ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-074

Equipment ID No. *EGA1* Equip. Class[1] *16*

Equipment Description *10 KVA STATIC INVERTER #21*

Note: *South-west anchor*

Note: *East anchors*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. *EGA8* Equip. Class[1] *16*

Equipment Description *10 KVA STATIC INVERTER #23*

Location: Bldg. *CB* Floor El. *33'-0"* 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☒

   The anchorage configuration verification is not required.

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

   Anchorage of internal components to cabinet could not be inspected as operations is not allowed to open cabinet when cabinet is powered. Cabinet to be powered down and opened for internal inspection.

   Anchorage of cabinet to concrete floor is external to cabinet and was inspected.

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

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes, the anchorage is free of visible cracks in the concrete near the anchor.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. *EGA8* Equip. Class[1] *16*

Equipment Description *10 KVA STATIC INVERTER #23*

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☒

   Not applicable since component is not part of the anchorage configuration verification.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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

   Block wall is seismiclly qualified by Computech report No. R547.01.

   Fluorescent bulbs need to be secured to fixture with wires. CR IP2-2012-06120 tracks installation of wires to tie florescent bulb to fixture. It is judged the hard target inverter will remain operable if the fluorescent bulbs were to fall on it.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. *EGA8* Equip. Class[1] *16*

Equipment Description *10 KVA STATIC INVERTER #23*

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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: A206640, Rev 10, Arrangement of equipment in cable spreading room elev. 33'
AWC-004

Evaluated by: *Nick Crispell* Date: *10/11/2012*

Stephen Yuan *10/11/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

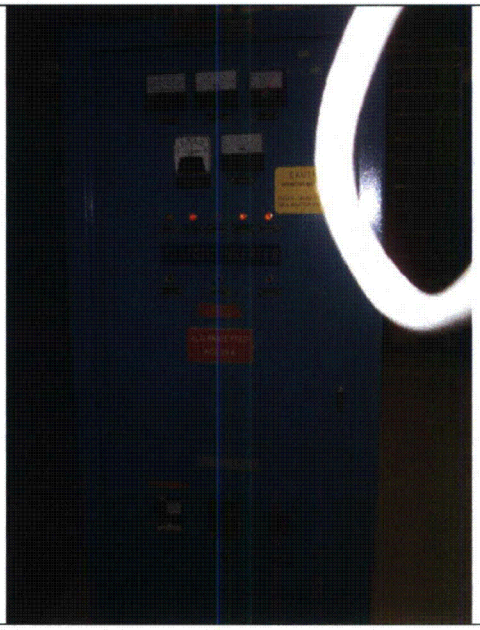
Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. *EGA8* Equip. Class[1] *16*

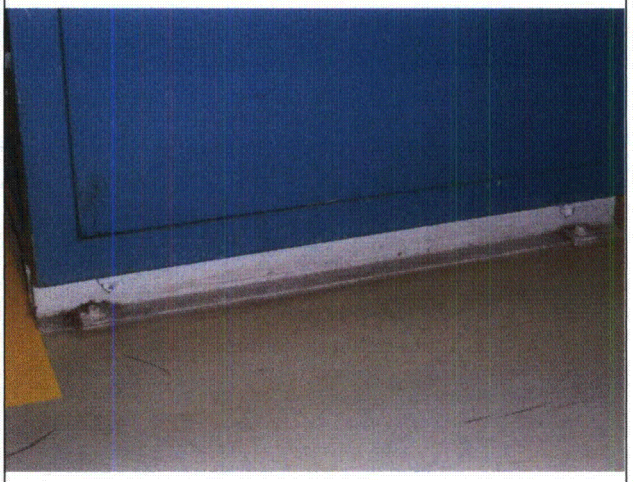
Equipment Description *10 KVA STATIC INVERTER #23*

Photographs



Note:

10 KVA Static inverter #23



Note:

Right side anchorage.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-075

Equipment ID No. *EGA8* Equip. Class[1] *16*

Equipment Description *10 KVA STATIC INVERTER #23*

Note:

Left side anchorage.

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-076

Equipment ID No. *21EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 21*

Location: Bldg. *EDG* Floor El. *72'-0"* 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☐

   Yes the anchorage configuration verification is required.

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

   Anchorage of components internal to cabinets attached to diesel where not examined. Opening cabinets attached to EDG's needs to be schedueled for the next diesel generator outage. Internals are to be inspected when cabinets are opened.

   External anchorage was inspected and is acceptable.

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

   Minor surface rust. Accepable.

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

   A few minor hair like cracks. No significant structural cracks.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-076

Equipment ID No. *21EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 21*

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 matches the SQUG (SEWS).

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Numerious tubes touch each other. Judged OK.

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☐

   Refer to AWC-011 for partition discussion.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-076

Equipment ID No. *21EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 21*

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☐

    Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

West lower air filters bottom clip does not hold air filter in place. Air can by-pass filter. Operations personnel fixed issue while inspection team was their. Operations CR IP2-2012-06238 issued for trend tracking resolusion.

References: Drawings and AWC

Drawings: 9321-H-2250, Rev 7, Diesel generator building general arrangement plan.
9321-F-18533 (A201351), Control and diesel generator buildings foundation plan and details.

AWC-011

Evaluated by: *Nick Crispell* Date: *10/15/2012*

Stephen Yuan *10/15/2012*

Dan Nuta *10/15/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

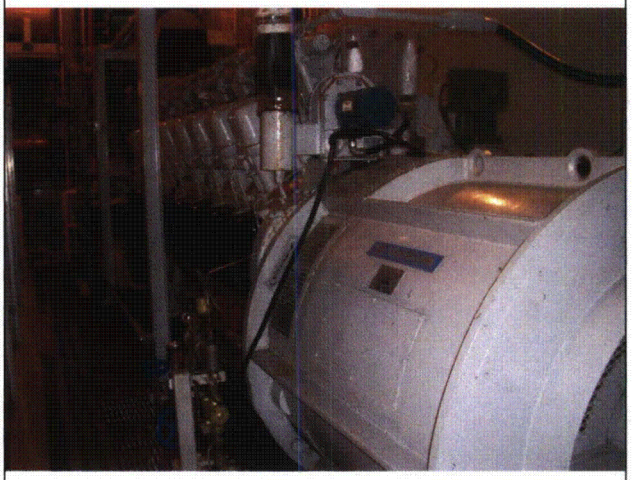
Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) **SWEL1-076**

Equipment ID No. *21EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 21*

Photographs



Note:

DIESEL GENERATOR NO 21.

Note:

LOWER AIR FILTER NOT FULLY LATCHED.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

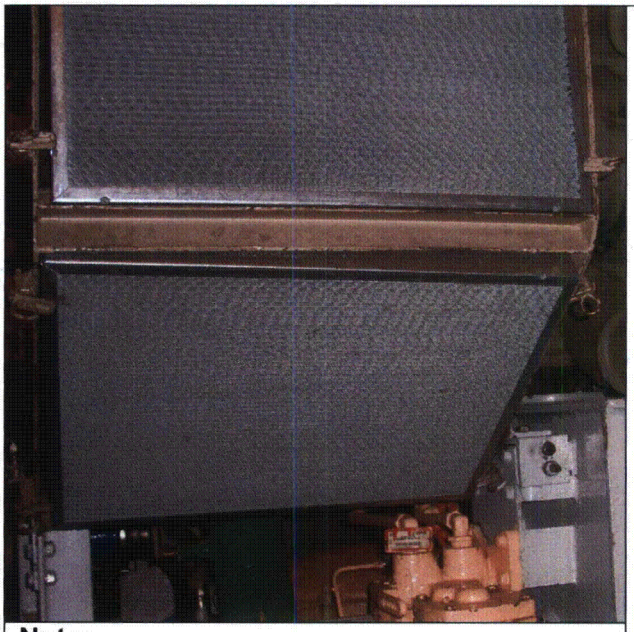
Sheet 5 of 5 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-076

Equipment ID No. *21EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 21*



Note:

LOWER AIR FILTER NOT FULLY LATCHED.

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 8

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. *0022EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 22*

Location: Bldg. *EDG* Floor El. *72'-0"* 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☐

   Yes the anchorage configuration verification is required.

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

   Anchorage of components internal to cabinets attached to diesel where not examined. Opening cabinets attached to EDG's needs to be scheduled for the next diesel generator outage. Internals are to be inspected when cabinets are opened.

   Southwest of the EDG near the western post of the EDG exhaust pipe there is a base plate missing 1 of 4 anchor bolt nuts. This is judged seismically adequate as this base plate was abandoned from the old EDG exhaust pipe support and now a 4" pipe bears on but is not welded to the base plate.

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

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 8

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. *0022EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 22*

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

   EDG Pedestal has some minor hair line cracks that are none structural. They are not near the anchors. Acceptable.

   EDG exhaust pipe is supported on a post frame that also supports fuse panel for 22 Pre Lube Pump, 22 Lube oil HTR, and 22 Jacket Water HTR. This support has damaged & missing grout under the eastern post base plate. LB-11 was issued to resolve.

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 matches the SQUG (SEWS).

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   A lot of tubing, hoses, etc. touch each other. All occurences where judged acceptable. Some but not all of the occurences are noted below.
   -Fuel oil filter line DF-80 touches DF-78 on south west side of 22EDG.
   -EDG DLO 13-1 EDG 22 STRNR Vent Stop Valve tubing touches pipe to 22EDLOS.
   -EDG JWP-1-1 22EDG PS-1-1 and PS-5-1 stop tubing touches pipe to FE-6469 on east side of 22EDG.
   -Line on west side of 22EDG to DLO-539 touches line to DF-107.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 8

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. *0022EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 22*

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☐

   Refer to AWC-011 for partition discussion.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

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☐

    Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 8

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. *0022EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 22*

Comments (Additional pages may be added as necessary)

The following are house keeping issues and judged acceptable for seismic concerns.

Grating at valve DA-559 DG22 Starting Air Right Side supply is touching valve hand wheel. This is a non- seismic issue.

One of the roof light bulbs is out. CR IP2-2012-06515 issued to track resolution.

Minor surface rust on some threaded rods, bolts, nuts, and other components. Judged acceptable.

Flange on 22EDG JW & LO Coolers cooling WTR outlet has one out of 23 bolts flush with nut. Judged acceptable.

Latch on 22EDG Gauge board cover panel on north side is not latched. CR IP2-2012-06238 issued to track resolution.

Noted WRT 00172112 was tagged to track resolution of a leak on south east side of diesel.

Evidence of oil leaks below south side of diesel typical for all diesels in area. Judged acceptable.

References: Drawings and AWC
Drawings: 9321-H-2250, Rev 7, Diesel generator building general arrangement plan.
CR IP2-2012-06515
CR IP2-2012-06238
WRT 00172112
AWC-011

Evaluated by: *Nick Crispell* Date: *10-15-2012*

Stephen Yuan *10-15-2012*

Dan Nuta *10-15-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 8

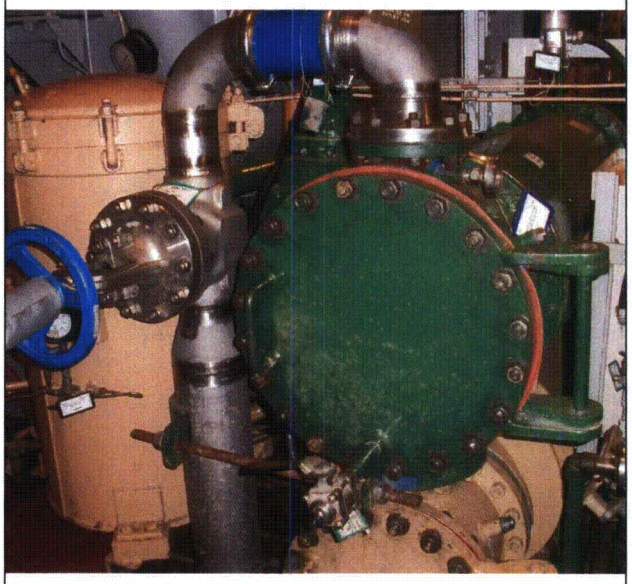
Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-077

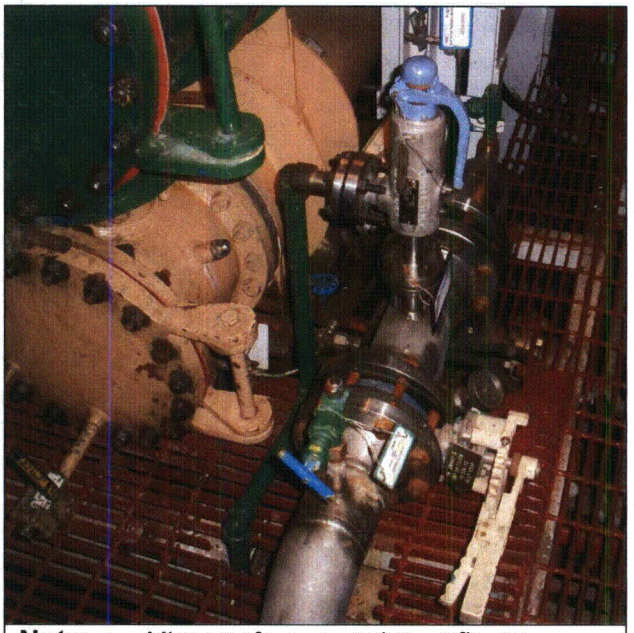
Equipment ID No. *0022EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 22*

Photographs



Note: *Flange on 22EDG JW & LO Coolers cooling WTR outlet with flush nut and showing minor surface corrosion.*



Note: *Minor surface corrosion on flange couplings. Possible galvanic corrosion stainless steel pipe and carbon steel bolts.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

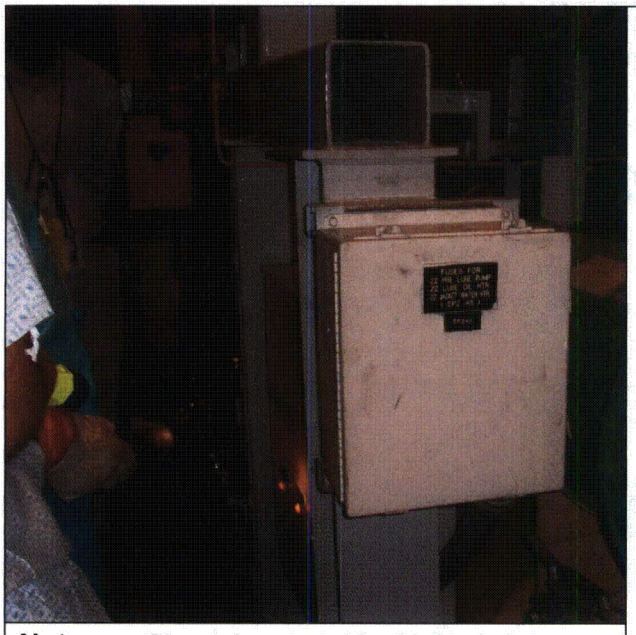
Sheet 6 of 8

Status: Y☐ N☐ U☒

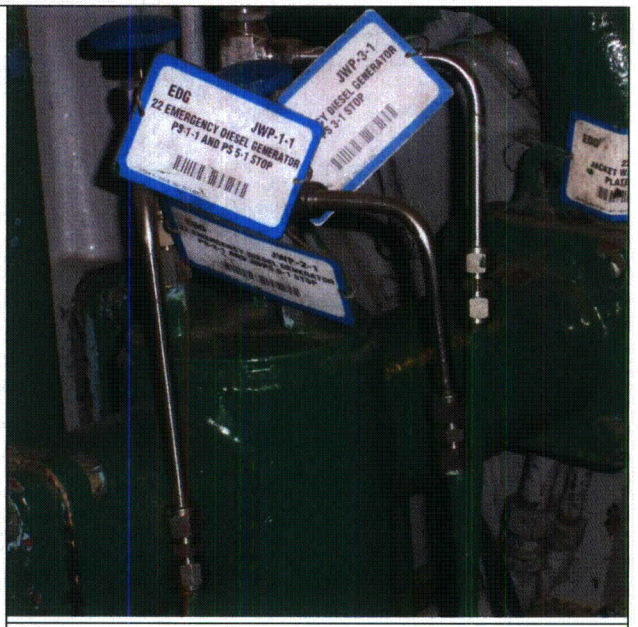
Seismic Walkdown Checklist (SWC) **SWEL1-077**

Equipment ID No. *0022EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 22*



Note: *Shows fuse panel for 22 Pre Lube Pump, 22 Lube oil HTR, and 22 Jacket Water HTR that has damaged & missing grout under the eastern (close) posts base plate.*



Note: *Example of tubing touching a pipe.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

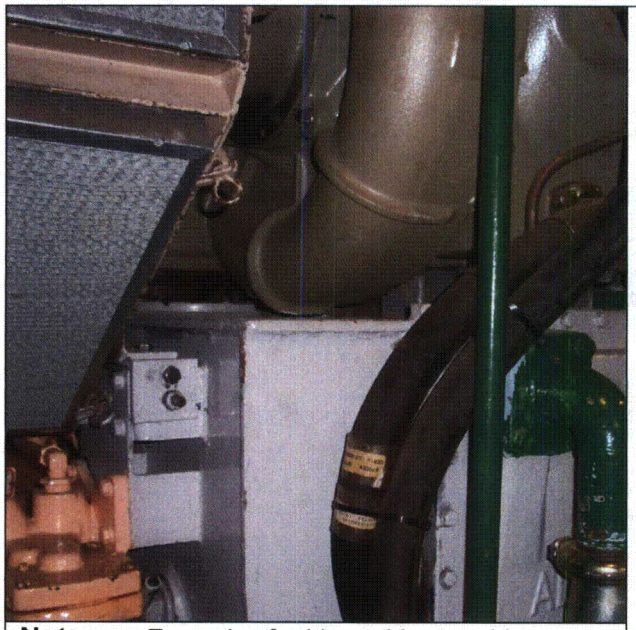
Sheet 7 of 8

Status: Y☐ N☐ U☒

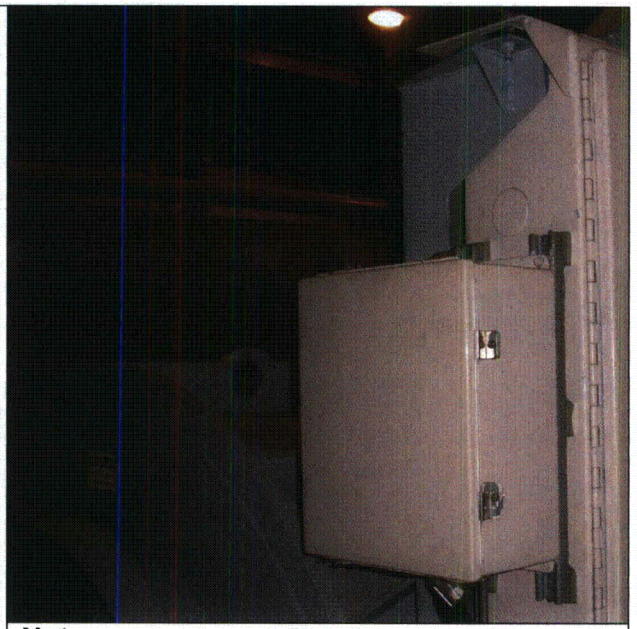
Seismic Walkdown Checklist (SWC) SWEL1-077

Equipment ID No. *0022EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 22*



Note: *Example of rubber tubing touching.*



Note: *Latch on 22EDG Gauge board cover panel on north side is not latched.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 8 of 8

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) **SWEL1-077**

Equipment ID No. *0022EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 22*

Note: *Cracked wels on partition wall between diesels.*

Note: *Flimsy partition wall between diesels that needs verification of seismic design.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-078

Equipment ID No. *0023EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 23*

Location: Bldg. *EDG* Floor El. *72'-0"* 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☐

   Yes the anchorage configuration verification is required.

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

   Anchorage of components internal to cabinets attached to diesel where not examined. Opening cabinets attached to EDG's needs to be schedueled for the next diesel generator outage. Internals are to be inspected when cabinets are opened.

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

   Surface corrosion. Not significant.

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

   Minor hair line cracks. Not significant.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-078

Equipment ID No. *0023EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 23*

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 matches the SQUG (SEWS).

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   Refer to AWC-011 for partition discussion.

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

   Numerious lines touching. Judged acceptable.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-078

Equipment ID No. *0023EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 23*

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☐

    Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

1 of 4 air filter latches do not hold air filter in place. Air can by-pass filter. Operations personnel fixed issue in our presence. CR IP2-2012-06238 issued for trend tracking purposes.

References: Drawings and AWC
Drawings: 9321-H-2250, Rev 7, Diesel generator building general arrangement plan, AWC-011

Evaluated by: *Nick Crispell* Date: *10/15/2012*

Stephen Yuan *10/15/2012*

Dan Nuta *10/15/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-078

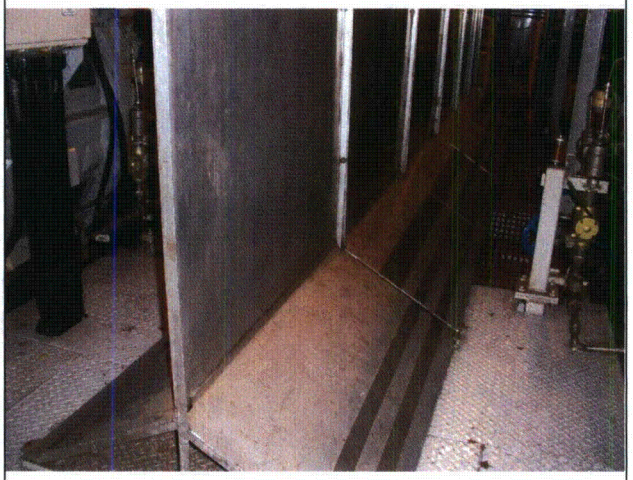
Equipment ID No. *0023EDG* Equip. Class[1] *17*

Equipment Description *DIESEL GENERATOR NO. 23*

Photographs

Note:

DIESEL GENERATOR NO 23.



Note:

PERTITION WALL BETWEEN GENERATORS.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. *INST RK5* Equip. Class[1] *18*

Equipment Description *INSTRUMENT RACK 5*

Location: Bldg. *AFB* Floor El. *18'-6"* 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☐

   Yes, the anchorage configuration verification is required.

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

   Yes, the 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☐

   Yes, the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes, the anchorage is free of visible cracks in the concrete near the anchor.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. *INST RK5* Equip. Class[1] *18*

Equipment Description *INSTRUMENT RACK 5*

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

   The anchorage configuration at the base of the rack is consistent with drawing 9321-F-7003-23 & SQUG (SEWS). The anchorage at the base was observed directly and the anchorage at the top was observed by use of a camera held overhead..

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

   Yes, based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   The 7' tall Rack 5 is anchored at the top and bottom per drawing 9321-F-7003. There are conduits/tubing fixed on the concrete wall and going into the rack. During a seismic event the rack will move with the concrete wall preventing it from beating against the wall. Conduits entering Rack 5 are attached to the concrete wall which the rack is attached to so conduits and rack will move together during a seismic event.

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

   The fluorescent light tubes need wires securing them to the fixture to prevent them from falling on the rack in a seismic event. Several fluorescent lights are out and need to be replaced. CR IP2-2012-06483 has been issued to track resolution.

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

   See response to #7.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. *INST RK5* Equip. Class[1] *18*

Equipment Description *INSTRUMENT RACK 5*

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

    Yes, based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

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☐

    Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References:

1. *SQUG INSTRUMENT RACK 5*
2. *DWG 9321-F-7003, Rev 23,(A201097), Transmitter racks piping arrangement-sht. No.2 instrumentation.*
3. *CR IP2-2012-06483*
4. *AWC-035*

Evaluated by: *Stephen Yuan* Date: *10/25/2012*

Paul Huebsch *10/25/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

Status: Y☒ N☐ U☐

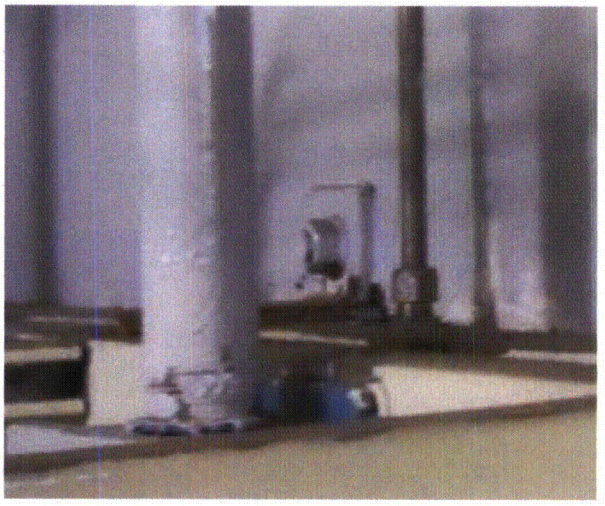
Seismic Walkdown Checklist (SWC) **SWEL1-079**

Equipment ID No. *INST RK5* Equip. Class[1] *18*

Equipment Description *INSTRUMENT RACK 5*

Photographs

Note: *View at the top of rack 5 showing the two clip angle supports attaching the rack to the wall.*



Note: *Close up view of far top connection*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5 **IP2**

Note: *Close up view of near top connection*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-080

Equipment ID No. *PCV-1139* Equip. Class[1] *18*

Equipment Description *AUX. FWP TURB SUPP PRESS REDUCING VALVE*

Location: Bldg. *AFB* Floor El. *18'-6"* 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☒

   In-line valve. No anchorage to check.

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

   Not applicable since it is an in-line valve.

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

   Not applicable since it is an in-line valve.

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

   Not applicable since it is an in-line valve.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**
Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-080

Equipment ID No. *PCV-1139* Equip. Class[1] *18*

Equipment Description *AUX. FWP TURB SUPP PRESS REDUCING VALVE*

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☒

   Not applicable since component is an in-line valve.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Tubing over head between valve and MS-576 is near to touching control conduits for PCV-1139. Judged acceptable.

   Tubing to IA-1196 close to control conduit. Judged acceptable.

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☐

   Fluoresent light needs wire securing bulb to fixture. CR IP2-2012-06483 issued to track resolution. This is considered a non-seismic issue for this item.

   Light bulb out near valve PCV-1139. CR IP2-2012-06483 issued to track resolution.

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

   Unistrut on containment wall near tubing elbow tubing line judged to have adequate flexibility. Tubing clamp is near end of unistrut is judged acceptable due to negligible weight of tubing.

   Tubing to MS-576 support near end of unistrut. Judged acceptable given negligible weight of tubing.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-080

Equipment ID No. *PCV-1139* Equip. Class[1] *18*

Equipment Description *AUX. FWP TURB SUPP PRESS REDUCING VALVE*

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

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☐

    Support for PI-1261 is braced from the pipe near wear this valve PCV-1139 is mounted. This is a non typical design detail that is judged acceptable for a seismic event.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: B226033,Rev 3, Auxiliary boiler feed pump # 22 instrument piping detail for PCV-1139.
B226034, Rev 1, Auxiliary boiler feed pump # 22 instrument control rack detail for PCV-1139.
9321-F-7053,(A201147) Rev 38, Auxiliary boiler feed pump room instrument piping sht. No. 2 Instrumentation.
CR IP2-2012-06483
AWC-035

Evaluated by: *Nick Crispell* Date: *10-15-2012*

Stephen Yuan *10-15-2012*

Dan Nuta *10-15-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4 **IP2**

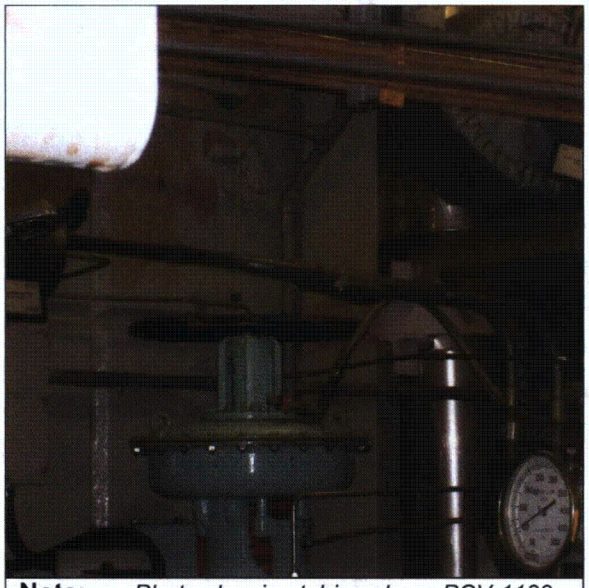
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-080

Equipment ID No. *PCV-1139* Equip. Class[1] *18*

Equipment Description *AUX. FWP TURB SUPP PRESS REDUCING VALVE*

Photographs



Note: *Photo showing tubing above PCV-1139 that is touching and very close to other components. Judged acceptable given flexibility and weight of tubing.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-081

Equipment ID No. *IP2-EDGB-72-DB6* Equip. Class[1] *18*

Equipment Description *EDG BLDG 72' EL ENGINE AUXILIARIES CTRL PNL*

Location: Bldg. *EDG* Floor El. *72'-0"* 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☒

   No, the anchorage configuration verification is not required.

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

   Cabinet was not opened for internal inspection. Cabinet can not be opened when powered. Cabinet needs to be powered down and internals inspected.

   External anchorage is present and was inspected. External anchorage is free of bent, brocken, missing or loose hardware.

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

   Minor surface corrosion. Judged OK.

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

   Floor is coated. No visible cracks.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-081

Equipment ID No. *IP2-EDGB-72-DB6* Equip. Class[1] *18*

Equipment Description *EDG BLDG 72' EL ENGINE AUXILIARIES CTRL PNL*

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☒

   Not applicable since component is not part of the anchorage configuration verification.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions. However internal components must be examined when cabinet can be opened.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   Speaker and heater overhead judged to be adequately supported.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-081

Equipment ID No. *IP2-EDGB-72-DB6* Equip. Class[1] *18*

Equipment Description *EDG BLDG 72' EL ENGINE AUXILIARIES CTRL PNL*

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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

Top right cover screw is loose. Panel is judged by the walkdown team to be seismicly adequate with missing screw. Operations personnel fixed issue immediately for walkdown team.

References: Drawings and AWC.
Drawings: 9321-F-3049,Rev 30, Conduit layout diesel generator building,elev 67' and 72' plan.
A209208, Rev 11. Conduit layout diesel generator building,elev 67' and 72' section 4 Details.
9321-H-2250,Rev 7. Diesel generator building general arrangement plan.
AWC-011

Evaluated by: *Nick Crispell* Date: *10/15/2012*

Stephen Yuan *10/15/2012*

Dan Nuta *10/15/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4 **IP2**

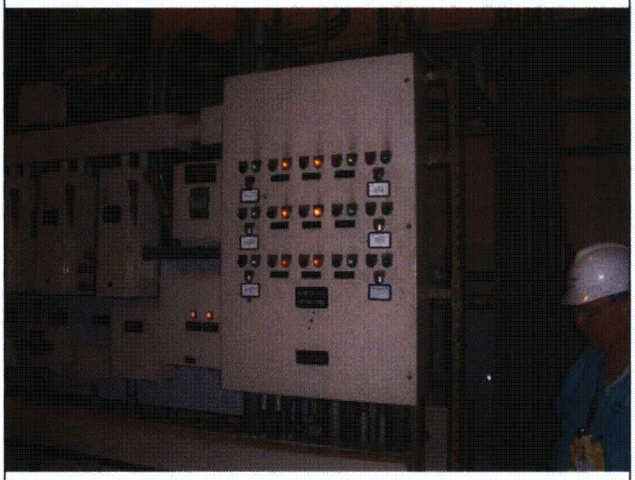
Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-081

Equipment ID No. *IP2-EDGB-72-DB6* Equip. Class[1] *18*

Equipment Description *EDG BLDG 72' EL ENGINE AUXILIARIES CTRL PNL*

Photographs



Note:

EDG BLDG 72' EL ENGINE AUXILIARIES CTRL PANEL.

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-084

Equipment ID No. *ELJ-10* Equip. Class[1] *19*

Equipment Description *EDG BLDG THERMOSTAT*

Location: Bldg. *EDG* Floor El. *72'-0"* 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☒

   The anchorage configuration verification is not required.

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

   Yes, the 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☐

   Minor surface rust. Judged OK.

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

   Anchorage to structural steel, not to concrete.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-084

Equipment ID No. *ELJ-10* Equip. Class[1] *19*

Equipment Description *EDG BLDG THERMOSTAT*

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☒

   Not applicable since component is not part of the anchorage configuration verification.

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

   Yes, based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes, soft targets are free from impact by nearby equipment or structures.

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☐

   Yes, overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes, attached lines have adequate flexibility to avoid damage.

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

    Yes, based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**
Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-084

Equipment ID No. *ELJ-10* Equip. Class[1] *19*

Equipment Description *EDG BLDG THERMOSTAT*

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☐

Yes, we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-1460, (A201195), Rev 15, Diesel Generator Building Plan, Section and Elevation.
9321-F-3049, Rev 30, Conduit Layout Diesel Generator Building, Elevation 67' and 72'.
A209208, Rev 11, Conduit Layout Diesel Generator Building, Elevations 67' and 72' Sections and Details.
AWC-011

Evaluated by: *Stephen Yuan* Date: *10/15/12*

Nick Crispell *10/15/12*

Dan Nuta *10/15/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-084

Equipment ID No. *ELJ-10* Equip. Class[1] *19*

Equipment Description *EDG BLDG THERMOSTAT*

Photographs

No photo due to restriction of EN-DC-217	
Note:	**Note:**

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-085

Equipment ID No. *TE-130* Equip. Class[1] *19*

Equipment Description *NON REGHX OUTLET LETDOWN TEMP ELEMENT*

Location: Bldg. *PAB* Floor El. *98'-0"* 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☒

   The anchorage configuration verification is not required.

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

   Temperature element is inline, and therefore anchorage inspection not applicable.

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

   Temperature element is inline, and therefore anchorage inspection not applicable.

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

   Temperature element is inline, and therefore anchorage inspection not applicable.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-085

Equipment ID No. *TE-130* Equip. Class[1] *19*

Equipment Description *NON REGHX OUTLET LETDOWN TEMP ELEMENT*

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☒

   Temperature element is inline, and therefore anchorage inspection not applicable.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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

   Block wall penetration (approximately 4' x 4') is qualified by Computech report R547.01.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-085

Equipment ID No. *TE-130* Equip. Class[1] *19*

Equipment Description *NON REGHX OUTLET LETDOWN TEMP ELEMENT*

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☐

    Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-1397, Rev 21, (A200204), Primary Auxiliary building floor plans and elevations.
9321-F-2592, Rev 38, (A200678), Primary Auxiliary buildingcomposite piping arrangement sections sheet no.7
AWC-025

Evaluated by: *Nick Crispell* Nick Crispell Date: *10-22-2012*

Dan Nuta Dragos D. Nuta *10-22-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-085

Equipment ID No. *TE-130* Equip. Class[1] *19*

Equipment Description *NON REGHX OUTLET LETDOWN TEMP ELEMENT*

Photographs

Note: *Temperature element*

Note: *Temperature element closeup.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-087

Equipment ID No. *PNL PP9* Equip. Class[1] *20*

Equipment Description *EDG 21 CONTROL PANEL*

Location: Bldg. *EDG* Floor El. *72'-0"* 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☒

   No, the anchorage configuration verification is not required.

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

   Internal anchorage could not be checked as panel is not allowed to be opened when panel is powered. Panel to be powered down and internal anchorage inspected when possible.

   External anchors where inspected and are 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☐

   No corrosion found on external bolts. Internal bolts could not be observed as panel could not be opened.

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

   Internal bolts could not be observed since panel could not be opened. No visible cracks at external anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-087

Equipment ID No. *PNL PP9* Equip. Class[1] *20*

Equipment Description *EDG 21 CONTROL PANEL*

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☒

   Not applicable since component is not part of the anchorage configuration verification.

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

   Cannot be determined since some anchorage is internal to cabinet and door could not be opened.

Interaction Effects

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

   The 21EDG control panel has a side synch panel. The side synch panel is free to swing on hinge into 21EDG control panel. Restraint bracket on bottom of side panel is broken. Operations personnel reattached and repaired restraint bracket immediately in our presence. CR IP2-2012-6207 issued for tracking purposes.

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☐

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4 **IP2**

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-087

Equipment ID No. *PNL PP9* Equip. Class[1] *20*

Equipment Description *EDG 21 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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

Panel on north end of #23 EDG control panel is missing 1 of 24 bolts. Bottom latch of #22 and #23 EDG control panel not lached. Operations personnel fixed issues on the spot in our presence. CR IP2-2012-06238 issued for tracking.

References: Drawings and AWC
Drawings: 9321-H-2250, Rev 7, Diesel generator building general arrangement plan.
AWC-011

Evaluated by: *Nick Crispell* Date: *10-15-2012*

Stephen Yuan *10-15-2012*

Dan Nuta *10-15-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4 **IP2**

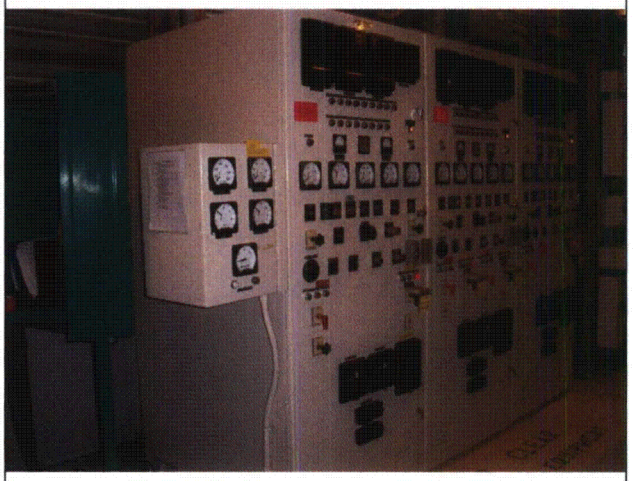
Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) **SWEL1-087**

Equipment ID No. *PNL PP9* Equip. Class[1] *20*

Equipment Description *EDG 21 CONTROL PANEL*

Photographs



Note: *EDG 21 control panel showing side Synch panel that is free to swing.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-088

Equipment ID No. *EPK1* Equip. Class[1] *20*

Equipment Description *SW PMP #21 STRAINER CONT PNL*

Location: Bldg. *SWSTR PIT* Floor El. *5'-9"* 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☒

   The anchorage configuration verification is not required.

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

   Yes the anchorage is free of bent, broken, missing or loose hardware. The panel was opened up and internal components were examined and acceptable.

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

   Slight surface corrosion was observed and is juged acceptable.

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

   Wall is coated. No significant cracks observed.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-088

Equipment ID No. *EPK1* Equip. Class[1] *20*

Equipment Description *SW PMP #21 STRAINER CONT PNL*

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☒

   Not applicable since component is not part of the anchorage configuration verification.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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 bulb overhead has a plexiglass cover to catch bulb if it falls out of the prongs. No issues noted.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-088

Equipment ID No. *EPK1* Equip. Class[1] *20*

Equipment Description *SW PMP #21 STRAINER CONT PNL*

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☐

    Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

Cover is missing 2 of 10 hold downs. Panel judged seismically adequate with missing hold downs. CR IP2-2012-06841 issued to fix hold downs.

References: Drawings and AWC
Drawings: 9321-F-2011, Rev 9, General arrangement intake structure plan unit 2.
CR IP2-2012-06841
AWC-013

Evaluated by: *Nick Crispell* Nick Crispell Date: *10-17-2012*

Dan Nuta Dragos D. Nuta *10-17-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL1-088**

Equipment ID No. *EPK1* Equip. Class[1] *20*

Equipment Description *SW PMP #21 STRAINER CONT PNL*

Photographs

Note: *EPK1*

Note: *Missing latches.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5 **IP2**

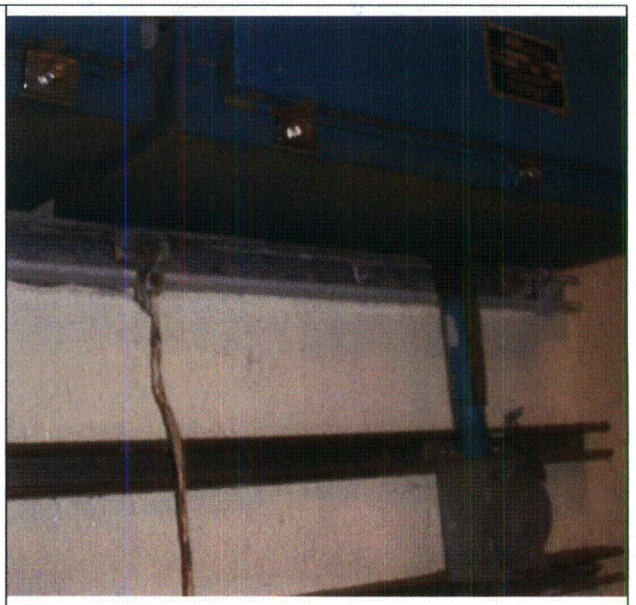
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-088

Equipment ID No. *EPK1* Equip. Class[1] *20*

Equipment Description *SW PMP #21 STRAINER CONT PNL*

Note: *Missing latches.*



Note: *Anchorage at bottom of panel.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-089

Equipment ID No. *EPG9* Equip. Class[1] *20*

Equipment Description *REMOTE UNDERVOLTAGE RELAY CABINET, BUS 6A*

Location: Bldg. *CB* Floor El. *15'-0"* 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☒

   The anchorage configuration verification is not required.

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

   Cabinet door was opened and internal component anchorage was acceptable.

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

   Minor surface corrosion present. Judged acceptable.

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

   Minor crack near by but not significant. Judged acceptable.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-089

Equipment ID No. *EPG9* Equip. Class[1] *20*

Equipment Description *REMOTE UNDERVOLTAGE RELAY CABINET, BUS 6A*

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☒

   Not applicable since component is not part of the anchorage configuration verification.

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

   Yes, based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes, soft targets are free from impact by nearby equipment or structures.

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☐

   Yes, overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes, attached lines have adequate flexibility to avoid damage.

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

    Yes, based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-089

Equipment ID No. *EPG9* Equip. Class[1] *20*

Equipment Description *REMOTE UNDERVOLTAGE RELAY CABINET, BUS 6A*

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☐

    Yes, we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-7028, (A201122), Rev 46, Containment Building Instrument Arrangement-Sheet no 2,Instrumentation.
AWC-002

Evaluated by: *Nick Crispell* Date: *10/9/12*

Stepeh Yuan *10/9/12*

Dan Nuta *10/9/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4 **IP2**

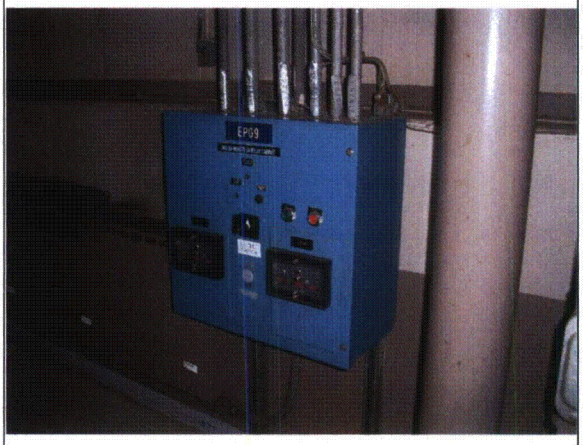
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-089

Equipment ID No. *EPG9* Equip. Class[1] *20*

Equipment Description *REMOTE UNDERVOLTAGE RELAY CABINET, BUS 6A*

Photographs



Note: *EPG9 Cabinet*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-090

Equipment ID No. *22SIP* Equip. Class[1] *20*

Equipment Description *22 SAFETY INJECTION PUMP*

Location: Bldg. *PAB* Floor El. *59'-0"* 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☐

   The anchorage configuration verification is required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-090

Equipment ID No. *22SIP* Equip. Class[1] *20*

Equipment Description *22 SAFETY INJECTION 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☐

   Anchorage matches drawing 9321-F-1167 & 9321-F-1166.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-090

Equipment ID No. *22SIP* Equip. Class[1] *20*

Equipment Description *22 SAFETY INJECTION 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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-1166, Rev. 26, Primary Auxiliary Building Concrete Plans at El. 15'-0", 35'-0" & 42'-0"
9321-F-1167, Rev. 24, Primary Auxiliary Building Concrete Plans at El. 59'-0" and 68'-0"
AWC-017

Evaluated by: *Nick Crispell* Date: *10/19/2012*

Paul Huebsch *10/19/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

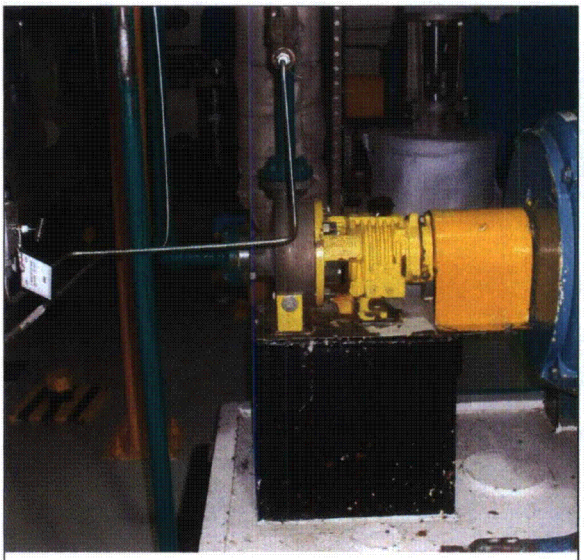
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-090

Equipment ID No. *22SIP* Equip. Class[1] *20*

Equipment Description *22 SAFETY INJECTION PUMP*

Photographs



Note: *SIJ Pump*

Note: *SIJ Pump*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

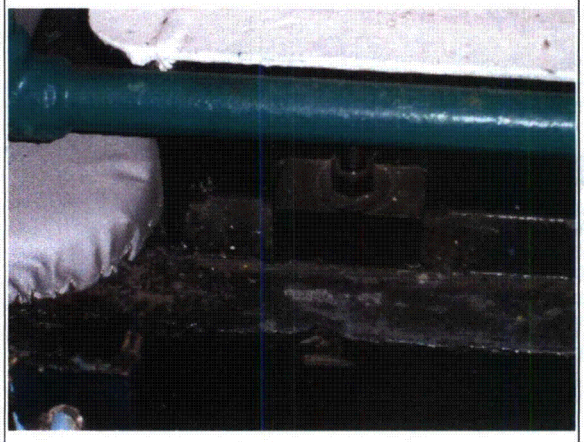
Sheet 5 of 5 **IP2**

Status: Y☒ N☐ U☐

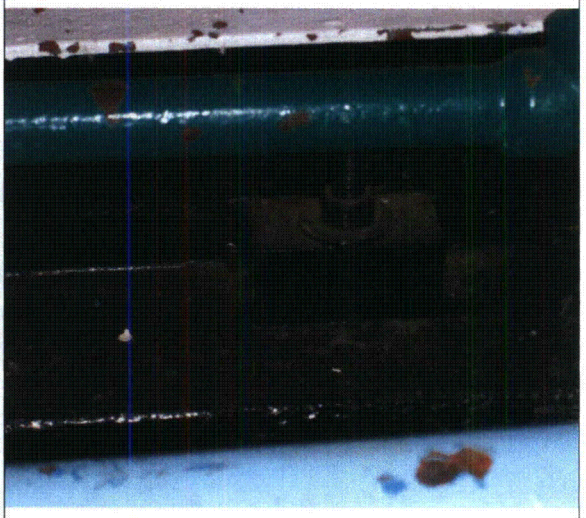
Seismic Walkdown Checklist (SWC) **SWEL1-090**

Equipment ID No. *22SIP* Equip. Class[1] *20*

Equipment Description *22 SAFETY INJECTION PUMP*



Note: *Typical anchorage*



Note: *Typical anchorage*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-091

Equipment ID No. *PNL EPA10* Equip. Class[1] *20*

Equipment Description *PAB EXH & CB PRG FAN 21 CONTROL PANEL*

Location: Bldg. *FAN HOUSE* Floor El. *80'-0"* 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☒

   The anchorage configuration verification is not required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

   An abandoned hole near the lower anchorage found about 4" away Not a seismic issue.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-091

Equipment ID No. *PNL EPA10* Equip. Class[1] *20*

Equipment Description *PAB EXH & CB PRG FAN 21 CONTROL PANEL*

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☒

   Not applicable since component is not part of the anchorage configuration verification.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-091

Equipment ID No. *PNL EPA10* Equip. Class[1] *20*

Equipment Description *PAB EXH & CB PRG FAN 21 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☐

    Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-1166, Rev 24, (A200107), Primary Auxiliary building concrete plans at elev. 59'-0" and 68'-0".
9321-F-11666, Rev 26, (A200106), Primary Auxiliary building concrete plans at elev. 15',35', and 42'
AWC-030

Evaluated by: *Kirit Parikh* Date: *10/24/2012*

Nick Crispell *10/24/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

Status: Y☒ N☐ U☐

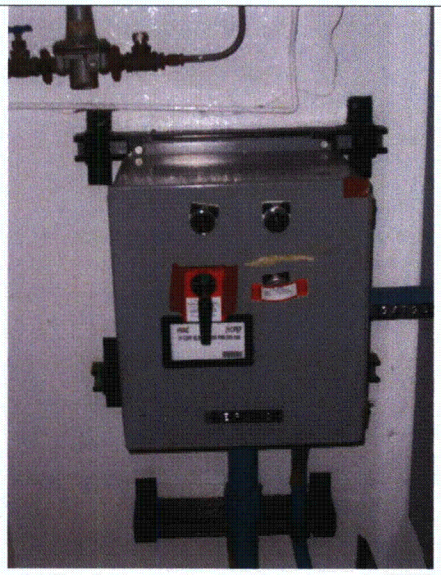
Seismic Walkdown Checklist (SWC) SWEL1-091

Equipment ID No. *PNL EPA10* Equip. Class[1] *20*

Equipment Description *PAB EXH & CB PRG FAN 21 CONTROL PANEL*

Photographs

Note: *Panel identification*



Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

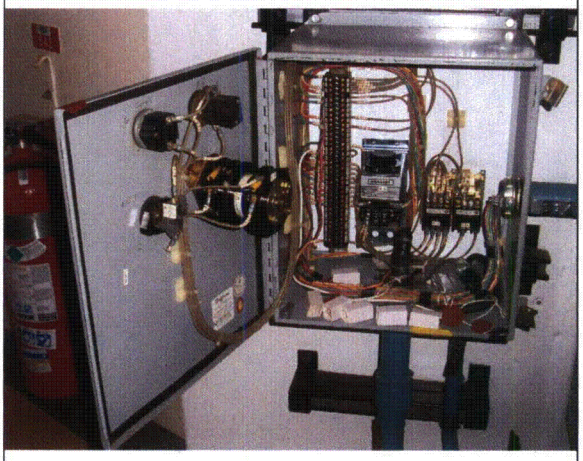
Sheet 5 of 5 **IP2**

Status: Y☒ N☐ U☐

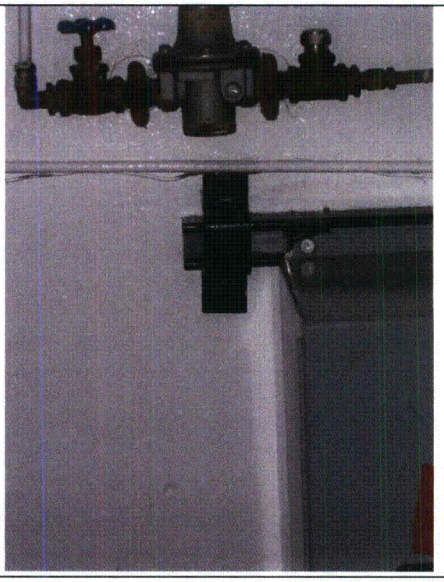
Seismic Walkdown Checklist (SWC) SWEL1-091

Equipment ID No. *PNL EPA10* Equip. Class[1] *20*

Equipment Description *PAB EXH & CB PRG FAN 21 CONTROL PANEL*



Note: *Open panel EPA10 / Anchorage. Replacement bulbs for the panel are laying on the bottom inside of the panel. Walkdown engineers judged this acceptable.*



Note: *Panel anchorage.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-092

Equipment ID No. *21CCST* Equip. Class[1] *21*

Equipment Description *21 COMPONENT COOLING SURGE TNK*

Location: Bldg. *PAB* Floor El. *98'-0"* 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☐

   The anchorage configuration verification is required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-092

Equipment ID No. *21CCST* Equip. Class[1] *21*

Equipment Description *21 COMPONENT COOLING SURGE TNK*

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 matches SQUG (SEWS).

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-092

Equipment ID No. *21CCST* Equip. Class[1] *21*

Equipment Description *21 COMPONENT COOLING SURGE TNK*

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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-2510, (A200627), Rev 49, Primary Auxiliary building general arrangement plans.
AWC-023

Evaluated by: *Nick Crispell* Date: *10-22-2012*

Dan Nuta *10-22-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

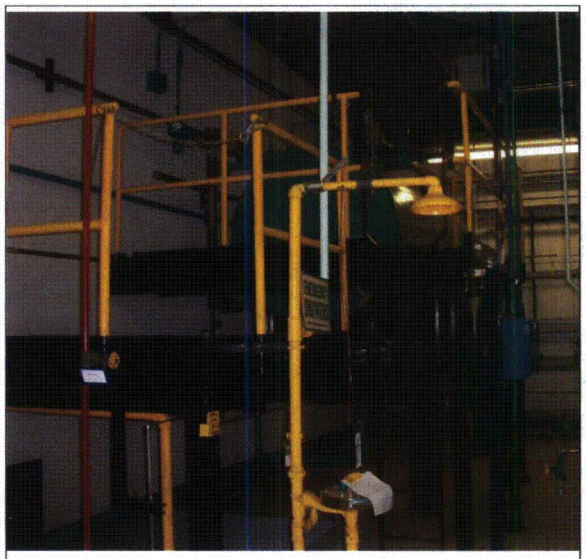
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL1-092**

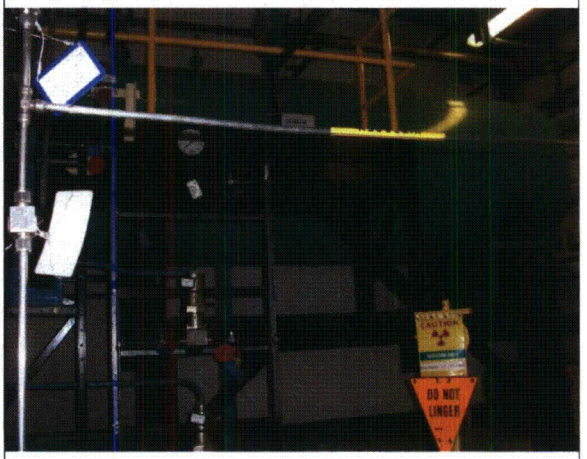
Equipment ID No. *21CCST* Equip. Class[1] *21*

Equipment Description *21 COMPONENT COOLING SURGE TNK*

Photographs



Note: *Overview of tank.*



Note: *Overview of tank.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL1-092**

Equipment ID No. *21CCST* Equip. Class[1] *21*

Equipment Description *21 COMPONENT COOLING SURGE TNK*

Note: *Typical anchorage to structural steel.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-093

Equipment ID No. *22BAT* Equip. Class[1] *21*

Equipment Description *BORIC ACID TANK*

Location: Bldg. *PAB* Floor El. *98'-0"* 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☐

   The anchorage configuration verification is required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-093

Equipment ID No. *22BAT* Equip. Class[1] *21*

Equipment Description *BORIC ACID TANK*

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 matches SQUG (SEWS).

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   One fluorescent light is burnt out nearby - not a seismic concern. CR IP2-2012-06354 issued to track resolution.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-093

Equipment ID No. *22BAT* Equip. Class[1] *21*

Equipment Description *BORIC ACID 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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC.
Drawings: 9321-F-2510, (A200627), Rev 49, Primary Auxiliary buildinggeneral arrangement plans.
684J905 Rev 40, Boric acid tank
AWC-023

Evaluated by: *Nick Crispell* Date: *10-22-2012*

Dan Nuta *10-22-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

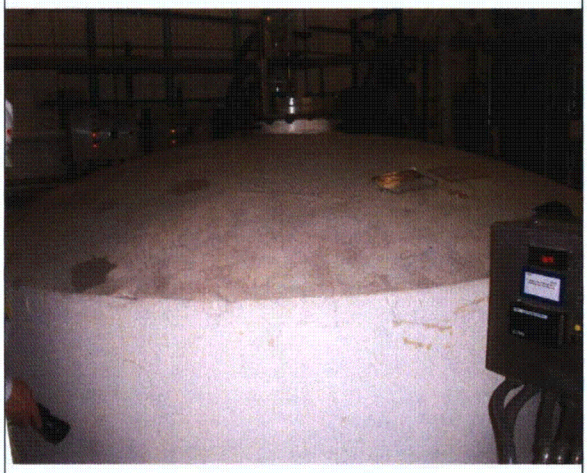
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL1-093**

Equipment ID No. *22BAT* Equip. Class[1] *21*

Equipment Description *BORIC ACID TANK*

Photographs



Note: *Boric Acid Tank*

Note: *Typical anchorage.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL1-093**

Equipment ID No. *22BAT* Equip. Class[1] *21*

Equipment Description *BORIC ACID TANK*

Note: *Typical anchorage.*

Note: *Typical anchorage.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walk down Checklist (SWC) SWEL1-094

Equipment ID No. *0021RWST* Equip. Class[1] *21*

Equipment Description *21 REFUELING WATER STORAGE TANK*

Location: Bldg. *NTF* Floor El. *82'-0"* 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☐

   The anchorage configuration verification is required.

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

   Yes the 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☐

   Mild corrosion. Acceptable, not a seismic concern.
   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Small cracks near bolt nos. 30, 24 & 25. Acceptable, not a seismic concern.

   Significant concrete spalling and numerous cracks near bolt nos. 16,17,18,19. See photos below. CR IP2-2012-06547 issued for tracking.LB-03 issued for resolution

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walk down Checklist (SWC) SWEL1-094

Equipment ID No. *0021RWST* Equip. Class[1] *21*

Equipment Description *21 REFUELING WATER STORAGE TANK*

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

   The anchorage configuration matches drawing 9321-F-1468, Rev 5 and 9321-F-1004, Rev 1.

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

   No see question 4, and pictures below.

Interaction Effects

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

   The tank is very close to the nearby platform steel structure. Refer to AWC-032 for discussion. LB-07 issued to resolve.

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☐

   Transmission line above the tank. Acceptable due to enough height

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Based on the above seismic interaction evaluations, the equipment is not free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walk down Checklist (SWC) SWEL1-094

Equipment ID No. *0021RWST* Equip. Class[1] *21*

Equipment Description *21 REFUELING WATER STORAGE 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☐

    Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-1468,Rev 5, Primary and refueling water tanks concrete foundations.
9321-F-1004,Rev 1 Plan of the entrance roads units 1,2& 3
AWC-032

Evaluated by: *Kirit Parikh* Date: *10/25/2012*

Nick Crispell *10/25/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

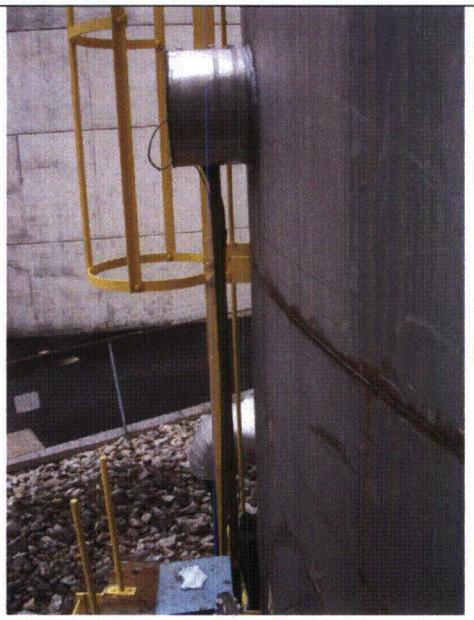
Status: Y☒ N☐ U☐

Seismic Walk down Checklist (SWC) SWEL1-094

Equipment ID No. *0021RWST* Equip. Class[1] *21*

Equipment Description *21 REFUELING WATER STORAGE TANK*

Photographs



Note: *Tank 0021 RWST view.*

Note: *The tank too close to the platform railing*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

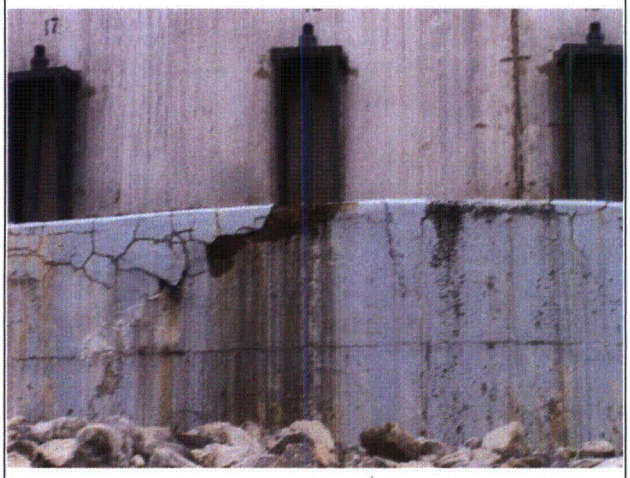
Sheet 5 of 5 **IP2**

Status: Y☒ N☐ U☐

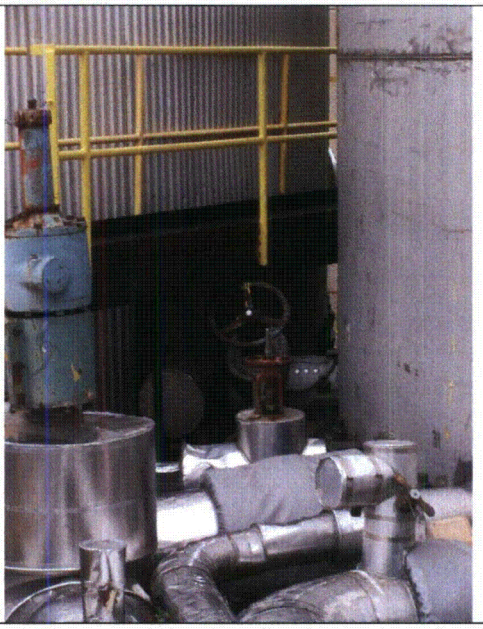
Seismic Walk down Checklist (SWC) SWEL1-094

Equipment ID No. *0021RWST* Equip. Class[1] *21*

Equipment Description *21 REFUELING WATER STORAGE TANK*



Note: *Significant Spalling and cracks near bolts 16 and 17*



Note: *The tank valve handle almost touching the plateform steel and the cut bracing on the platform legs.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-095

Equipment ID No. *CST* Equip. Class[1] *21*

Equipment Description *CONDENSATE STORAGE TANK*

Location: Bldg. *CWST* Floor El. *80'-0"* Room, Area

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

   The anchorage configuration verification is required.

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

   Yes the 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☐

   Mild corrosion on the bolt surface, Acceptable, no seismic concern.

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Minor cracks due to weather. Acceptable not a seismic concern.

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-095

Equipment ID No. *CST* Equip. Class[1] *21*

Equipment Description *CONDENSATE STORAGE TANK*

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

   The anchorage configuration matches drawing 9321-F-1472-1 Rev 1 and 9321-F-1004-1 Rev 1.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-095

Equipment ID No. *CST* Equip. Class[1] *21*

Equipment Description *CONDENSATE STORAGE 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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-1472, Rev 1, Condensate water storage tank concrete foundation.
9321-F-1004, Rev 1, Plan of entrance roads units no. 1,2 & 3.
AWC-034

Evaluated by: *Kirit Parikh* Date: *10/25/2012*

Nick Crispell *10/25/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-095

Equipment ID No. *CST* Equip. Class[1] *21*

Equipment Description *CONDENSATE STORAGE TANK*

Photographs

Note: *Condensate storage tank view*

Note: *Anchorage of the storage tank*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

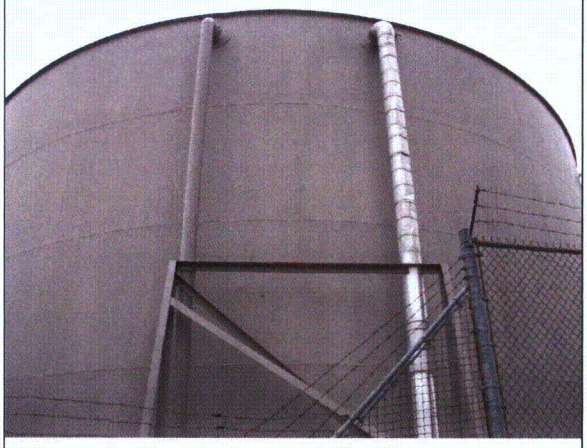
Sheet 5 of 5 **IP2**

Status: Y☒ N☐ U☐

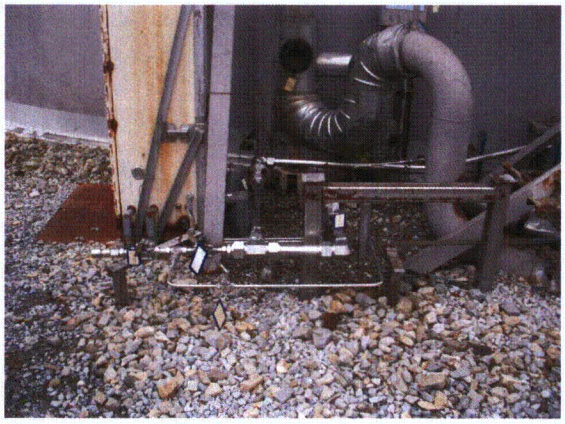
Seismic Walkdown Checklist (SWC) **SWEL1-095**

Equipment ID No. *CST* Equip. Class[1] *21*

Equipment Description *CONDENSATE STORAGE TANK*



Note: *The view above the storage tank.*



Note: *The soft connections on the storage tank*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-096

Equipment ID No. *21FODT* Equip. Class[1] *21*

Equipment Description *F.O. DAY TANK NO. 21*

Location: Bldg. *EDG* Floor El. *72'-0"* 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☐

   Yes the anchorage configuration verification is required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Anchorage is to structural steel not to concrete.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-096

Equipment ID No. *21FODT* Equip. Class[1] *21*

Equipment Description *F.O. DAY TANK NO. 21*

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 matches calculation 91177-C-02.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**
Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL1-096**

Equipment ID No. *21FODT* Equip. Class[1] *21*

Equipment Description *F.O. DAY TANK NO. 21*

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☐

Fire piping over top of tank is threaded and has sprinkler heads nearby. At time of walk down it was not known if system was a dry or wet system. Leaks could occur due to a sesmic event the would leak or spray water onto tank. Water leaking or spraying on tank is judged acceptable as there are no electrical components on tank. See AWC-011 for reference as well as photos below.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC.
Drawings: 9321-H-2250, Rev 7, Diesel generator building general arrangement plan.
AWC-011

Evaluated by: *Nick Crispell* Date: *10-16-2012*

Stephen Yuan *10-16-2012*

Dan Nuta *10-16-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4 **IP2**

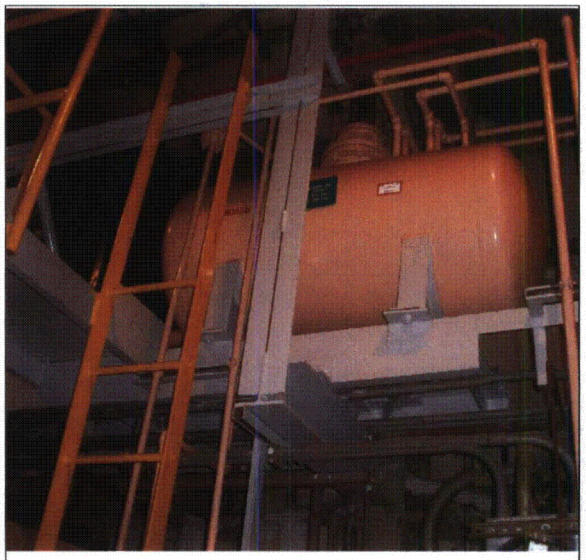
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL1-096**

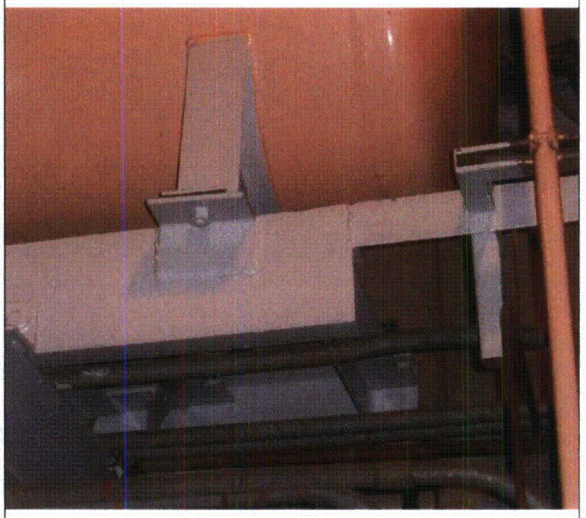
Equipment ID No. *21FODT* Equip. Class[1] *21*

Equipment Description *F.O. DAY TANK NO. 21*

Photographs



Note: *F.O. Day Tank for 21 EDG*



Note: *Anchorage of tank.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-097

Equipment ID No. *21NRHX* Equip. Class[1] *21*

Equipment Description *NON REGEN HEAT EXCHANGER NO 21*

Location: Bldg. *PAB* Floor El. *98'-0"* Room, Area

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

   The anchorage configuration verification is required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-097

Equipment ID No. *21NRHX* Equip. Class[1] *21*

Equipment Description *NON REGEN HEAT EXCHANGER NO 21*

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 matches SEWS & drawing 9321-F-1169.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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

   Block wall penetration is seismicly qualified by Computech report R547.01.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-097

Equipment ID No. *21NRHX* Equip. Class[1] *21*

Equipment Description *NON REGEN HEAT EXCHANGER NO 21*

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☐

    Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC

Drawings:

9321-F-2510, Rev 49, (A200627), Primary Auxiliary Building General Arrangement Plans.

9321-F-1169, Rev 14,(A200109), Primary Auxiliary Building Concrete Floor Plan at Elevation 98'.

AWC-025

Evaluated by: *Nick Crispell* Date: *10-22-2012*

Dan Nuta *10-22-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

Status: Y☒ N☐ U☐

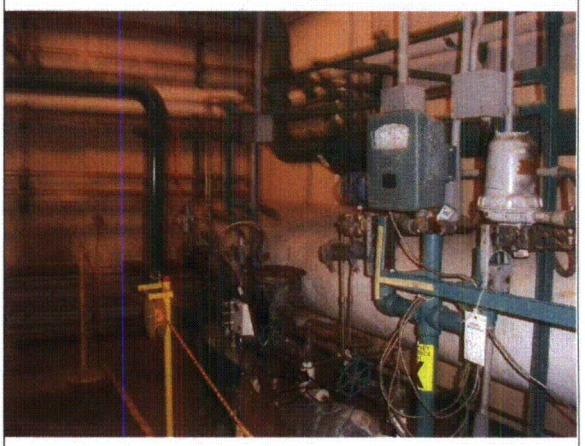
Seismic Walkdown Checklist (SWC) **SWEL1-097**

Equipment ID No. *21NRHX* Equip. Class[1] *21*

Equipment Description *NON REGEN HEAT EXCHANGER NO 21*

Photographs

Note: *South end of Non Regen Heat Exchanger*



Note: *View of HX from door way into cubical.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

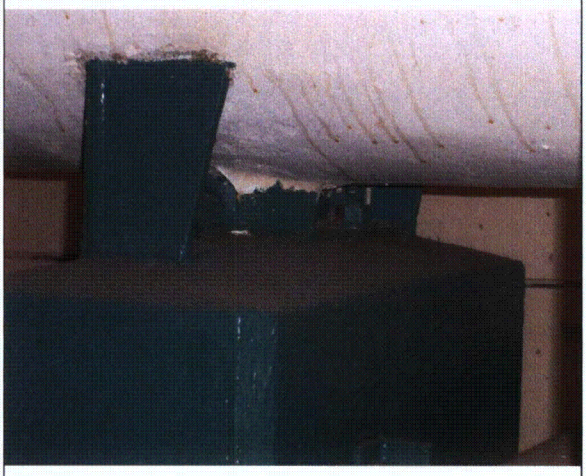
Sheet 5 of 5 **IP2**

Status: Y☒ N☐ U☐

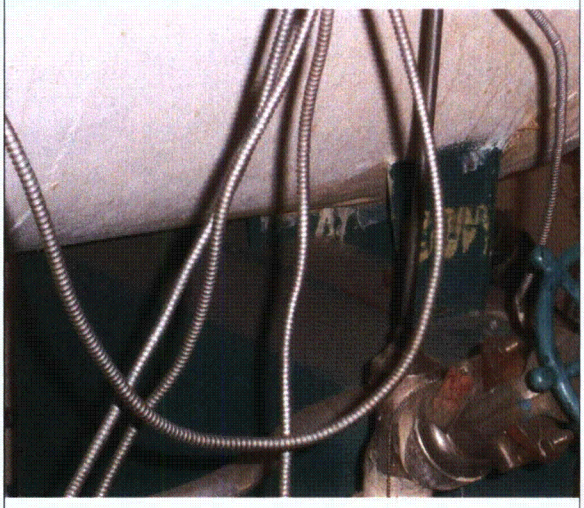
Seismic Walkdown Checklist (SWC) SWEL1-097

Equipment ID No. *21NRHX* Equip. Class[1] *21*

Equipment Description *NON REGEN HEAT EXCHANGER NO 21*



Note: *North anchorage pedestal of HX.*



Note: *South anchorage pedestal of HX.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 6 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-098

Equipment ID No. *21CCHX* Equip. Class[1] *21*

Equipment Description *CCW HEAT EXCH NO 21*

Location: Bldg. *PAB* Floor El. *80' to 98'* 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☐

   The anchorage configuration verification is required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion t0hat is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**
Sheet 2 of 6 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-098

Equipment ID No. *21CCHX* Equip. Class[1] *21*

Equipment Description *CCW HEAT EXCH NO 21*

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 matches SQUG (SEWS).

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   On 80' elevation conduit is close to tank with approximately 3/8" gap between tank wall and conduit. Judged ok given tank is a hard target.

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

   Fluorescent bulbs need wire securing bulb to fixture. One light bulb is out in the area. Judged ok and not to be seismic concern given hard target tank, valves, and piping in the area. CR IP2-2012-06354 issued to track resolution.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 6 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL1-098**

Equipment ID No. *21CCHX* Equip. Class[1] *21*

Equipment Description *CCW HEAT EXCH NO 21*

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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-2510, (A200627), Rev 49, Primary Auxiliary building general arrangement plans.
9321-F-1169, (A200109), Rev 14, Primary Auxiliary building concrete floor plan at elev. 98'
AWC-023

Evaluated by: *Nick Crispell* Date: *10-22-2012*

Dan Nuta *10-22-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 6 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-098

Equipment ID No. *21CCHX* Equip. Class[1] *21*

Equipment Description *CCW HEAT EXCH NO 21*

Photographs

Note: *CCW HX on 80' elevation.*

Note: *CCW HX on 80' elevation looking at ceiling.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

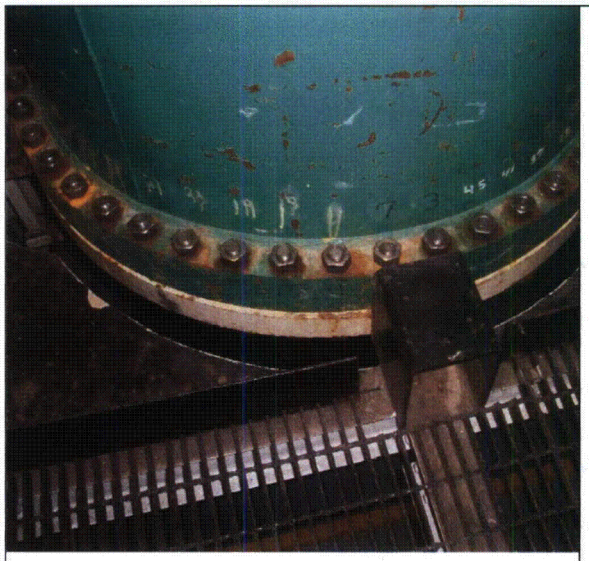
Sheet 5 of 6 **IP2**

Status: Y☒ N☐ U☐

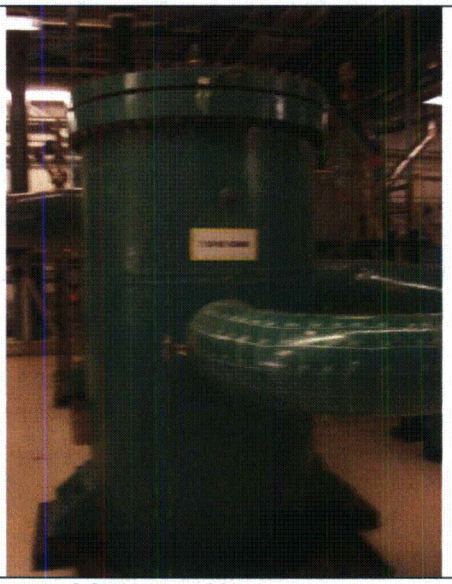
Seismic Walkdown Checklist (SWC) SWEL1-098

Equipment ID No. *21CCHX* Equip. Class[1] *21*

Equipment Description *CCW HEAT EXCH NO 21*



Note: *Typical anchorage on 80' elevation.*



Note: *CCW HX on 98' elevation.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 6 of 6 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-098

Equipment ID No. *21CCHX* Equip. Class[1] *21*

Equipment Description *CCW HEAT EXCH NO 21*

Note: *CCW HX on 98' elevation.*

Note: *Typical anchorage on 98' elevation.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-099

Equipment ID No. *0022IACA* Equip. Class[1] *21*

Equipment Description *INST AIR COMP 22 AFTERCOOLER*

Location: Bldg. *CB* Floor El. *15'-0"* 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☒

   The item is an in line component.

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

   In line component.

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

   In line component.

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

   In line component.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-099

Equipment ID No. *0022IACA* Equip. Class[1] *21*

Equipment Description *INST AIR COMP 22 AFTERCOOLER*

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☒

   Not applicable since component is in-line.

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

   Yes, based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes, soft targets are free from impact by nearby equipment or structures.

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

   The masonry brick wall was seismic qualified by Computech Report no. R547.01. Therefore, overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes, attached lines have adequate flexibility to avoid damage.

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

    Yes, based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-099

Equipment ID No. *0022IACA* Equip. Class[1] *21*

Equipment Description *INST AIR COMP 22 AFTERCOOLER*

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☐

    Yes, we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-3052, Rev 38, Equipment arrangement Control building.
AWC-001

Evaluated by: *Nick Crispell* Date: *10/9/12*

Stephen Yuan *10/9/12*

Dan Nuta *10/9/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4 **IP2**

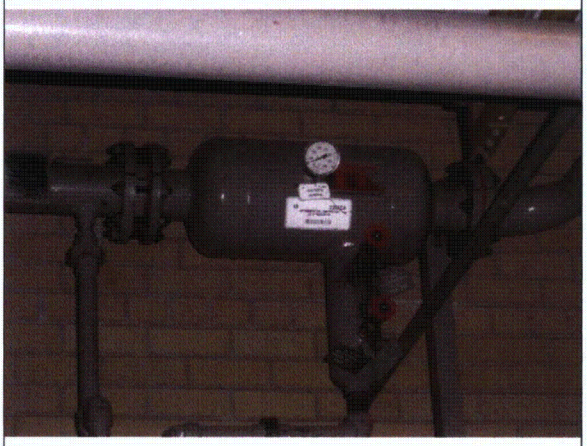
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-099

Equipment ID No. *0022IACA* Equip. Class[1] *21*

Equipment Description *INST AIR COMP 22 AFTERCOOLER*

Photographs



Note: *Inst Air Comp 22 Aftercoller.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-100

Equipment ID No. *0022EDSAT* Equip. Class[1] *21*

Equipment Description *START AIR TANK 22DG*

Location: Bldg. *EDG* Floor El. *67'-0"* 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☐

   Yes the anchorage configuration verification is required.

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

   Yes the 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☐

   Minimal surface corrosion on anchors & tank side. Judged acceptable.

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

   Coating is chipped on concrete pedestal and nearby floor. No noticable cracks of significance where observed. Acceptable.

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

ATTACHMENT 9.6	SEISMIC WALKDOWN CHECKLIST FORM
Sheet 2 of 5	IP2

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-100

Equipment ID No. *0022EDSAT* Equip. Class[1] *21*

Equipment Description *START AIR TANK 22DG*

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 matches SQUG (SEWS).

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Conduits and unistruts near by tank are close to touching tank. 1/8" to 1/2" gap on some of the nearby conduits. All occurences are judged acceptable given robustness of conduits and the tank.

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☐

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**
Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-100

Equipment ID No. *0022EDSAT* Equip. Class[1] *21*

Equipment Description *START AIR TANK 22DG*

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☐

Fire piping above uses threaded fittings that could leak and spray due to a seismic event. At time of walk down it was not known if the system was a dry or wet system. If they leak water the tank would remain operable.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-H-2250, Rev 7,Diesel generator building general arrangement plan
9321-H-2251, Rev 5, Diesel generator building general arrangement sections.
AWC-011

Evaluated by: *Stephen Yuan* Date: *10-16-2012*

Nick Crispell *10-16-2012*

Dan Nuta *10-16-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL1-100**

Equipment ID No. *0022EDSAT* Equip. Class[1] *21*

Equipment Description *START AIR TANK 22DG*

Photographs

Note: *EDG starting air tank*

Note: *Base plate for starting air tank*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5 **IP2**

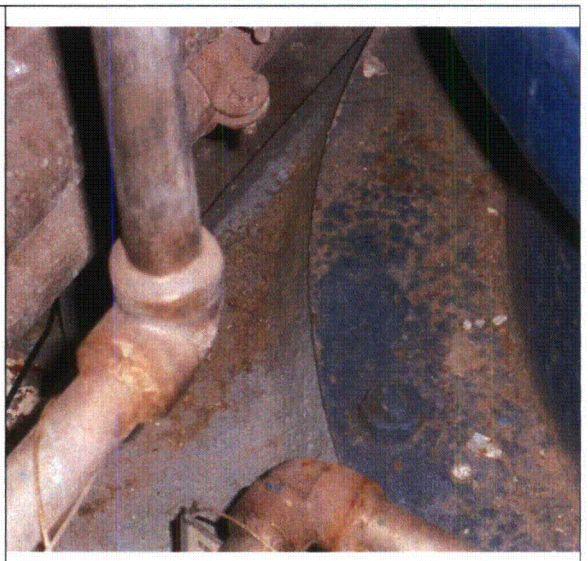
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-100

Equipment ID No. *0022EDSAT* Equip. Class[1] *21*

Equipment Description *START AIR TANK 22DG*

Note: *Typical anchor bolt for 22EDSAT*



Note: *Typical anchor bolt for 22EDSAT*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. *21RWPP* Equip. Class[1] *5*

Equipment Description *Refueling Water Purification Pump 21 and Motor*

Location: Bldg. *PAB* Floor El. *68* 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☐

   The anchorage configuration verification is required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. *21RWPP* Equip. Class[1] *5*

Equipment Description *Refueling Water Purification Pump 21 and 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 matches drawing 9321-F-1167 & 9321-F-1166.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. *21RWPP* Equip. Class[1] *5*

Equipment Description *Refueling Water Purification Pump 21 and 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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-1167, Rev 24, (A200107) Primary Auxiliary building concrete plans at elev. 59'-0" and 68'-0".
9321-F-1166, Rev 6, (A200106), Primary Auxiliary building concrete plans at elev. 15'-0", 35'-0" and 42'-0".

AWC-019

Evaluated by: *Nick Crispell* Date: *10-19-2012*

Paul Huebsch *10-19-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

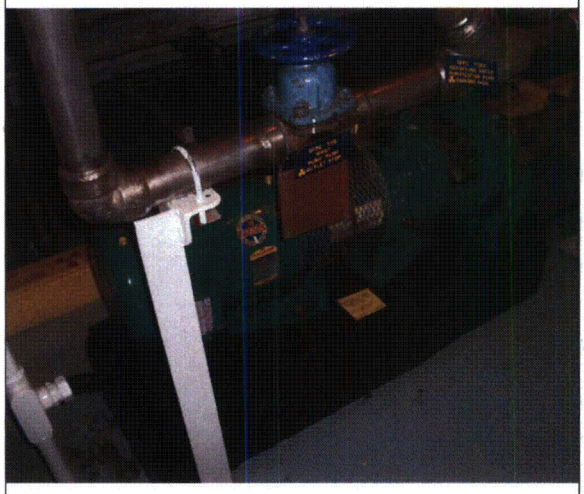
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. *21RWPP* Equip. Class[1] *5*

Equipment Description *Refueling Water Purification Pump 21 and Motor*

Photographs



Note: *21RWPP*

Note: *21RWPP*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL2-001**

Equipment ID No. *21RWPP* Equip. Class[1] *5*

Equipment Description *Refueling Water Purification Pump 21 and Motor*

Note: *Typical anchorage*

Note: *Typical anchorage*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-002

Equipment ID No. *21SFPP* Equip. Class[1] *5*

Equipment Description *Spent Fuel Pit Pump 21 and Motor*

Location: Bldg. *FSB* Floor El. *70'-0"* 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☐

   The anchorage configuration verification is required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-002

Equipment ID No. *21SFPP* Equip. Class[1] *5*

Equipment Description *Spent Fuel Pit Pump 21 and 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 matches drawing 9321-F-1197.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   Light cage nearby looks to be cross threaded (Typical 3 lights). Missing glass dome inside cage (2 lights). CR IP2-2012-06744 tracks resolution of lighting issue.

   Masonry block wall next to the SFP exchanger.

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

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-002

Equipment ID No. *21SFPP* Equip. Class[1] *5*

Equipment Description *Spent Fuel Pit Pump 21 and 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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

Pump has a boric acid leak showing signs under impeller as well as valves. Boric acid will be resolved by work order tags in the area. Label fell off.

Minor corrosion on structural beams overhead. No structural impact.

References: Drawings and AWC
Drawings: 9321-F-2514, Rev 19,Fuel storage building general arrangement plans and elevations,Unit 2.
9321-F-1197, Rev 8, (A200137), Fuel storage building concrete details sheet 2
AWC-007

Evaluated by: *Stephen Yuan* Date: *10/12/12*

Nick Crispell *10/12/12*

Dan Nuta *10/12/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-002

Equipment ID No. *21SFPP* Equip. Class[1] *5*

Equipment Description *Spent Fuel Pit Pump 21 and Motor*

Photographs

Note: *SFP Pump*

Note: *SFP Pump*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. *22SFPP* Equip. Class[1] *5*

Equipment Description *Spent Fuel Pit Pump 22 and Motor*

Location: Bldg. *FSB* Floor El. *70'-0"* 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☐

   The anchorage configuration verification is required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. *22SFPP* Equip. Class[1] *5*

Equipment Description *Spent Fuel Pit Pump 22 and 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 matches drawing 9321-1197.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6	SEISMIC WALKDOWN CHECKLIST FORM
Sheet 3 of 5	IP2

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. *22SFPP* Equip. Class[1] *5*

Equipment Description *Spent Fuel Pit Pump 22 and 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☐

    Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

Pump has a boric acid leak showing signs under impeller, as well as valves. Leak is being worked by WRT IP2-06-WAJ-24968 per tag near leak. See photos below. This is not a seismic issue as no significant boric acid corosion was observed.

References: Drawings and AWC
Drawings: 9321-F-1197(A200137) Rev 8, Fuel storage building concrete details sheet-2
AWC-007

Evaluated by: *Stephen Yuan* Date: *10/12/12*

Nick Crispell *10/12/12*

Dan Nuta *10/12/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-003

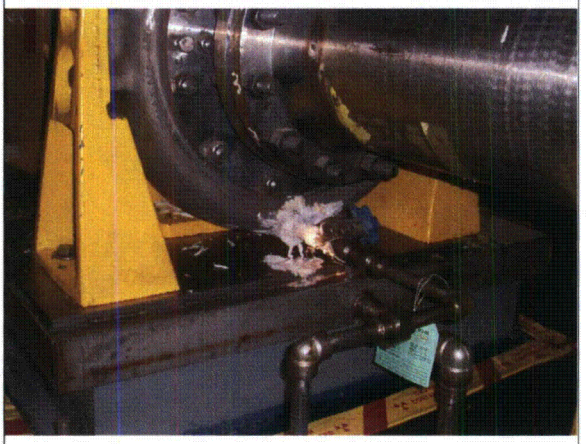
Equipment ID No. *22SFPP* Equip. Class[1] *5*

Equipment Description *Spent Fuel Pit Pump 22 and Motor*

Photographs

Note:

22SFPP



Note:

BORIC ACID LEAK

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

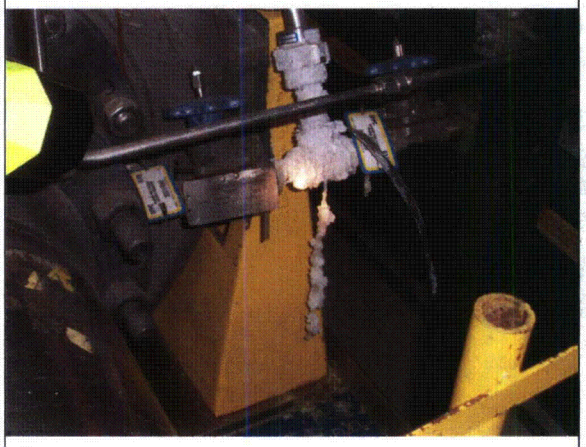
Sheet 5 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. *22SFPP* Equip. Class[1] *5*

Equipment Description *Spent Fuel Pit Pump 22 and Motor*



Note:

BORIC ACID LEAK

Note:

BORIC ACID LEAK

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. *21SFPHX* Equip. Class[1] *21*

Equipment Description *Spent Fuel Pit Heat Exchanger*

Location: Bldg. *FSB* Floor El. *80* 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☐

   The anchorage configuration verification is required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. *21SFPHX* Equip. Class[1] *21*

Equipment Description *Spent Fuel Pit Heat Exchanger*

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 matches drawing 9321-F-1197.

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

   Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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 bulbs need to be secured by wires. CR IP2-2012-06741 tracks the resolution. Falling bulb would break small diameter tubes running to heat exchanger in seismic event.

   Masonry wall is seismically qualified by computech report R547.01 per SQUG SEWS.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**
Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL2-004**

Equipment ID No. *21SFPHX* Equip. Class[1] *21*

Equipment Description *Spent Fuel Pit Heat Exchanger*

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☐

Tubing (1/4")runing to CCW-4 is vibrating significantly. Its unsupported span length is approximately 6'. CR IP2-2012-06753 track the resolution.

Comments (Additional pages may be added as necessary)

One of the fluorescent bulb above is out. Needs to be replaced.

References: Drawings and AWC
Drawings:9321-F-2514(A200629) Rev 19, Fuel storage building general arrangement plans and elevations.
9321-F-1197(A200137) Rev 8, Fuel storage building concrete details,sheet 2
AWC-008

Evaluated by: *Nick Crispell* Date: *10/12/12*

Stephen Yuan *10/12/12*

Dan Nuta *10/12/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. *21SFPHX* Equip. Class[1] *21*

Equipment Description *Spent Fuel Pit Heat Exchanger*

Photographs

Note:

21SFHPX

Note:

One light above is out..

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 7 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-005

Equipment ID No. *SFPBH* Equip. Class[1] *0*

Equipment Description *Spent Fuel Pit Bridge Crane*

Location: Bldg. *FSB* Floor El. *95'-0"* 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☒

   The anchorage configuration verification is not required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 7 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-005

Equipment ID No. *SFPBH* Equip. Class[1] *0*

Equipment Description *Spent Fuel Pit Bridge Crane*

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☒

   Not applicable since component is not part of the anchorage configuration verification.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Yes soft targets are free from impact by nearby equipment or structures.

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☐

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 7 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-005

Equipment ID No. *SFPBH* Equip. Class[1] *0*

Equipment Description *Spent Fuel Pit Bridge Crane*

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☐

    Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-2514, Rev 19, Fuel storage building general arrangement plans and elevations (Unit no. 2).
AWC-020

Evaluated by: *Paul Huebsch* Date: *10-19-2012*

Nick Crispell *10-19-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 7 **IP2**

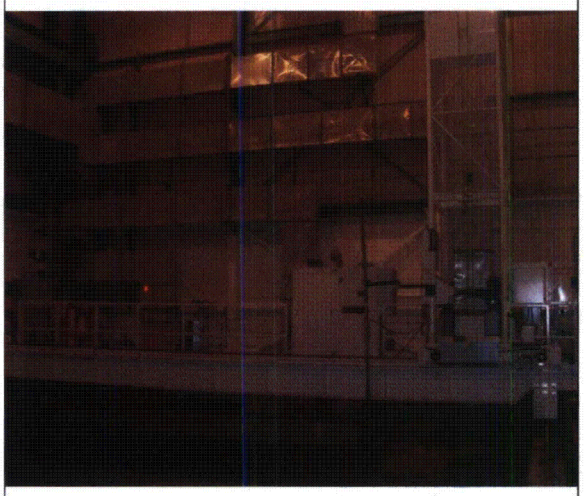
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL2-005**

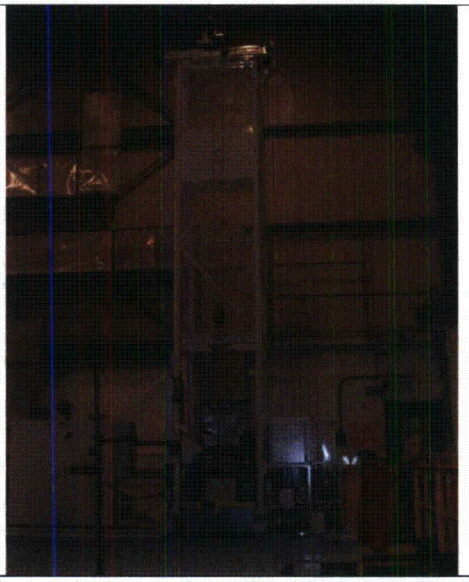
Equipment ID No. *SFPBH* Equip. Class[1] *0*

Equipment Description *Spent Fuel Pit Bridge Crane*

Photographs



Note: *Spent Fuel Pit Bridge Crane.*



Note: *Tower on Spent Fuel Pit Bridge Crane.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

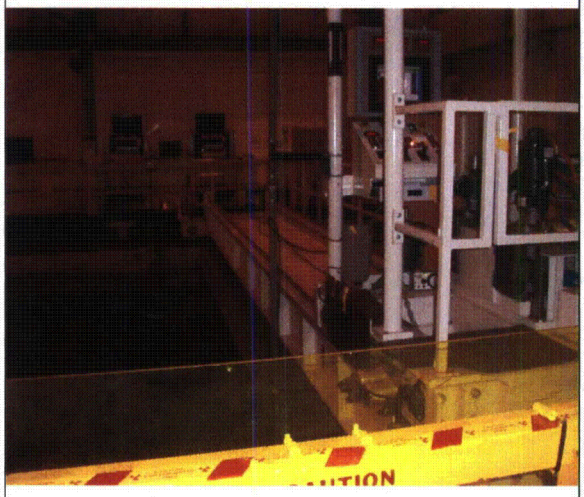
Sheet 5 of 7 **IP2**

Status: Y☒ N☐ U☐

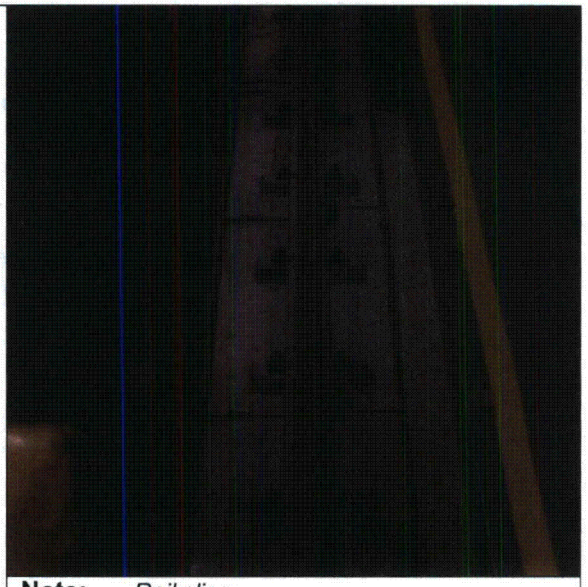
Seismic Walkdown Checklist (SWC) **SWEL2-005**

Equipment ID No. *SFPBH* Equip. Class[1] *0*

Equipment Description *Spent Fuel Pit Bridge Crane*



Note: *Side view of Spent Fuel Pit Bridge Crane*



Note: *Rail clips*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 6 of 7 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL2-005**

Equipment ID No. *SFPBH* Equip. Class[1] *0*

Equipment Description *Spent Fuel Pit Bridge Crane*

Note: *Top of mast.*

Note: *Bottom of mast and operator platform.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

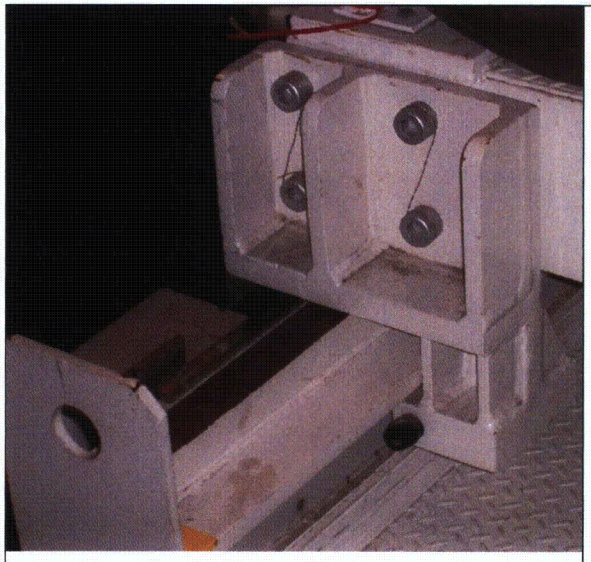
Sheet 7 of 7 **IP2**

Status: Y☒ N☐ U☐

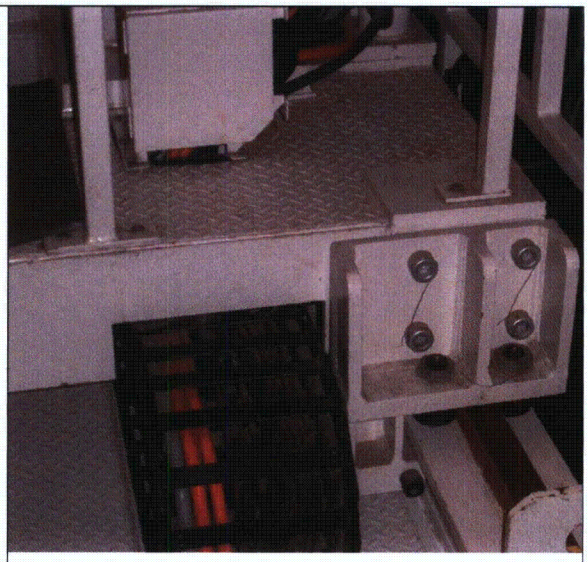
Seismic Walkdown Checklist (SWC) **SWEL2-005**

Equipment ID No. *SFPBH* Equip. Class[1] *0*

Equipment Description *Spent Fuel Pit Bridge Crane*



Note: *Mast uplift bracket so mast will not topple over into the SFP do to a seismic event.*



Note: *Mast uplift bracket so mast will not topple over into the SFP do to a seismic event.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. *40TFSBH* Equip. Class[1] *1*

Equipment Description *Fuel Storage Building 40/5 Ton Crane*

Location: Bldg. *FSB* Floor El. *95'-0"* 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☒

   No, the anchorage configuration verification is not required.

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

   There are no visible defects.

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

   There are no visible defects.

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

   Yes, the anchorage is free of visible cracks in the concrete near the anchor.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. *40TFSBH* Equip. Class[1] *1*

Equipment Description *Fuel Storage Building 40/5 Ton Crane*

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☒

   Not applicable since component is not part of the anchorage configuration verification.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Not a soft target.

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

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. *40TFSBH* Equip. Class[1] *1*

Equipment Description *Fuel Storage Building 40/5 Ton Crane*

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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-2514, Rev 19, General arrangement plans and elevations (Unit 2).
9321-F-1306(A200185), Rev 8, Fuel storage building framing plan at roof crane girders and platform elev. 96'-6"
AWC-020

Evaluated by: *Nick Crispell* Date: *10/19/2012*

Paul Huebsch *10/19/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

Status: Y☒ N☐ U☐

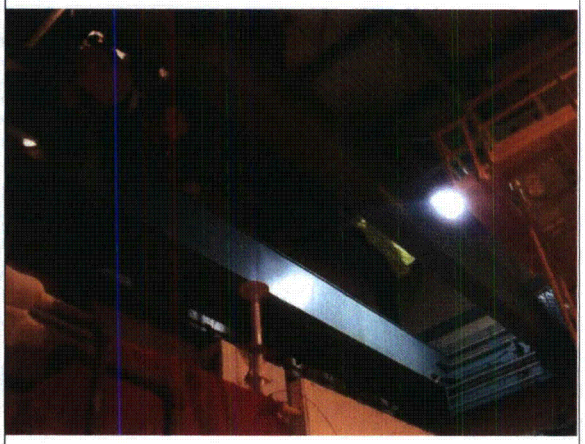
Seismic Walkdown Checklist (SWC) **SWEL2-006**

Equipment ID No. *40TFSBH* Equip. Class[1] *1*

Equipment Description *Fuel Storage Building 40/5 Ton Crane*

Photographs

Note: *View of trolley.*



Note: *View of crane bridge.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL2-006**

Equipment ID No. *40TFSBH* Equip. Class[1] *1*

Equipment Description *Fuel Storage Building 40/5 Ton Crane*

Note: *General roof framing and diagphram was inspected along with building walls.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. *110TFSB* Equip. Class[1] *0*

Equipment Description *Ederer Crane (Dry Fuel Storage)*

Location: Bldg. *FSB* Floor El. *95'-0"* 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☒

   The anchorage configuration verification is not required.

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

   Yes the 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☐

   Yes the anchorage is free of corrosion that is more than mild surface oxidation.

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

   Yes the anchorage is free of visible cracks in the concrete near the anchors.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. *110TFSB* Equip. Class[1] *0*

Equipment Description *Ederer Crane (Dry Fuel Storage)*

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☒

   Not applicable since component is not part of the anchorage configuration verification.

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

   Yes based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

   Not a soft target.

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

   Yes overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   Yes attached lines have adequate flexibility to avoid damage.

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

    Yes based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. *110TFSB* Equip. Class[1] *0*

Equipment Description *Ederer Crane (Dry Fuel Storage)*

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☐

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment.

Comments (Additional pages may be added as necessary)

References: Drawings and AWC
Drawings: 9321-F-2514, Rev 19, Fuel Storage building general arrangement, plans and elevations. (Unit no. 2).
AWC-020

Evaluated by: *Paul Huebsch* Date: *10-19-2012*

Nick Crispell *10-19-2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5 **IP2**

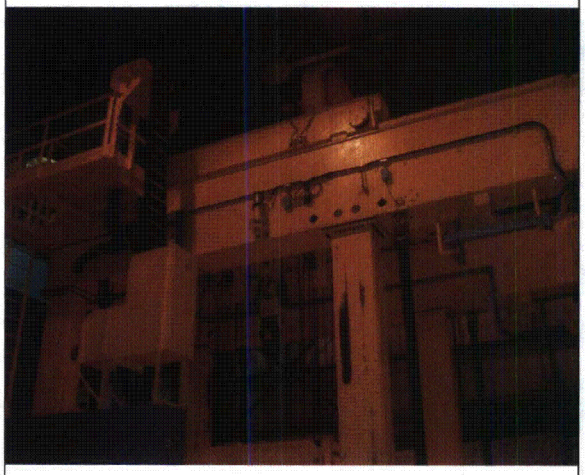
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL2-007**

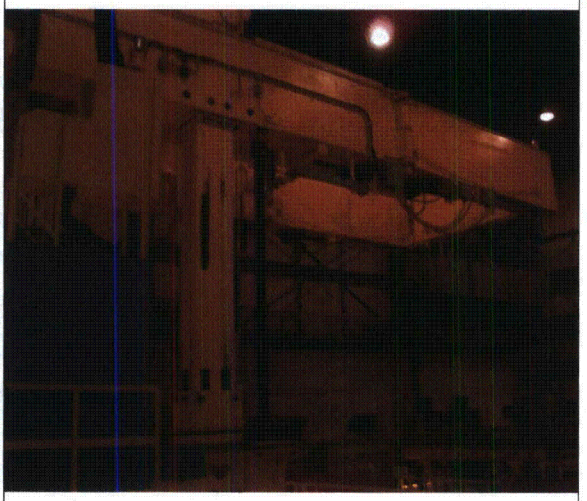
Equipment ID No. *110TFSB* Equip. Class[1] *0*

Equipment Description *Ederer Crane (Dry Fuel Storage)*

Photographs



Note: *Top of crane and trolley.*



Note: *Crane extended to right over top of SFP.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

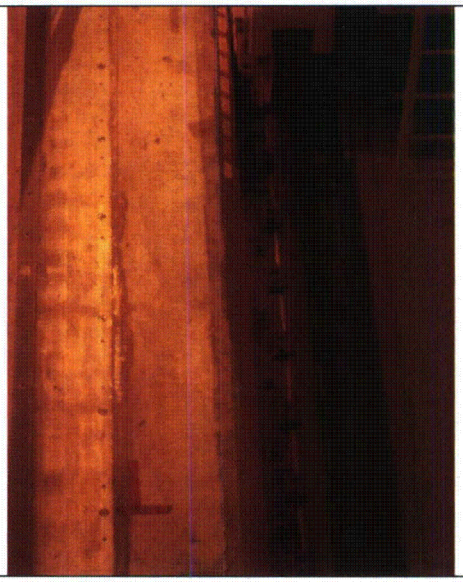
Sheet 5 of 5 **IP2**

Status: Y☒ N☐ U☐

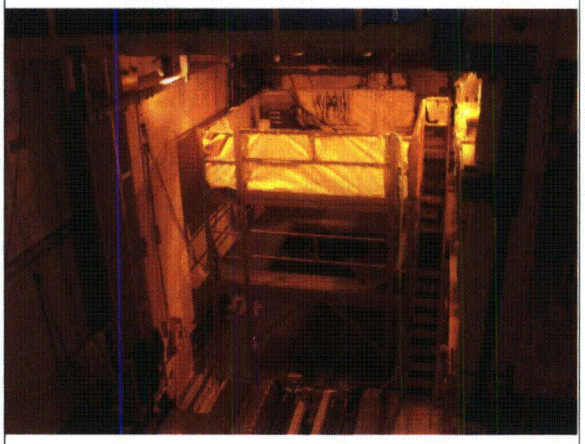
Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. *110TFSB* Equip. Class[1] *0*

Equipment Description *Ederer Crane (Dry Fuel Storage)*



Note: *Rail clips for crane.*



Note: *Base of crane and counter weights.*

ATTACHMENT D – AREA WALK-BY CHECKLISTS (AWCs)

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-001

Location: Bldg. *CB* Floor El. *15'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-017, 019, 024, 051, 058, 059, 099***

Instructions for Completing Checklist

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

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

   Yes anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

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

   Minor surface corrosion noted. Judged insignificant.

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

   Conduit east of column J8,10.1 missing anchor bolt to brick wall for conduit for instrument air SOV-1199. No operability issue conduit spans less then 8'. Conduit anchorage condition was documented in CR- IP2-2012-06495.

   Conduit east of column H6,10.1 missing anchor to brick wall for conduit to IACC TC-1106S. No operability issue conduit spans less then 8'. Was documented in CR- IP2-2012-06495.

   Unistrut supporting cable tray overhead half way between instrument air compressor 21 and double doors to transformer yard is wrapped with temporary paper and tape preventing inspection of two unistrut joints. Observation was noted in CR IP2-2012-06495 and this is not a seismic concern.

   All of the above concerns are accepted.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-001

Location: Bldg. *CB* Floor El. *15'-0"* Room, Area[1]

SWEL Components: ***SWEL1-017, 019, 024, 051, 058, 059, 099***

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

   Masonry (brick & block) walls are in the area are seismically qualified per Computech report R547.01.

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

   Component cooling water in room is judged to be adequately supported and therefore will not cause flooding or spray interactions.

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

   Yes it appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

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

   Carts near double doors to transformer yard are adequately secured with chains.

   Portable ladder near double doors is laid down and secured only on one end allowing other end to slide freely on the floor. Discussed with operations personnel in area and they corrected the problem immediately. CR IP2-2012-06495 issued for tracking.
   All of the above concerns are acceptable. No seismic concern

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-001

Location: Bldg. *CB* Floor El. *15'-0"* Room, Area[1]

SWEL Components: ***SWEL1-017, 019, 024, 051, 058, 059, 099***

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

   Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area.

Comments (Additional pages may be added as necessary)

No more seismic concerns.

Evaluated by: *Nick Crispell* Date: *10-8-2012*

Stephen Yuan *10-8-2012*

Dan Nuta *10-8-2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

IP2

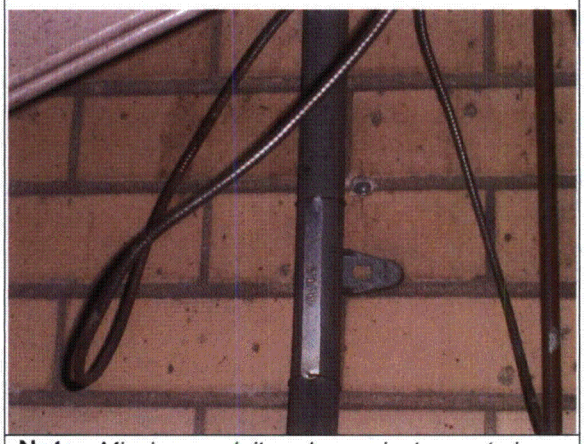
Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-001

Location: Bldg. *CB* Floor El. *15'-0"* Room, Area[1]

SWEL Components: ***SWEL1-017, 019, 024, 051, 058, 059, 099***

Photographs



Note: *Missing conduit anchor on instrument air SOV-1199.*

Note: *Taped and paper raped unistrut connections supporting cable tray.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 5

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-001

Location: Bldg. *CB* Floor El. *15'-0"* Room, Area[1]

SWEL Components: ***SWEL1-017, 019, 024, 051, 058, 059, 099***

Note: *Missing conduit anchor on IACC TC-1106S. Conduit support spacing judged acceptable. CR IP2-2012-06495 issued for tracking.*

Note: *Missing conduit anchor on IACC TC-1106S*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-002

Location: Bldg. *CB* Floor El. *15'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-013, 014, 016, 065, 066, 089***

Instructions for Completing Checklist

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

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

   Yes anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

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

   Slight surface corrosion acceptable.

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

   Yes based on a visual inspection from the floor, the cable/conduit raceways and HVAC ducting appears to be free of potentially adverse seismic conditions.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-002

Location: Bldg. *CB* Floor El. *15'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-013, 014, 016, 065, 066, 089***

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

   Masonry (brick & block) walls in the area are seismically qualified per Computech report R547.01.

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

   Component cooling water in room is judged to be adequately supported and therefore will not cause flooding or spray interactions.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

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

   Portable ladder near double doors is laid down and secured only on one end allowing other end to slide freely on the floor. Discussed with operations personnel in area and they corrected the problem in our presence.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) **AWC-002**

Location: Bldg. *CB* Floor El. *15'-0"* Room, Area[1]

SWEL Components: ***SWEL1-013, 014, 016, 065, 066, 089***

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

Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area.

Comments (Additional pages may be added as necessary)

No more seismic concerns.

Evaluated by: *Nick Crispell* Date: *10-8-2012*

Stephen Yuan *10-8-2012*

Dan Nuta *10-8-2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-002

Location: Bldg. *CB* Floor El. *15'-0"* Room, Area[1]

SWEL Components: ***SWEL1-013, 014, 016, 065, 066, 089***

Photographs

Note: *Ladder top that is unsecured.*

Note: *Masonry brick wall. Wall sandwich plates are not on the entire length of wall.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-003

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-018, 015, 061, 062***

Instructions for Completing Checklist

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

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

   Yes anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

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

   Yes anchorage of equipment in the area appears to be free of significant degraded conditions.

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

   Cable tray support frame (over top of 22 MG SET) appears too close to the conduit west of the frame. The frame might interact with the conduit. Additionally the cable tray support frame does not appear to be seismically designed. This is documented in CR-IP2-2012-06498 and evaluated in LB-01.

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

   Some florescent bulbs need wires securing the bulb to the fixture. CR IP2-2012-06120 tracks resolution of this issue. Not a seismic issue given location of bulbs and targets in the area. Bulbs are to be secured as a good seismic housekeeping practice.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-003

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-018, 015, 061, 062***

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

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

   The engine hoist tool located on the north wall needs to be tied more securely to the fixed post. Hoist can roll side to side along wall and impact the nearby instrument rack. See photo below. CR IP2-2012-6135 issued to resolves.

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

   Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area.

Comments (Additional pages may be added as necessary)

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-003

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1]

SWEL Components: ***SWEL1-018, 015, 061, 062***

A few bolts on equipment cover panels are missing. See photos below. Cover panels judged acceptable during seismic event. CR IP2-2012-06155 issued to track resolution. See SWEL1-015 for reference.

Door hold down missing on upper small box. See photos below. Box judged acceptable during a seismic event. CR IP2-2012-06155 issued to track resolution.

References:
CR IP2-2012-06155
CR IP2-2012-6135

Evaluated by: *Nick Crispell* Date: *10-10-2012*

Stephen Yuan *10-10-2012*

Dan Nuta *10-10-2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

IP2

Status: Y☒ N☐ U☐

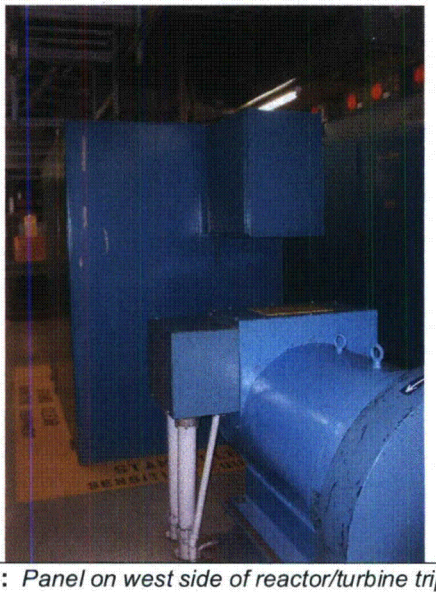
Area Walk-By Checklist (AWC) AWC-003

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-018, 015, 061, 062***

Photographs

Note: *Engine hoist needing to be secured to the cross bars to prevent movement from left to right in this photo.*



Note: *Panel on west side of reactor/turbine trip cabinet missing 2 bolts.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 5

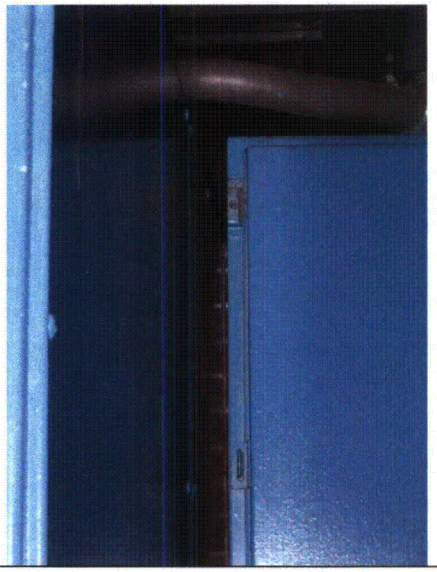
IP2

Status: Y☒ N☐ U☐

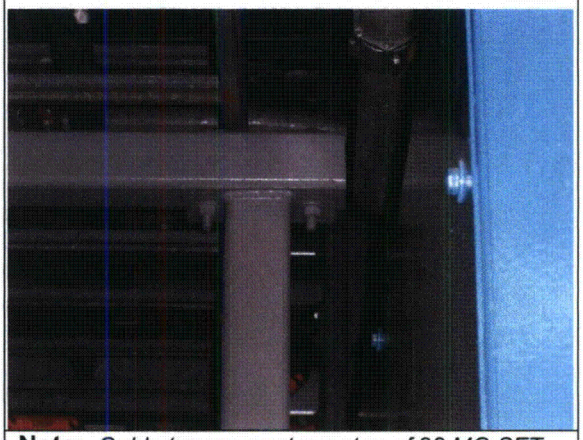
Area Walk-By Checklist (AWC) AWC-003

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-018, 015, 061, 062***



Note: *Cabinet hanging on west side of reactor/turbine trip cabinet missing top latch.*



Note: *Cable tray support over top of 22 MG SET and next to Reactor Trip Breaker cabinet appears to be none seismically designed and appears to have a seismic separation issue with the conduit pictured. Tray support is the tube steel pictured.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-004

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1]

SWEL Components: ***SWEL1-011, 012, 018, 067, 072, 073, 074, 075***

Instructions for Completing Checklist

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

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

   One anchor bolt is missing on baseplate for EL1A & EL4A support along north wall. Plant drawing 309189-00 allows 3 anchors in this baseplate therefore acceptable.

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

   Yes anchorage of equipment in the area appears to be free of significant degraded conditions.

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

   Yes based on a visual inspection from the floor, the cable/conduit raceways and HVAC ducting appears to be free of potentially adverse seismic conditions.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-004

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-011, 012, 018, 067, 072, 073, 074, 075***

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

   Some fluorescent bulbs need to be secured to the light fixture with wires and a bulb is missing in the light behind MCC27A. Not a seismic concern given location of bulbs and hard target in the area. CR IP2-2012-06120 securing bulbs to light fixtures for good seismic housekeeping.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

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

   Lighting panel 219 door slightly ajar (not closed/latched). Operations personnel shut panel in our presence. CR IP2-2012-06119 issued to ensure the issue does not happen again.

   23DC Power Panel door not closed. Latch is broken and latch is missing parts. CR IP2-2012-06117 was issued for tracking.

   24DC Power PNL has latches in the open position. Door is shut and multiple other latches on door are in closed position. CR IP2-2012-06117 was issued for tracking.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) **AWC-004**

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1]

SWEL Components: ***SWEL1-011, 012, 018, 067, 072, 073, 074, 075***

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

   Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area.

Comments (Additional pages may be added as necessary)

No more seismic concerns.

Evaluated by: *Nick Crispell* Nick Crispell Date: *10-10-2012*

Stephen Yuan Stephen Yuan *10-10-2012*

Dan Nuta Dragos D. Nuta *10-10-2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-004

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1]

SWEL Components: ***SWEL1-011, 012, 018, 067, 072, 073, 074, 075***

Photographs

Note: *23DC Power Panel door not closed. Latch is broken and latch is missing parts.*

Note: *24DC Power PNL has latches in the open position. Door is shut and multiple other latches on door are in closed position.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 5

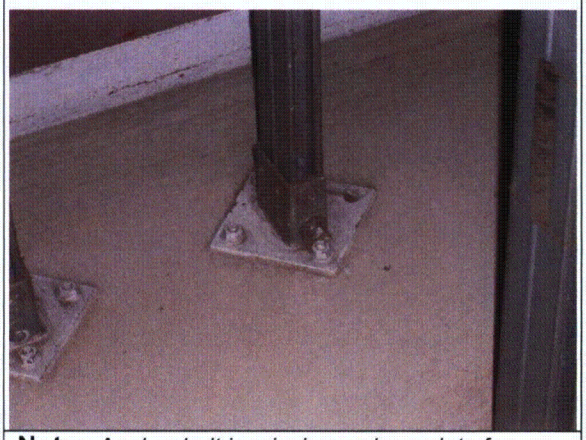
IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-004

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-011, 012, 018, 067, 072, 073, 074, 075***



Note: *Anchor bolt is missing on baseplate for EL1A & EL4A support along north wall.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-005

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] *22 Battery Room*

SWEL Components: ***SWEL1-069***

Instructions for Completing Checklist

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

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

   Yes anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

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

   Yes anchorage of equipment in the area appears to be free of significant degraded conditions.

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

   Yes based on a visual inspection from the floor, the cable/conduit raceways and HVAC ducting appears to be free of potentially adverse seismic conditions.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-005

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] *22 Battery Room*

SWEL Components: ***SWEL1-069***

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

   Some fluorescent bulbs need to be secured to the light fixture with wires. This is judged not to be a seismic concern given hard target batteries below. CR IP2-2012-06120 securing bulbs for good seismic housekeeping.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-005

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] *22 Battery Room*

SWEL Components: ***SWEL1-069***

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

   Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area.

Comments (Additional pages may be added as necessary)

Lose 12" long steel member (construction waist) found lying on floor under the battery rack located in the south-east corner of room. This is considered to be not a seismic concern. CR IP2-2012-06510 issued to remove the item.

Evaluated by: *Nick Crispell* Nick Crispell Date: *10-10-2012*

Stephen Yuan *10-10-2012*

Dan Nuta *10-10-2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-005

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] *22 Battery Room*

SWEL Components: ***SWEL1-069***

Photographs

Note: *Pictures could not be taken while meeting the procedural camera standoff requirements.*	**Note:**

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-006

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] *21 Battery Room*

SWEL Components: ***SWEL1-068***

Instructions for Completing Checklist

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

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

   Yes anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

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

   Yes anchorage of equipment in the area appears to be free of significant degraded conditions.

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

   Yes based on a visual inspection from the floor, the cable/conduit raceways and HVAC ducting appears to be free of potentially adverse seismic conditions.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-006

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] *21 Battery Room*

SWEL Components: ***SWEL1-068***

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

   One light needs to have a safety cover. This is not a seismic concern given hard target batteries below light. CR IP2-2012-06120 safety cover installation as a good seismic housekeeping practice.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) ***AWC-006***

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] *21 Battery Room*

SWEL Components: ***SWEL1-068***

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

   Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area.

Comments (Additional pages may be added as necessary)

No comments.

Evaluated by: *Nick Crispell* Date: *10-10-2012*

Stephen Yuan *10-10-2012*

Dan Nuta *10-10-2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-006

Location: Bldg. *CB* Floor El. *33'-0"* Room, Area[1] *21 Battery Room*

SWEL Components: ***SWEL1-068***

Photographs

Note: *Pictures could not be taken while meeting the procedural camera standoff requirements.*	**Note:**

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 6 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-007

Location: Bldg. *FSB* Floor El. *70'* Room, Area[1] *SFP Pump Room*

SWEL Components: ***SWEL2-002, 003***

Instructions for Completing Checklist

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

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

   Yes anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

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

   Minor surface corrosion on pipe hangers in area. Not significant.

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

   Yes based on a visual inspection from the floor, the cable/conduit raceways and HVAC ducting appears to be free of potentially adverse seismic conditions.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 6 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-007

Location: Bldg. *FSB* Floor El. *70'* Room, Area[1] *SFP Pump Room*

SWEL Components: ***SWEL2-002, 003***

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

   Yes it appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 6 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-007

Location: Bldg. *FSB* Floor El. *70'* Room, Area[1] *SFP Pump Room*

SWEL Components: ***SWEL2-002, 003***

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

   Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area.

Comments (Additional pages may be added as necessary)

1. *Valve SFP 719A outlet to SFP Demin Stop shows slight surface rust. As well as 2 pipe hangers on the pipe to this valve. Not significant.*
2. *Top of overhead concrete beam is jagged. Not a structural issue.*
3. *Light bulb above 22SFP Pump is burnt out. This is not a seismic issue Lights Out Hotline (extension-7600) was contacted regarding the light out.*
4. *Light safety cages on all three lights in the room appear to be sitting in the light fixtures incorrectly. They look to be cross threaded. Hard target pumps would not be rendered inoperable. CR IP2-2012-06744 issued to track fixing the light safety cages.*
5. *Multiple boric acid leaks noted in the area on SFP pumps. No significant boric acid corrosion observed. Boric acid leaks are already work order tagged in the field for repairs. See photos below.*

References:
CR IP2-2012-06744

Evaluated by: *Nick Crispell* Date: *10-12-2012*

Stephen Yuan Date: *10/12/2012*

Dan Nuta *10-12-2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 6

IP2

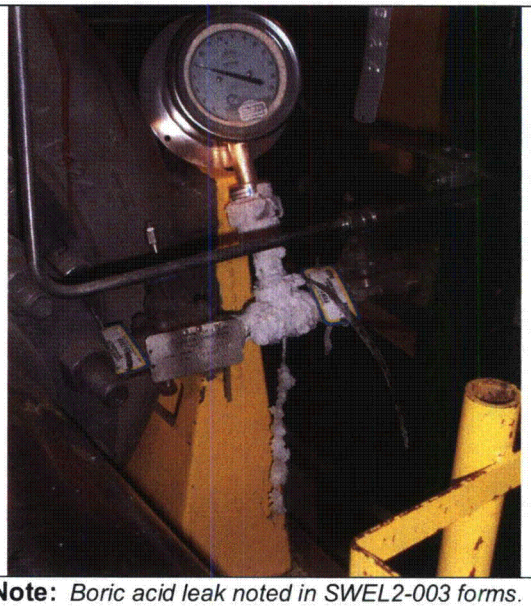
Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-007

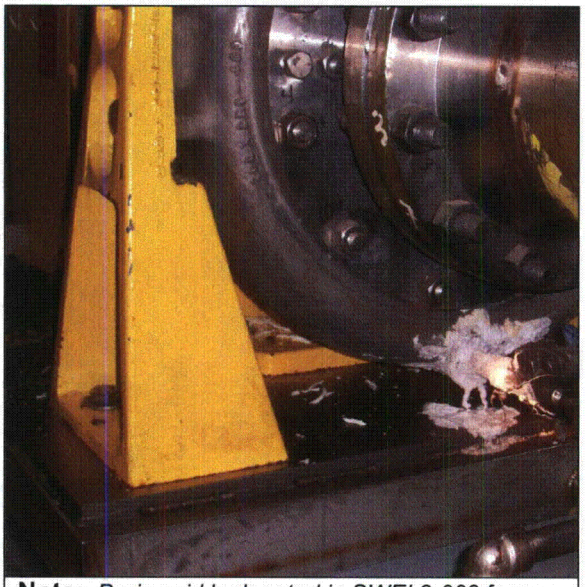
Location: Bldg. *FSB* Floor El. *70'* Room, Area[1] *SFP Pump Room*

SWEL Components: ***SWEL2-002, 003***

Photographs



Note: *Boric acid leak noted in SWEL2-003 forms.*



Note: *Boric acid leak noted in SWEL2-003 forms.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 6

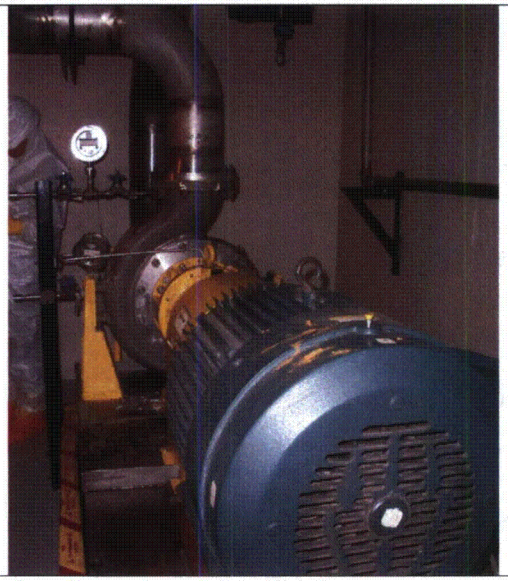
IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-007

Location: Bldg. *FSB* Floor El. *70'* Room, Area[1] *SFP Pump Room*

SWEL Components: ***SWEL2-002, 003***



Note: *General area of 22 SFP Pump*

Note: *General area of 21 SFP Pump*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 6 of 6

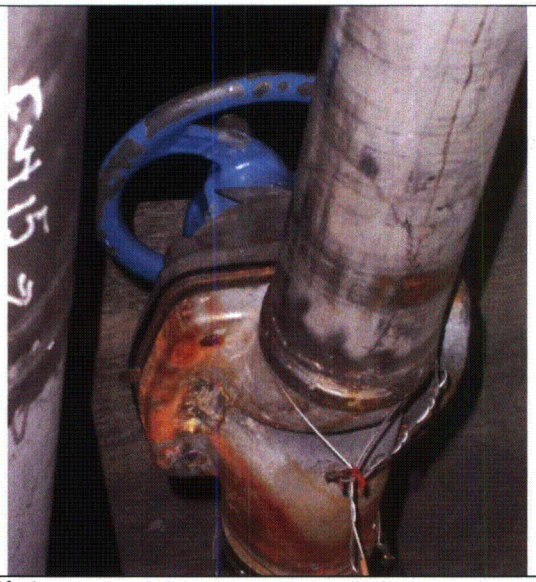
IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-007

Location: Bldg. *FSB* Floor El. *70'* Room, Area[1] *SFP Pump Room*

SWEL Components: ***SWEL2-002, 003***



Note: *Valve SFP 719A outlet to SFP Demin Stop shows slight surface rust.*

Note: *Pipe hanger near valve SFP 719A shows slight surface rust.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 9 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-008

Location: Bldg. *FSB* Floor El. *80'-0"* Room, Area[1] *SFP Heat Exchanger Room*

SWEL Components: ***SWEL2-004***

Instructions for Completing Checklist

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

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

   Yes anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

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

   Yes anchorage of equipment in the area appears to be free of significant degraded conditions.

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

   Tubing running to the SFP heat exchanger is vibrating significantly. Long span of approximately 6' for a ¼" tubing appears to be excessive. CR IP2-2012-06753 issued to investigate vibration fatigue issues and provided seismic adequacy of the long span. See photo below.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 9 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-008

Location: Bldg. *FSB* Floor El. *80'-0"* Room, Area[1] *SFP Heat Exchanger Room*

SWEL Components: ***SWEL2-004***

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

   Yes it appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

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

   Tool box is secured such that its restraint chain would load and possibly damage the fire water pipe shown in photo below. CR IP2-2012-06774 issued to better secure the tool box.

   See question 3 and CR IP2-2012-06753 for flooding/spray adequacy of possible leakage from the vibrating small diameter tubing.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 9 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-008

Location: Bldg. *FSB* Floor El. *80'-0"* Room, Area[1] *SFP Heat Exchanger Room*

SWEL Components: ***SWEL2-004***

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

   Numerous miscellaneous tools, ladders, stands, etc. under and round stairs are not adequately secured with chains. See multiple photos below. CR IP2-2012-06774 was issued to resolve the issue.

   Gas bottle has support chain attached to a moveable ladder on the other side of a concrete column. Ladder is not tight against the column. This would allow gas bottle to topple in a seismic event. Bottle should be secured around concrete column alone with two chains one high and one low on the bottle. See photos below. CR IP2-2012-06774 was issued to resolve the issue.

   Magnetic mount for camera doesn't appear adequate for a seismic event. Falling of camera will not effect operation of safety related SSC's however room monitoring for accident response would be lost. CR IP2-2012-06774 issued to determine if camera should be seismically mounted.

   Hair line cracks in concrete wall on north side. Cracks are normal concrete cracks and are not structurally significant.

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

   Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area.

Comments (Additional pages may be added as necessary)

CR IP2-2012-06753
CR IP2-2012-06774

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 9 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-008

Location: Bldg. *FSB* Floor El. *80'-0"* Room, Area[1] *SFP Heat Exchanger Room*

SWEL Components: ***SWEL2-004***

Evaluated by: *Nick Crispell* Date: *10/13/2012*

Dan Nuta *10/13/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 9

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-008

Location: Bldg. *FSB* Floor El. *80'-0"* Room, Area[1] *SFP Heat Exchanger Room*

SWEL Components: ***SWEL2-004***

Photographs

Note: *Picture of heat exchanger. Tubing in question is in the top right of photo running from the concrete column to near the gage on the large bore pipe shown.*

Note: *Tool box secured on left side only could damage the fire water pipe causing flooding. Tool box should be tied back at both left and right sides.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 6 of 9

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-008

Location: Bldg. *FSB* Floor El. *80'-0"* Room, Area[1] *SFP Heat Exchanger Room*

SWEL Components: ***SWEL2-004***

Note: *Gas bottle secured to moveable ladder on other side of column. Bottle and ladder can move easily in a seismic event.*

Note: *Gas bottle secured to moveable ladder on other side of column. Bottle and ladder can move easily in a seismic event.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 7 of 9

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-008

Location: Bldg. *FSB* Floor El. *80'-0"* Room, Area[1] *SFP Heat Exchanger Room*

SWEL Components: ***SWEL2-004***

Note: *Magnetic camera mount does not appear seismically adequate.*

Note: *Miscellaneous tools left loose behind 21 Spent Fuel Pit Pump switch.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 8 of 9

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-008

Location: Bldg. *FSB* Floor El. *80'-0"* Room, Area[1] *SFP Heat Exchanger Room*

SWEL Components: ***SWEL2-004***

Note: *Unsecured ladder next to stair way.*

Note: *Numerous unsecured items under stair way.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 9 of 9

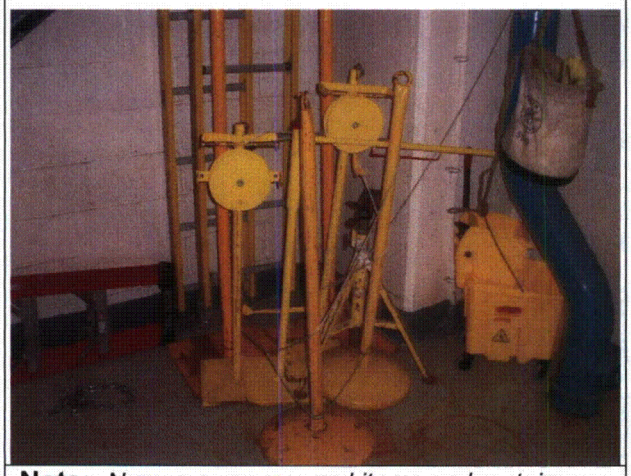
IP2

Status: Y☒ N☐ U☐

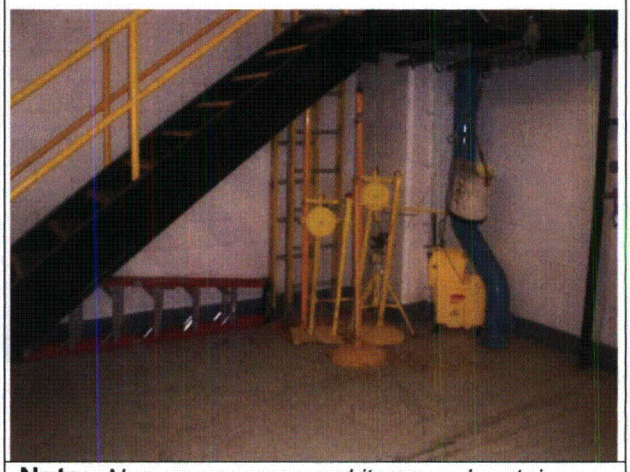
Area Walk-By Checklist (AWC) AWC-008

Location: Bldg. *FSB* Floor El. *80'-0"* Room, Area[1] *SFP Heat Exchanger Room*

SWEL Components: ***SWEL2-004***



Note: *Numerous unsecured items under stair way.*



Note: *Numerous unsecured items under stair way.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-009

Location: Bldg. *AF* Floor El. *32'-6"* Room, Area[1] _____

SWEL Components: ***SWEL1-035***

Instructions for Completing Checklist

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

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

   Yes anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

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

   Yes anchorage of equipment in the area appears to be free of significant degraded conditions.

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

   Yes based on a visual inspection from the floor, the cable/conduit raceways and HVAC ducting appears to be free of potentially adverse seismic conditions.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-009

Location: Bldg. *AF* Floor El. *32'-6"* Room, Area[1] _____

SWEL Components: ***SWEL1-035***

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

   Some florescent bulbs need wires securing the bulb to the fixture. CR IP2-2012-06485 tracks resolution of this issue.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-009

Location: Bldg. *AF* Floor El. *32'-6"* Room, Area[1]

SWEL Components: ***SWEL1-035***

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

   Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area.

Comments (Additional pages may be added as necessary)

Miscellaneous small items (nuts, bolts, unistrut clamp) found near overhead crane trolley door. CR IP2-2012-06511 issued to clean up.

Evaluated by: *Nick Crispell* Nick Crispell Date: *10-12-2012*

Stephen Yuan Stephen Yuan *10-12-2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

IP2

Status: Y☒ N☐ U☐

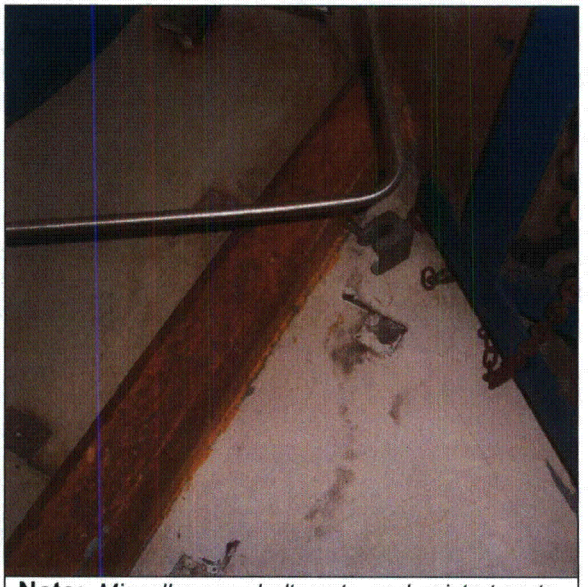
Area Walk-By Checklist (AWC) AWC-009

Location: Bldg. *AF* Floor El. *32'-6"* Room, Area[1] _____

SWEL Components: ***SWEL1-035***

Photographs

Note: *Miscellaneous bolts nuts, and unistrut parts left near overhead trolley door.*



Note: *Miscellaneous bolts nuts, and unistrut parts left near overhead trolley door.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 5

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-009

Location: Bldg. *AF* Floor El. *32'-6"* Room, Area[1] _____

SWEL Components: ***SWEL1-035***

Note: *General area of walk by*

Note: *General area of walk by*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-010

Location: Bldg. *AFB* Floor El. *43'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-034***

Instructions for Completing Checklist

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

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

   Yes anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

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

   Yes anchorage of equipment in the area appears to be free of significant degraded conditions.

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

   Yes based on a visual inspection from the floor, the cable/conduit raceways and HVAC ducting appears to be free of potentially adverse seismic conditions.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-010

Location: Bldg. *AFB* Floor El. *43'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-034***

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

   Yes it appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

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

   Moveable stairs in area is chain secured on one side. But can roll into nearby small valves by rotating about chain in a seismic event. Piping & valves judged to survive seismic impact from moveable stairs. CR IP2-2012-06636 issued to better secure movable stairs.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-010

Location: Bldg. *AFB* Floor El. *43'-0"* Room, Area[1] _____

SWEL Components: ***SWEL1-034***

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

   Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area.

Comments (Additional pages may be added as necessary)

Some fluorescent bulbs need wires securing the bulb to the fixture. CR IP2-2012-06640 tracks resolution of this issue.

Insulation in area has been removed from main steam lines for work. This is not a seismic issue. CR IP2-2012-06638 issued to track resolution.

References:
CR IP2-2012-06636
CR IP2-2012-06638
CR IP2-2012-06640

Evaluated by: *Stephen Yuan* Date: *10-12-2012*

Nick Crispell *10-12-2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

IP2

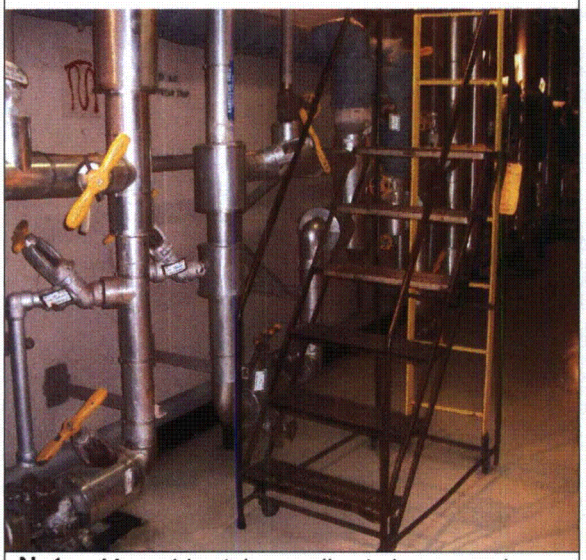
Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-010

Location: Bldg. *AFB* Floor El. *43'-0"* Room, Area[1]

SWEL Components: ***SWEL1-034***

Photographs



Note: *Moveable stairs needing to be secured.*

Note: *Insulation in area has been removed from main steam lines for work. This is not a seismic issue. CR IP2-2012-06638 issued to track resolution.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 7 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-011

Location: Bldg. *EDG* Floor El. *All* Room, Area[1] _____

SWEL Components: SWEL1-036, 037, 047, 060, 076, 077, 078, 081, 084, 087, 096, & 100

Instructions for Completing Checklist

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

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

   Yes anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

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

   Minor surface corrosion. Judged acceptable.

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

   Conduit above door needs support on west side of door. Conduit goes to box TPS-5 which is a security box. CR IP2-2012-06235 issued to resolve. This is not a seismic concern and therefore is acceptable. Conduit is located such that failure and falling of the conduit would not affect the function of safety related equipment.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 7 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-011

Location: Bldg. *EDG* Floor El. *All* Room, Area[1]

SWEL Components: SWEL1-036, 037, 047, 060, 076, 077, 078, 081, 084, 087, 096, & 100

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

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

   Fire protection pipes in the area uses threaded fittings without welding. The fire protection piping is seismically analyzed, and EDG building is qualified for spray & flooding as discussed in existing operability evaluation attached to CR IP2-2005-04868 and calculation IP-CALC-06-00039.

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

   Yes it appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

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

   Loose parts scattered around platform in North East corner to EDG building. The Crane hook should be tied off. These items are not near safe shutdown SSCs and therefore are judged acceptable seismically. Operations fixed the problems in our presence and CR IP2-2012-06238 was issued for trend tracking.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 7 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-011

Location: Bldg. *EDG* Floor El. *All* Room, Area[1]

SWEL Components: SWEL1-036, 037, 047, 060, 076, 077, 078, 081, 084, 087, 096, & 100

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

Partitions between EDG's are shown on drawing 207634. These partitions between EDG's have multiple cracked welds (see photos below). These partitions are discussed in CR IP2-2003-03195, and seismically qualified in calculation FCX-00534. These partitions and calculation FCX-00534 require further investigation as cracked welds indicate a problem. CR IP2-2012-06278 issued to track investigation and resolution of the cracked welds. Walk down team judged partitions to be seismically adequate with cracked welds.

Walk down team recommends redesigning the partitions to include personnel loads (i.e. handrail lateral loads) as observations showed most personnel hold onto the ends of the partition when stepping next to the EDG's as the transition from flat grating to the sloped partition base is difficult. Also recommend removing the sloped base as this makes walking next to the EDG's difficult and presents a safety issue.

Comments (Additional pages may be added as necessary)

Grating south of 21 & 22 EDG's have their bearing bars spanning the wrong direction. Bearing bars span east-west where they do not bear on structural floor beams. The bearing bars should be rotated 90 degrees to bear on structural steel as the grating is cupping under just personnel load as the cross wires are bearing all the weight. This is judged not to be a seismic issue but a safety issue. CR IP2-2012-06512 issued to track resolution. It should be noted that this deficiency was previously noted in IP2-2005-03784, IP2-2008-04346, and IP2-2009-0195. Work request No. 00141381 was written in 2008 and work order IP2-05-01026.

Evaluated by: *Nick Crispell* Date: *10-15-2012*

Stephen Yuan *10-15-2012*

Dan Nuta *10-15-2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 7

IP2

Status: Y☒ N☐ U☐

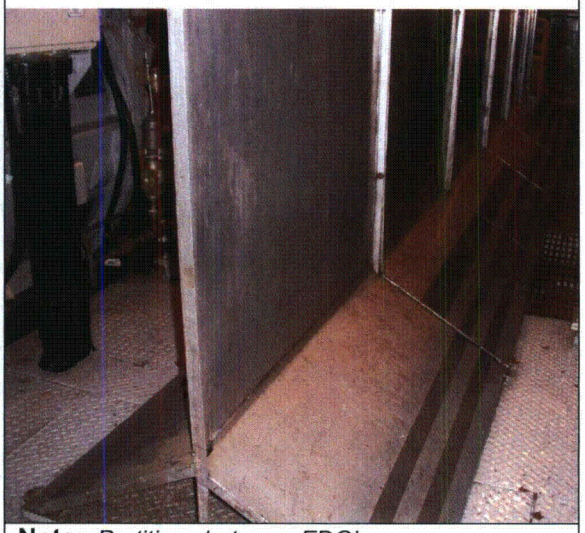
Area Walk-By Checklist (AWC) AWC-011

Location: Bldg. *EDG* Floor El. *All* Room, Area[1]

SWEL Components: SWEL1-036, 037, 047, 060, 076, 077, 078, 081, 084, 087, 096, & 100

Photographs

Note: *Multiple cracked welds on the partitions between EDG's.*



Note: *Partitions between EDG's*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 7

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-011

Location: Bldg. *EDG* Floor El. *All* Room, Area[1] _____

SWEL Components: **SWEL1-036, 037, 047, 060, 076, 077, 078, 081, 084, 087, 096, & 100**

Note: *Conduit above door needs support on west side of door. Large conduit above the light shown here. Conduit goes to box TPS-5.*

Note: *Crane hook is not secured.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 6 of 7

IP2

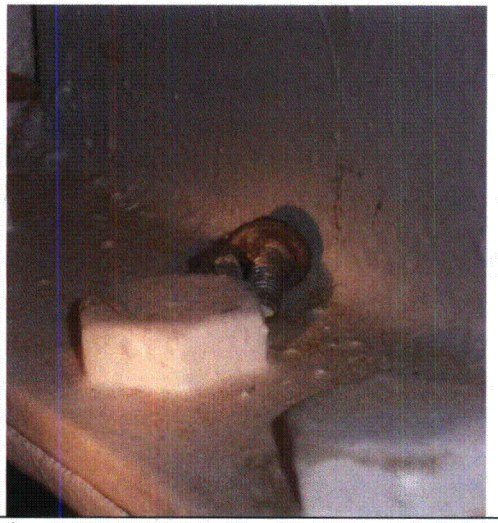
Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-011

Location: Bldg. *EDG* Floor El. *All* Room, Area[1]

SWEL Components: **SWEL1-036, 037, 047, 060, 076, 077, 078, 081, 084, 087, 096, & 100**

Note: *Loose parts scattered around platform in north east corner of EDG's.*



Note: *Loose parts scattered around platform in north east corner of EDG's.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 7 of 7

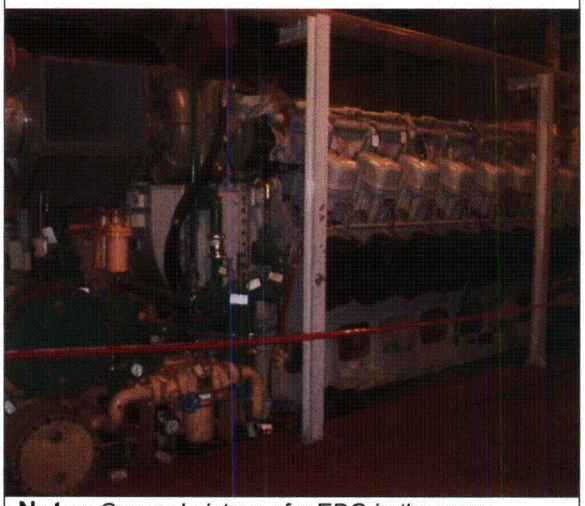
IP2

Status: Y☒ N☐ U☐

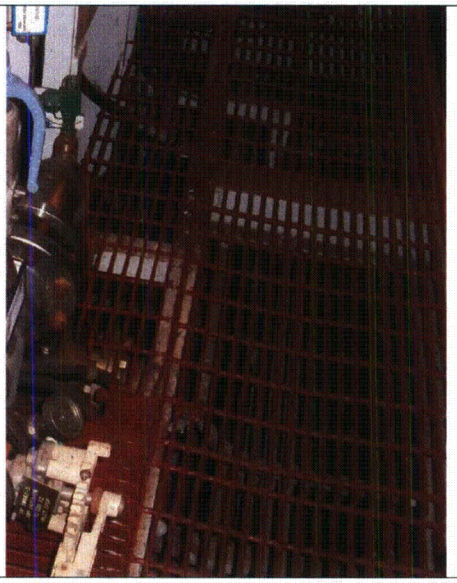
Area Walk-By Checklist (AWC) AWC-011

Location: Bldg. *EDG* Floor El. *All* Room, Area[1]

SWEL Components: **SWEL1-036, 037, 047, 060, 076, 077, 078, 081, 084, 087, 096, & 100**



Note: *General picture of a EDG in the area.*



Note: *Picture of grating south of EDG 21 & 22 that has baring bars spanning the wrong direction. A noticeable plastic deformation cupping of grating has occurred as cross wires are having to span the opening.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 9 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-012

Location: Bldg. *FOST* Floor El. *77'-6"* Room, Area[1] _____

SWEL Components: SWEL1-032

Instructions for Completing Checklist

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

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

   One pipe is supported from another pipe see photo below. This is a non typical pipe support. Design drawings for this support were not available at time of walk down. One pipe (insulated pipe) runs to the Emergency Domestic truck fill stop valve and the other orange pipes from the EDG building to near 23FOTP. LB-09 issued to resolve.

   The overhead pipe near the roof line of the EDG building is supported on three wide flange columns. These columns are supported on baseplates with some nuts not fully engaged. Typical of all three baseplates. LB-02 issued for resolution.

   There is a transmission tower located to the east of the area that is tall enough to fall into the area of this walk by. The transmission tower is judged to be adequate for seismic loading and therefore is acceptable.

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

   Grout under base plate for orange pipe west of pump 23FOTP has multiple cracks and is missing a corner. It is judged acceptable for seismic loading in its existing condition. Cracks should be sealed to prevent further degradation. CR IP2-2012-06847 issued to track sealing of the cracks.

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

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 9 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-012

Location: Bldg. *FOST* Floor El. *77'-6"* Room, Area[1] _____

SWEL Components: SWEL1-032

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

   Spring can on south side of overhead pipe is showing surface rust. Judged acceptable at this time.

   Yes based on a visual inspection from the floor, the cable/conduit raceways and HVAC ducting appears to be free of potentially adverse seismic conditions.

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

   Yes the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

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

   Yes the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area. Additionally the area is an outdoor environment that is designed to be rained on. Flooding and spray water would runoff the elevated on grade slab and not pool to significant levels in the area.

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

   Yes the area is free of potentially adverse seismic interactions that could cause a fire in the area.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 9 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-012

Location: Bldg. *FOST* Floor El. *77'-6"* Room, Area[1] _____

SWEL Components: SWEL1-032

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

   Yes the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

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

   Yes we have looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area.

Comments (Additional pages may be added as necessary)

Following items are housekeeping and good practices. They are judged acceptable (i.e. they do not pose an seismic issues).

A wood stick is left lying on the ground next to the EDG building. See photo below.
CR IP2-2012-06542 issued to track resolution.

Clear tubing running to EDG Fuel Oil Fill level panel is falling out of Unistrut support. See photo below.
CR IP2-2012-06542 issued to track resolution.

On grade slab has numerous cracks of large size. Not a seismic concern and no repair needed.

A trash bag filled with construction debris was left against the pipe south of 21FOTP. See photo below.
CR IP2-2012-06542 issued to track resolution.

Insulation is missing and damaged on discharge pipe from pump 21 FOTP. See photo below.
CR IP2-2012-06542 issued to track resolution.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 9 **IP2**

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-012

Location: Bldg. *FOST* Floor El. *77'-6"* Room, Area[1]

SWEL Components: SWEL1-032

Evaluated by: *Nick Crispell* Date: *10-16-2012*

Dan Nuta *10-16-2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 9

IP2

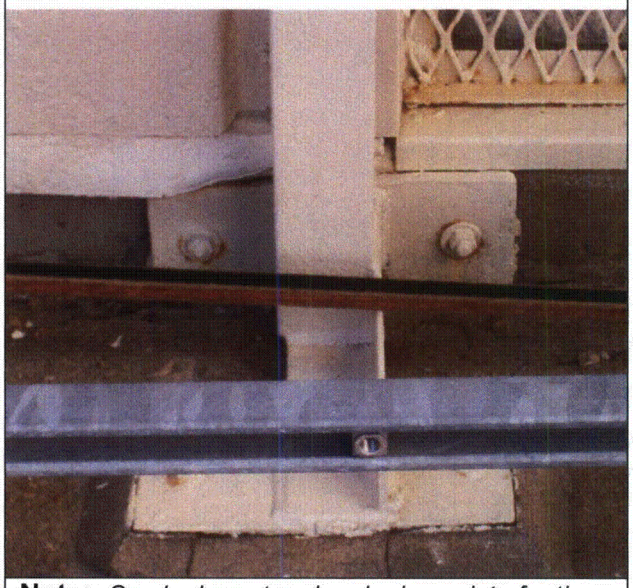
Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-012

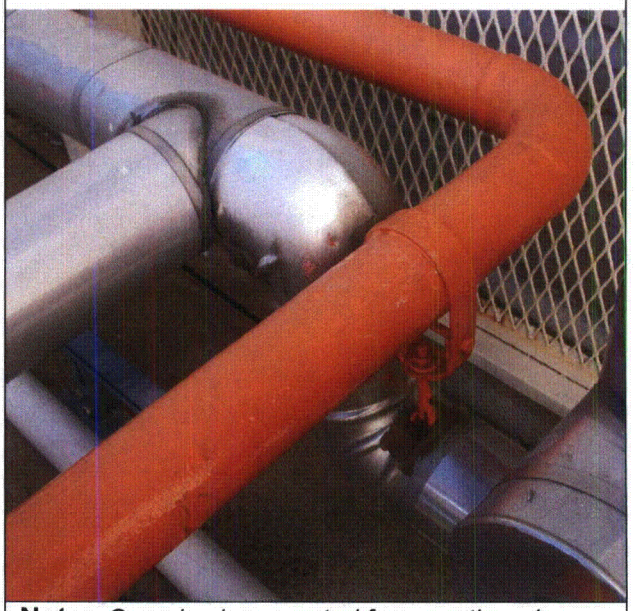
Location: Bldg. *FOST* Floor El. *77'-6"* Room, Area[1] _____

SWEL Components: SWEL1-032

Photographs



Note: *Cracked grout pad under baseplate for the orange pipe.*



Note: *One pipe is supported from another pipe. This is a none typical pipe support. One pipe (insulated pipe) runs to the Emergency Domestic truck fill stop valve and the other orange pipe from the EDG building into ground near 23FOTP.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 6 of 9

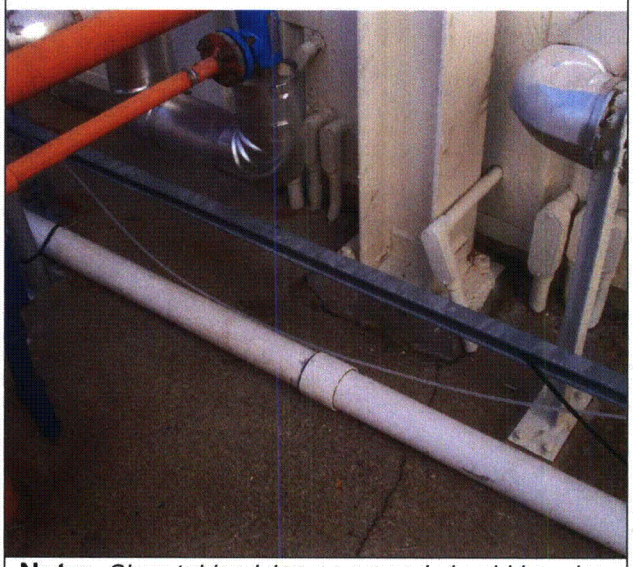
IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-012

Location: Bldg. *FOST* Floor El. *77'-6"* Room, Area[1] _____

SWEL Components: SWEL1-032



Note: *Clear tubing lying on ground should be wire tied inside of the horizontal unistrut.*

Note: *Example of on grade slab crack.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 7 of 9

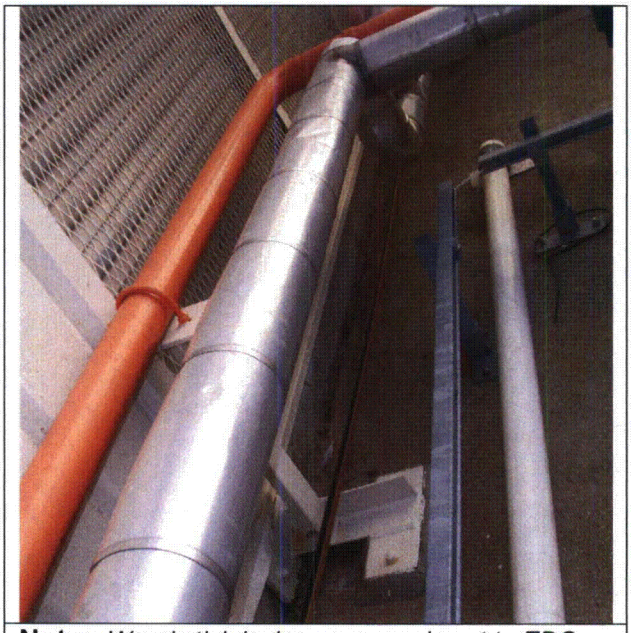
IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-012

Location: Bldg. *FOST* Floor El. *77'-6"* Room, Area[1] _____

SWEL Components: SWEL1-032



Note: *Wood stick laying on ground next to EDG building.*

Note: *Trash bag full of construction trash lying next to pump 21FOTP.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 8 of 9

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-012

Location: Bldg. *FOST* Floor El. *77'-6"* Room, Area[1] _____

SWEL Components: **SWEL1-032**

Note: *One of the baseplates for the overhead pipe that do not have full thread engagement.*

Note: *Another one of the baseplates for the overhead pipe that do not have full thread engagement.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 9 of 9

IP2

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-012

Location: Bldg. *FOST* Floor El. *77'-6"* Room, Area[1]

SWEL Components: **SWEL1-032**

Note: *Pipe to pump 21FOTP that has damaged and missing insulation.*

Note: