

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-058

Equipment ID No. SI MVA602-B

Equip. Class¹ MOTOR-OPERATED AND SOLENOID-OPERATED VALVES

-OR-

2SI-L102B

Equipment Description SAFETY INJECTION SUMP OUTLET HEADER B ISOLATION

Location: Bldg. RB Floor El. -35 Room, Area B53, COL 7A, LINE LZ

Manufacturer, Model, Etc. (optional but recommended) FISHER CONTROLS CO INC, 9211

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - In-line component
 - Valve hardware is covered by insulation. However, anchorage is acceptable based on Inservice Testing (Program Section No. SEP-WF3-IST-3)

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - In-line component
 - Valve hardware is covered by insulation. However, anchorage is acceptable based on Inservice Testing (Program Section No. SEP-WF3-IST-3)

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-058

Equipment ID No. SI MVA602-B

Equip. Class MOTOR-OPERATED AND SOLENOID-OPERATED VALVES

-OR-

2SI-L102B

Equipment Description SAFETY INJECTION SUMP OUTLET HEADER B ISOLATION

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y N U N/A
- In-line component
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- In-line component, N/A

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-058

Equipment ID No. SI MVA602-B Equip. Class MOTOR-OPERATED AND SOLENOID-OPERATED VALVES
-OR-
2SI-L102B

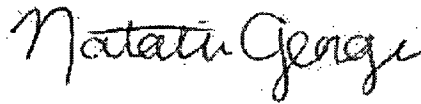
Equipment Description SAFETY INJECTION SUMP OUTLET HEADER B ISOLATION

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- No visible tag; verified by isometric 4035-1879 and penetration #33
- For area walk-by checklist see AWC-028



Evaluated by: Natalie George

Date: 10/15/12



Chu-Chieh Lin

10/15/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-058

Equipment ID No. SI MVA602-B

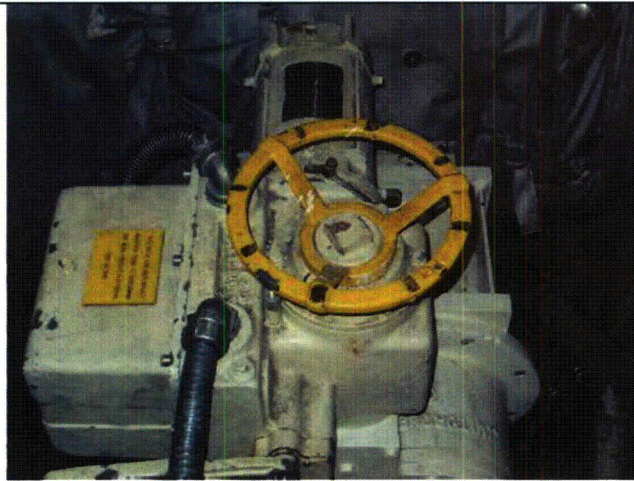
Equip. Class MOTOR-OPERATED AND SOLENOID-OPERATED VALVES

-OR-

2SI-L102B

Equipment Description SAFETY INJECTION SUMP OUTLET HEADER B ISOLATION

Photographs



Note: Safety Injection Sump Outlet Header B Isolation

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-059

Equipment ID No. ACCMFAN0002-B Equip. Class¹ Fans
-OR- FAN 10

Equipment Description WET COOLING TOWER B FAN 2-SB

Location: Bldg. CTB Floor El. -35 Room, Area ROOM B60A COL 12A LINE Q1

Manufacturer, Model, Etc. (optional but recommended) AEROVENT INC, Model W

Instructions for Completing Checklist

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

See Attachment K - Revision 1

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-059

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

Equipment Description WET COOLING TOWER B FAN 2-SB

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

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

Interaction Effects

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

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

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

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

See Attachment K - Revision 1

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-059

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

Equipment Description WET COOLING TOWER B FAN 2-SB

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

See Attachment K - Revision 1

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-059

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

Equipment Description WET COOLING TOWER B FAN 2-SB

Photographs

Note:	Note:

See Attachment K - Revision 1

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-060

Equipment ID No. CC MFAN0003-A Equip. Class¹ Fans

-OR- FAN 3SA

Equipment Description DRY COOLING TOWER A FAN 3-SA

Location: Bldg. CTA Floor El. -35 Room, Area ROOM B59 COL 1M

Manufacturer, Model, Etc. (optional but recommended) HUDSON PRODUCT CORP, Model APT14W6

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
 - Item not one of the 50% of SWEL items requiring verification

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - Motor anchored to skid, which is welded to existing steel and bolted to the wall. Fan gear unit adequately anchored.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - Anchorage is free of corrosion
 - Mild corrosion behind base plate; no seismic concern

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - No cracks near support bolted to nearby wall

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-060

Equipment ID No. CC MFAN0003-A Equip. Class Fans
-OR- FAN 3SA

Equipment Description DRY COOLING TOWER A FAN 3-SA

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Item not one of the 50% of SWEL items requiring verification
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- Questions 2-4 satisfied; no seismic concern

Interaction Effects

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

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-060

Equipment ID No. CC MFAN0003-A Equip. Class Fans

-OR- FAN 3SA

Equipment Description DRY COOLING TOWER A FAN 3-SA


Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-010

Evaluated by: Brian Pace



Date: 10-05-2012

Dinesh Patel



10-05-2012

Sheet 4 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-060

Equipment ID No. CC MFAN0003-A Equip. Class Fans

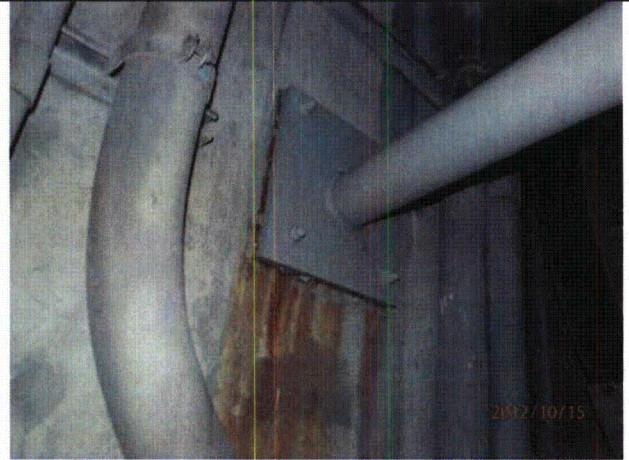
-OR- FAN 3SA

Equipment Description DRY COOLING TOWER A FAN 3-SA

Photographs



Note: Dry cooling tower A fan 3-SA motor



Note: Bolts in good condition on wall support. Mild corrosion behind base plate.

Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-060

Equipment ID No. CC MFAN0003-A Equip. Class Fans

-OR- FAN 3SA

Equipment Description DRY COOLING TOWER A FAN 3-SA



Note: Bolts mounting motor to skid

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-061

Equipment ID No. HVCMAHU0001-A Equip. Class¹ Fans
-OR- AH-12(3A-SA)

Equipment Description Control Room Air Handling Unit AH-12A

Location: Bldg. RAB Floor El. +46 Room, Area Room 314, Col. 9A, Line L

Manufacturer, Model, Etc. (optional but recommended) Buffalo Forge Co., 980

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
 - Item not one of the 50% of SWEL items requiring anchorage configuration verification

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - One bolt is loose on the motor base. This is a tension rod and is used for alignment of the motor. This bolt being loose has no seismic concern.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - Mild surface corrosion is located on one bolt on the shaft housing. This is no seismic concern.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - Base (skid) is welded to existing embedment plate. There are no visible cracks in this concrete.

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-061

Equipment ID No. HVCMAHU0001-A Equip. Class Fans

-OR- AH-12(3A-SA)

Equipment Description Control Room Air Handling Unit AH-12A

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y N U N/A
- Item not one of the 50% of SWEL items requiring anchorage configuration verification
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- Questions 2-4 satisfied; no seismic concern

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
- No soft targets around equipment.
 - There is a long term ladder in the area that is properly secured. No seismic concern.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
- Overhead lights are not covered. However, bulbs falling will have no adverse effect on any equipment. The fixture is properly mounted.
 - Block wall in front of the unit acceptable per drawing no. G756 sh. 2, calculation no. Civil Seismic Block Wall, and FSAR Section 3.8.4.8
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
- One flexible conduit located on motor.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U
- Questions 7-9 satisfied

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-061

Equipment ID No. HVCMAHU0001-A Equip. Class Fans

-OR- AH-12(3A-SA)

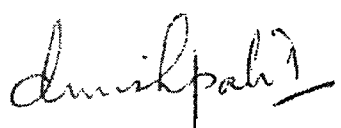
Equipment Description Control Room Air Handling Unit AH-12A

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-038



Evaluated by: Dinesh Patel

Date: 10-09-2012



Brian Pace

10-09-2012

Sheet 4 of 5

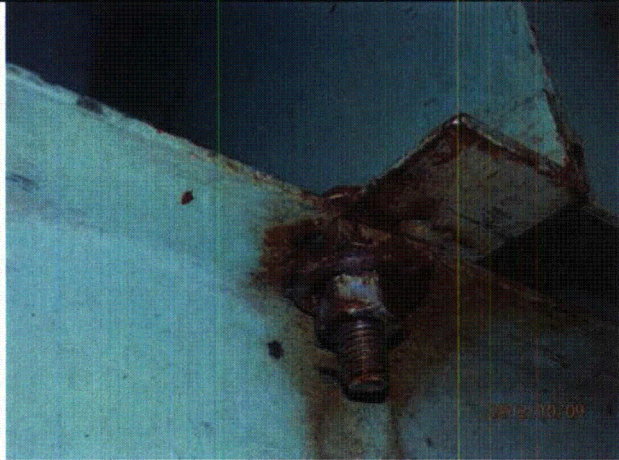
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Seismic Walkdown Checklist (SWC) SWEL1-061

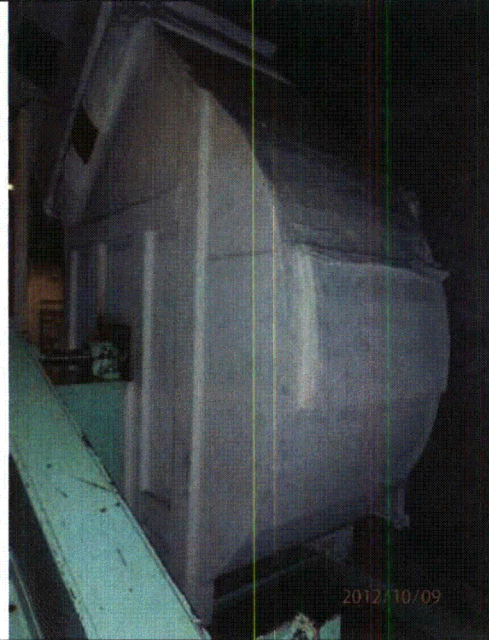
Equipment ID No. HVCMAHU0001-A Equip. Class Fans
-OR- AH-12(3A-SA)

Equipment Description Control Room Air Handling Unit AH-12A

Photographs



Note: Mild surface corrosion on shaft housing bolt



Note: AH-12A

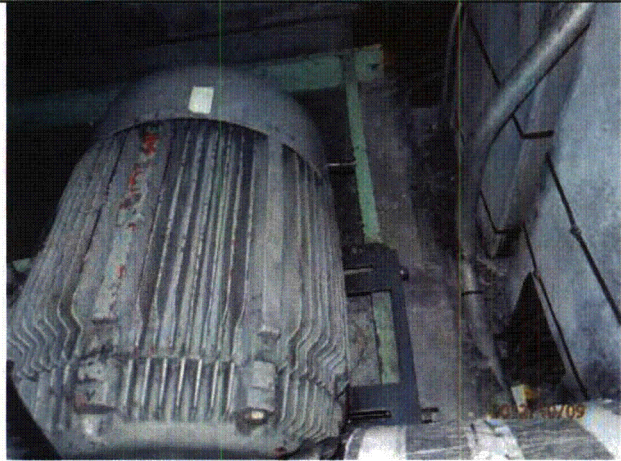
Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-061

Equipment ID No. HVCMAHU0001-A Equip. Class Fans
-OR- AH-12(3A-SA)

Equipment Description Control Room Air Handling Unit AH-12A



Note: AH-12A motor



Note: Example of anchor bolt in good condition

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-062

Equipment ID No. HVCMFAN0010-B Equip. Class¹ Fans

-OR- S-8(3B-SB)

Equipment Description Control Room Emergency Filtration Unit B

Location: Bldg. RAB Floor El. +41 Room, Area Room 314, Col. 10A, Line K

Manufacturer, Model, Etc. (optional but recommended) Buffalo Forge Co., 540L21

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
 - Bolted to base frame which is welded to embedded steel
 - No drawing available to verify weld configuration

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All hardware and welds are accounted for and in good condition

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion on anchorage
 - Anchorage is painted

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - Anchorage is bolted to steel base frame or welded to embedded steel
 - No visible cracks in concrete around embedded steel

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-062

Equipment ID No. HVCMFAN0010-B Equip. Class Fans

-OR- S-8(3B-SB)

Equipment Description Control Room Emergency Filtration Unit B

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
- Anchors on fan assembly are consistent with plant documentation (Drawing no 7W-94663 and IPEEE pg. E-44)
 - No documents available to verify weld configuration
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concerns

Interaction Effects

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

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-062

Equipment ID No. HVCMFAN0010-B Equip. Class Fans
-OR- S-8(3B-SB)

Equipment Description Control Room Emergency Filtration Unit B

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-038

Natalie George

Evaluated by: Natalie George

Date: 10/9/12

Chu-Chieh Lin

Chu-Chieh Lin

10/9/12

Sheet 4 of 5

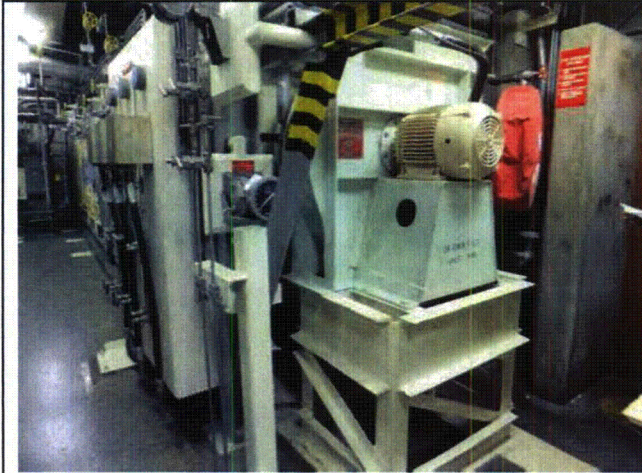
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Seismic Walkdown Checklist (SWC) SWEL1-062

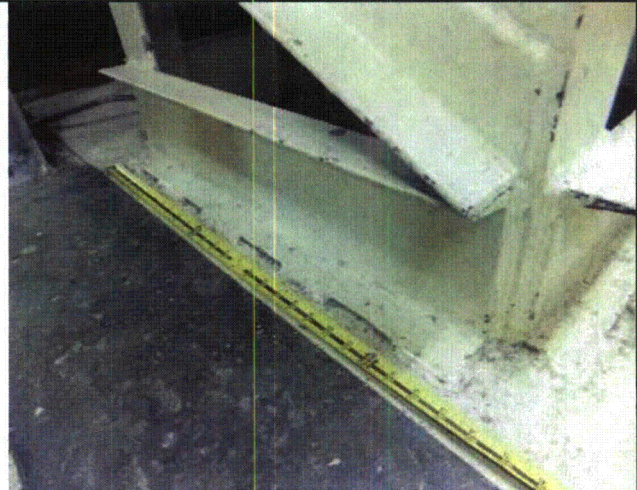
Equipment ID No. HVCMFAN0010-B Equip. Class Fans
-OR- S-8(3B-SB)

Equipment Description Control Room Emergency Filtration Unit B

Photographs



Note: Control Room Emergency Filtration Unit B



Note: Weld configuration on base frame

Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-062

Equipment ID No. HVCMFAN0010-B Equip. Class Fans
-OR- S-8(3B-SB)

Equipment Description Control Room Emergency Filtration Unit B



Note: Weld configuration on base frame

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-063

Equipment ID No. HVRMFAN0025-A Equip. Class¹ Fans
-OR- E-28(3A-SA)

Equipment Description EDG ROOM A EXHAUST FAN E-28A

Location: Bldg. RAB Floor El. +46 Room, Area Room 299, Col. 3A, Line J

Manufacturer, Model, Etc. (optional but recommended) JOY MFG CO, 8426870

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
 - Item not one of the 50% of SWEL items requiring anchorage configuration verification

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-063

Equipment ID No. HVRMFAN0025-A Equip. Class Fans
-OR- E-28(3A-SA)

Equipment Description EDG ROOM A EXHAUST FAN E-28A

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Item not one of the 50% of SWEL items requiring anchorage configuration verification
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- Questions 2-4 are satisfied; no seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-063

Equipment ID No. HVRMFAN0025-A Equip. Class Fans
-OR- E-28(3A-SA)

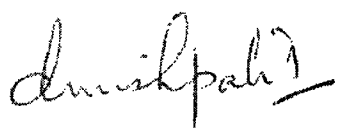
Equipment Description EDG ROOM A EXHAUST FAN E-28A

Other Adverse Conditions

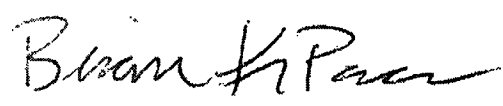
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y N U

Comments (Additional pages may be added as necessary)

- See AWC-036 for Area Walk-By Checklist



Evaluated by: Dinesh Patel Date: 10-08-2012



Brian Pace 10-08-2012

Sheet 4 of 4

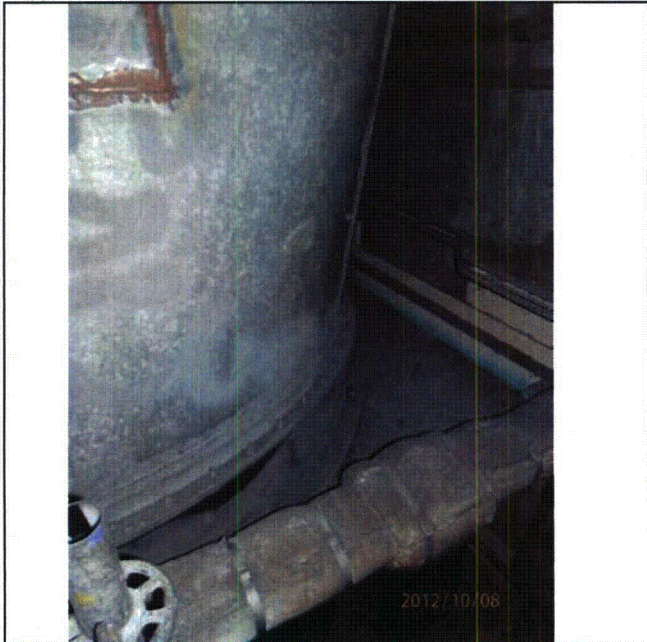
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Seismic Walkdown Checklist (SWC) SWEL1-063

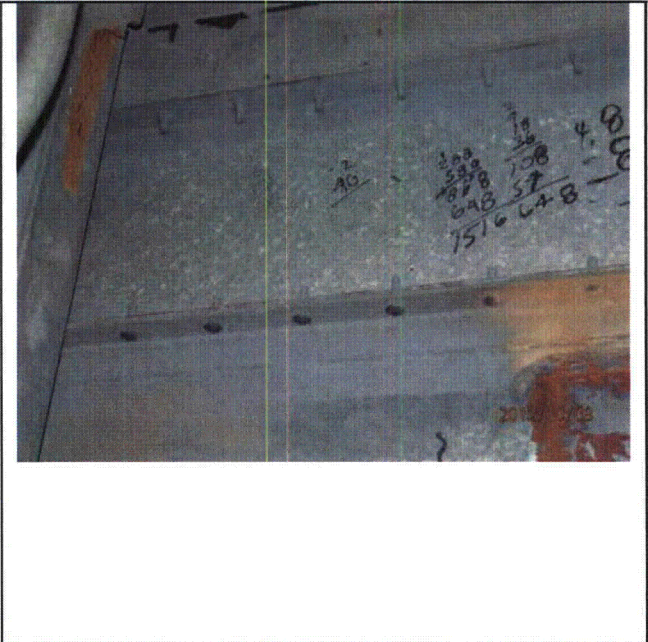
Equipment ID No. HVRMFAN0025-A Equip. Class Fans
-OR- E-28(3A-SA)

Equipment Description EDG ROOM A EXHAUST FAN E-28A

Photographs



Note: Fan E-28 and surrounding area



Note: Bolts around fan are in good condition

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-064

Equipment ID No. HVCMAHU0009-A Equip. Class¹ Air Handlers

-OR- S-8(3A-SA)

Equipment Description Control Room Emergency Filtration Unit A

Location: Bldg. RAB Floor El. +46 Room, Area Room 314, Col. 9A, Line K

Manufacturer, Model, Etc. (optional but recommended) Penwalt Corp., B47100012

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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 12 bolts are accounted for and in good condition

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - Cracks found near several anchors. See LB-07 in Attachment F.
 - Some cracks appear to be patched

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-064

Equipment ID No. HVCMAHU0009-A Equip. Class Air Handlers

-OR- S-8(3A-SA)

Equipment Description Control Room Emergency Filtration Unit A

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration is consistent with plant documentation
(IPEEE pg E-76)
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- Need to determine if cracks at anchor points are acceptable

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,
and masonry block walls not likely to collapse onto the equipment? Y N U N/A
- There is a small 7' partition block wall more than 10' from
equipment; no seismic concern
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-064

Equipment ID No. HVCMAHU0009-A Equip. Class Air Handlers
-OR- S-8(3A-SA)

Equipment Description Control Room Emergency Filtration Unit A

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
- Did not open doors; this is not necessary since no electronic equipment or sensors are enclosed

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-038

Natalie George

Evaluated by: Natalie George

Date: 10/9/12

Chu-Chieh Lin

Chu-Chieh Lin

10/9/12

Sheet 4 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-064

Equipment ID No. HVCMAHU0009-A Equip. Class Air Handlers
-OR- S-8(3A-SA)

Equipment Description Control Room Emergency Filtration Unit A

Photographs



Note: Cracks found near several anchors



Note: Cracks found near several anchors

Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-064

Equipment ID No. HVCMAHU0009-A Equip. Class Air Handlers
-OR- S-8(3A-SA)

Equipment Description Control Room Emergency Filtration Unit A



Note: 7' partition block wall

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-065

Equipment ID No. HVRMAHU0028-A Equip. Class¹ Air Handlers
-OR- AH-10(3A-SA)

Equipment Description CCW Pump Room A Air Handling Unit AH-10A

Location: Bldg. RAB Floor El. +21 Room, Area Room 235, Col. 5A, Line K

Manufacturer, Model, Etc. (optional but recommended) Buffalo Forge Co., 60VPCO

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
 - Fan is mounted to steel frame. Frame is mounted to wall.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All hardware is accounted for and in good condition

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-065

Equipment ID No. HVRMAHU0028-A Equip. Class Air Handlers
-OR- AH-10(3A-SA)

Equipment Description CCW Pump Room A Air Handling Unit AH-10A

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
- Questions 2-4 satisfied. No seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-065

Equipment ID No. HVRMAHU0028-A Equip. Class Air Handlers

-OR- AH-10(3A-SA)

Equipment Description CCW Pump Room A Air Handling Unit AH-10A

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

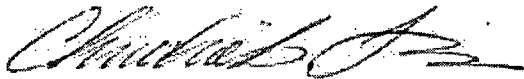
- For area walk-by checklist see AWC-022

Evaluated by: Brian Pace



Date: 10/4/12

Chu-Chieh Lin



10/4/12

Sheet 4 of 4

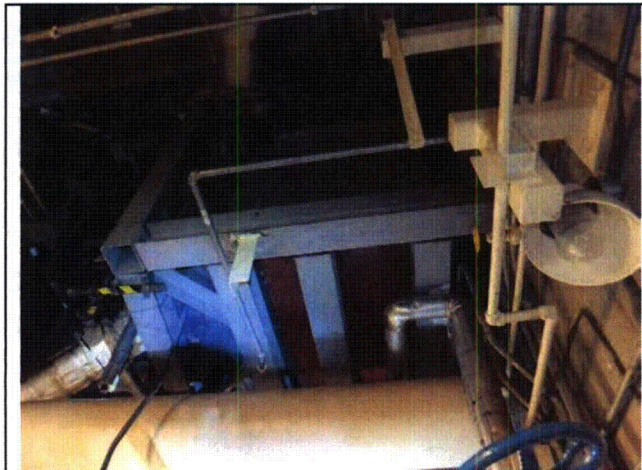
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-065

Equipment ID No. HVRMAHU0028-A Equip. Class Air Handlers
-OR- AH-10(3A-SA)

Equipment Description CCW Pump Room A Air Handling Unit AH-10A

Photographs



Note: CCW Pump Room A Air Handling Unit
AH-10A

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-066

Equipment ID No. HVRMAHU0032-B Equip. Class¹ Air Handlers
-OR- AH-3(3B-SB)

Equipment Description Shutdown Cooling HX B Air Handling Unit AH-3B (Coolers for Heat Exchangers)

Location: Bldg. RAB Floor El. -35 Room, Area Room B20, Col. 11A, Line J

Manufacturer, Model, Etc. (optional but recommended) Buffalo Forge Co., 60PCO

Instructions for Completing Checklist

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion on anchorage, painted

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-066

Equipment ID No. HVRMAHU0032-B Equip. Class Air Handlers
-OR- AH-3(3B-SB)

Equipment Description Shutdown Cooling HX B Air Handling Unit AH-3B (Coolers for Heat Exchangers)

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
- No seismic concerns

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-066

Equipment ID No. HVRMAHU0032-B Equip. Class Air Handlers
-OR- AH-3(3B-SB)

Equipment Description Shutdown Cooling HX B Air Handling Unit AH-3B (Coolers for Heat Exchangers)

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

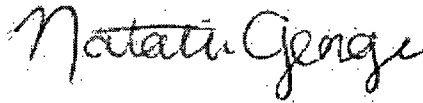
- For area walk-by checklist see AWC-004

Evaluated by: Dinesh Patel



Date: 10/2/12

Natalie George



10/2/12

Sheet 4 of 4

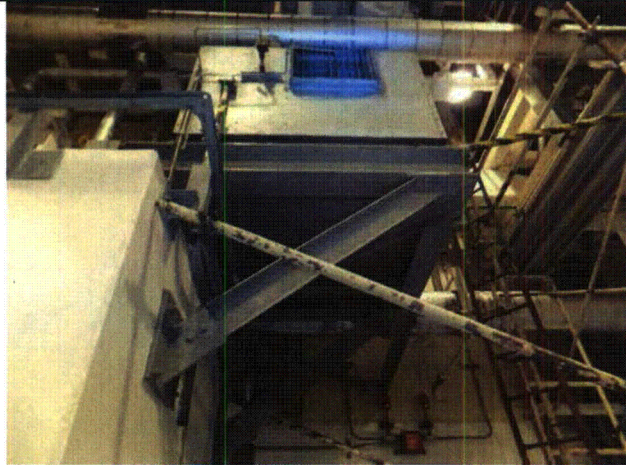
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-066

Equipment ID No. HVRMAHU0032-B Equip. Class Air Handlers
-OR- AH-3(3B-SB)

Equipment Description Shutdown Cooling HX B Air Handling Unit AH-3B (Coolers for Heat Exchangers)

Photographs



Note: Shutdown Cooling HX B Air Handling Unit AH-3B

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-067

Equipment ID No. RFRMCHL0001-B Equip. Class¹ Chillers

-OR- WC-1(3B-SB)

Equipment Description Essential Chiller B

Location: Bldg. RAB Floor El. +46 Room, Area Room 299, Col. 3A, Line K

Manufacturer, Model, Etc. (optional but recommended) Carrier Corp., 19FA427C121818SDF

Instructions for Completing Checklist

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

- 3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - Mild corrosion on anchorage; no seismic concern

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

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-067

Equipment ID No. RFRMCHL0001-B Equip. Class Chillers

-OR- WC-1(3B-SB)

Equipment Description Essential Chiller B

-
5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration consistent with plant documentation
(IPEEE pg. E-42)
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concern
-

Interaction Effects

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

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-067

Equipment ID No. RFRMCHL0001-B Equip. Class Chillers

-OR- WC-1(3B-SB)

Equipment Description Essential Chiller B

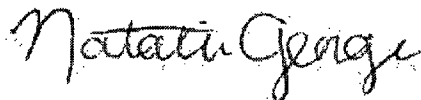
Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

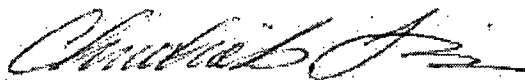
- Water around chiller, previously documented and preventative measures in place
- Moderate corrosion on bolts on half circle at end of compressor
- CR-WF3-2012-05275 and WR 287632 initiated to address moderate corrosion on bolts on half circle at end of compressor
- For area walk-by checklist see AWC-037

Evaluated by: Natalie George



Date: 10/15/12

Chu-Chieh Lin



10/15/12

Sheet 4 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-067

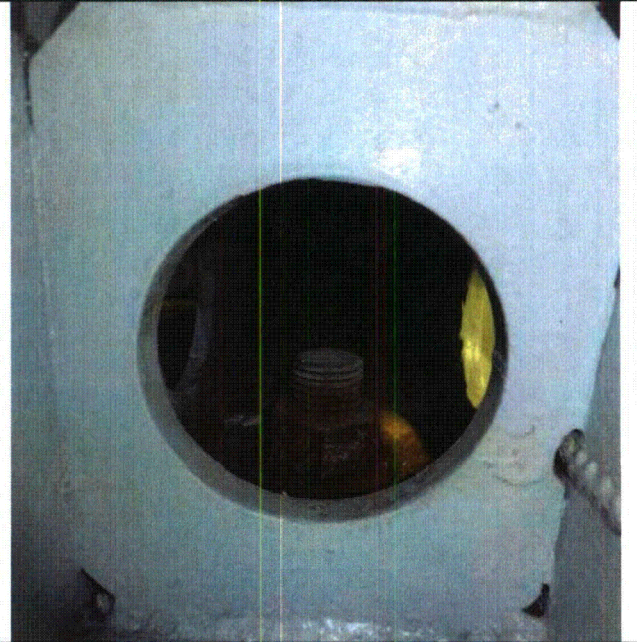
Equipment ID No. RFRMCHL0001-B Equip. Class Chillers
-OR- WC-1(3B-SB)

Equipment Description Essential Chiller B

Photographs



Note: Essential Chiller B



Note: Example of Essential Chiller B anchorage with mild corrosion

Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-067

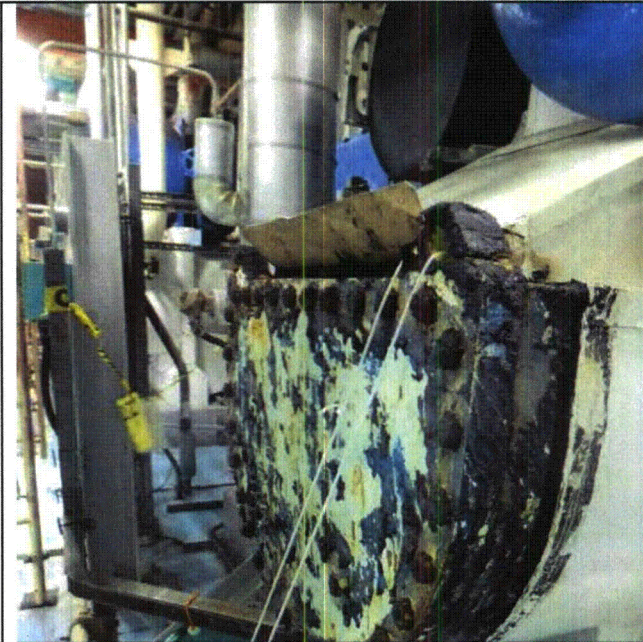
Equipment ID No. RFRMCHL0001-B Equip. Class Chillers

-OR- WC-1(3B-SB)

Equipment Description Essential Chiller B



Note: Water around chiller, previously documented and preventative measures in place



Note: Moderate corrosion on bolts on half circle at end of compressor

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-068

Equipment ID No. DC EPDPB-DC Equip. Class¹ Distribution Panels and Automatic Transfer Switches
-OR- PDP-3B-DC-S

Equipment Description PDP B-DC

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

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
 - All hardware accounted for and in good condition

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - Spall concrete around three anchor bolts, no seismic concern since this is a CIP bolt (see photo)

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-068

Equipment ID No. DC EPDPB-DC Equip. Class Distribution Panels and Automatic Transfer Switches
-OR- PDP-3B-DC-S

Equipment Description PDP B-DC

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 configuration consistent with plant documentation (Drawing no. G574 sh. 5 and IPEEE pg. E-64)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- Questions 1-5 satisfied; no seismic concern
-

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
- Conduits attached rigidly to equipment are acceptable per drawing no. B288, pg. 19-1
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-068

Equipment ID No. DC EPDPB-DC Equip. Class Distribution Panels and Automatic Transfer Switches
-OR- PDP-3B-DC-S

Equipment Description PDP B-DC

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- Housekeeping issue; no seismic concern
 - Extra hardware near anchor inside back of cabinet
 - CR-WF3-2012-05270 and WR-287622 initiated to address this condition.
- For area walk-by checklist see AWC-018

Evaluated by: Brian Pace



Date: 10/2/12

Dinesh Patel



10/2/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-068

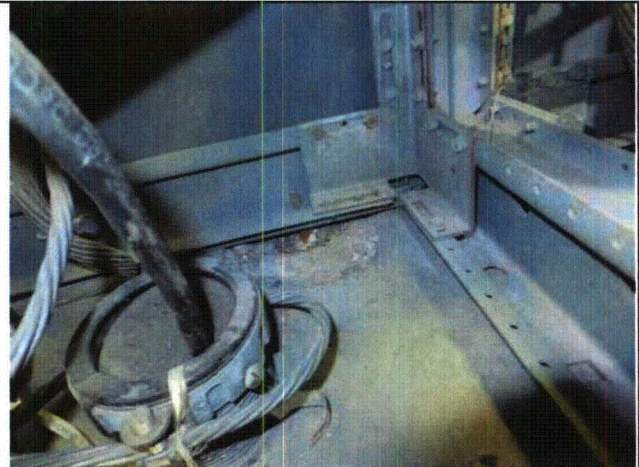
Equipment ID No. DC EPDPB-DC Equip. Class Distribution Panels and Automatic Transfer Switches
-OR- PDP-3B-DC-S

Equipment Description PDP B-DC

Photographs



Note: PDP B-DC



Note: Extra hardware (washer) near anchor inside of cabinet, spall concrete around anchor bolt

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-069

Equipment ID No. ID EPDPM D Equip. Class¹ Distribution Panels and Automatic Transfer
-OR- PDP-3MDS Switches

Equipment Description PDP MD NUCLEAR INST CHANNEL D

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

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
 - All hardware is accounted for and in good condition

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-069

Equipment ID No. ID EPDPM D Equip. Class Distribution Panels and Automatic Transfer Switches
-OR- PDP-3MDS

Equipment Description PDP MD NUCLEAR INST CHANNEL D

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 configuration consistent with G574-SH5
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- Questions 2-5 satisfied, no seismic concern
-

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
- Conduit rigidly attached to equipment is acceptable per drawing no. B288 sh. 19-1
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U
- Questions 7-9 satisfied, no seismic concern

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-069

Equipment ID No. ID EPDPM Equip. Class Distribution Panels and Automatic Transfer Switches
-OR- PDP-3MDS

Equipment Description PDP MD NUCLEAR INST CHANNEL D

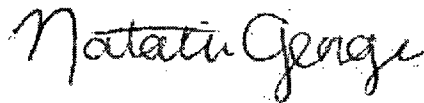
Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

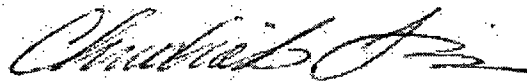
- The panel is identified based on all breaker IDs of B289-S146.
- For area walk-by checklist see AWC-018

Evaluated by: Natalie George



Date: 10/19/12

Chu-Chieh Lin



10/19/12

Sheet 4 of 4

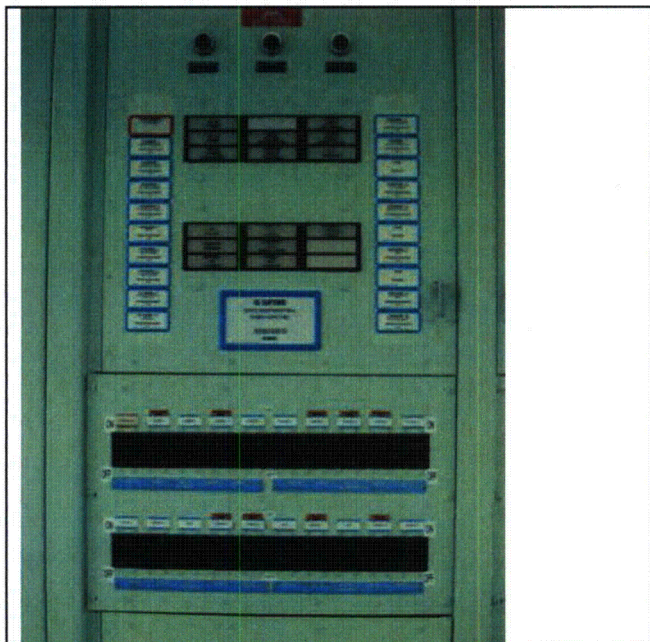
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-069

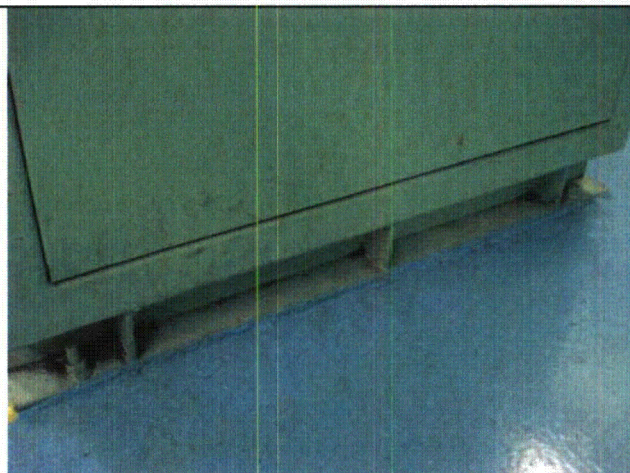
Equipment ID No. ID EPDPM D Equip. Class Distribution Panels and Automatic Transfer Switches
-OR- PDP-3MDS

Equipment Description PDP MD NUCLEAR INST CHANNEL D

Photographs



Note: The panel is identified based on all breaker IDs of B289-S146.



Note: Anchorage configuration consistent with IPEEE of the identical item ID EPDPMA (PDP-3MAS)

Sheet 1 of 4

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1-070**Equipment ID No. DC EBATB Equip. Class¹ Battery Racks-OR- DC-B-3BSEquipment Description 125V Battery & Rack 125VDC Battery B-S 60 CellsLocation: Bldg. RAB Floor El. +21 Room, Area Room 213, Col. 9A, Line JManufacturer, Model, Etc. (optional but recommended) C&D Batteries @ Allied, LCR33 and LCUN33**Instructions for Completing Checklist**

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-070

Equipment ID No. DC EBATB Equip. Class Battery Racks

-OR- DC-B-3BS

Equipment Description 125V Battery & Rack 125VDC Battery B-S 60 Cells

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 configuration consistent with plant documentation (see drawing no. G574 sh. 11)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- Questions 2-5 satisfied; no seismic concern

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
- Block walls are acceptable per drawing no. G765 sh. 2, calculation no. Civil Seismic Block Wall, and FSAR Section 3.8.4.8
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
- Rigidly attached conduits are acceptable per drawing no. B288 pg. 19-1
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U
- Questions 7-9 are satisfied

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-070

Equipment ID No. DC EBATB Equip. Class Battery Racks

-OR- DC-B-3BS

Equipment Description 125V Battery & Rack 125VDC Battery B-S 60 Cells

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-017

Evaluated by: Brian Pace



Date: 10/2/12

Dinesh Patel



10/2/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-070

Equipment ID No. DC EBATB Equip. Class Battery Racks

-OR- DC-B-3BS

Equipment Description 125V Battery & Rack 125VDC Battery B-S 60 Cells

Photographs



Note: 125V Battery & Rack 125VDC Battery B-S 60 Cells



Note: Anchorage in good condition

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-071

Equipment ID No. DC EBC1A Equip. Class¹ Battery Chargers and Inverters
-OR- 3A1-S

Equipment Description Battery Charger A1

Location: Bldg. RAB Floor El. +21 Room, Area Room 212A, Col. 9A, Line H

Manufacturer, Model, Etc. (optional but recommended) C&D Batteries @ Allied, ARR130K150F3

Instructions for Completing Checklist

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-071

Equipment ID No. DC EBC1A Equip. Class Battery Chargers and Inverters

-OR- 3A1-S

Equipment Description Battery Charger A1

-
5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration consistent with plant documentation
(Drawing no. G574 sh. 5 and IPEEE pg. E-74)
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- Questions 2-5 satisfied, no seismic concern.
-

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,
and masonry block walls not likely to collapse onto the equipment? Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
- Conduits rigidly attached to equipment are acceptable per
drawing no. B288 sh. 19-1
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-071

Equipment ID No. DC EBC1A Equip. Class Battery Chargers and Inverters

-OR- 3A1-S

Equipment Description Battery Charger A1

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

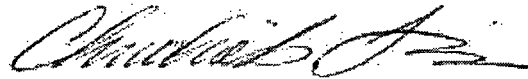
- For area walk-by checklist see AWC-016

Evaluated by: Brian Pace



Date: 10/4/12

Chu-Chieh Lin



10/4/12

Sheet 4 of 4

Status: Y N U

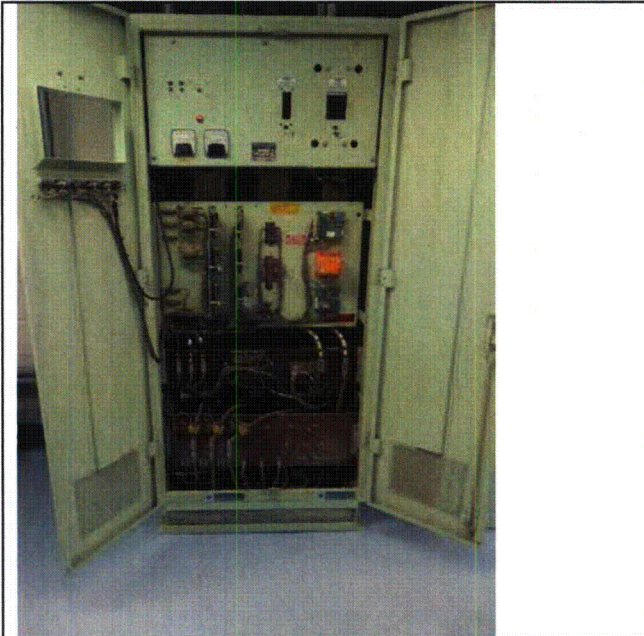
Seismic Walkdown Checklist (SWC) SWEL1-071

Equipment ID No. DC EBC1A Equip. Class Battery Chargers and Inverters

-OR- 3A1-S

Equipment Description Battery Charger A1

Photographs



Note: Battery Charger A1

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-072

Equipment ID No. EG MDSG0001-B Equip. Class¹ Engine Generators

Equipment Description Emergency Diesel Generator B

Location: Bldg. RAB Floor El. +21 Room, Area Room 222, 5A-J

Manufacturer, Model, Etc. (optional but recommended) Cooper Ind., Inc./Bessemer, KSV16T

Instructions for Completing Checklist

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-072

Equipment ID No. EG MDSG0001-B Equip. Class Engine Generators

Equipment Description Emergency Diesel Generator B

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration consistent with plant documentation
(drawing no. 1564-2040 and IPEEE pg. E-38), well anchored
common skid
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concerns

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-072

Equipment ID No. EG MDSG0001-B Equip. Class Engine Generators

Equipment Description Emergency Diesel Generator B

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

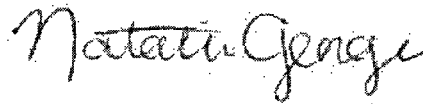
- For area walk-by checklist see AWC-025

Evaluated by: Dinesh Patel



Date: 10/2/12

Natalie George



10/2/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-072

Equipment ID No. EG MDSG0001-B Equip. Class Engine Generators

Equipment Description Emergency Diesel Generator B

Photographs



Note: Example of Emergency Diesel Generator B anchorage



Note: Emergency Diesel Generator B

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-073

Equipment ID No. CC ILS7011-B Equip. Class¹ INSTRUMENT RACKS

-OR-

LS-CC-7011BS

Equipment Description CCW SURGE TANK B SIDE LO/LO LEVEL SWITCH

Location: Bldg. RAB Floor El. +91 Room, Area 417, COL 1A, LINE K

Manufacturer, Model, Etc. (optional but recommended) MAGNETROL INTL INC, BC751VPX

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
 - This is an in-line component and cannot be part of the 50% list or be evaluated for anchorage.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - Welds between component and pipes are accounted for and in good condition.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - Welds appear to be in good condition. They are free of corrosion and painted.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - This is an in-line component

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-073

Equipment ID No. CC ILS7011-B Equip. Class INSTRUMENT RACKS

-OR-

LS-CC-7011BS

Equipment Description CCW SURGE TANK B SIDE LO/LO LEVEL SWITCH

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y N U N/A
- This is an in-line component and cannot be part of the 50% list or be evaluated for anchorage.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- The level switch is well supported by the pipes and their rigid supports, but is an in-line component and therefore has no anchorage.

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-073

Equipment ID No. CC ILS7011-B Equip. Class INSTRUMENT RACKS

-OR-

LS-CC-7011BS

Equipment Description CCW SURGE TANK B SIDE LO/LO LEVEL SWITCH

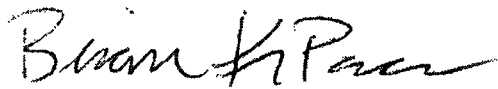
Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- The switch is well supported by the connecting pipes at the top and at the bottom with nearby rigid supports
- For area walk-by checklist see AWC-040

Evaluated by: Brian Pace



Date: 10-08-2012

Dinesh Patel



10-08-2012

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-073

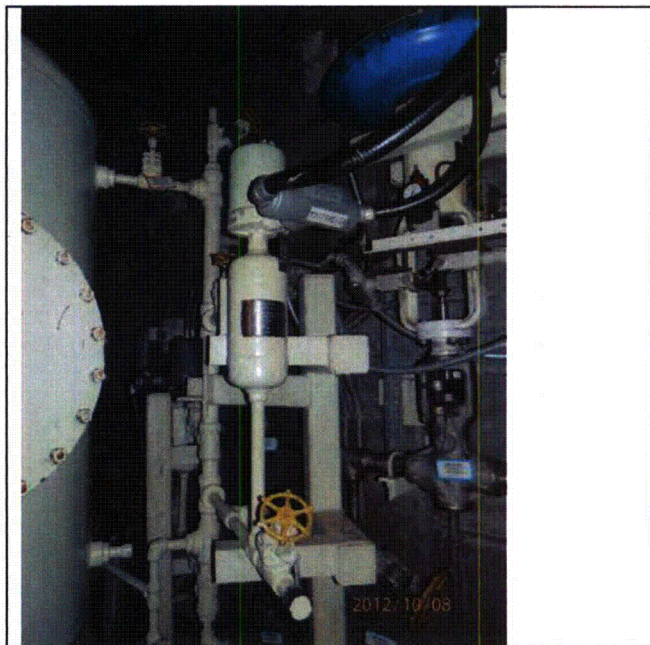
Equipment ID No. CC ILS7011-B Equip. Class INSTRUMENT RACKS

-OR-

LS-CC-7011BS

Equipment Description CCW SURGE TANK B SIDE LO/LO LEVEL SWITCH

Photographs



Note: CC ILS7011-B

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-074

Equipment ID No. EGFILT6903-A Equip. Class¹ Instrument Racks

-OR- LT-EG-6903AS

Equipment Description Diesel Oil Feed Tank A Level Transmitter

Location: Bldg. RAB Floor El. +46 Room, Area Room 328B, Col. 2A, Line J

Manufacturer, Model, Etc. (optional but recommended) Rosemount, 1153DA4

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
 - Four bolts are accounted for and in good condition

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion on any of the bolts on the mounting plate or on the supports anchored to the floor.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - No cracks found around the support base plates.

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-074

Equipment ID No. EGFILT6903-A Equip. Class Instrument Racks

-OR- LT-EG-6903AS

Equipment Description Diesel Oil Feed Tank A Level Transmitter

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage is consistent with documentation in drawing
1564-7973.
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- Questions 2-5 are satisfied; no seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-074

Equipment ID No. EGFILT6903-A Equip. Class Instrument Racks

-OR- LT-EG-6903AS

Equipment Description Diesel Oil Feed Tank A Level Transmitter

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-035

Evaluated by: Dinesh Patel  Date: 10-08-2012

Brian Pace  10-08-2012

Sheet 4 of 4

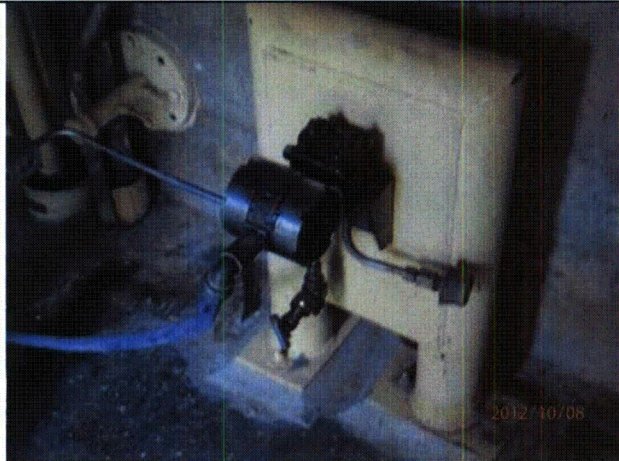
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-074

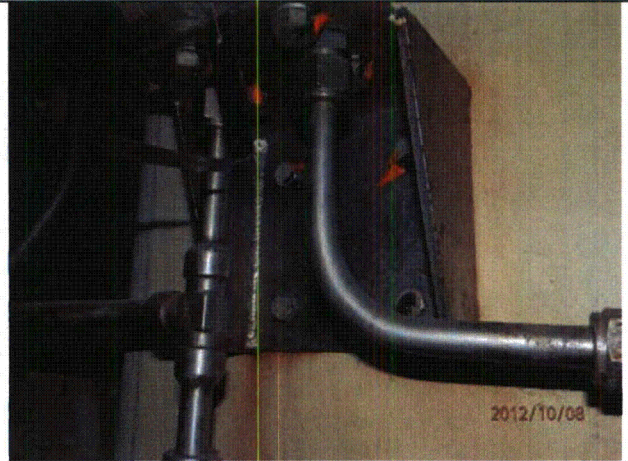
Equipment ID No. EGFILT6903-A Equip. Class Instrument Racks
-OR- LT-EG-6903AS

Equipment Description Diesel Oil Feed Tank A Level Transmitter

Photographs



Note: Level transmitter mounted with four bolts to the mounting plate



Note: Four bolts in good condition and are consistent with plant documentation

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-075

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

Equipment Description Instrument Cabinet C-1C

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

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

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

See Attachment K - Revision 1

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-075

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

Equipment Description Instrument Cabinet C-1C

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

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

Interaction Effects

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

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

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

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

See Attachment K - Revision 1

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-075

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

Equipment Description Instrument Cabinet C-1C

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

See Attachment K - Revision 1

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-075

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

Equipment Description Instrument Cabinet C-1C

Photographs

Note:	Note:

See Attachment K - Revision 1

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-076

Equipment ID No. IC ICDC12 Equip. Class¹ INSTRUMENT RACKS

Equipment Description INSTRUMENT CABINET C-12

Location: Bldg. RB Floor El. -4 Room, Area ROOM B145, COL 2AZ

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
 - No documentation to verify weld configuration

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - Welds are in good condition; no documentation to verify weld configuration

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion near welds

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - Equipment is welded to embedded steel; no cracks in concrete around embeds

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-076

Equipment ID No. IC ICDC12 Equip. Class INSTRUMENT RACKS

Equipment Description INSTRUMENT CABINET C-12

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
- No documentation to verify weld configuration
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,
and masonry block walls not likely to collapse onto the equipment? Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
- Conduit rigidly attached to equipment is acceptable per drawing
no. B288 sh. 19-1
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-076

Equipment ID No. IC ICDC12 Equip. Class INSTRUMENT RACKS

Equipment Description INSTRUMENT CABINET C-12

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

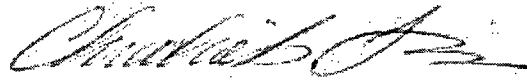
- Mild corrosion on cabinet exterior; no seismic concern. CR-WF3-2012-05275 and WR-287634 initiated to address this condition.
- Missing lifting eye at back of cabinet (1 of 4); no seismic concern
- For area walk-by checklist see AWC-030



Evaluated by: Natalie George

Date: 10/5/12

Chu-Chieh Lin



10/5/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-076

Equipment ID No. IC ICDC12 Equip. Class INSTRUMENT RACKS

Equipment Description INSTRUMENT CABINET C-12

Photographs



Note: Mild corrosion on cabinet exterior

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. IC ICDC9 Equip. Class¹ Instrument Racks

Equipment Description Instrument Cabinet C-9

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

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

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

See Attachment K - Revision 1

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. IC ICDC9 Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-9

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U

Interaction Effects

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

See Attachment K - Revision 1

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. IC ICDC9 Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-9

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

See Attachment K - Revision 1

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. IC ICDC9 Equip. Class Instrument Racks

Equipment Description Instrument Cabinet C-9

Photographs

Note:	Note:

See Attachment K - Revision 1

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-078

Equipment ID No. NG IPIS0945-B Equip. Class¹ Instrument Racks

-OR- PS-NG-0945BS

Equipment Description NITROGEN HEADER 6 PRESS INDICATING SWITCH

Location: Bldg. RB Floor El. +46 Room, Area COL 2AZ LINE M

Manufacturer, Model, Etc. (optional but recommended) ITT BARTON INSTRUMENTS, MODEL 580-1

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
 - Item not one of the 50% of SWEL items requiring anchorage configuration verification

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All anchorage accounted for and in good condition

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - Switch anchorage to support has mild corrosion; no seismic concern
 - Support anchorage to wall is corrosion free

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-078

Equipment ID No. NG IPIS0945-B Equip. Class Instrument Racks

-OR- PS-NG-0945BS

Equipment Description NITROGEN HEADER 6 PRESS INDICATING SWITCH

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y N U N/A
- Item not one of the 50% of SWEL items requiring anchorage configuration verification
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- No seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-078

Equipment ID No. NG IPIS0945-B Equip. Class Instrument Racks

-OR- PS-NG-0945BS

Equipment Description NITROGEN HEADER 6 PRESS INDICATING SWITCH

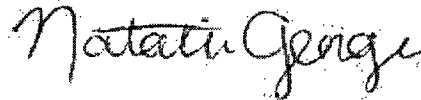
Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

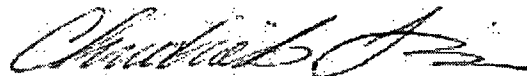
- For area walk-by checklist see AWC-041

Evaluated by: Natalie George



Date: 10/12/12

Chu-Chieh Lin



10/12/12

Sheet 4 of 4

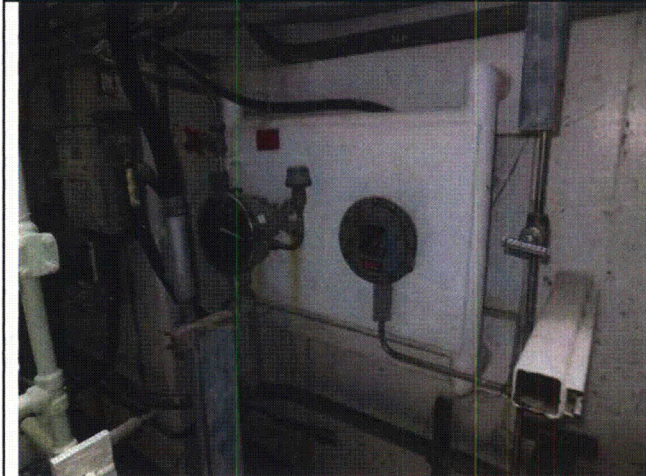
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-078

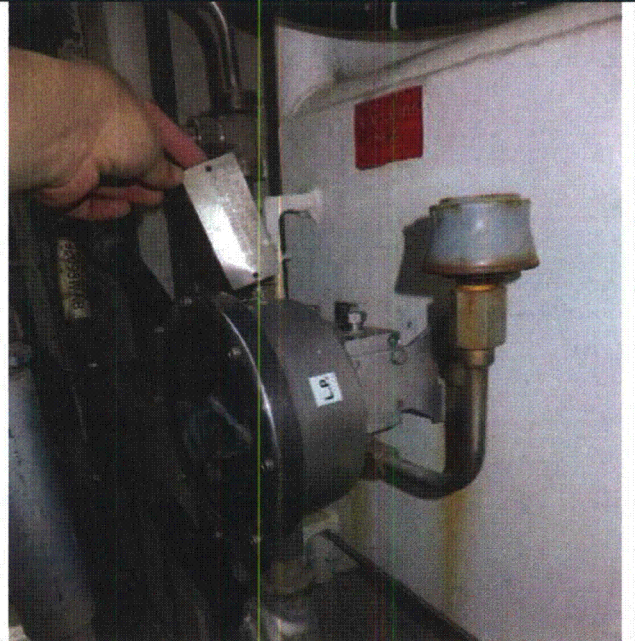
Equipment ID No. NG IPIS0945-B Equip. Class Instrument Racks
-OR- PS-NG-0945BS

Equipment Description NITROGEN HEADER 6 PRESS INDICATING SWITCH

Photographs



Note: Nitrogen header 6 pressure indicating switch



Note: Switch anchorage to support has mild corrosion

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. SG ILT1115-A Equip. Class¹ Instrument Racks

-OR- LT-FW-1115AS

Equipment Description STEAM GENERATOR 1 LEVEL IXMITR (WIDE RANGE)

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

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

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

See Attachment K - Revision 1

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. SG ILT1115-A Equip. Class Instrument Racks

-OR- LT-FW-1115AS

Equipment Description STEAM GENERATOR 1 LEVEL IXMITR (WIDE RANGE)

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U

Interaction Effects

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

See Attachment K - Revision 1

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. SG ILT1115-A Equip. Class Instrument Racks

-OR- LT-FW-1115AS

Equipment Description STEAM GENERATOR 1 LEVEL IXMITR (WIDE RANGE)

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

See Attachment K - Revision 1

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. SG ILT1115-A Equip. Class Instrument Racks

-OR- LT-FW-1115AS

Equipment Description STEAM GENERATOR 1 LEVEL IXMITR (WIDE RANGE)

Photographs

Note:	Note:

See Attachment K - Revision 1

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-080

Equipment ID No. RC ITE0122-HA1 Equip. Class¹ Temperature Sensors
-OR- TE-RC-0122HA

Equipment Description Reactor Coolant Loop 2 Hot Leg Temperature

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

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

Instructions for Completing Checklist

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

Anchorage

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

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

See Attachment K - Revision 1

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-080

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

-OR- TE-RC-0122HA

Equipment Description Reactor Coolant Loop 2 Hot Leg Temperature

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U

Interaction Effects

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

See Attachment K - Revision 1

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-080

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

-OR- TE-RC-0122HA

Equipment Description Reactor Coolant Loop 2 Hot Leg Temperature

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

See Attachment K - Revision 1

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-080

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

-OR- TE-RC-0122HA

Equipment Description Reactor Coolant Loop 2 Hot Leg Temperature

Photographs

Note:	Note:

See Attachment K - Revision 1

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-081

Equipment ID No. EG ECP6850-B Equip. Class¹ Instrumentation and Control Panels
-OR- D030

Equipment Description Diesel Generator B Engine Control Panel

Location: Bldg. RAB Floor El. +21 Room, Area Room 222, Col. 5A, Line K

Manufacturer, Model, Etc. (optional but recommended) Cooper Ind., Inc./Bessemer, G5262961

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
 - Verified anchor bolts on front side, rear anchor bolts not accessible. Rear bolts acceptable per IPEEE walkdown. See drawing 1564-2169 for anchorage configuration.
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - Visible anchorage is accounted for and in good condition
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion on visible anchors
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - No visible cracks in the concrete

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-081

Equipment ID No. EG ECP6850-B Equip. Class Instrumentation and Control Panels

-OR- D030

Equipment Description Diesel Generator B Engine Control Panel

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
- Questions 2-4 satisfied

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
- Conduit rigidly attached to equipment is acceptable per drawing no. B288 sh. 19-1
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-081

Equipment ID No. EG ECP6850-B Equip. Class Instrumentation and Control Panels

-OR- D030

Equipment Description Diesel Generator B Engine Control Panel

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-025

Evaluated by: Brian Pace



Date: 10/2/12

Dinesh Patel



10/2/12

Sheet 4 of 4

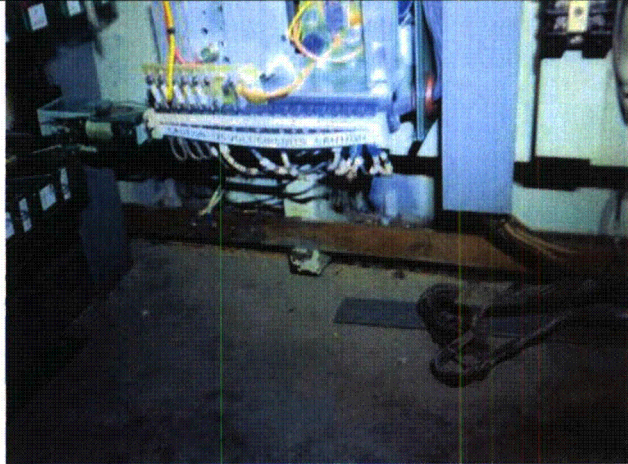
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Seismic Walkdown Checklist (SWC) SWEL1-081

Equipment ID No. EG ECP6850-B Equip. Class Instrumentation and Control Panels
-OR- D030

Equipment Description Diesel Generator B Engine Control Panel

Photographs



Note: Diesel Generator B Engine Control Panel

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-082

Equipment ID No. ESFECF0001-A Equip. Class¹ Instrumentation and Controls Panels

Equipment Description ESFAS Cabinets

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

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
 - All anchorage is accounted for and in good condition

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

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

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

Sheet 2 of 4

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1-082**Equipment ID No. ESFECP0001-A Equip. Class Instrumentation and Controls PanelsEquipment Description ESFAS Cabinets

-
5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration consistent with plant documentation (SQ-NSSSS-ICE-4)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- Questions 2-5 are satisfied, no seismic concern.
-

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
- Conduits rigidly attached to equipment are acceptable per drawing no. B288 sh. 19-1
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U
- Questions 7-9 are satisfied, no seismic concern.

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-082

Equipment ID No. ESFECP0001-A Equip. Class Instrumentation and Controls Panels

Equipment Description ESFAS Cabinets

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

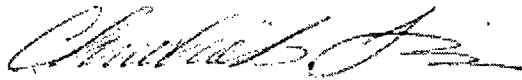
- A bolt was found near the 4th anchor bolt from the left at front, minor house keeping issue, no seismic concern.
 - For area walk-by checklist see AWC-016
-

Evaluated by: Brian Pace



Date: 10/4/12

Chu-Cheih Lin



10/4/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-082

Equipment ID No. ESFECP0001-A Equip. Class Instrumentation and Controls Panels

Equipment Description ESFAS Cabinets

Photographs



Note: ESFAS Cabinets



Note: ESFAS Cabinets Anchorage

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-083

Equipment ID No. IC EAUX2 Equip. Class¹ Instrumentation and Control Panels

Equipment Description AUXILIARY PANEL 2(SB)

Location: Bldg. RAB Floor El. +35 Room, Area Room 262, Col. 11A, Line G

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
 - Item not one of the 50% of SWEL items requiring anchorage configuration verification

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All anchorage is accounted for and in good condition

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-083

Equipment ID No. IC EAUX2 Equip. Class Instrumentation and Control Panels

Equipment Description AUXILIARY PANEL 2(SB)

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y N U N/A
- IPEEE pg. E-41 states that bays are bolted together and welded to embedded steel. However, upon further inspection it was determined the equipment is bolted with eight 1/2" bolts to the embedded plate.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- No seismic concern

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
- Block walls acceptable per drawing no. G765 sh. 2, calculation no. Civil Seismic Block Walls, and FSAR Section 3.8.4.8
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-083

Equipment ID No. IC EAUX2 Equip. Class Instrumentation and Control Panels

Equipment Description AUXILIARY PANEL 2(SB)

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-053

Natalie George

Evaluated by: Natalie George

Date: 10/15/12

Chu-Chieh Lin

Chu-Chieh Lin

10/15/12

Sheet 4 of 4

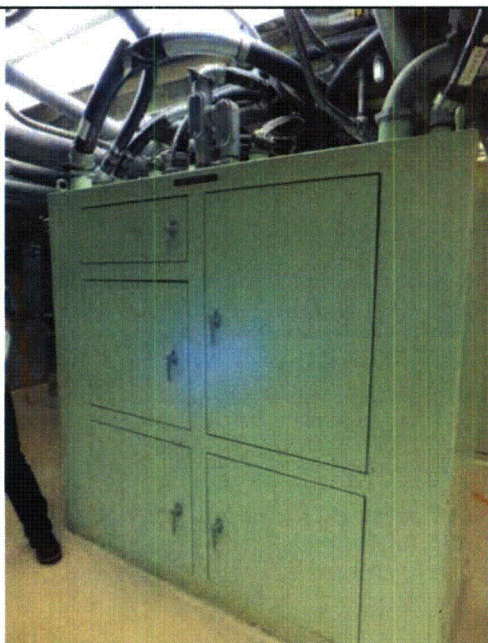
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Seismic Walkdown Checklist (SWC) SWEL1-083

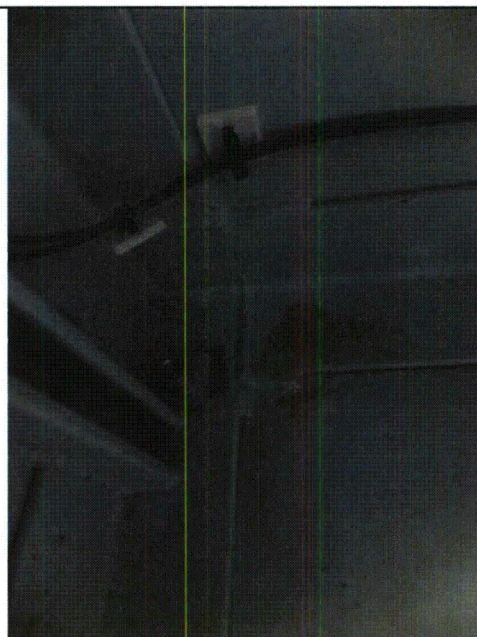
Equipment ID No. IC EAUX2 Equip. Class Instrumentation and Control Panels

Equipment Description AUXILIARY PANEL 2(SB)

Photographs



Note: Auxiliary Panel 2(SB)



Note: Example of 1/2" bolt anchoring equipment to embedded plate

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-084

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

Equipment Description Engineered Safeguard Control Panel CP8

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

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

Instructions for Completing Checklist

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

See Attachment K - Revision 1

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-084

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

Equipment Description Engineered Safeguard Control Panel CP8

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U

Interaction Effects

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

See Attachment K - Revision 1

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-084

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

Equipment Description Engineered Safeguard Control Panel CP8

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-084

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

Equipment Description Engineered Safeguard Control Panel CP8

Photographs

Note:	Note:

See Attachment K - Revision 1

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-085

Equipment ID No. IC ECP22 Equip. Class¹ Instrumentation and Control Panels

Equipment Description Core Protection Calculators

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

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
 - Could only verify anchors on one side of the cabinet. Based on back side anchorage, front side anchorage is considered acceptable.
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - Visible anchorage is accounted for and in good condition.
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - Visible anchorage is free of corrosion.
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - No visible cracks on the concrete; concrete covered with carpeting

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

Sheet 2 of 4Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1-085**Equipment ID No. IC ECP22 Equip. Class Instrumentation and Control PanelsEquipment Description Core Protection Calculators

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

- Questions 2-4 satisfied; no seismic concern

Interaction Effects

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

Y N U N/A

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

Y N U N/A

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

Y N U N/A

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

Y N U

- Questions 7-9 satisfied

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-085

Equipment ID No. IC ECP22 Equip. Class Instrumentation and Control Panels

Equipment Description Core Protection Calculators


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

- Bookcase near panel is anchored, satisfying requirements specified by IPEEE walkdowns. The anchorage calculation can be found in ECC95-005.

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-032

Evaluated by: Brian Pace  Date: 10-5-2012

Dinesh Patel  10-5-2012

Sheet 4 of 4

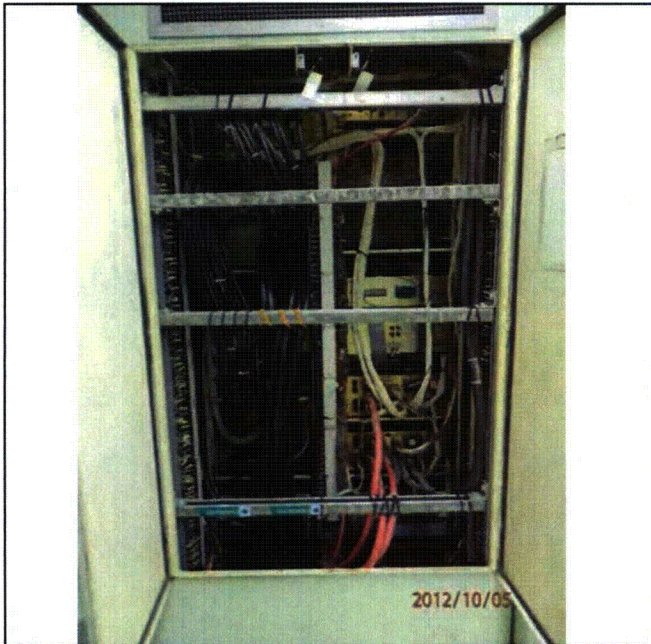
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-085

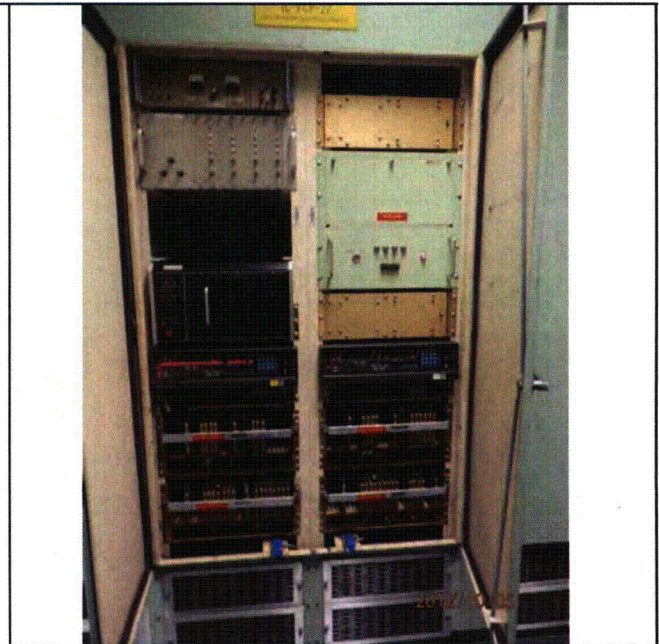
Equipment ID No. IC ECP22 Equip. Class Instrumentation and Control Panels

Equipment Description Core Protection Calculators

Photographs



Note: Example of one of the four cabinets on ECP-22. A picture of the anchorage could not be made in order to not break the plane of the door, but it was determined to be in good condition. Notice the four unistruts. All are in good condition and bolted properly.



Note: Example of the front of ECP-22. All internals are well supported. Anchorage is not visible from this side.

Sheet 1 of 4Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1-086**Equipment ID No. IC ECP26 Equip. Class¹ Instrumentation and Control PanelsEquipment Description Process Analog Control Protective Channel BLocation: Bldg. RAB Floor El. +46 Room, Area Room 304, Col. 8A, Line HManufacturer, Model, Etc. (optional but recommended) Westinghouse Electric Corp., W8001**Instructions for Completing Checklist**

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
 - Item not one of the 50% of SWEL items requiring anchorage configuration verification

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All anchorage is accounted for and in good condition

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-086

Equipment ID No. IC ECP26 Equip. Class Instrumentation and Control Panels

Equipment Description Process Analog Control Protective Channel B

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Item not one of the 50% of SWEL items requiring anchorage configuration verification
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- Questions 2-4 satisfied; no seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-086

Equipment ID No. IC ECP26 Equip. Class Instrumentation and Control Panels

Equipment Description Process Analog Control Protective Channel B

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- Verified that issues discussed in IPEEE document have been resolved. Cabinets are now bolted together (see photo).
- For area walk-by checklist see AWC-032

Evaluated by:  Date: 10-05-2012

Brian Pace  10-05-2012

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-086

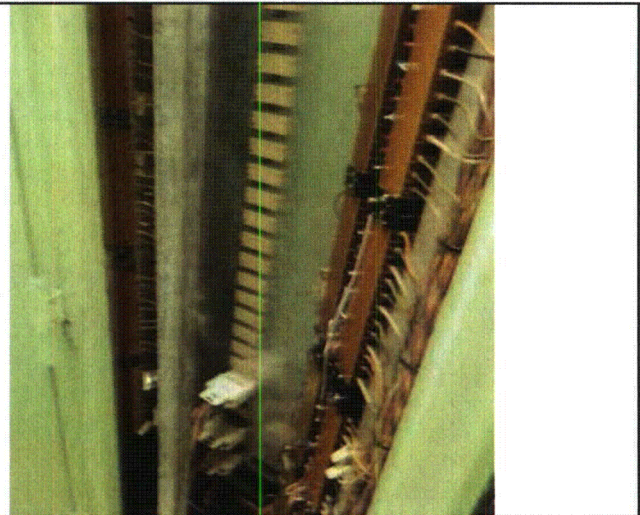
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Equipment Description Process Analog Control Protective Channel B

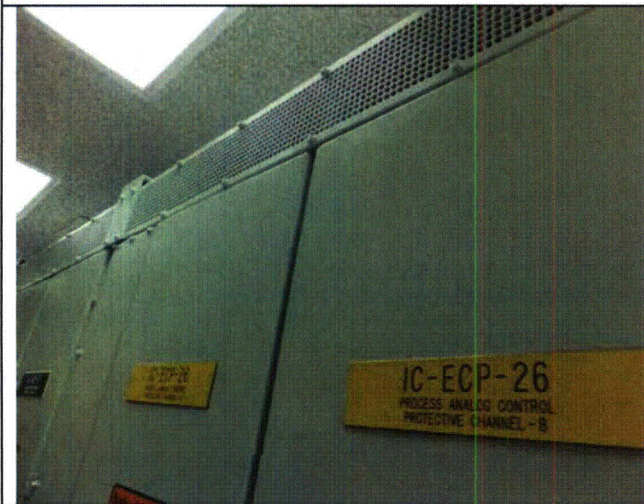
Photographs



Note: Back side of ECP-26



Note: Front side of ECP-26



Note: Cabinets are now bolted together

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-087

Equipment ID No. IC ELCP61 Equip. Class¹ Instrumentation and Control Panels
-OR- LCP-61

Equipment Description Local Control Panel PAC LCP-61

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

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
 - All welds accounted for and in good condition

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-087

Equipment ID No. IC ELCP61 Equip. Class Instrumentation and Control Panels
-OR- LCP-61

Equipment Description Local Control Panel PAC LCP-61

-
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 configuration consistent with plant
documentation (IPEEE pg. E-74)
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concern
-

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,
and masonry block walls not likely to collapse onto the equipment? Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
- Conduits rigidly attached to equipment are acceptable per
drawing no. B288 sh. 19-1
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-087

Equipment ID No. IC ELCP61 Equip. Class Instrumentation and Control Panels
-OR- LCP-61

Equipment Description Local Control Panel PAC LCP-61

Other Adverse Conditions


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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-016

Evaluated by: Natalie George 

10/4/12

Chu-Chieh Lin 

10/4/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-087

Equipment ID No. IC ELCP61 Equip. Class Instrumentation and Control Panels
-OR- LCP-61

Equipment Description Local Control Panel PAC LCP-61

Photographs



Note: Local Control Panel PAC LCP-61



Note: Weld configuration

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-088

Equipment ID No. RFRECP3311-3B Equip. Class: Instrumentation and Control Panels

Equipment Description Water Chiller Compressor Control Panel 3B

Location: Bldg. RAB Floor El. +46 Room, Area Room 299, Col. 3A, Line K

Manufacturer, Model, Etc. (optional but recommended) Carrier Corp., 24991800

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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 welds and bolts are accounted for and in good condition

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - Equipment welded to chiller skid, no visible cracks in the chiller skid concrete pad

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-088

Equipment ID No. RFRECP3311-3B Equip. Class Instrumentation and Control Panels

Equipment Description Water Chiller Compressor Control Panel 3B

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration consistent with plant documentation
(IPEEE pg. E-43)
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-088

Equipment ID No. RFRECP3311-3B Equip. Class Instrumentation and Control Panels

Equipment Description Water Chiller Compressor Control Panel 3B

Other Adverse Conditions

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


Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-037



Evaluated by: Natalie George

Date: 10/15/12

Chu-Chieh Lin 

10/15/12

Sheet 4 of 4

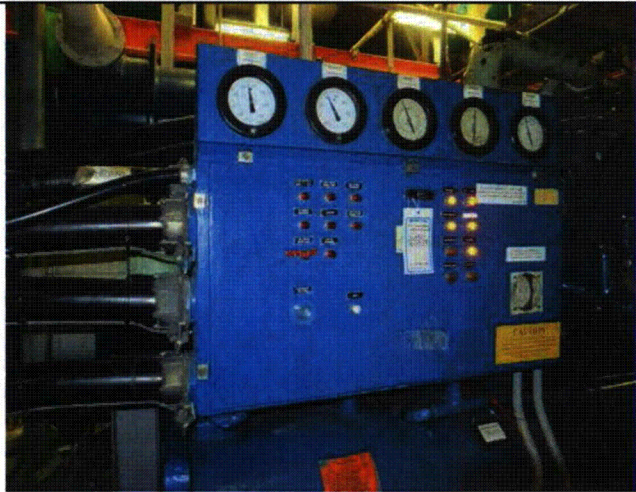
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-088

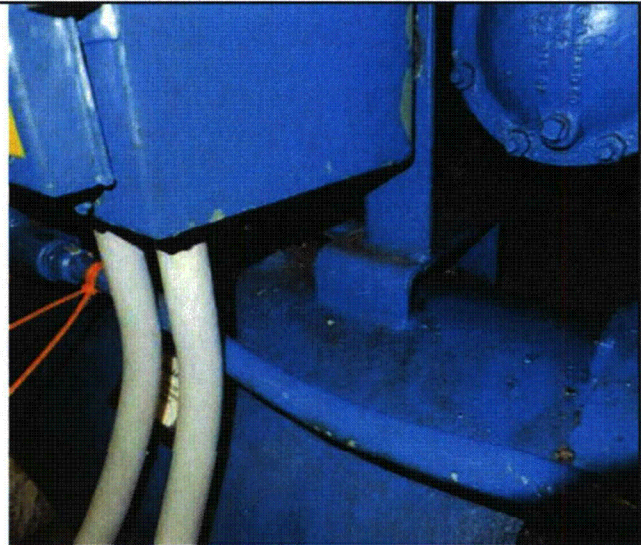
Equipment ID No. RFRECP3311-3B Equip. Class Instrumentation and Control Panels

Equipment Description Water Chiller Compressor Control Panel 3B

Photographs



Note: Water Chiller Compressor Control Panel 3B



Note: Water Chiller Compressor Control Panel 3B
Weld to Chiller skid

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-089

Equipment ID No. BAMMTNK0001-A Equip. Class Tanks and Heat Exchangers

Equipment Description Boric Acid Makeup Tank A (Stores boric acid for normal or emergency supply to the reactor coolant system)

Location: Bldg. RAB Floor El. -35 Room, Area B38, Col. 5A, Line H

Manufacturer, Model, Etc. (optional but recommended) C-E Airpreheater (Built by C-E Avery).

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
 - Anchor bolts are covered with insulation. Since bolts cannot be seen, anchorage cannot be verified with plant documentation.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - One bolt has its insulation covering broken.
 - Other bolts are not visible.
 - This visible bolt is not bent, broken, missing, or loose.
 - Other bolts have insulation in good condition and bolts are assumed to also be in good condition.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - The exposed bolt has mild surface corrosion (boric acid).
 - This corrosion is on the surface and not a concern. Other bolts are assumed to be in similar or better condition.

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-089

Equipment ID No. BAMMTNK0001-A Equip. Class Tanks and Heat Exchangers

Equipment Description Boric Acid Makeup Tank A (Stores boric acid for normal or emergency supply to the reactor coolant system)

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.)

- See #1.

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

- Questions 2-4 satisfied.

Interaction Effects

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

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

- Questions 7-9 satisfied.

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-089

Equipment ID No. BAMMTNK0001-A Equip. Class Tanks and Heat Exchangers

Equipment Description Boric Acid Makeup Tank A (Stores boric acid for normal or emergency supply to the reactor coolant system)

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- CR-WF3-2012-05046 and WR-286685 initiated to address the missing anchor bolt insulation cover and the bolt's corrosion.
- Insulation clips missing (3 of 8) ; no seismic concern
- CR-WF3-2012-05046 and WR 286685 initiated to address missing insulation clips (3 of 8)
- For area walk-by checklist see AWC-005

Evaluated by: Dinesh Patel



Date: 10/3/12

Brian Pace



10/3/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-089

Equipment ID No. BAMMTNK0001-A Equip. Class Tanks and Heat Exchangers

Equipment Description Boric Acid Makeup Tank A (Stores boric acid for normal or emergency supply to the reactor coolant system)

Photographs



Note: Insulation cover on one anchor bolt is missing; anchor bolt has mild surface corrosion (boric acid)



Note: Insulation clips missing (3 of 8)

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-090

Equipment ID No. CC MHX0001-A Equip. Class¹ Tanks and Heat Exchangers

Equipment Description Component Cooling Water Heat Exchanger A

Location: Bldg. RAB Floor El. +21 Room, Area Room 220, Col 2A, Line K

Manufacturer, Model, Etc. (optional but recommended) Struthers Wells Corporation, YEAR-1976

Instructions for Completing Checklist

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-090

Equipment ID No. CC MHX0001-A Equip. Class Tanks and Heat Exchangers

Equipment Description Component Cooling Water Heat Exchanger A

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 consistent with plant documentation (Drawing no. 1564-1466 and IPEEE pg. E-68)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- Questions 2-5 are satisfied; no seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-090

Equipment ID No. CC MHX0001-A Equip. Class Tanks and Heat Exchangers

Equipment Description Component Cooling Water Heat Exchanger A

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-023

Evaluated by: Dinesh Patel  Date: 10/4/2012

Brian Pace  10/4/2012

Sheet 4 of 4

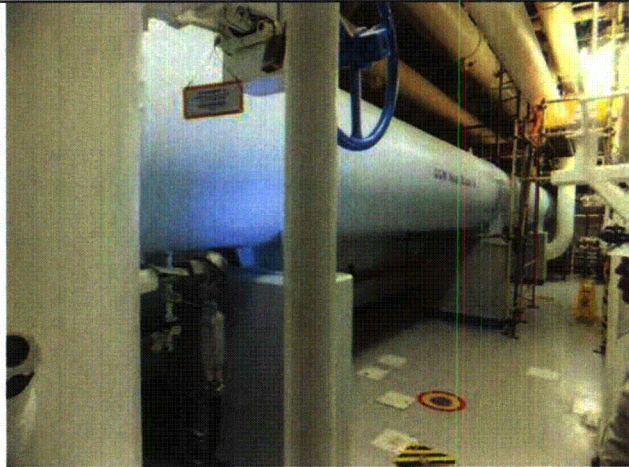
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Seismic Walkdown Checklist (SWC) SWEL1-090

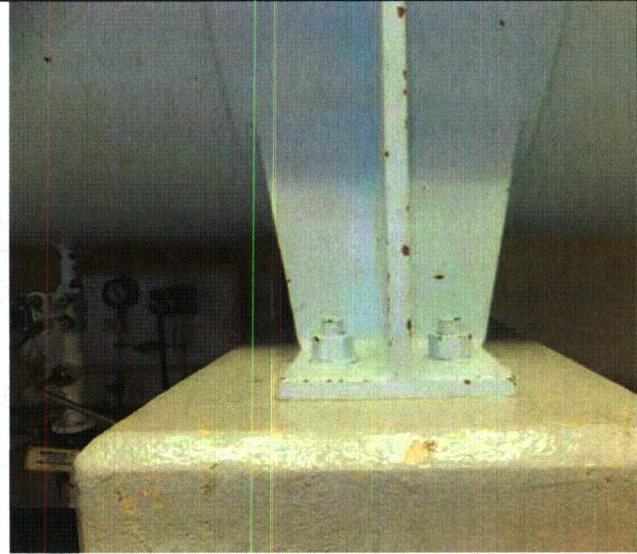
Equipment ID No. CC MHX0001-A Equip. Class Tanks and Heat Exchangers

Equipment Description Component Cooling Water Heat Exchanger A

Photographs



Note: Component Cooling Water Heat Exchanger A



Note: Component Cooling Water Heat Exchanger A anchorage

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-091

Equipment ID No. CC MTNK0001-C Equip. Class¹ TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING WATER SURGE TANK

Location: Bldg. RAB Floor El. +91 Room, Area 417, COL 1A, LINE K

Manufacturer, Model, Etc. (optional but recommended) BETHLEHEM STEEL, 15644554

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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 four anchor bolts are free of any bent, broken, missing, or loose hardware. Tank is well supported.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - Anchors are mounted onto concrete floor. No visible cracks are in the concrete.

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-091

Equipment ID No. CC MTNK0001-C Equip. Class TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING WATER SURGE TANK

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- Anchorage configuration is consistent with plant documentation. See drawing G574, S05.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- Questions 2-5 are satisfied; no seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-091

Equipment ID No. CC MTNK0001-C Equip. Class TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING WATER SURGE TANK

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-040

Evaluated by: Brian Pace



Date: 10-08-2012

Dinesh Patel



10-08-2012

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-091

Equipment ID No. CC MTNK0001-C Equip. Class TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING WATER SURGE TANK

Photographs



Note: Component Cooling Water Surge Tank



Note: Example of satisfactory anchorage of the tank

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-092

Equipment ID No. CS MHX0001-A Equip. Class¹ Tanks and Heat Exchangers

Equipment Description Shutdown Cooling Heat Exchanger A

Location: Bldg. RAB Floor El. -35 Room, Area Room B48, Col. 11A, Line J

Manufacturer, Model, Etc. (optional but recommended) Engineers and Fabricators Company (EFCO)

Instructions for Completing Checklist

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion on anchorage
 - Anchorage is painted

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

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-092

Equipment ID No. CS MHX0001-A Equip. Class Tanks and Heat Exchangers

Equipment Description Shutdown Cooling Heat Exchanger A

-
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 configuration consistent with plant documentation (General arrangement drawing G501, sh. 1 and IPEEE pg. E-87)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- Question 2-5 satisfied
-

Interaction Effects

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

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-092

Equipment ID No. CS MHX0001-A Equip. Class Tanks and Heat Exchangers

Equipment Description Shutdown Cooling Heat Exchanger A

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- 2 insulation clips open or loose on top, front end; no seismic concern
- For area walk-by checklist see AWC-006

Evaluated by: Dinesh Patel  Date: 10/3/12

Brian Pace  10/3/12

Sheet 4 of 5

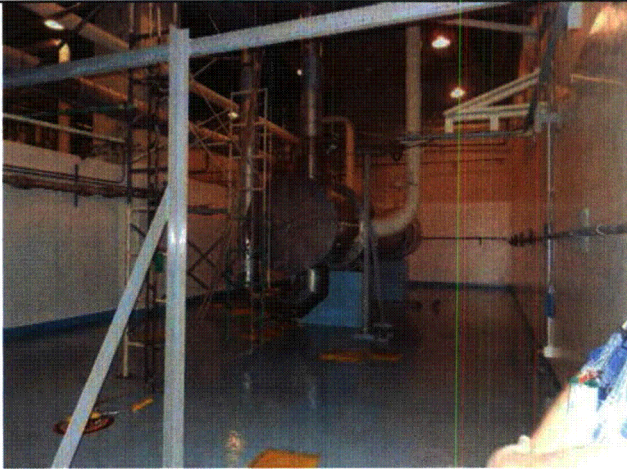
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-092

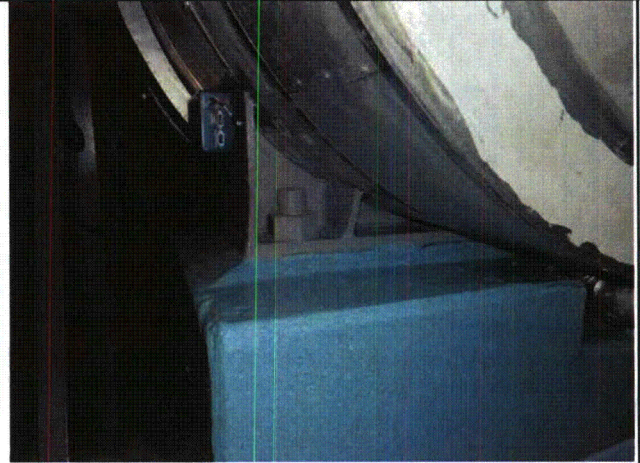
Equipment ID No. CS MHX0001-A Equip. Class Tanks and Heat Exchangers

Equipment Description Shutdown Cooling Heat Exchanger A

Photographs



Note: Shutdown Cooling Heat Exchanger A



Note: Anchorage of Shutdown Cooling Heat Exchanger A

Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-092

Equipment ID No. CS MHX0001-A Equip. Class Tanks and Heat Exchangers

Equipment Description Shutdown Cooling Heat Exchanger A

Photographs



Note: 2 insulation clips open or loose on top, front end

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-093

Equipment ID No. EGFMTNK0001-A Equip. Class: TANKS AND HEAT EXCHANGERS

Equipment Description FUEL OIL STORAGE TANK A

Location: Bldg. RB Floor El. -35 Room, Area COL 1A, LINE L

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
 - Tank anchorage is free of bent, broken, missing, or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - One of the anchor bolts, and its surrounding area has mild surface corrosion. This poses no seismic concern.

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

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-093

Equipment ID No. EGFMTNK0001-A Equip. Class TANKS AND HEAT EXCHANGERS

Equipment Description FUEL OIL STORAGE TANK A

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 configuration consistent with plant documentation; see anchorage detail on drawing G501 sh. 2
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- Questions 2-5 satisfied; no seismic concerns

Interaction Effects

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

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-093

Equipment ID No. EGFMTNK0001-A Equip. Class TANKS AND HEAT EXCHANGERS

Equipment Description FUEL OIL STORAGE TANK A

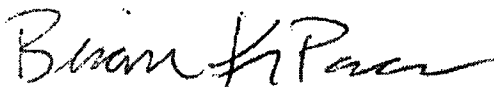
Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- WO-50074 from April 2005 references a leak from the flange gasket; no seismic concern.
- Mild surface corrosion on manhole cover, anchor bolt, and anchor bolt stiffener plate; no seismic concern
- CR-WF3-2012-05275 and WR-287635 initiated to address all corrosion conditions.
- For area walk-by checklist see AWC-029

Evaluated by: Brian Pace



Date: 10-5-2012

Dinesh Patel



10-5-2012

Sheet 4 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-093

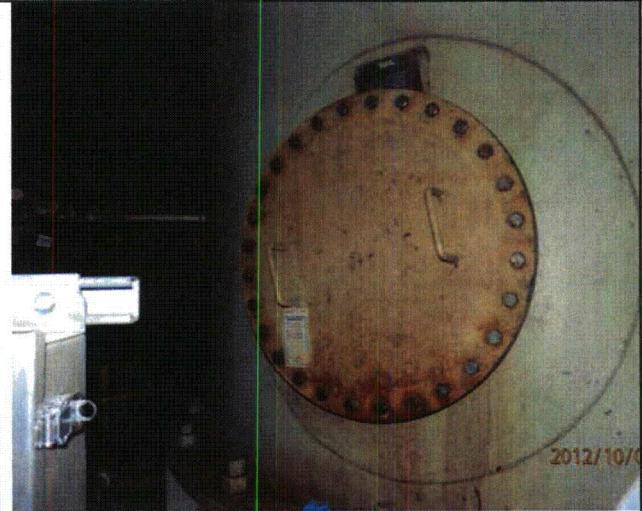
Equipment ID No. EGFMTNK0001-A Equip. Class TANKS AND HEAT EXCHANGERS

Equipment Description FUEL OIL STORAGE TANK A

Photographs



Note: Mild surface corrosion on anchor bolt and stiffener plate



Note: Mild surface corrosion on manhole cover

Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-093

Equipment ID No. EGFMTNK0001-A Equip. Class TANKS AND HEAT EXCHANGERS

Equipment Description FUEL OIL STORAGE TANK A



Note: Example of the good condition of the anchor bolts for the Diesel Oil Storage Tank A

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-094

Equipment ID No. NG MACC0003 Equip. Class¹ Tanks and Heat Exchangers

Equipment Description Nitrogen Accumulator #3

Location: Bldg. RAB Floor El. +21 Room, Area Room 219, Col. 5A, Line L

Manufacturer, Model, Etc. (optional but recommended) Dravo 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
 - Welds are in good condition

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion on welds

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - Legs are welded to embedded plates; no cracks in concrete around embedded plates

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-094

Equipment ID No. NG MACC0003 Equip. Class Tanks and Heat Exchangers

Equipment Description Nitrogen Accumulator #3

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration is consistent with IPEEE pg. E-14
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
-

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-094

Equipment ID No. NG MACC0003 Equip. Class Tanks and Heat Exchangers

Equipment Description Nitrogen Accumulator #3

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

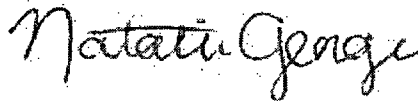
- For area walk-by checklist see AWC-021

Evaluated by: Dinesh Patel



Date: 10/4/12

Natalie George



10/4/12

Sheet 4 of 4

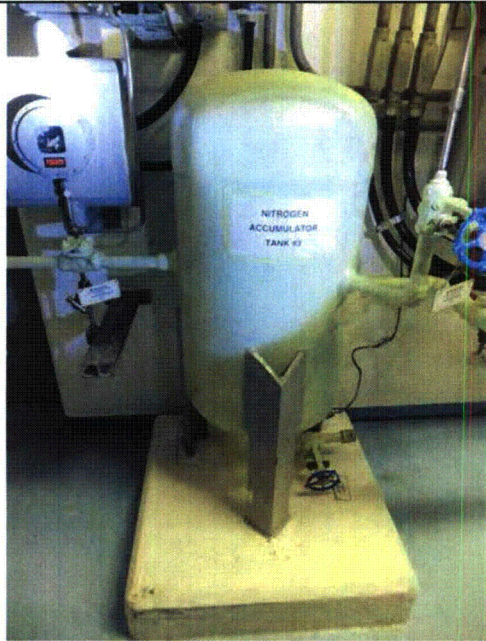
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-094

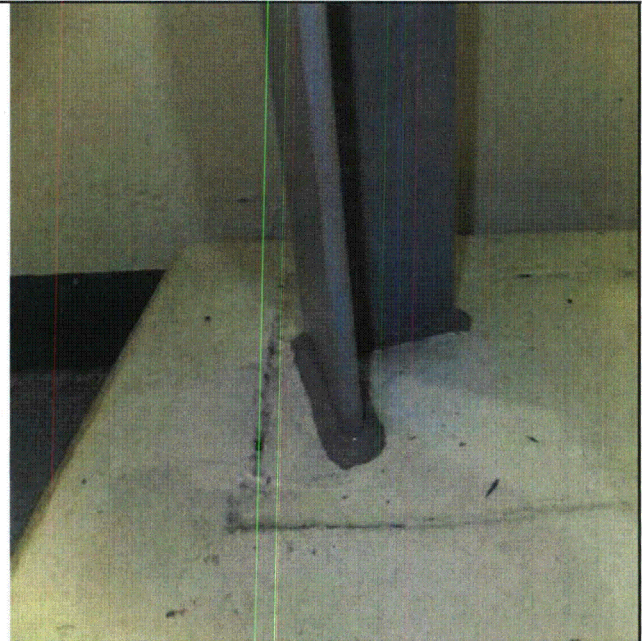
Equipment ID No. NG MACC0003 Equip. Class Tanks and Heat Exchangers

Equipment Description Nitrogen Accumulator #3

Photographs



Note: Nitrogen Accumulator #3



Note: Welds at base of leg

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-095

Equipment ID No. EGAMCMP0002-A Equip. Class¹ Air Compressors

Equipment Description EG A Air Compressor A2

Location: Bldg. RAB Floor El. +21 Room, Area Room 221, Col. 3A, Line J

Manufacturer, Model, Etc. (optional but recommended) Kellogg-American Inc., 352TV

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
 - EG A Air Compressor A2 is bolted to top of EGA Air Receiver A2

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All anchorage accounted for and in good shape

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - EG A Air Compressor A2 is bolted to top of EGA Air Receiver A2; no cracks in concrete near receiver anchorage

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-095

Equipment ID No. EGAMCMP0002-A Equip. Class Air Compressors

Equipment Description EG A Air Compressor A2

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
• No seismic concern

Interaction Effects

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

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

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

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-095

Equipment ID No. EGAMCMP0002-A Equip. Class Air Compressors

Equipment Description EG A Air Compressor A2

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-045

Natalie George

Evaluated by: Natalie George

Date: 10/8/12

Chu-Chieh Lin

Chu-Chieh Lin

10/8/12

Sheet 4 of 4

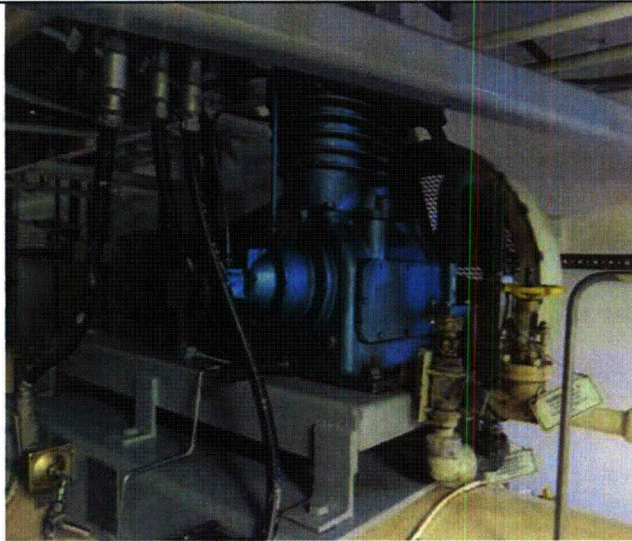
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-095

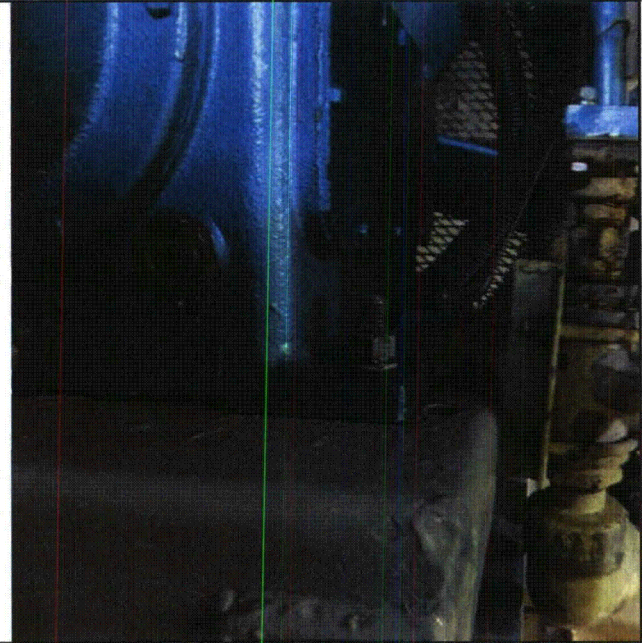
Equipment ID No. EGAMCMP0002-A Equip. Class Air Compressors

Equipment Description EG A Air Compressor A2

Photographs



Note: EG A Air Compressor A2



Note: EG A Air Compressor A2 anchorage to skid

Sheet 1 of 4

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL1-096**Equipment ID No. EGAMRCR0002-A Equip. Class¹ Tanks and Heat ExchangersEquipment Description (Air Receiver) EGA Air Receiver A2Location: Bldg. RAB Floor El. +21 Room, Area Room 221, Col. 3A, Line KManufacturer, Model, Etc. (optional but recommended) Cooper Ind. Inc./Bessemer, 207V2410001**Instructions for Completing Checklist**

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion, anchorage painted

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-096

Equipment ID No. EGAMRCR0002-A Equip. Class Tanks and Heat Exchangers

Equipment Description (Air Receiver) EGA Air Receiver A2

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration consistent with plant documentation
(Drawing no. 1564-2060 and IPEEE pg. E-61)
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-096

Equipment ID No. EGAMRCR0002-A Equip. Class Tanks and Heat Exchangers

Equipment Description (Air Receiver) EGA Air Receiver A2

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-045

Natalie George

Evaluated by: Natalie George

Date: 10/8/12

Chu-Chieh Lin

Chu-Chieh Lin

10/8/12

Sheet 4 of 4

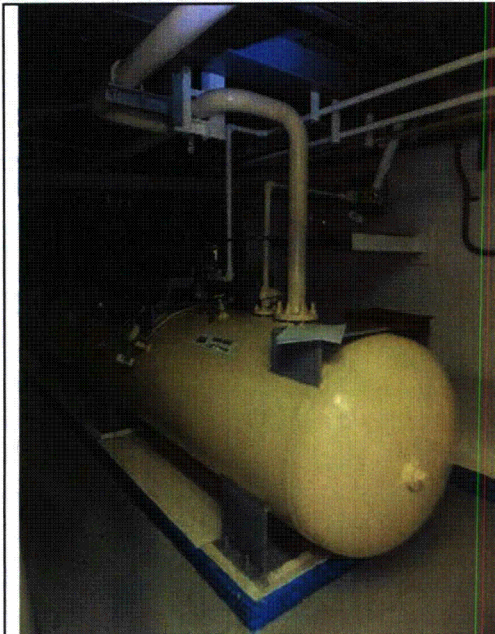
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-096

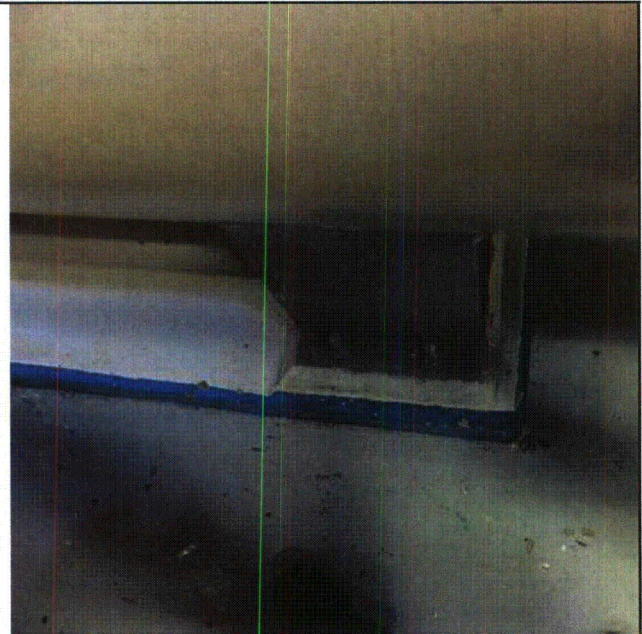
Equipment ID No. EGAMRCR0002-A Equip. Class Tanks and Heat Exchangers

Equipment Description (Air Receiver) EGA Air Receiver A2

Photographs



Note: EGA Air Receiver A2



Note: Example of EGA Air Receiver A2 anchorage

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-097

Equipment ID No. 4KVESWGR3B Equip. Class¹ Medium Voltage, Metal-Clad Switchgear

-OR- SWGR-3B3S

Equipment Description Switchgear 3B

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

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

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
 - Only opened panels 1-5, 12, and 15. The rest will be deferred until later when they are available.
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

See Attachment K - Revision 1

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-097

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

-OR- SWGR-3B3S

Equipment Description Switchgear 3B

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

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

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting,
and masonry block walls not likely to collapse onto the equipment? Y N U N/A
• Lighting is in walk path. It is not over equipment.

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

10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U
• Questions 7-9 verified.

See Attachment K - Revision 1

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-097

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

-OR- SWGR-3B3S

Equipment Description Switchgear 3B

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- Anchorage in panels that were opened is in good condition. All internals were well mounted.
- Panels 2 and 4 have two possibly missing bolts. Refer to photo.

Evaluated by: Brian Pace Date: 10-16-2012

Chu-Chieh Lin 10-16-2012

Sheet 4 of 4

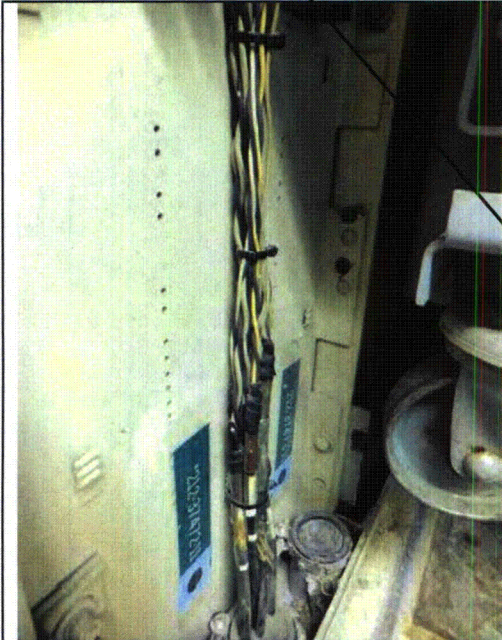
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-097

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

Equipment Description Switchgear 3B

Photographs



Note: Possible missing bolts. They do not pose a seismic concern though.

Note:

See Attachment K - Revision 1

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. FS EBKR314A-5D Equip. Class¹ Motor Control Centers and Wall-Mounted
Contactors

Equipment Description FUEL POOL PURIFICATION PUMP CIRCUIT BREAKER

Location: Bldg. FHB Floor El. +1 Room, Area Room B151 Col 1FH, Line V

Manufacturer, Model, Etc. (optional but recommended) Westinghouse Electric Corporation, HMCP050K2

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. FS EBKR314A-5D Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description FUEL POOL PURIFICATION PUMP CIRCUIT BREAKER

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
-

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. FS EBKR314A-5D Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description FUEL POOL PURIFICATION PUMP CIRCUIT BREAKER

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. FS EBKR314A-5D Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description FUEL POOL PURIFICATION PUMP CIRCUIT BREAKER

Photographs

Note:	Note:

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-002

Equipment ID No. FS EBKR314A-5M Equip. Class¹ Motor Control Centers and Wall-Mounted Contactors

Equipment Description Fuel Pool Pump A Circuit Breaker

Location: Bldg. FHB Floor El. +1 Room, Area Room B151, Col. 1FH, Line V

Manufacturer, Model, Etc. (optional but recommended) Westinghouse Electric Corporation, HMCP100R3

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-002

Equipment ID No. FS EBKR314A-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description Fuel Pool Pump A Circuit Breaker

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
-

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-002

Equipment ID No. FS EBKR314A-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description Fuel Pool Pump A Circuit Breaker

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-002

Equipment ID No. FS EBKR314A-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description Fuel Pool Pump A Circuit Breaker

Photographs

Note:	Note:

Note:	Note:

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. FS EBKR314B-6F Equip. Class¹ Motor Control Centers and Wall-Mounted Contactors

Equipment Description REFUELING CANAL DRAIN PUMP CIRCUIT BREAKER

Location: Bldg. FHB Floor El. +1 Room, Area Room B151, Col. 2FH, Line W

Manufacturer, Model, Etc. (optional but recommended) Westinghouse Electric Corp., HMCP030H1

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. FS EBKR314B-6F Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description REFUELING CANAL DRAIN PUMP CIRCUIT BREAKER

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
-

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. FS EBKR314B-6F Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description REFUELING CANAL DRAIN PUMP CIRCUIT BREAKER

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. FS EBKR314B-6F Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description REFUELING CANAL DRAIN PUMP CIRCUIT BREAKER

Photographs

Note:

Note:

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. CC EBKR90A-21 Equip. Class Low Voltage Switchgear and Breaker Panels

Equipment Description MAIN FUEL POOL HX TCV CHANNEL A SOL (CC-620)

Location: Bldg. RAB Floor El. +35 Room, Area Room 262, Col. 11A, Line G

Manufacturer, Model, Etc. (optional but recommended) Heinemann Electric, CD2G3U52402

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
 - Bolts on panel ID EPDP90A are not bent, broken, missing, or loose.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No visible corrosion on bolts.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - There are two surface cracks in the concrete that lead up and through an anchor bolt on both sides of cabinet ID EPDP90A. These cracks appear only to be surface cracks and do not affect the structural capacity of the bolts. There is no seismic concern in this case.

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. CC EBKR90A-21 Equip. Class Low Voltage Switchgear and Breaker Panels

Equipment Description MAIN FUEL POOL HX TCV CHANNEL A SOL (CC-620)

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
• Questions 2-4 satisfied; no seismic concern

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
• A block wall is located behind cabinet ID EPDP90A. The block wall is acceptable per drawing no. G756 sh. 2, calculation no. Civil Seismic Block Wall, and FSAR Section 3.8.4.8

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
• Rigid conduits penetrate the top of ID EPDP90A. These conduits are acceptable per B288, S19-1.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U
• Questions 7-9 satisfied

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. CC EBKR90A-21 Equip. Class Low Voltage Switchgear and Breaker Panels

Equipment Description MAIN FUEL POOL HX TCV CHANNEL A SOL (CC-620)

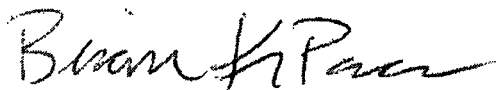
Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- ID EPDP90A cabinet is attached to a vertical wide flange structural member at three locations. Vertical wide flange is welded to a base plate at the bottom and to a structural member at the top.
- On opposite side of the cabinet, there are 12 stitch welds that are 2" long welded to a vertical wide flange member. This wide flange is welded to base plate at the bottom.
- On the first panel from the left inside ID EPDP90A, two of 18 bolts are missing from the panel cover. This is not a seismic concern. WR-161979 previously initiated to address this condition.
- On the third panel from the left inside ID EPDP90A, three of 18 bolts are missing from the panel cover. This is not a seismic concern. WR-161979 previously initiated to address this condition.
- For area walk-by checklist see AWC-052

Evaluated by: Brian Pace



Date: 10-10-2012

Dinesh Patel



10-10-2012

Sheet 4 of 5

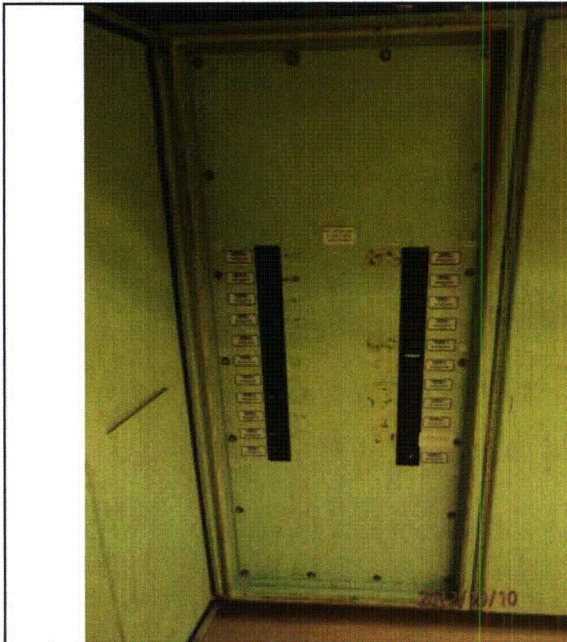
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. CC EBKR90A-21 Equip. Class Low Voltage Switchgear and Breaker Panels

Equipment Description MAIN FUEL POOL HX TCV CHANNEL A SOL (CC-620)

Photographs



Note: Inside panel with CC EBKR90A-21



Note: This surface crack leads to an anchor bolt, but it is not a seismic or structural concern (same on other side)

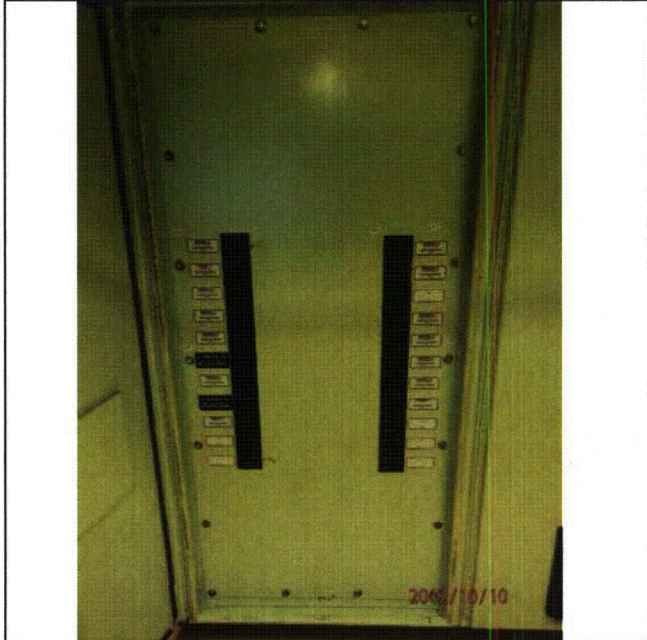
Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. CC EBKR90A-21 Equip. Class Low Voltage Switchgear and Breaker Panels

Equipment Description MAIN FUEL POOL HX TCV CHANNEL A SOL (CC-620)



Note: Third cabinet from the left on ID EPDP90A has three missing bolts of its 18 total.

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-005

Equipment ID No. CC EBKR91B-21 Equip. Class¹ Low Voltage Switchgear and Breaker Panels

Equipment Description MAIN FUEL POOL HX TCV CHANNEL B SOL (CC-620)

Location: Bldg. RAB Floor El. +35 Room, Area Room 262, Col. 11A, Line K

Manufacturer, Model, Etc. (optional but recommended) Heinemann Electric Company, CD2G3U52402

Instructions for Completing Checklist

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-005

Equipment ID No. CC EBKR91B-21 Equip. Class Low Voltage Switchgear and Breaker Panels

Equipment Description MAIN FUEL POOL HX TCV CHANNEL B SOL (CC-620)

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.)
- Configuration of bolts between switchgear and frame are verified based on drawing no. 5817-4669. No documents available to verify frame anchorage to ground.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- No seismic concern

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
- Block walls acceptable per drawing no. G765 sh. 2, calculation no. Civil Seismic Block Walls, and FSAR Section 3.8.4.8
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
- Rigid conduit acceptable per drawing no. B-288, Sh. 19-1
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-005

Equipment ID No. CC EBKR91B-21 Equip. Class Low Voltage Switchgear and Breaker Panels

Equipment Description MAIN FUEL POOL HX TCV CHANNEL B SOL (CC-620)

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-053

Natalie George

Evaluated by: Natalie George

Date: 10/15/12

Chu-Chieh Lin

Chu-Chieh Lin

10/15/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-005

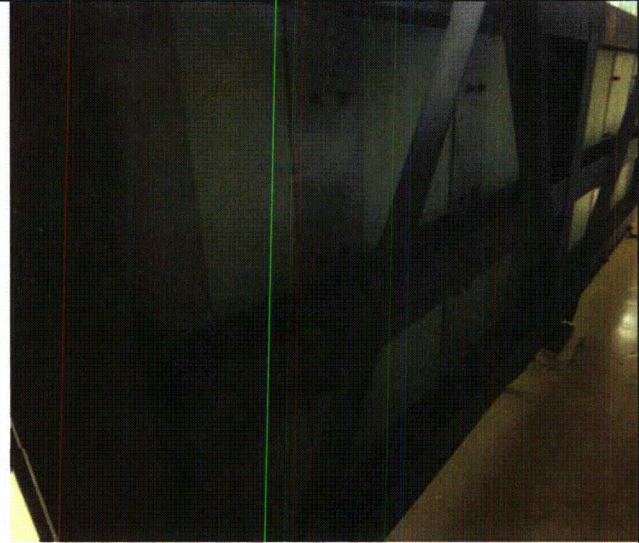
Equipment ID No. CC EBKR91B-21 Equip. Class Low Voltage Switchgear and Breaker Panels

Equipment Description MAIN FUEL POOL HX TCV CHANNEL B SOL (CC-620)

Photographs



Note: Main Fuel Pool HX TCV Channel B SOL (CC-620)



Note: Bolts between switchgear and frame

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. FS EBKR314B-5M Equip. Class¹ Motor Control Centers and Wall-Mounted Contactors

Equipment Description Fuel Pool Pump B

Location: Bldg. FHB Floor El. +1 Room, Area Room B151, Col. 2FH, Line W

Manufacturer, Model, Etc. (optional but recommended) Gould, Inc., EF3A100

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. FS EBKR314B-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description Fuel Pool Pump B

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

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

Interaction Effects

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

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

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

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. FS EBKR314B-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description Fuel Pool Pump B

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. FS EBKR314B-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description Fuel Pool Pump B

Photographs

Note:

Note:

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. FS EOL314A-5M Equip. Class: Motor Control Centers and Wall-Mounted Contactors

Equipment Description FUEL POOL PUMP A TOL

Location: Bldg. FHB Floor El. +1 Room, Area Room B151, Col. 1FH, Line V

Manufacturer, Model, Etc. (optional but recommended) Gould Inc., A203FT58

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. FS EOL314A-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description FUEL POOL PUMP A TOL

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
-

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. FS EOL314A-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description FUEL POOL PUMP A TOL

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. FS EOL314A-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description FUEL POOL PUMP A TOL

Photographs

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Note:

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Note:

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-008

Equipment ID No. FS EOL314B-5M Equip. Class¹ Motor Control Centers and Wall-Mounted Contactors

Equipment Description FUEL POOL PUMP B TOL

Location: Bldg. FHB Floor El. +1 Room, Area Room B152, Col. 2FH, Line W

Manufacturer, Model, Etc. (optional but recommended) Gould Inc., E20FOL1

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-008

Equipment ID No. FS EOL314B-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description FUEL POOL PUMP B TOL

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
-

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-008

Equipment ID No. FS EOL314B-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description FUEL POOL PUMP B TOL

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-008

Equipment ID No. FS EOL314B-5M Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description FUEL POOL PUMP B TOL

Photographs

Note:

Note:

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-009

Equipment ID No. FS EOL314B-6F Equip. Class: Motor Control Centers and Wall-Mounted Contactors

Equipment Description REFUELING CANAL DRAIN PMP TOL

Location: Bldg. FHB Floor El. +1 Room, Area Room B152, Col. 2FH, Line W

Manufacturer, Model, Etc. (optional but recommended) Gould, Inc. A203C12

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-009

Equipment ID No. FS EOL314B-6F Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description REFUELING CANAL DRAIN PMP TOL

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
-

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-009

Equipment ID No. FS EOL314B-6F Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description REFUELING CANAL DRAIN PMP TOL

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: _____

Sheet 4 of 4

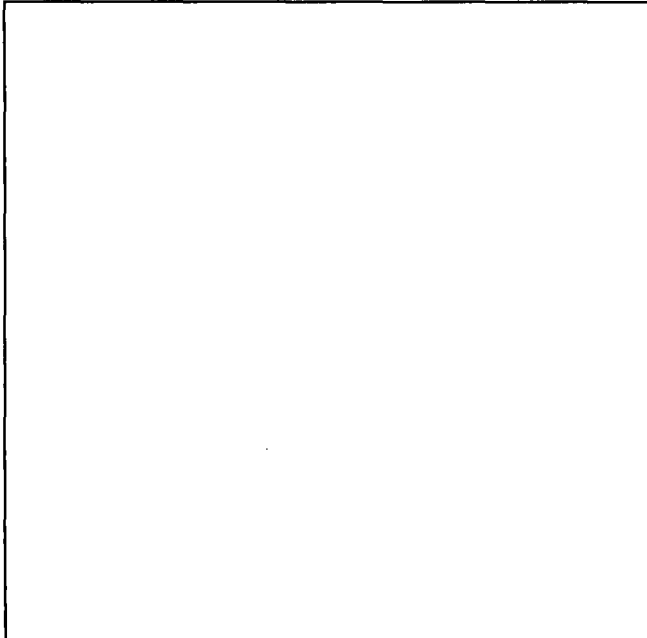
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Seismic Walkdown Checklist (SWC) SWEL2-009

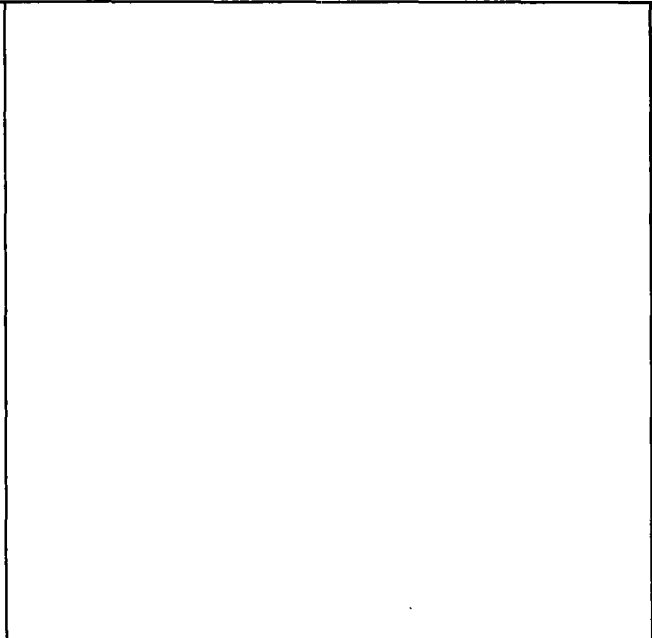
Equipment ID No. FS EOL314B-6F Equip. Class Motor Control Centers and Wall-Mounted Contactors

Equipment Description REFUELING CANAL DRAIN PMP TOL

Photographs



Note:



Note:

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-010

Equipment ID No. CC EMTR3A-2 Equip. Class¹ Horizontal Pumps

Equipment Description Component Cooling Water Pump A

Location: Bldg. RAB Floor El. +21 Room, Area Room 235, Col. 5A, Line K

Manufacturer, Model, Etc. (optional but recommended) Siemens-Allis, Inc., 135

Instructions for Completing Checklist

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion on anchorage
 - Anchorage painted

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-010

Equipment ID No. CC EMTR3A-2 Equip. Class Horizontal Pumps

Equipment Description Component Cooling Water Pump A

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration is consistent with plant documentation
(Drawing no. 1564-1347 and IPEEE pg. E-72)
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-010

Equipment ID No. CC EMTR3A-2 Equip. Class Horizontal Pumps

Equipment Description Component Cooling Water Pump A

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-022

Natalie George

Evaluated by: Natalie George

Date: 10/8/12

Chu-Chieh Lin

Chu-Chieh Lin

10/8/12

Sheet 4 of 4

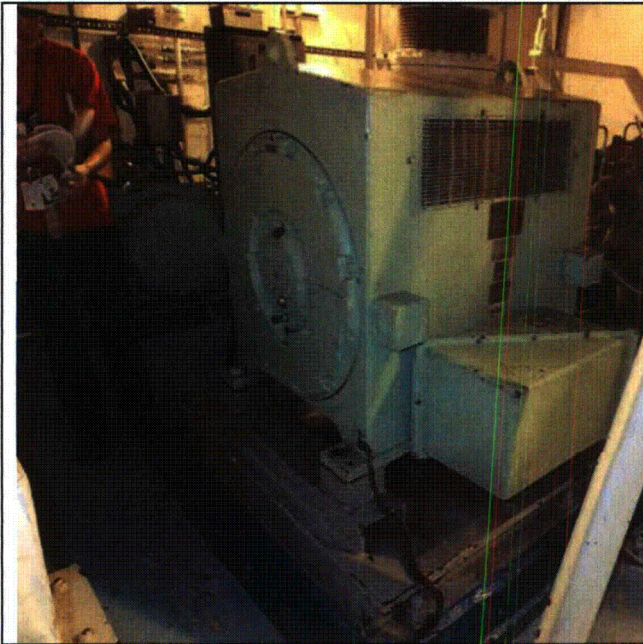
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-010

Equipment ID No. CC EMTR3A-2 Equip. Class Horizontal Pumps

Equipment Description Component Cooling Water Pump A

Photographs



Note: Component Cooling Water Pump A

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-011

Equipment ID No. CC MPMP0001-A Equip. Class¹ Horizontal Pumps

Equipment Description Component Cooling Water Pump A

Location: Bldg. RAB Floor El. +21 Room, Area Room 235, Col. 5A, Line K

Manufacturer, Model, Etc. (optional but recommended) Babcock & Wilcox Company, 12X14X16

Instructions for Completing Checklist

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - Mild corrosion; no seismic concern

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

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

Sheet 2 of 5Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL2-011**Equipment ID No. CC MPMP0001-A Equip. Class Horizontal PumpsEquipment Description Component Cooling Water Pump A

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 configuration is consistent with plant documentation (IPEEE pg. E-72)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- No seismic concern

Interaction Effects

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

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-011

Equipment ID No. CC.MPMP0001-A Equip. Class Horizontal Pumps

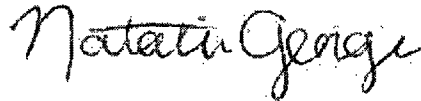
Equipment Description Component Cooling Water Pump A

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- No tag identifying the equipment was found; used drawing no. 1564-1347, IPEEE pg. E-72, and Manufacturer name to verify the equipment to be evaluated
- Leakage and mild corrosion around base of pump; no seismic concern. WR-288202 previously initiated for this condition.
- For area walk-by checklist see AWC-022



Evaluated by: Natalie George

Date: 10/8/12

Chu-Chieh Lin



10/8/12

Sheet 4 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-011

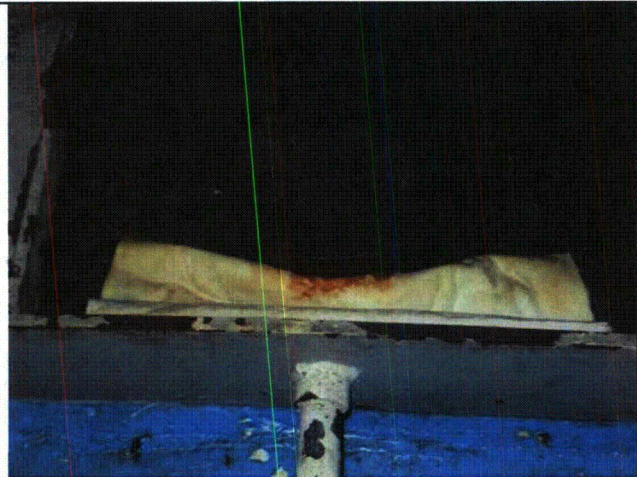
Equipment ID No. CC MPMP0001-A Equip. Class Horizontal Pumps

Equipment Description Component Cooling Water Pump A

Photographs



Note: Leakage and mild corrosion around base of pump



Note: Leakage and mild corrosion around base of pump

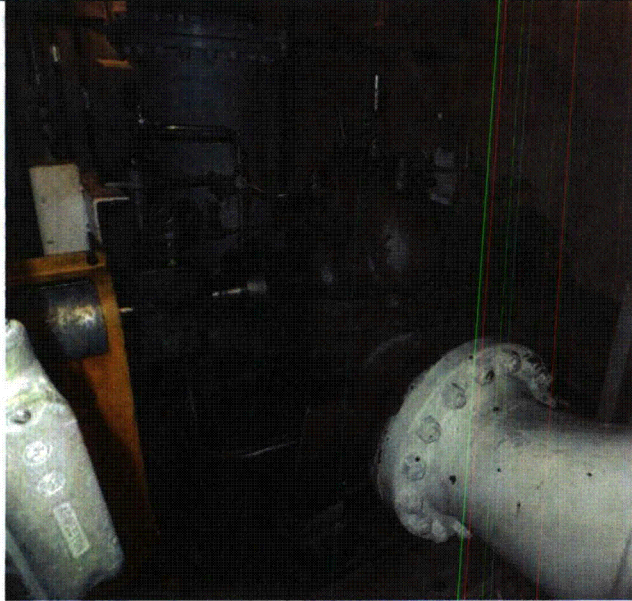
Sheet 5 of 5

Status: Y N U

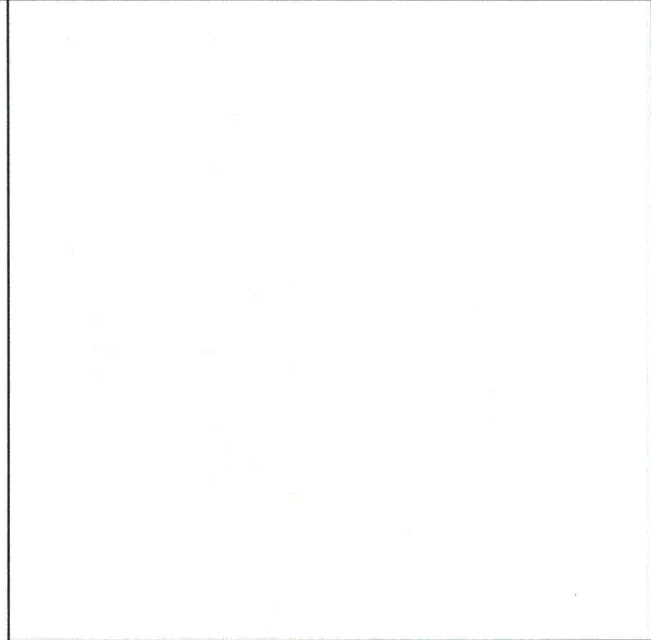
Seismic Walkdown Checklist (SWC) SWEL2-011

Equipment ID No. CC MPMP0001-A Equip. Class Horizontal Pumps

Equipment Description Component Cooling Water Pump A



Note: Component Cooling Water Pump A



Note:

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-012

Equipment ID No. FS EMTR314A-5M Equip. Class¹ Horizontal Pumps

Equipment Description Fuel Pool Pump A Motor

Location: Bldg. FHB Floor El. +1 Room, Area Room B156, Col. 3FH, Line T

Manufacturer, Model, Etc. (optional but recommended) Westinghouse Electric Corporation, TBDP74C15518

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
 - Anchors are accounted for and in good condition

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-012

Equipment ID No. FS EMTR314A-5M Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump A Motor

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration consistent with plant documentation
(Drawing 1564-702 and G595)
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concerns

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-012

Equipment ID No. FS EMTR314A-5M Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump A Motor

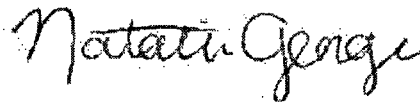
Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

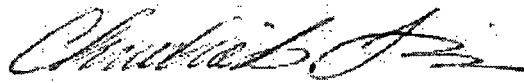
- For area walk-by checklist see AWC-048

Evaluated by: Natalie George



Date: 10/10/12

Chu-Chieh Lin



10/10/12

Sheet 4 of 4

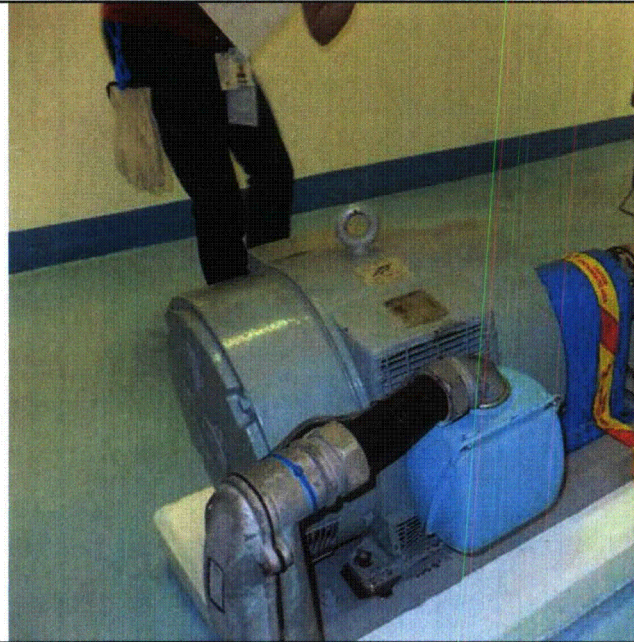
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-012

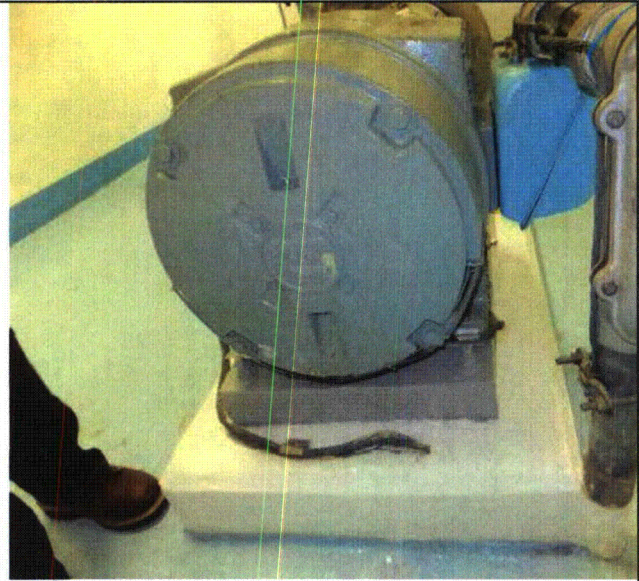
Equipment ID No. FS EMTR314A-5M Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump A Motor

Photographs



Note: Fuel Pool Pump A Motor



Note: Example of Fuel Pool Pump A Motor anchorage

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-013

Equipment ID No. FS EMTR314B-5M Equip. Class¹ Horizontal Pumps

Equipment Description Fuel Pool Pump B Motor

Location: Bldg. FHB Floor El. +1 Room, Area Room B157, Col. 2FH, Line T

Manufacturer, Model, Etc. (optional but recommended) Westinghouse Electric Corp., TBDP

Instructions for Completing Checklist

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-013

Equipment ID No. FS EMTR314B-5M Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump B Motor

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration consistent with plant documentation
(Drawing no. G595 and 1564-702)
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-013

Equipment ID No. FS EMTR314B-5M Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump B Motor

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-049

Natalie George

Evaluated by: Natalie George

Date: 10/12/12

Chu-Chieh Lin

Chu-Chieh Lin

10/12/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-013

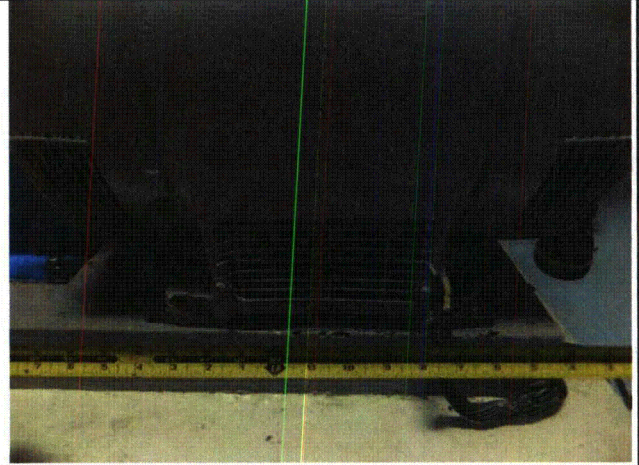
Equipment ID No. FS EMTR314B-5M Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump B Motor

Photographs



Note: Fuel Pool Pump B Motor



Note: Fuel Pool Pump B Motor anchorage

Sheet 1 of 5

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL2-014**Equipment ID No. FS EMTR314B-6F Equip. Class¹ Horizontal PumpsEquipment Description Refueling Canal Drain Pump MotorLocation: Bldg. FHB Floor El. -35 Room, Area Room B58, Col. 4FH, Line VManufacturer, Model, Etc. (optional but recommended) Allis Chalmers Corp., RG213T**Instructions for Completing Checklist**

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
 - Motor mounted to pump skid, skid mounted to concrete
 - Item not one of the 50% of SWEL items requiring anchorage configuration verification
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - Four bolts used to mount motor to pump skid, bolts in good condition
 - Four bolts used to mount skid to concrete, bolts in good condition; see drawing G501, S03
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion was found on any anchorage
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - No visible cracks in concrete near the anchors mounting skid to concrete

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-014

Equipment ID No. FS EMTR314B-6F Equip. Class Horizontal Pumps

Equipment Description Refueling Canal Drain Pump Motor

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Item not one of the 50% of SWEL items requiring anchorage configuration verification
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- Questions 2-4 are satisfied; no seismic concern

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,
and masonry block walls not likely to collapse onto the equipment? Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
- One flexible conduit and a grounding cable connected to motor
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U
- Questions 7-9 satisfied

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-014

Equipment ID No. FS EMTR314B-6F Equip. Class Horizontal Pumps

Equipment Description Refueling Canal Drain Pump Motor

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- See AWC-050 for Area Walk-By Checklist

Evaluated by: Brian Pace



Date: 10-10-2012

Dinesh Patel



10-10-2012

Sheet 4 of 5

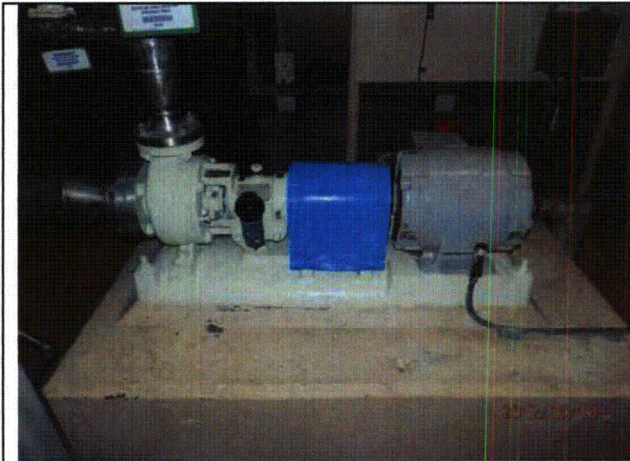
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Seismic Walkdown Checklist (SWC) SWEL2-014

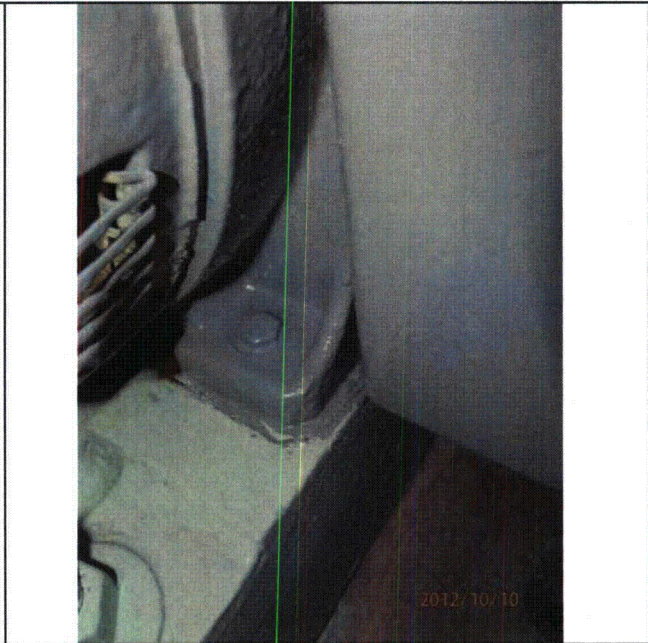
Equipment ID No. FS EMTR314B-6F Equip. Class Horizontal Pumps

Equipment Description Refueling Canal Drain Pump Motor

Photographs



Note: Refueling Canal Drain Pump and Motor



Note: Motor is well anchored to pump skid

Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-014

Equipment ID No. FS EMTR314B-6F Equip. Class Horizontal Pumps

Equipment Description Refueling Canal Drain Pump Motor



Note: Flexible conduit attached to motor

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-015

Equipment ID No. FS MPMP0001-A Equip. Class¹ Horizontal Pumps

Equipment Description Fuel Pool Pump A

Location: Bldg. FHB Floor El. +1 Room, Area Room B157, Col. 2FH, Line T

Manufacturer, Model, Etc. (optional but recommended) Crane Deming Pumps, 406680650999

Instructions for Completing Checklist

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-015

Equipment ID No. FS MPMP0001-A Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump A

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration consistent with plant documentation
(Drawing 1564-702 and G595)
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-015

Equipment ID No. FS MPMP0001-A Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump A

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-048

Natalie George

Evaluated by: Natalie George

Date: 10/10/12

Chu-Chieh Lin

Chu-Chieh Lin

10/10/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-015

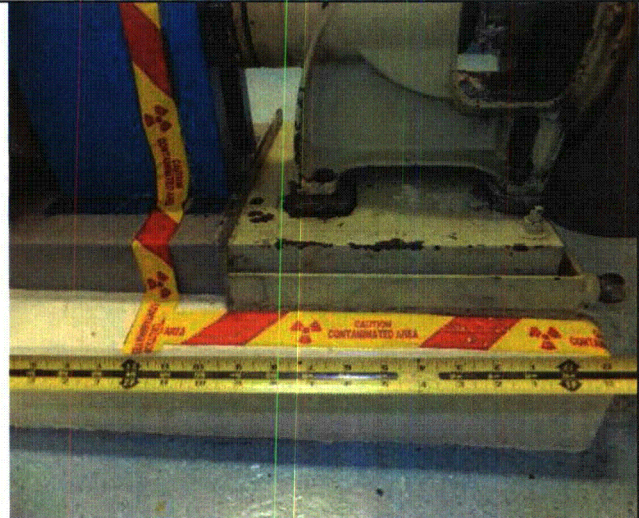
Equipment ID No. FS MPMP0001-A Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump A

Photographs



Note: Fuel Pool Pump A



Note: Example of Fuel Pool Pump A anchorage

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-016

Equipment ID No. FS MPMP0001-B Equip. Class¹ Horizontal Pumps

Equipment Description Fuel Pool Pump B

Location: Bldg. FHB Floor El. +1 Room, Area Room B157, Col. 3FH, Line T

Manufacturer, Model, Etc. (optional but recommended) Crane Deming Pumps, 406680650999

Instructions for Completing Checklist

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

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-016

Equipment ID No. FS MPMP0001-B Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump B

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Anchorage configuration consistent with plant documentation
(Drawing no. G595 and 1564-702)
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concern

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-016

Equipment ID No. FS MPMP0001-B Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump B

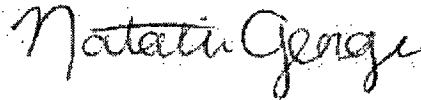
Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

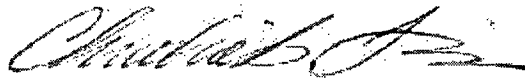
- Mild corrosion on pump; no seismic concern. WR-288204 previously initiated for this condition.
- No tag on equipment; verified based on manufacturer, plant location, and equipment drawings
- For area walk-by checklist see AWC-049

Evaluated by: Natalie George



Date: 10/12/12

Chu-Chieh Lin



10/12/12

Sheet 4 of 4

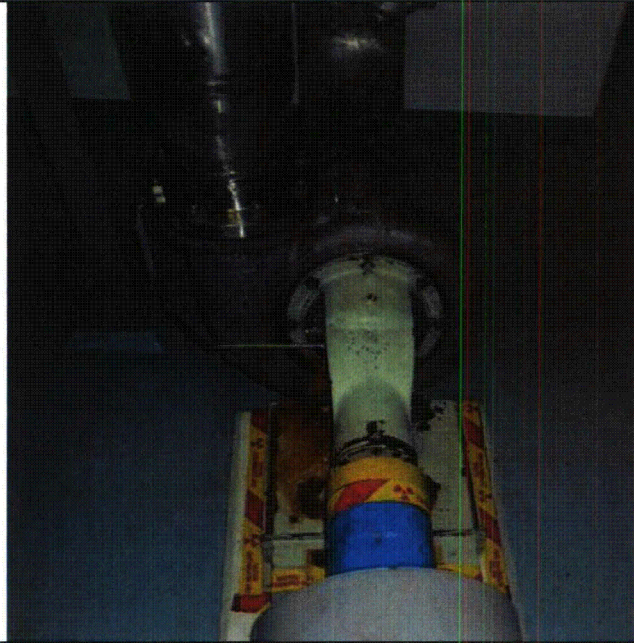
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Seismic Walkdown Checklist (SWC) SWEL2-016

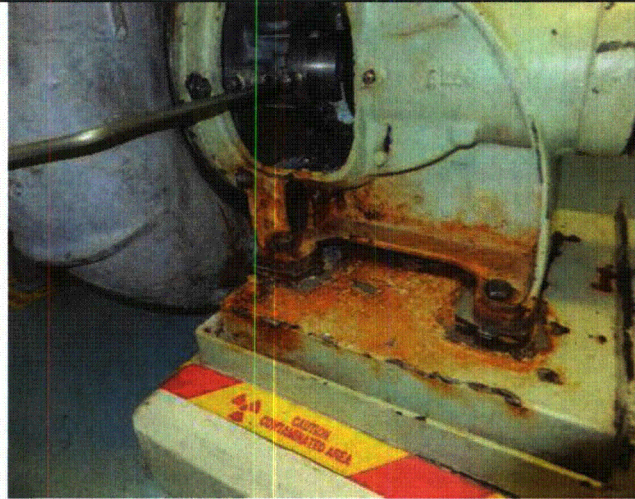
Equipment ID No. FS MPMP0001-B Equip. Class Horizontal Pumps

Equipment Description Fuel Pool Pump B

Photographs



Note: Fuel Pool Pump B



Note: Mild corrosion on pump

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-017

Equipment ID No. CC MVA620 Equip. Class¹ Pneumatic-Operated Valves
-OR- 3CC-FM138A/B

Equipment Description Fuel Pool Heat Exchanger Temperature Control

Location: Bldg. FHB Floor El. +1 Room, Area Room B161, Col. 1FH, Line U

Manufacturer, Model, Etc. (optional but recommended) Fisher Controls Company, Inc., 9211-12"

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - In-line component; all valve related hardware is accounted for and in good condition

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion on valve hardware, painted

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-017

Equipment ID No. CC MVA620 Equip. Class Pneumatic-Operated Valves
-OR- 3CC-FM138A/B

Equipment Description Fuel Pool Heat Exchanger Temperature Control

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
• In-line component
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
• In-line component, N/A; no seismic concerns

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
• Fluorescent lights do not have cages, no seismic concern
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-017

Equipment ID No. CC MVA620 Equip. Class Pneumatic-Operated Valves
-OR- 3CC-FM138A/B

Equipment Description Fuel Pool Heat Exchanger Temperature Control

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-046

Evaluated by: Natalie George  Date: 10/10/12

Chu-Chieh Lin  10/10/12

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-017

Equipment ID No. CC MVAAA620 Equip. Class Pneumatic-Operated Valves
-OR- 3CC-FM138A/B

Equipment Description Fuel Pool Heat Exchanger Temperature Control

Photographs



Note: Fuel Pool Heat Exchanger Temperature Control

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-018

Equipment ID No. CC ISV0620-1 Equip. Class¹ Motor-Operated and Solenoid-Operated Valves
-OR- 3CC-FM138A/B

Equipment Description SV FOR CC-620

Location: Bldg. FHB Floor El. +1 Room, Area Room B161, Col. 1FH, Line V

Manufacturer, Model, Etc. (optional but recommended) ASCO, NPX832058E

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
 - Item not one of the 50% of SWEL items requiring anchorage configuration verification

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All anchorage accounted for and in good condition

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - Component attached to support, support attached to wall; no cracks in concrete around support anchorage

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-018

Equipment ID No. CC ISV0620-1 Equip. Class Motor-Operated and Solenoid-Operated Valves
-OR- 3CC-FM138A/B

Equipment Description SV FOR CC-620

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Item not one of the 50% of SWEL items requiring anchorage
configuration verification
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concern
-

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
- Florescent lights do not have cages, no seismic concern
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-018

Equipment ID No. CC ISV0620-1 Equip. Class Motor-Operated and Solenoid-Operated Valves
-OR- 3CC-FM138A/B

Equipment Description SV FOR CC-620

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-046

Natalie George

Evaluated by: Natalie George

Date: 10/10/12

Chu-Chieh Lin

Chu-Chieh Lin

10/10/12

Sheet 4 of 5

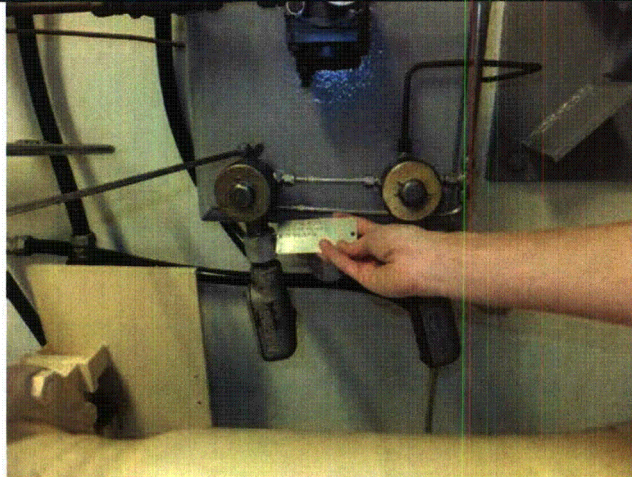
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Seismic Walkdown Checklist (SWC) SWEL2-018

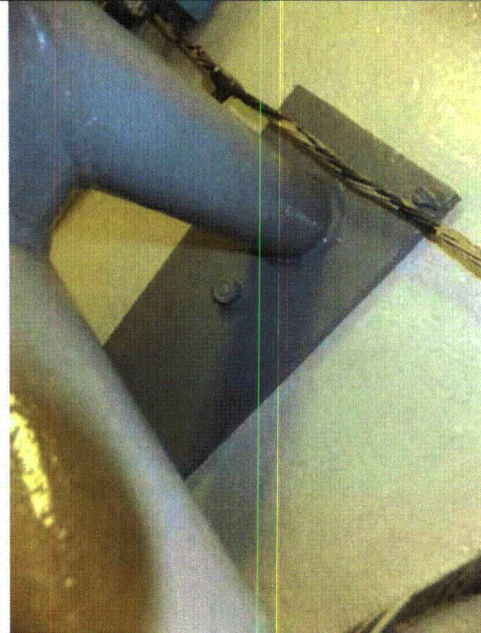
Equipment ID No. CC ISV0620-1 Equip. Class Motor-Operated and Solenoid-Operated Valves
-OR- 3CC-FM138A/B

Equipment Description SV FOR CC-620

Photographs



Note: SV for CC-620



Note: Support anchorage to wall

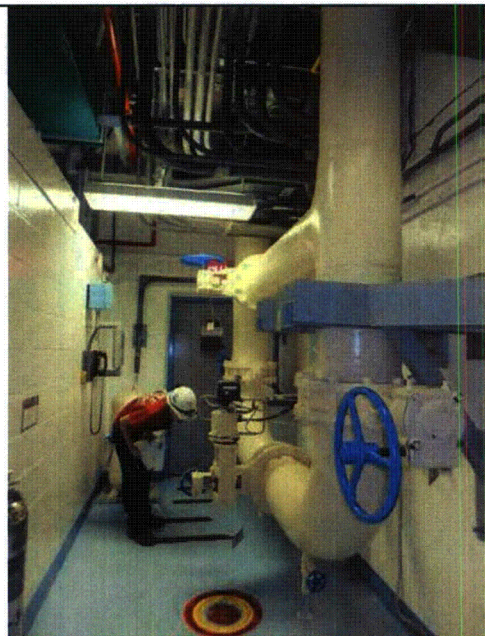
Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-018

Equipment ID No. CC ISV0620-1 Equip. Class Motor-Operated and Solenoid-Operated Valves
-OR- 3CC-FM138A/B

Equipment Description SV FOR CC-620



Note: Florescent lights do not have cages

Sheet 1 of 5

Status: Y N U **Seismic Walkdown Checklist (SWC) SWEL2-019**Equipment ID No. CC ISV0620-2 Equip. Class¹ Motor-Operated and Solenoid-Operated ValvesEquipment Description SV FOR CC-620Location: Bldg. FHB Floor El. +1 Room, Area Room B161, Col. 1FH, Line VManufacturer, Model, Etc. (optional but recommended) MPX832058E**Instructions for Completing Checklist**

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
 - Item not one of the 50% of SWEL items requiring anchorage configuration verification
2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All anchorage is accounted for and in good condition
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - All anchorage is free of corrosion, painted
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - Component is attached to support, support is anchored to wall; no cracks in concrete around support

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-019

Equipment ID No. CC ISV0620-2 Equip. Class Motor-Operated and Solenoid-Operated Valves

Equipment Description SV FOR CC-620

-
5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
- Item not one of the 50% of SWEL items requiring anchorage
configuration verification
6. Based on the above anchorage evaluations, is the anchorage free of
potentially adverse seismic conditions? Y N U
- No seismic concern
-

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
- Fluorescent lights do not have cages, no seismic concern
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-019

Equipment ID No. CC ISV0620-2 Equip. Class Motor-Operated and Solenoid-Operated Valves

Equipment Description SV FOR CC-620

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-046

Natalie George

Evaluated by: Natalie George

Date: 10/10/12

Chu-Chieh Lin

Chu-Chieh Lin

10/10/12

Sheet 4 of 5

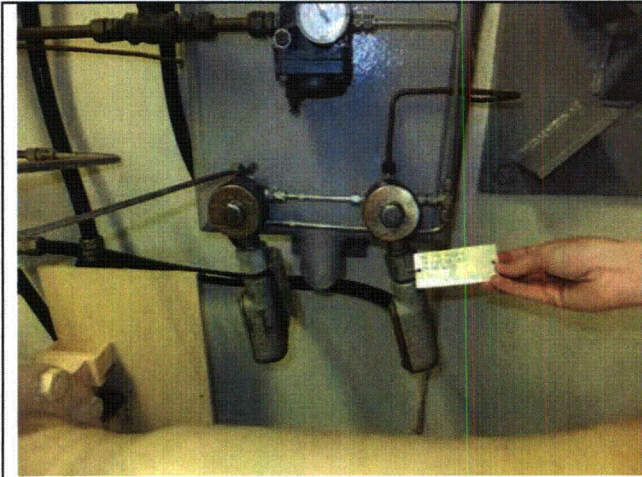
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Seismic Walkdown Checklist (SWC) SWEL2-019

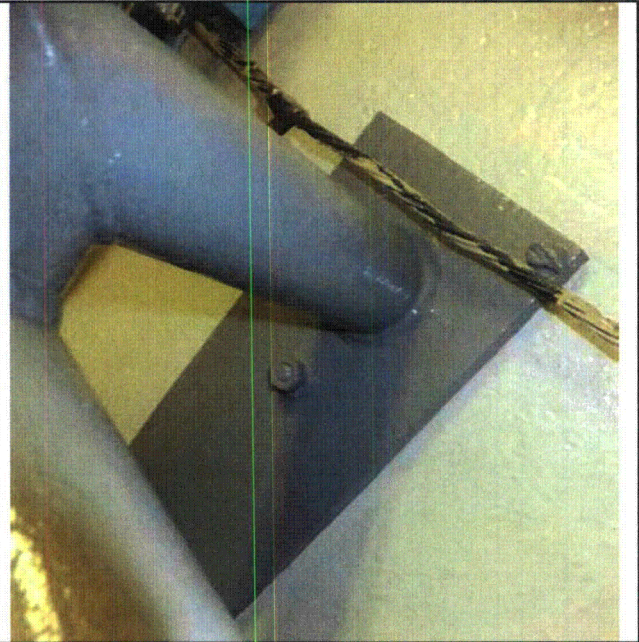
Equipment ID No. CC ISV0620-2 Equip. Class Motor-Operated and Solenoid-Operated Valves

Equipment Description SV FOR CC-620

Photographs



Note: SV for CC-620



Note: Support anchorage to wall

Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-019

Equipment ID No. CC ISV0620-2 Equip. Class Motor-Operated and Solenoid-Operated Valves

Equipment Description SV FOR CC-620



Note: Fluorescent lights do not have cages

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-020

Equipment ID No. FS MHX0001 Equip. Class¹ Tanks and Heat Exchangers

Equipment Description Fuel Pool Heat Exchanger Tube Side

Location: Bldg. FHB Floor El. +1 Room, Area Col. 2FH, Line U

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

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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 anchors are free of bent and missing hardware.

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-020

Equipment ID No. FS MHX0001 Equip. Class Tanks and Heat Exchangers

Equipment Description Fuel Pool Heat Exchanger Tube Side

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 configuration consistent with plant documentation (Drawing no. 1564-157 and G595)

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

- Questions 2-5 satisfied

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

Fluorescent lighting without caging is present over the equipment. However, these bulbs falling on the heat exchanger pose no seismic concern and the fixture itself is rigidly mounted.

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

- Questions 7-9 satisfied

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-020

Equipment ID No. FS MHX0001 Equip. Class Tanks and Heat Exchangers

Equipment Description Fuel Pool Heat Exchanger Tube Side

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-047

Evaluated by: Brian Pace



Date: 10-10-2012

Dinesh Patel



10-10-2012

Sheet 4 of 4

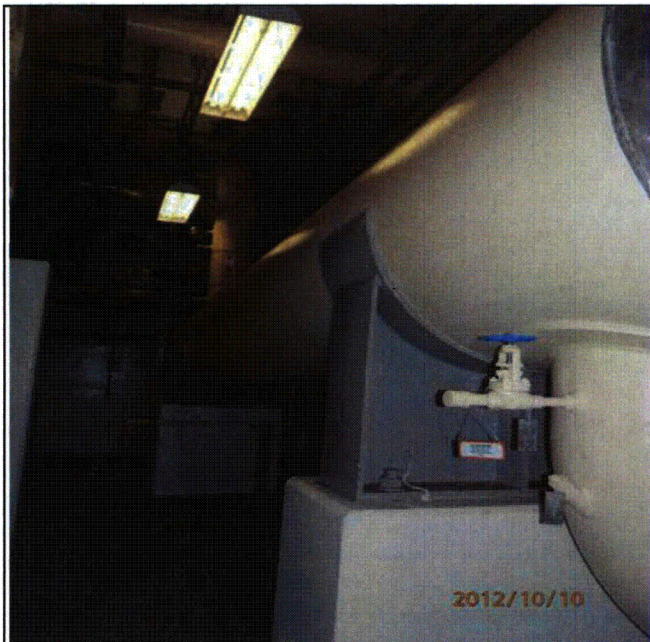
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-020

Equipment ID No. FS MHX0001 Equip. Class Tanks and Heat Exchangers

Equipment Description Fuel Pool Heat Exchanger Tube Side

Photographs



Note: Fuel Pool Heat Exchanger



Note: Example of anchorage on Fuel Pool Heat Exchanger

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-021

Equipment ID No. FS MHX0002 Equip. Class¹ Tanks and Heat Exchangers

Equipment Description Back-Up Fuel Pool Heat Exchanger PO#J11-100014

Location: Bldg. FHB Floor El. -35 Room, Area Col. 3FH, Line T

Manufacturer, Model, Etc. (optional but recommended) Yuba Heat Transfer Corp., SFC1A

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to 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
 - One of the four 3/4" diameter bolts has a loose nut. All other hardware is accounted for and in good condition. CR-WF3-2012-05698 was initiated for this condition.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
 - No corrosion was found on anchorage, painted

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
 - Concrete pedestal has no visible cracks

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-021

Equipment ID No. FS MHX0002 Equip. Class Tanks and Heat Exchangers

Equipment Description Back-Up Fuel Pool Heat Exchanger PO#J11-100014

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 configuration consistent with plant documentation (Drawings 5817-8938 S01, S02, and S03)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- One of the anchor bolts has a loose nut (see question #2).

Interaction Effects

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

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-021

Equipment ID No. FS MHX0002 Equip. Class Tanks and Heat Exchangers

Equipment Description Back-Up Fuel Pool Heat Exchanger PO#J11-100014

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- For area walk-by checklist see AWC-051

Evaluated by: Brian Pace



Date: 10-10-2012

Dinesh Patel



10-10-2012

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-021

Equipment ID No. FS MHX0002 Equip. Class Tanks and Heat Exchangers

Equipment Description Back-Up Fuel Pool Heat Exchanger PO#J11-100014

Photographs



Note: Back-Up Fuel Pool Heat Exchanger



Note: Bolt (second from the left) has a loose nut, gap between bottom nut and washer

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-022

Equipment ID No. 7FS0 3/4-72 Equip. Class¹ Other (Pipe)

Equipment Description REFUEL CANAL DR PUMP STRN DRAIN LINE

Location: Bldg. FHB Floor El. -35 Room, Area _____

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
 - Consists of drain line and its components

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All anchorage of components and pipe supports are in good condition

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

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

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

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-022

Equipment ID No. 7FS0 3/4-72 Equip. Class Other (Pipe)

Equipment Description REFUEL CANAL DR PUMP STRN DRAIN LINE

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
• Questions 2-4 are satisfied; no seismic concern

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
• Overhead lighting has no cage. Falling bulbs will not impact
piping or supports. This is no seismic concern.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
• Line is well supported

10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U
• Questions 7-9 are satisfied

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-022

Equipment ID No. 7FS0 3/4-72 Equip. Class Other (Pipe)

Equipment Description REFUEL CANAL DR PUMP STRN DRAIN LINE

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- This piping was included due to potential for rapid drain down of the spent fuel pool
- Piping is consistent with plant isometric, see drawing V8.4-1001-11
- See AWC-050 for Area Walk-By Checklist

Evaluated by: Brian Pace



Date: 10-10-2012

Dinesh Patel



10-10-2012

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-022

Equipment ID No. 7FS0 3/4-72 Equip. Class Other (Pipe)

Equipment Description REFUEL CANAL DR PUMP STRN DRAIN LINE

Photographs



Note: Piping run 7FS0 3/4-72

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-023

Equipment ID No. 7FS4-45 Equip. Class¹ Other (Pipe)

Equipment Description Refuel Canal Drain Pump Suction

Location: Bldg. FHB Floor El. -35 Room, Area Col. 4FH, Line V

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
 - Consists of drain pump suction line and its components

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All anchorage of components and pipe supports is in good condition

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

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

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-023

Equipment ID No. 7FS4-45 Equip. Class Other (Pipe)

Equipment Description Refuel Canal Drain Pump Suction

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
• Questions 2-4 are satisfied; no seismic concern

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
• Overhead lighting has no cage. Falling bulbs will not impact
piping or supports. This is not a seismic concern.

9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
• Lines are well supported

10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U
• Questions 7-9 are satisfied

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-023

Equipment ID No. 7FS4-45 Equip. Class Other (Pipe)

Equipment Description Refuel Canal Drain Pump Suction


Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- This piping was included due to potential for rapid drain down of the spent fuel pool
- Piping is consistent with plant isometric; see drawing 4305-4446
- See AWC-050 for Area Walk-By Checklist

Evaluated by: Brian Pace



Date: 10-10-2012

Dinesh Patel



10-10-2012

Sheet 4 of 5

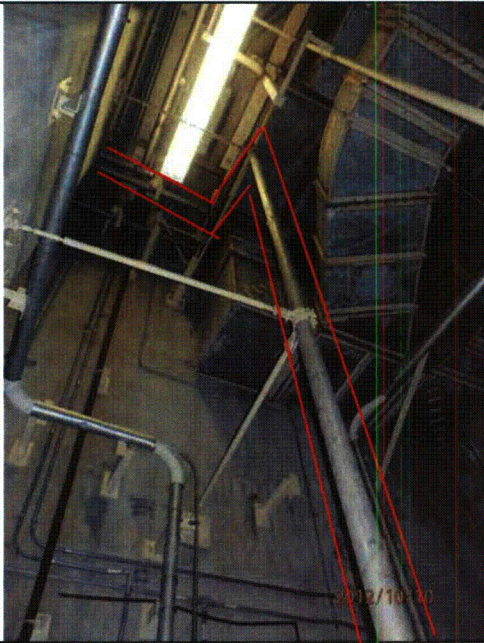
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Seismic Walkdown Checklist (SWC) SWEL2-023

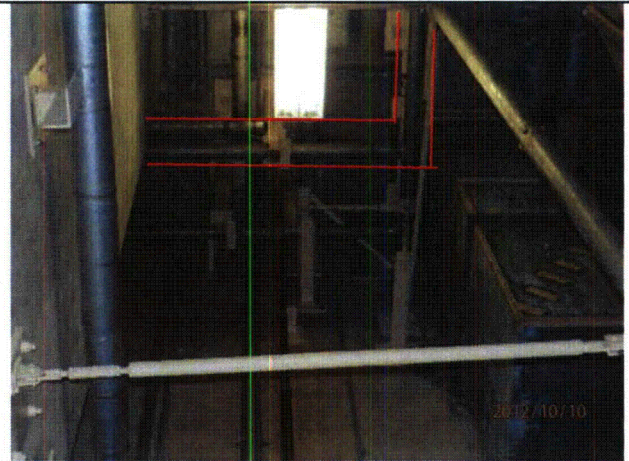
Equipment ID No. 7FS4-45 Equip. Class Other (Pipe)

Equipment Description Refuel Canal Drain Pump Suction

Photographs



Note: Pipe 7FS4-45



Note: Pipe 7FS4-45

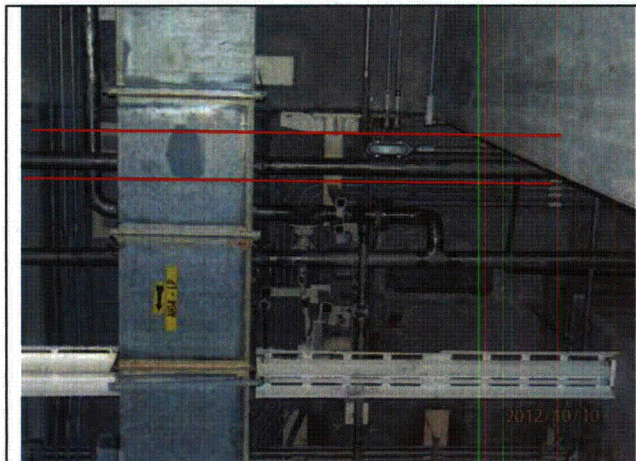
Sheet 5 of 5

Status: Y N U

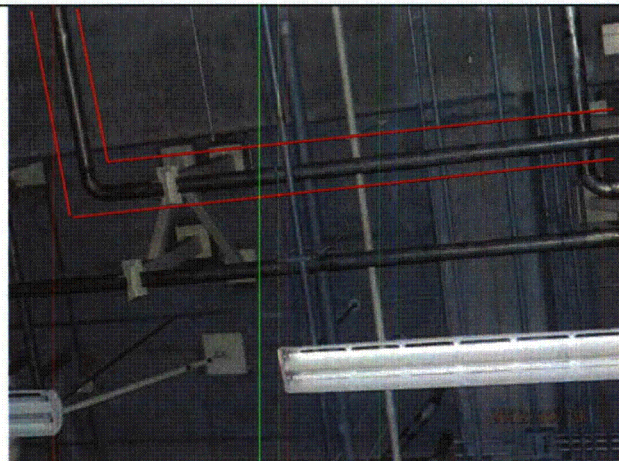
Seismic Walkdown Checklist (SWC) SWEL2-023

Equipment ID No. 7FS4-45 Equip. Class Other (Pipe)

Equipment Description Refuel Canal Drain Pump Suction



Note: Pipe 7FS4-45



Note: Pipe 7FS4-45

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-024

Equipment ID No. 7FS4-46 Equip. Class¹ OTHER (PIPE)

Equipment Description SPENT FUEL CASK STORAGE TO DRAIN PUMP SUCTION

Location: Bldg. FHB Floor El. -35 Room, Area _____

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
 - Consists of cask storage to drain pump suction line and its components

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All anchorage of components and pipe supports is in good condition

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

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

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

Sheet 2 of 5

Status: Y N U**Seismic Walkdown Checklist (SWC) SWEL2-024**Equipment ID No. 7FS4-46 Equip. Class OTHER (PIPE)Equipment Description SPENT FUEL CASK STORAGE TO DRAIN PUMP SUCTION

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

- Questions 2-4 are satisfied; no seismic concern

Interaction Effects

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

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

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

- Line is well supported

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

- Questions 7-9 are satisfied

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-024

Equipment ID No. 7FS4-46 Equip. Class OTHER (PIPE)

Equipment Description SPENT FUEL CASK STORAGE TO DRAIN PUMP SUCTION

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- This piping was included due to potential for rapid drain down of the spent fuel pool.
- Piping is consistent with plant isometric; see drawing 4305-4446
- See AWC-050 for Area Walk-By Checklist

Evaluated by: Brian Pace



Date: 10-10-2012

Dinesh Patel



10-10-2012

Sheet 4 of 5

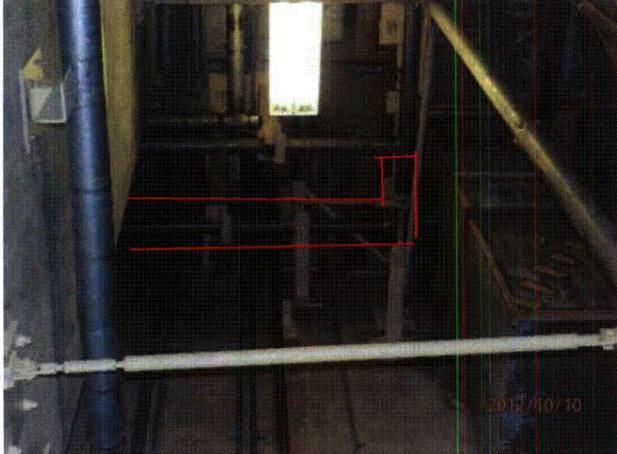
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Seismic Walkdown Checklist (SWC) SWEL2-024

Equipment ID No. 7FS4-46 Equip. Class OTHER (PIPE)

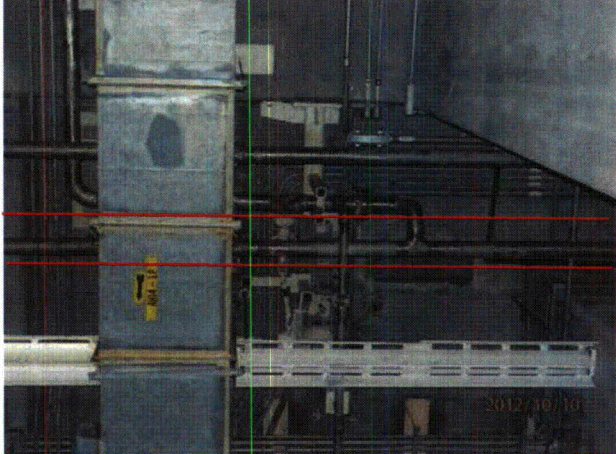
Equipment Description SPENT FUEL CASK STORAGE TO DRAIN PUMP SUCTION

Photographs



A photograph showing industrial equipment in a dark environment. A red rectangular box highlights a specific area on the right side of the image. A date stamp '2012/10/10' is visible in the bottom right corner of the photo.

Note: 7FS4-46



A photograph showing industrial equipment, including a large blue vertical tank. Two horizontal red lines highlight a section of the equipment. A date stamp '2012/10/10' is visible in the bottom right corner of the photo.

Note: 7FS4-46

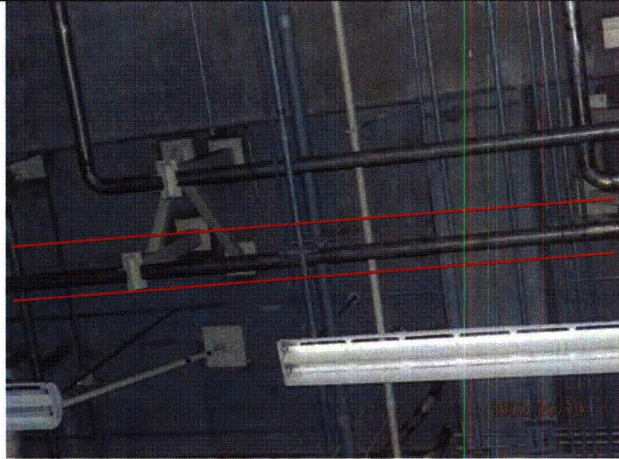
Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-024

Equipment ID No. 7FS4-46 Equip. Class OTHER (PIPE)

Equipment Description SPENT FUEL CASK STORAGE TO DRAIN PUMP SUCTION



Note: 7FS4-46

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-025

Equipment ID No. 7FS4-47 Equip. Class¹ OTHER (PIPE)

Equipment Description SPENT FUEL CASK DECONTAMINATION PIT

Location: Bldg. FHB Floor El. -35 Room, Area _____

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
 - Consists of cask decontamination pit line and its components

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - All anchorage of components and pipe supports is in good condition

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

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

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-025

Equipment ID No. 7FS4-47 Equip. Class OTHER (PIPE)

Equipment Description SPENT FUEL CASK DECONTAMINATION PIT

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
- Questions 2-4 are satisfied; no seismic concern

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,
and masonry block walls not likely to collapse onto the equipment? Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage?
• Line is well supported 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
- Questions 7-9 are satisfied

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-025

Equipment ID No. 7FS4-47 Equip. Class OTHER (PIPE)

Equipment Description SPENT FUEL CASK DECONTAMINATION PIT

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- This piping was included due to potential for rapid drain down of the spent fuel pool.
- Piping is consistent with plant isometric. Refer to drawing 4305-6961.
- See AWC-050 for Area Walk-By Checklist

Evaluated by: Brian Pace



Date: 10-10-2012

Dinesh Patel



10-10-2012

Sheet 4 of 5

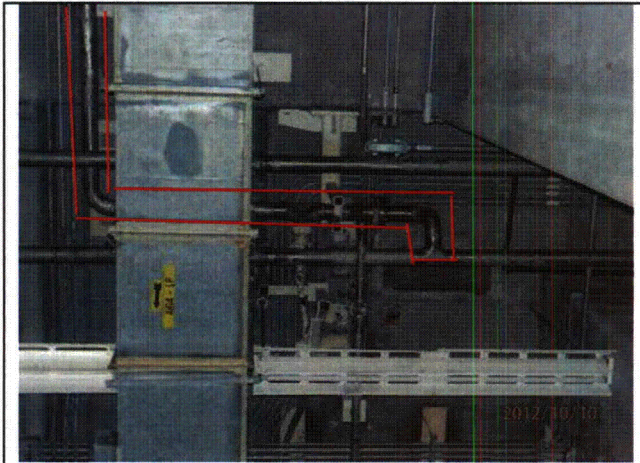
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Seismic Walkdown Checklist (SWC) SWEL2-025

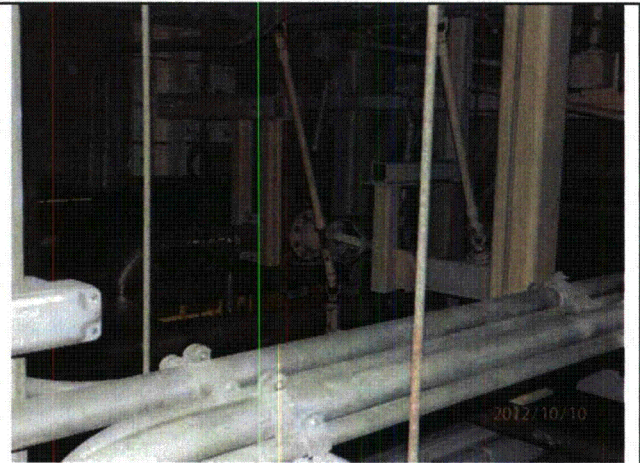
Equipment ID No. 7FS4-47 Equip. Class OTHER (PIPE)

Equipment Description SPENT FUEL CASK DECONTAMINATION PIT

Photographs



Note: 7FS4-47



Note: 7FS4-47

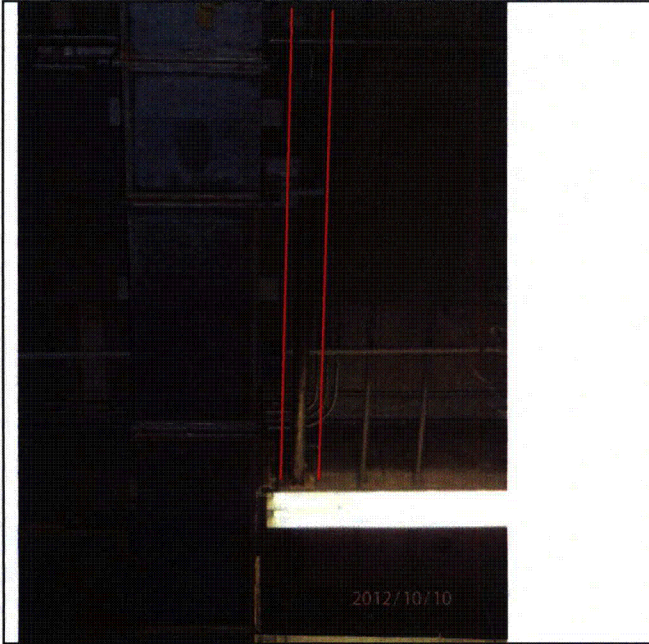
Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-025

Equipment ID No. 7FS4-47 Equip. Class OTHER (PIPE)

Equipment Description SPENT FUEL CASK DECONTAMINATION PIT



Note: 7FS4-47

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-026

Equipment ID No. FS MPMP0002 Equip. Class¹ Horizontal Pumps

Equipment Description Refueling Canal Drain Pump

Location: Bldg. FHB Floor El. -35 Room, Area Room B58, Col. 4FH, Line V

Manufacturer, Model, Etc. (optional but recommended) Goulds Pumps, Inc., 3196ST6

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y N
 - Item not one of the 50% of SWEL items requiring anchorage configuration verification

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
 - The pump is mounted to the skid with 3 bolts, bolts are in good condition
 - Four 5/8" diameter anchor bolts mount the skid to the concrete, bolts are in good condition; see drawing G501, S03 for details

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

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

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

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-026

Equipment ID No. FS MPMP0002 Equip. Class Horizontal Pumps

Equipment Description Refueling Canal Drain Pump

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y N U N/A
- Item not one of the 50% of SWEL items requiring anchorage configuration verification
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U
- Questions 2-4 are satisfied; no seismic concern

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
- No soft targets around equipment.
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 lights have no cage. The fixtures are properly mounted. Falling bulbs would have no impact on the equipment and is not a seismic concern.
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U
- Questions 7-9 are satisfied

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-026

Equipment ID No. FS MPMP0002 Equip. Class Horizontal Pumps

Equipment Description Refueling Canal Drain Pump

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

- See AWC-050 for Area Walk-By Checklist

Evaluated by: Brian Pace



Date: 10-10-2012

Dinesh Patel



10-10-2012

Sheet 4 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-026

Equipment ID No. FS MPMP0002 Equip. Class Horizontal Pumps

Equipment Description Refueling Canal Drain Pump

Photographs



Note: Refueling Canal Drain Pump and Motor



Note: Bolts mounting pump to skid in good condition

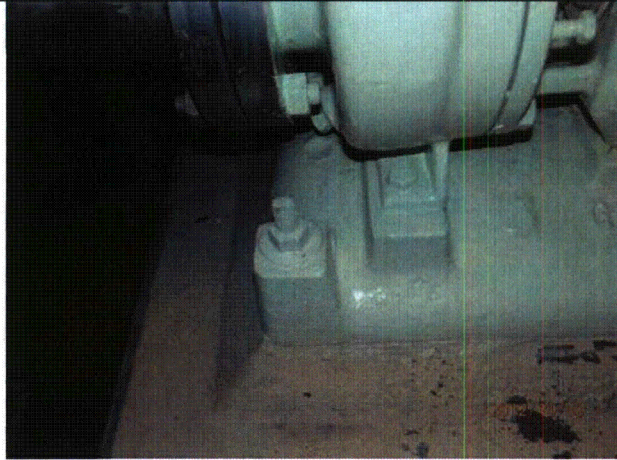
Sheet 5 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2-026

Equipment ID No. FS MPMP0002 Equip. Class Horizontal Pumps

Equipment Description Refueling Canal Drain Pump



Note: Bolts mounting skid to concrete in good condition



Note: Lines are properly attached