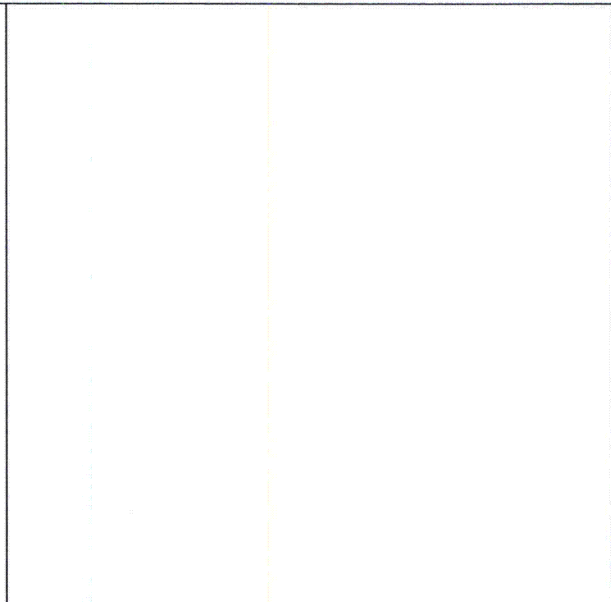
Equipment ID No. G41N007B Equip. Class¹ 18 - Instrument Rack

Equipment Description FUEL POOL PUMP C001B DISCH PRESSURE LOW SWITCH

Photographs



Note:



Note:

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL2- 006**Equipment ID No. G41N011 Equip. Class: 18 - Instrument RacksEquipment Description Upper Containment Pool Retrurn Flow TransmitterLocation: Bldg. AB Floor El. 185 Room, Area 1A527Manufacturer, Model, Etc. (optional but recommended) Rosemount, 1152DP5E22T0280PB**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
*Flow Transmitter is mounted to TS 6x6 vertical post which is anchored to the floor using (4) 1/2" dia. anchor bolts.
One of the bolt on the flow transmitter mounting bracket is not fully engaged. See photo. (CR 2012-11307 initiated WR# 00285927)*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Floor is covered with epoxy coating; no visual indication of corrosion found

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Floor is covered with epoxy coating; no visual indication of concrete crack found

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
See question number 2.

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 006

Equipment ID No. G41N011 Equip. Class: 18 - Instrument Racks

Equipment Description Upper Containment Pool Retrurn Flow Transmitter

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
All equipment/structures are rigidly supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
All overhead items (cable tray, light fixture, conduit, etc.) are rigidly supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flex conduit has been used for routing cable to the flow transmitter, and tubing attached to the transmitter has adequate flexibility.

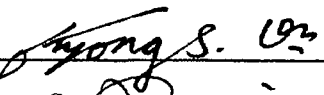
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

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

Comments

None

Evaluated by: Kyong S. (Jason) Pak  Date: 10/3/2012

Tori Robinson  10/3/2012

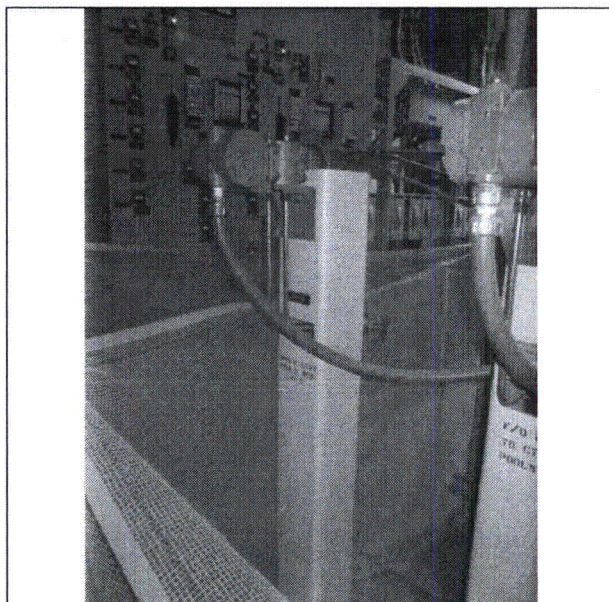
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 006

Equipment ID No. G41N011 Equip. Class¹ 18 - Instrument Racks

Equipment Description Upper Containment Pool Return Flow Transmitter

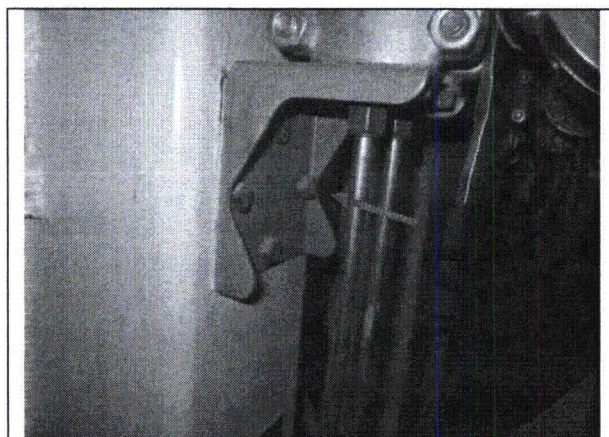
Photographs



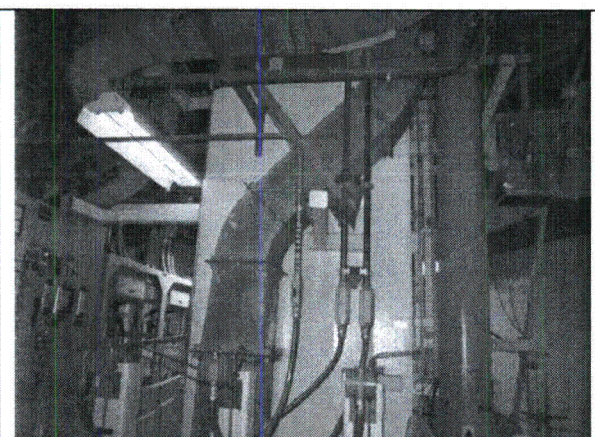
Note: *Flow Transmitter*



Note: *General view of the area*



Note: *Loose bolt*



Note: *General view of the overhead area*

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL2- 007**Equipment ID No. G41N018B Equip. Class¹ 18 - Instrument RackEquipment Description FUEL POOL PUMP B DISCH PRESSURE TRANSMITTERLocation: Bldg. AB Floor El. 166 Room, Area 1A428Manufacturer, Model, Etc. (optional but recommended) ROSEMOUNT.1151GP7A22T0001PB**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Item is mounted on floor mounted tube steel. The tube steel is mounted on a base plate.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
No oxidation all anchor bolts are coated

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
All base plates and floor anchorage is coated no visual cracks.

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.)
Bracket anchorage is consistent with vendor drawings. Base plate anchor bolts are 9" OC with 1.5" edge distance. Consistent with FSK-I-0113G-808-V

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 007

Equipment ID No. G41N018B Equip. Class 18 - Instrument Rack

Equipment Description FUEL POOL PUMP B DISCH PRESSURE TRANSMITTER

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Item is in open area.

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 raceways are supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flex conduit is connected to item.

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

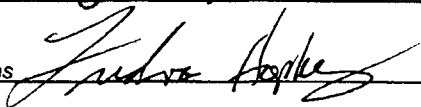
Other Adverse Conditions

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

Comments

None

Evaluated by: Chase Wharton  Date: 9/26/2012

Fred Hopkins  9/26/2012

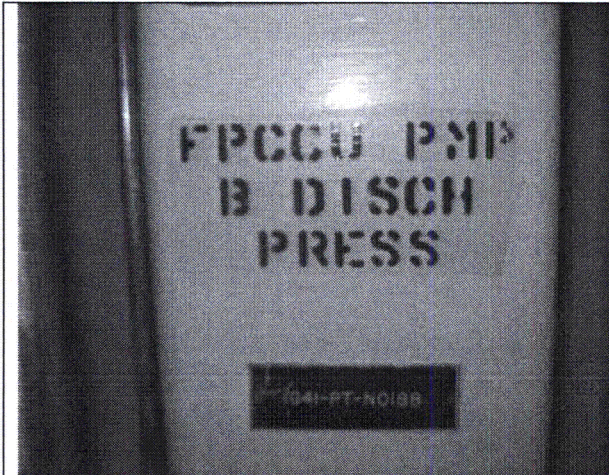
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 007

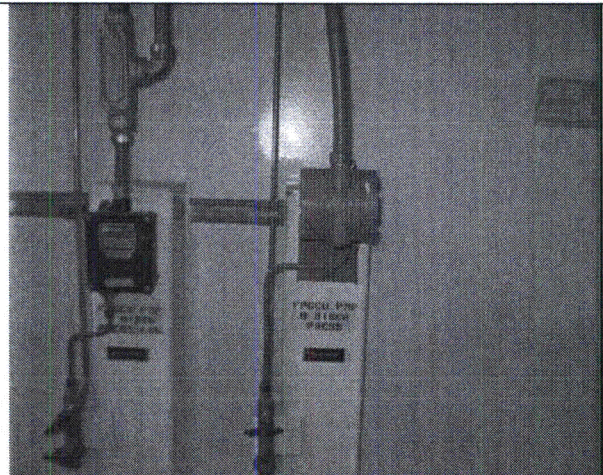
Equipment ID No. G41N018B Equip. Class¹ 18 - Instrument Rack

Equipment Description FUEL POOL PUMP B DISCH PRESSURE TRANSMITTER

Photographs



Note:



Note:

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 008

Equipment ID No. G41P002 Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description DIV 1 EMERGENCY SAFEGUARDSYSTEM SM CONTROL PANEL

Location: Bldg. AB Floor El. 166 Room, Area 1A432

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

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
Panel is welded to steel plate

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Anchored to steel

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

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 008

Equipment ID No. G41P002 Equip. Class' 20 - Instrumentation and Control Panels

Equipment Description DIV 1 EMERGENCY SAFEGUARDSYSTEM SM CONTROL PANEL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
Item has no soft targets

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

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

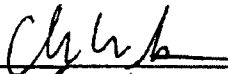
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Other Adverse Conditions

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

Comments

None

Evaluated by: Chase Wharton  Date: 10/10/2012

Fred Hopkins  10/10/2012


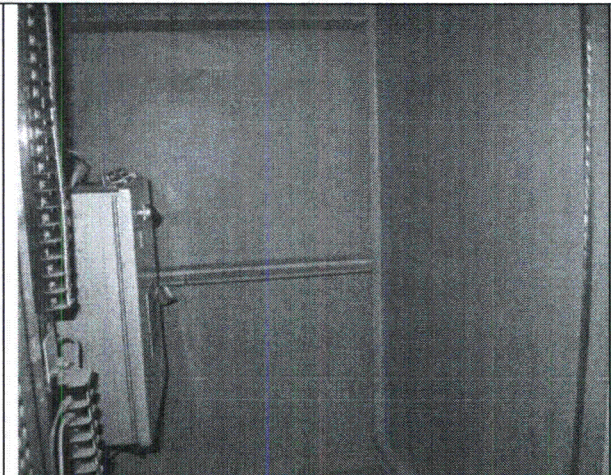
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 008

Equipment ID No. G41P002 Equip. Class¹ 20 - Instrumentation and Control Panels

Equipment Description DIV 1 EMERGENCY SAFEGUARDSYSTEM SM CONTROL PANEL

Photographs

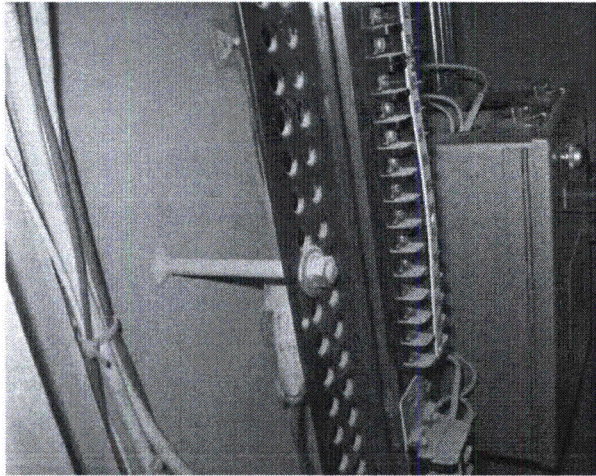
	
<p>Note:</p>	<p>Note:</p>

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 008

Equipment ID No. G41P002 Equip. Class: 20 - Instrumentation and Control Panels

Equipment Description DIV 1 EMERGENCY SAFEGUARDSYSTEM SM CONTROL PANEL



Note:

Note:

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL2- 009**Equipment ID No. G41A001 Equip. Class¹ 21 - Tanks and Heat ExchangersEquipment Description Fuel Pool Drain TankLocation: Bldg. AB Floor El. 191 Room, Area 1A537Manufacturer, Model, Etc. (optional but recommended) Buffalo Tank**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
Fuel pool drain tank is support by two heavy duty saddles. Each saddle is anchor to the floor using (4) 1 1/8" dia. anchor bolts. See photos. No bent, broken, missing or loose hardware found.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Floor is covered with epoxy coating; no visual indication of corrosion found

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Floor is covered with epoxy coating; no visual indication of concrete crack found

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.)
Anchorage was checked against vendor drawings L-3264A, SK-F2-2009NC-4A, & SK-F2-2009NC-5A in QP 62.00, and the configuration shown on the drawings matched the field condition.

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

¹ Enter the equipment class name from EPRI 1025286 Appendix B: Classes of Equipment.

Status: Y N U

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Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
This equipment is not a soft target.

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 items (piping/pipe supports) are rigidly supported.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Piping attached to the tank have adequate flexibility.

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

Other Adverse Conditions

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

Comments

None

Evaluated by: Kyong S. (Jason) Pak  Date: 10/3/2012

Tori Robinson  10/3/2012

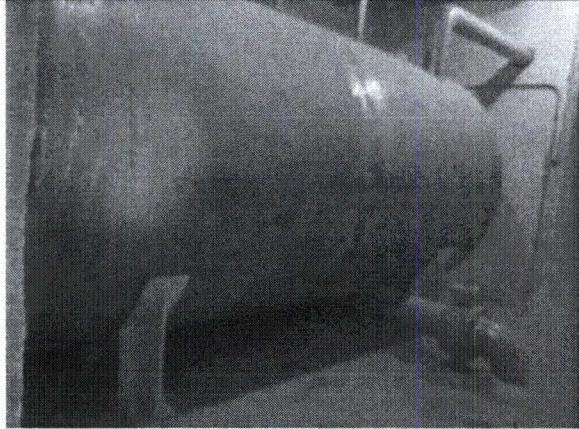
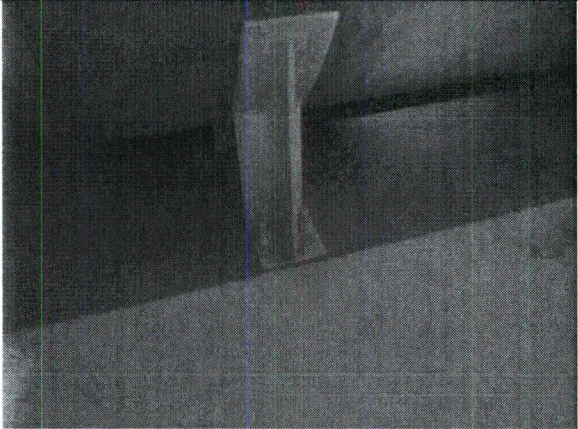
Status: Y N U

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Photographs

	
<p>Note: <i>Fuel Pool Drain Tank</i></p>	<p>Note: <i>Tank support saddle</i></p>