Seismic Walkdown Checklist (SWC)

Equipment ID No. *P44P403A* Equip. Class[1] *O, Other*

Equipment Description *N_2 Supply Tank Storage Rack*

Comments (Additional pages may be added as necessary)

☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 : _____ Date: 8/16/12

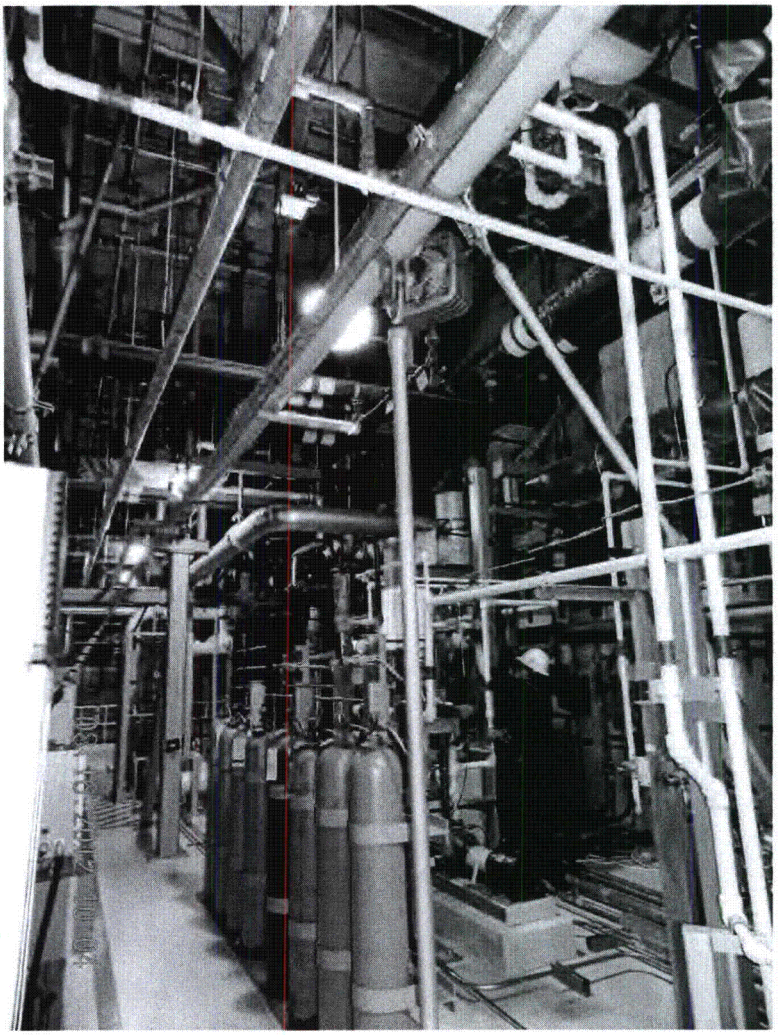
☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 : _____ Date: 08/16/12

Seismic Walkdown Pictures

Equipment ID No. *P44P403A* Equipment Class: *0, Other*

Equipment Description *N_2 Supply Tank Storage Rack*

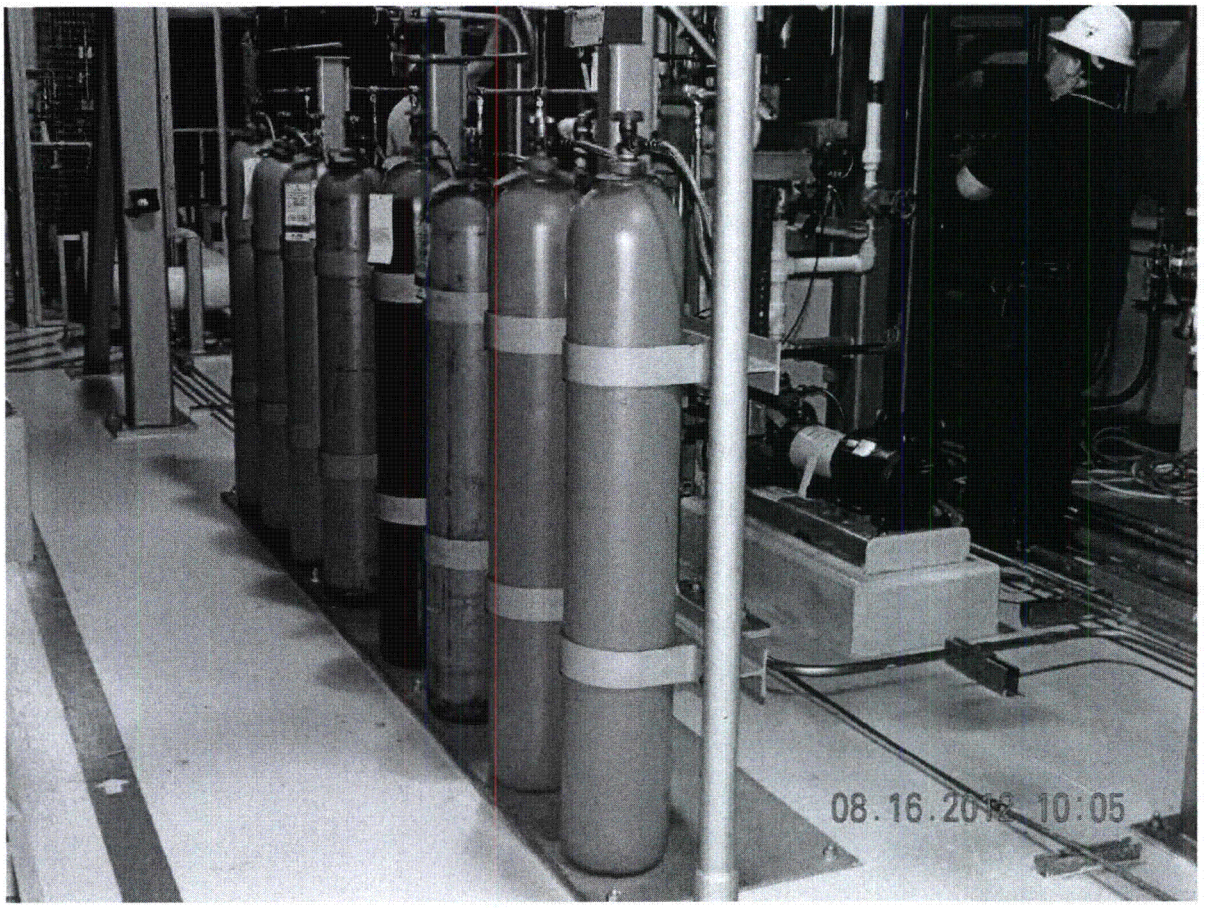


(004.JPG)

Seismic Walkdown Pictures

Equipment ID No. *P44P403A* Equipment Class: *0, Other*

Equipment Description *N_2 Supply Tank Storage Rack*



(005.JPG)

Seismic Walkdown Pictures

Equipment ID No. *P44P403A* Equipment Class: *0, Other*

Equipment Description *N_2 Supply Tank Storage Rack*

(015.JPG)

Seismic Walkdown Checklist (SWC)

Equipment ID No. *P4500C002B* Equip. Class[1] *6-Vertical Pumps*

Equipment Description *Emergency Equipment Service Water North Pump*

Location: Bldg. *RHR* Floor El. *1(590'-0")* Room, Area *NRHRPR, Col. E-11*

Manufacturer, Model, Etc. (optional but recommended) *Goulds Pumps Inc., VIT 8X14 JMC*

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   All anchors are intact and securely tightened.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   There is only mild surface oxidation. (See Picture 2.)

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are some surface cracks at the top of the concrete pedestal, but these would not affect the seismic integrity of the asset (NW quadrant and East face of pedestal). (See Picture 3.)

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   Anchorage matches configuration shown in drawing M-N-2090-6, Rev AD and drawing MD21145 sheets 1 and 2. REFERENCE DOCUMENTS HAVE NO APPLICABLE RESTRICTIONS. DJK 10/12/12

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment MPS 10/4/12

Seismic Walkdown Checklist (SWC)

Equipment ID No. *P4500C002B* Equip. Class[1] *6-Vertical Pumps*

Equipment Description *Emergency Equipment Service Water North Pump*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The nearby items that are near the soft targets are properly restrained and do not pose a concern.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   All nearby overhead equipment and conduit is properly restrained. (See Picture 12.)

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   Most attached lines are flexible. One small pipe is steel but is flexible enough and is attached only to the asset's base plate. (See Picture 11.)

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

Other Adverse Conditions

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

MPS 10/4/12

Seismic Walkdown Checklist (SWC)

Equipment ID No. P45000002B Equip. Class[1] 6 – Vertical Pumps

Equipment Description Emergency Equipment Service Water North Pump

Comments (Additional pages may be added as necessary)

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #1 : Michael P. Sasso Date: 8/16/12

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #2 : Scott Bauer Date: 8/16/12

Seismic Walkdown Pictures

Equipment ID No. *P4500C002B* Equipment Class: *6, Vertical Pumps*

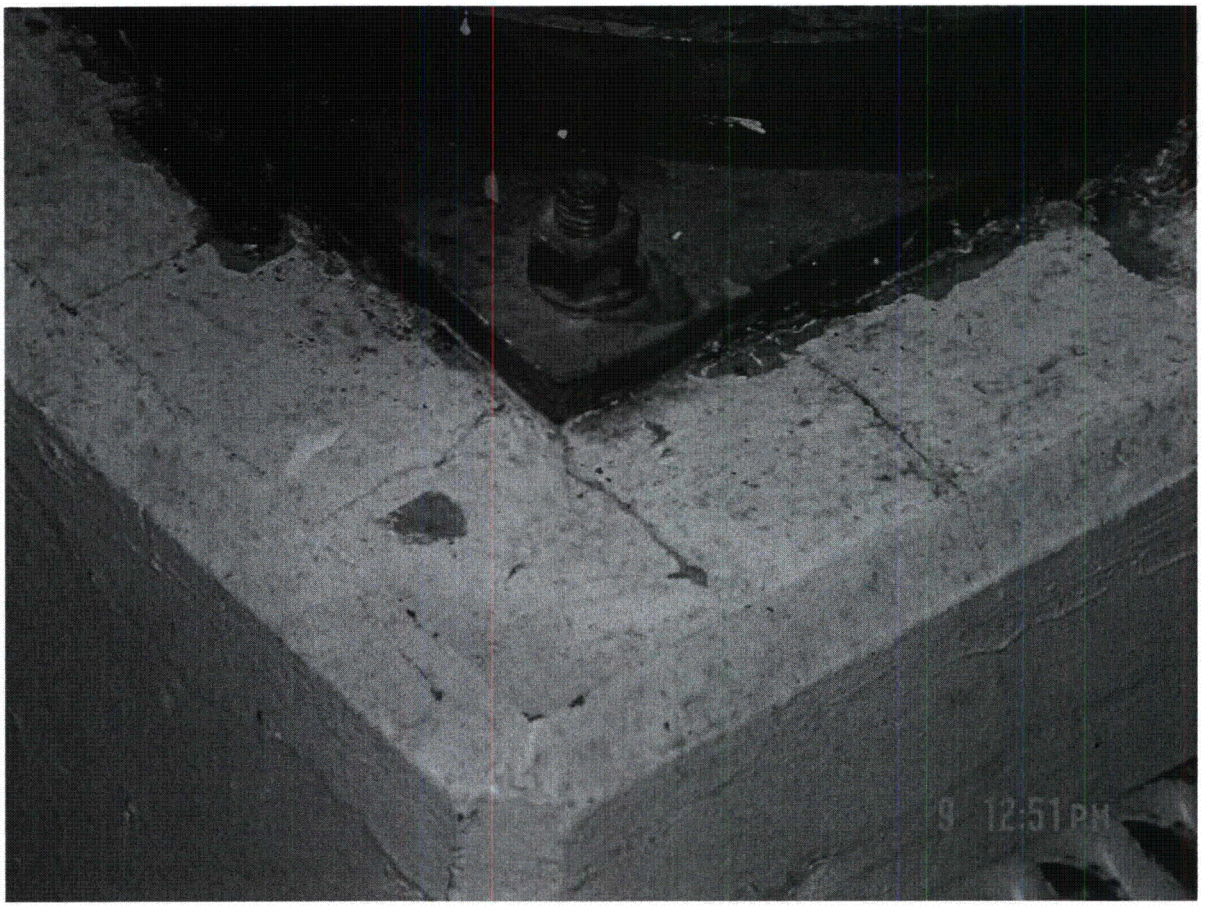
Equipment Description *EMERGENCY EQUIPMENT SERVICE WATER NORTH PUMP*

(Picture #2)

Seismic Walkdown Pictures

Equipment ID No. *P4500C002B* Equipment Class: *6, Vertical Pumps*

Equipment Description *EMERGENCY EQUIPMENT SERVICE WATER NORTH PUMP*

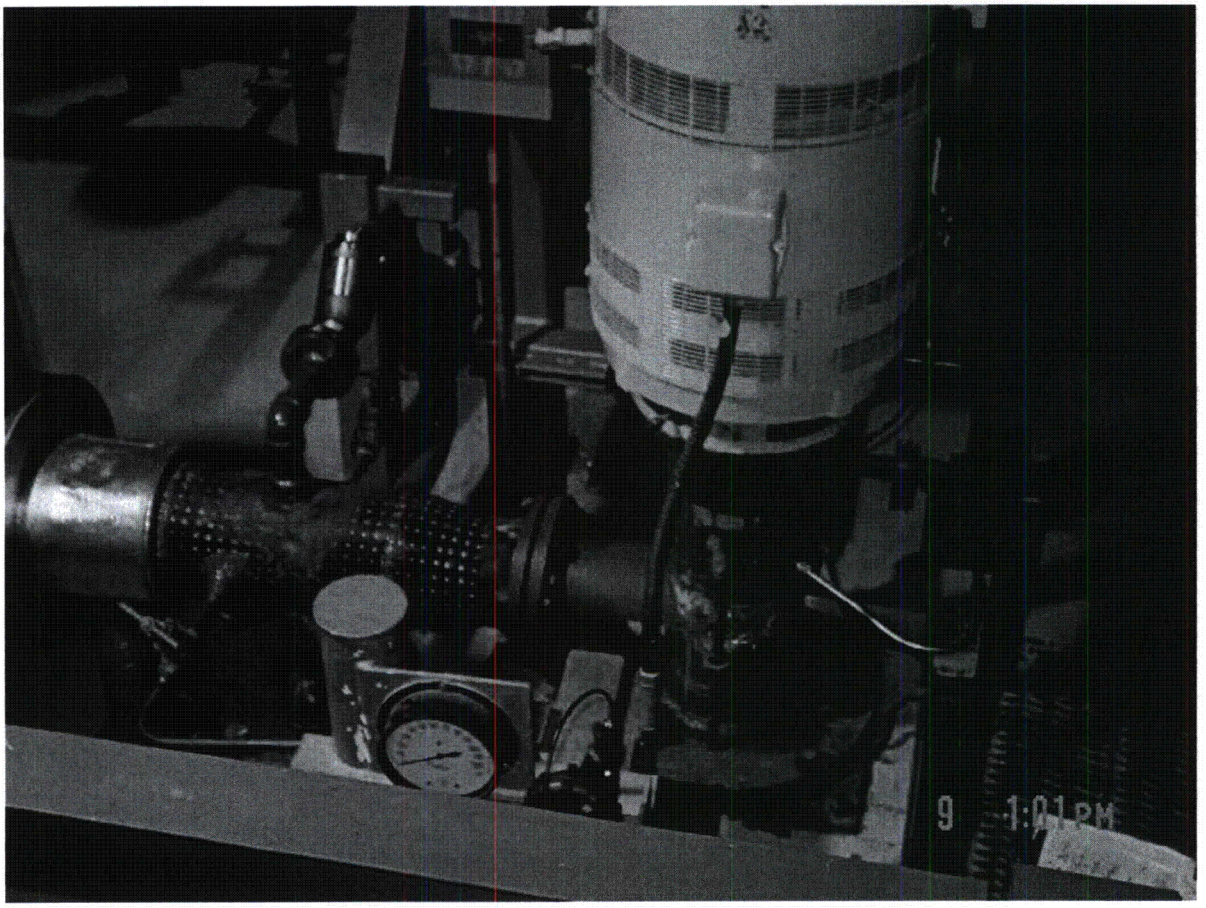


(Picture #3)

Seismic Walkdown Pictures

Equipment ID No. *P4500C002B* Equipment Class: *6, Vertical Pumps*

Equipment Description *EMERGENCY EQUIPMENT SERVICE WATER NORTH PUMP*

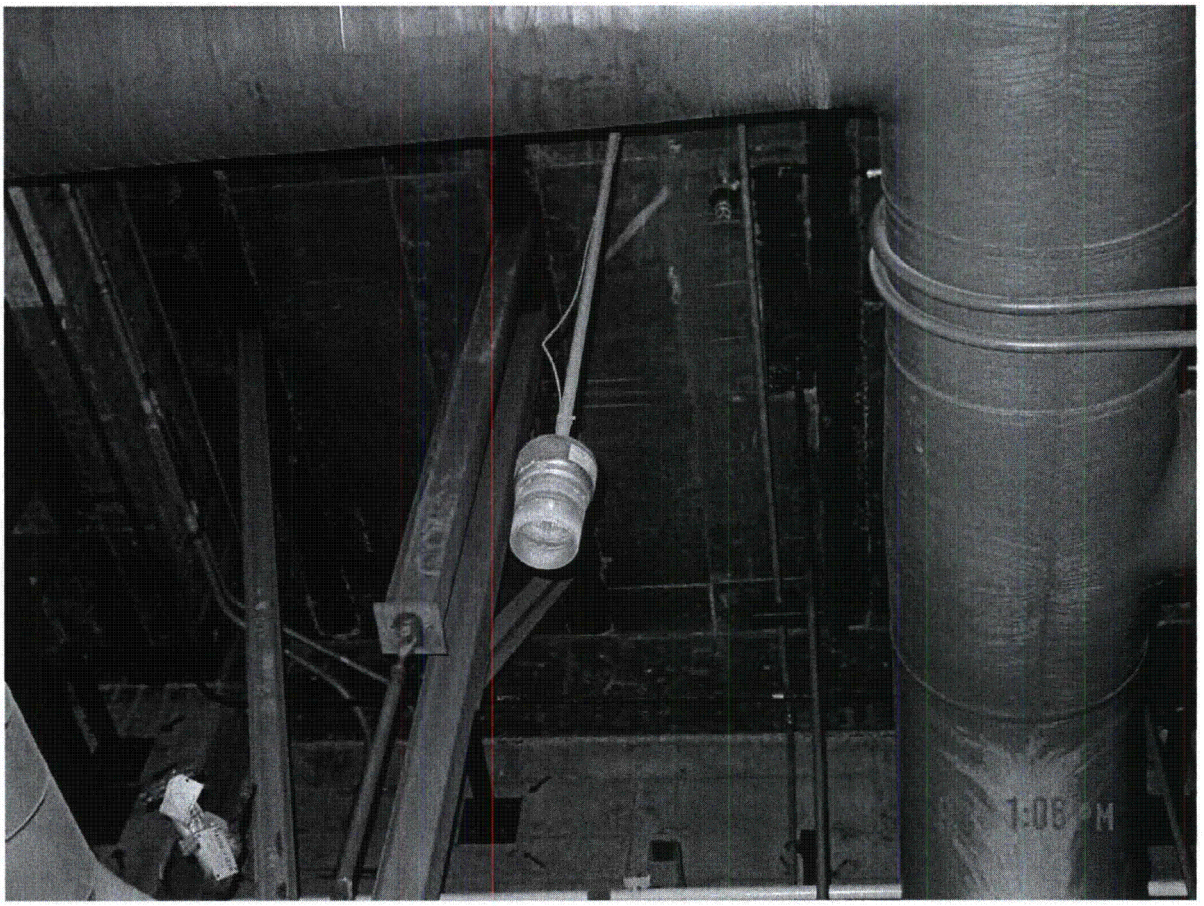


(Picture #11)

Seismic Walkdown Pictures

Equipment ID No. *P4500C002B* Equipment Class: *6, Vertical Pumps*

Equipment Description *EMERGENCY EQUIPMENT SERVICE WATER NORTH PUMP*



(Picture #12)

Seismic Walkdown Checklist (SWC)

Equipment ID No. *P5002D001* Equip. Class[1] *12-Air Compressor*

Equipment Description *Div I Control Air Compressor*

Location: Bldg. *AB* Floor El. *562'-0"* Room, Area *B-01, Col. G-15*

Manufacturer, Model, Etc. (optional but recommended) *Joy Mfg. Co. Model WGOL-9*

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   All anchors are present and securely tightened. (See Pictures 2 and 3)

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Anchors are not corroded.

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

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☐
   Edge distance from anchors to edge of concrete pedestal is 2¼". This roughly matches the 2 3/8" measurement shown on drawing M-3026. (See picture 2). Given the degree of precision for field measurement, the anchorage conforms to drawing M-3026, REV. H (NO APPLICABLE OPEN POSTINGS) | DTK 10/12/12

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

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

MPS 10/4/12

Seismic Walkdown Checklist (SWC)

Equipment ID No. *P5002D001* Equip. Class[1] *12-Air Compressor*

Equipment Description *Div I Control Air Compressor*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Asset is not nearby any independent equipment that could impact with it. (See Picture 4).

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   All pipes and conduit above are adequately supported and restrained. (See Picture 6).

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

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

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
    No other adverse condition were identified that could be considered adverse.

Seismic Walkdown Checklist (SWC)

Equipment ID No. P5002D001 Equip. Class[1] 12 - Air Compressor

Equipment Description Div. I Control Air Compressor

Comments (Additional pages may be added as necessary)

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #1 : Michael P. Sasso Date: 8/21/12

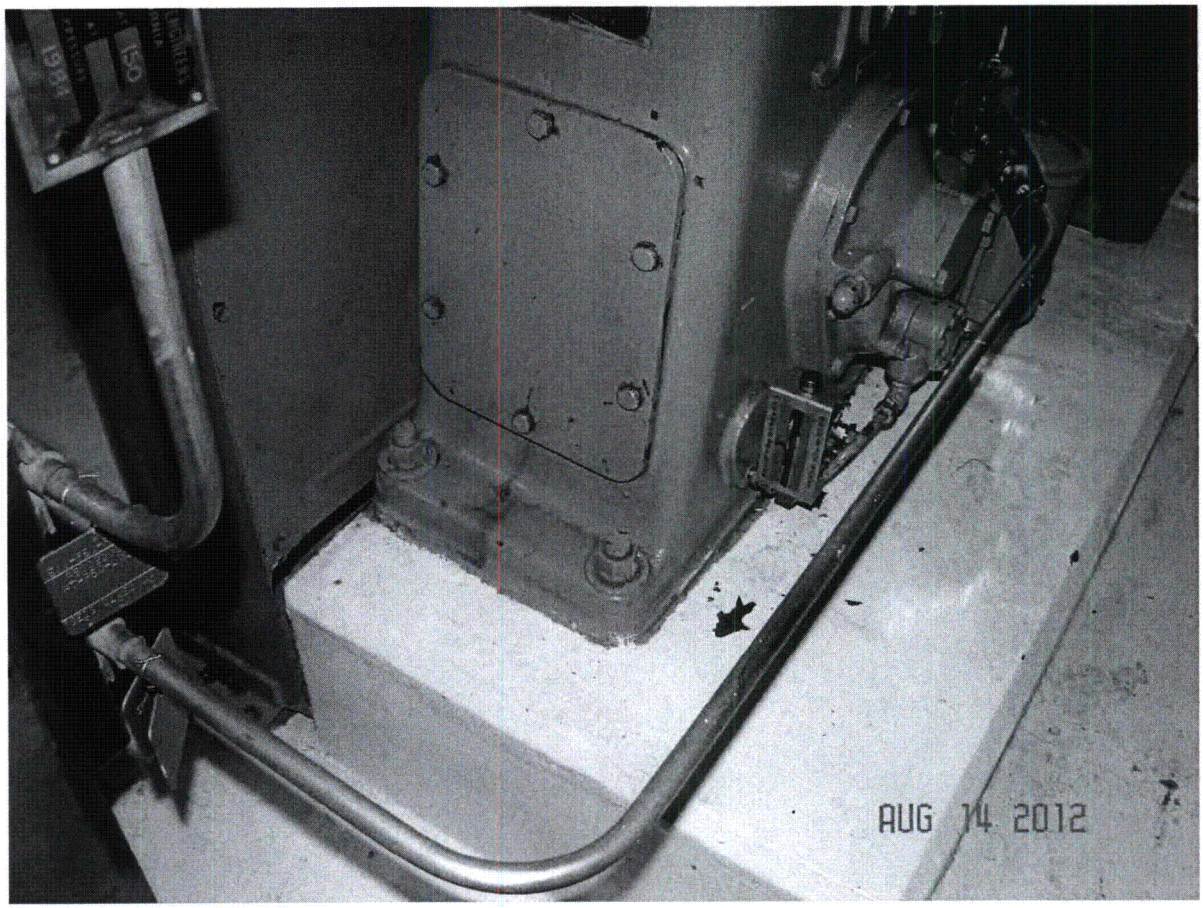
☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #2 : Scott Bauer Date: 8/21/12

Seismic Walkdown Pictures

Equipment ID No. *P5002D001* Equipment Class: *12-Air Compressor*

Equipment Description *Div I Control Air Compressor*

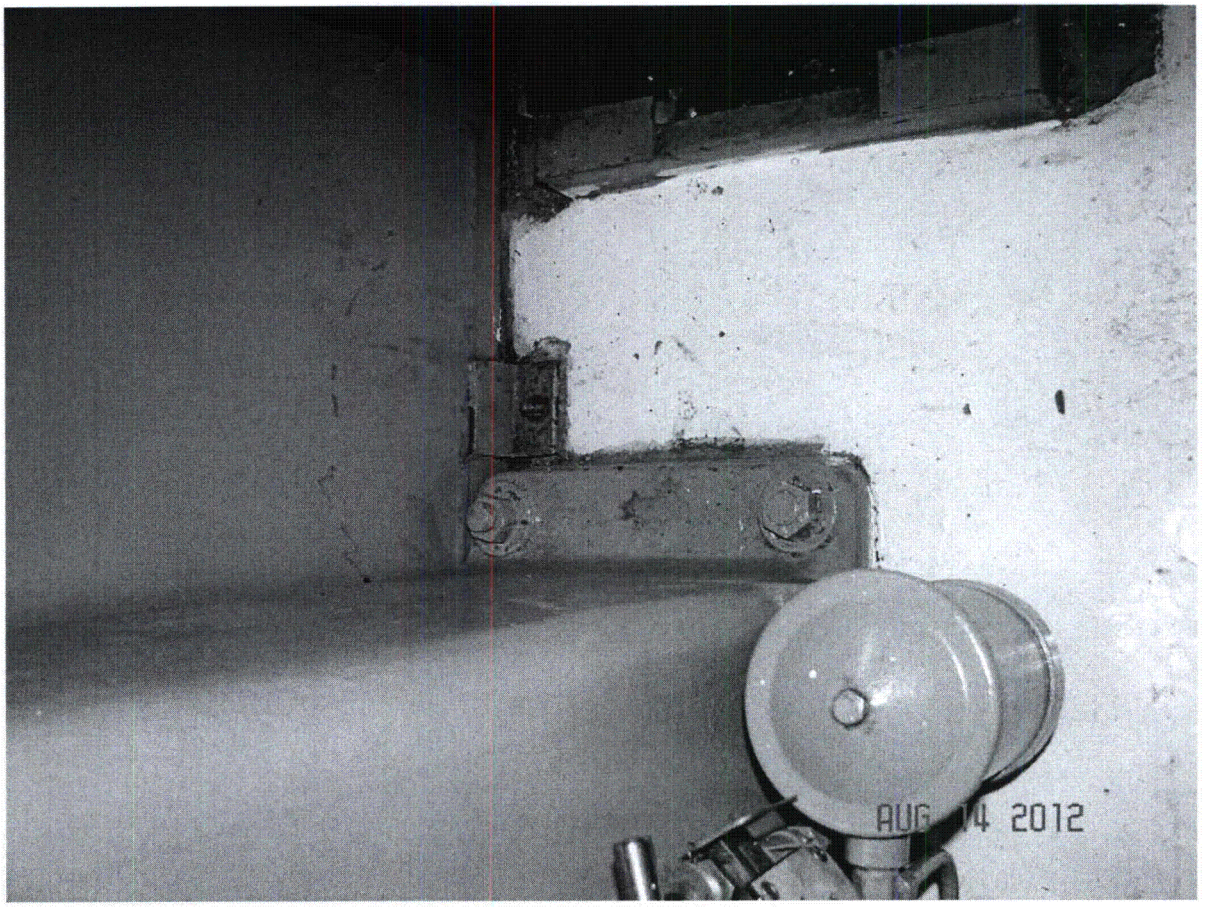


(Picture #2)

Seismic Walkdown Pictures

Equipment ID No. *P5002D001* Equipment Class: *12-Air Compressor*

Equipment Description *Div I Control Air Compressor*

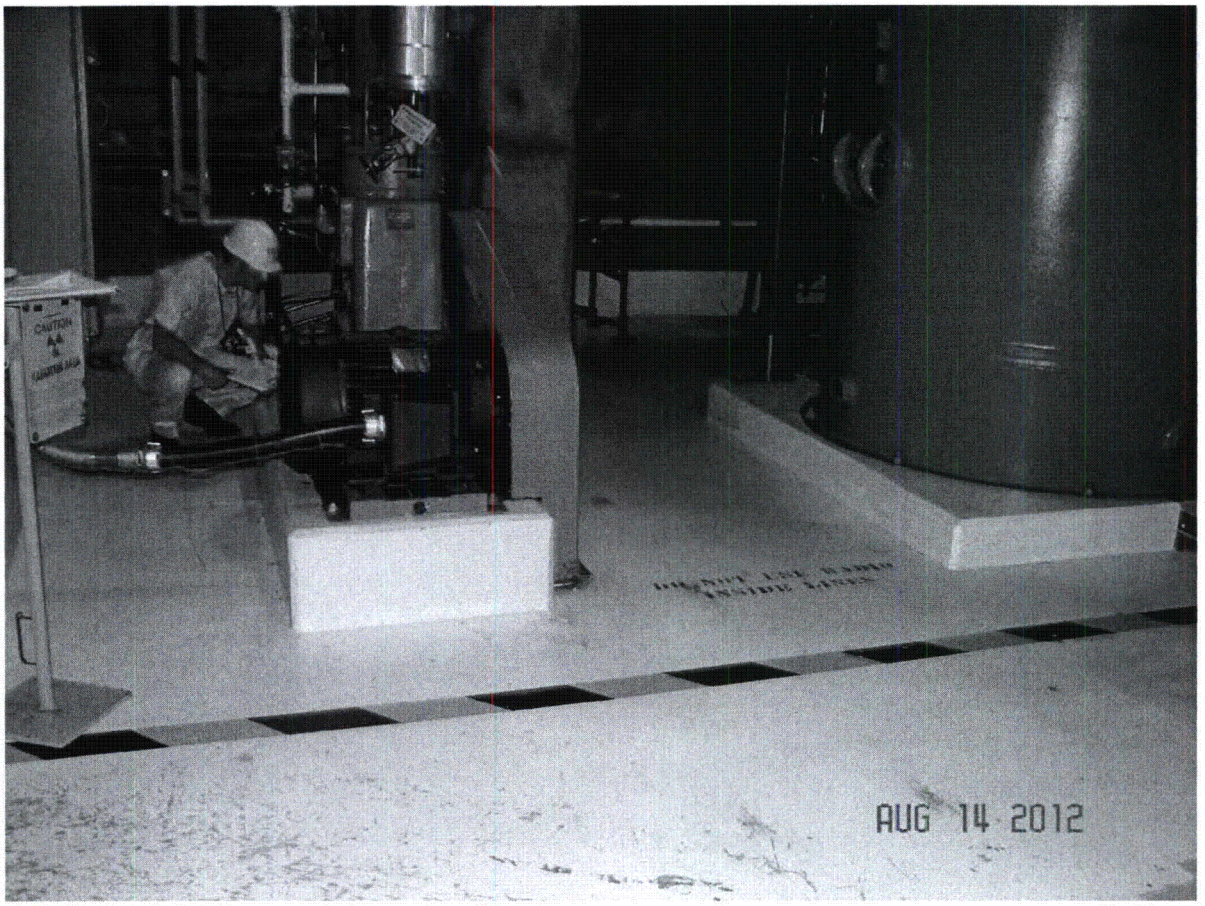


(Picture #3)

Seismic Walkdown Pictures

Equipment ID No. *P5002D001* Equipment Class: *12-Air Compressor*

Equipment Description *Div I Control Air Compressor*

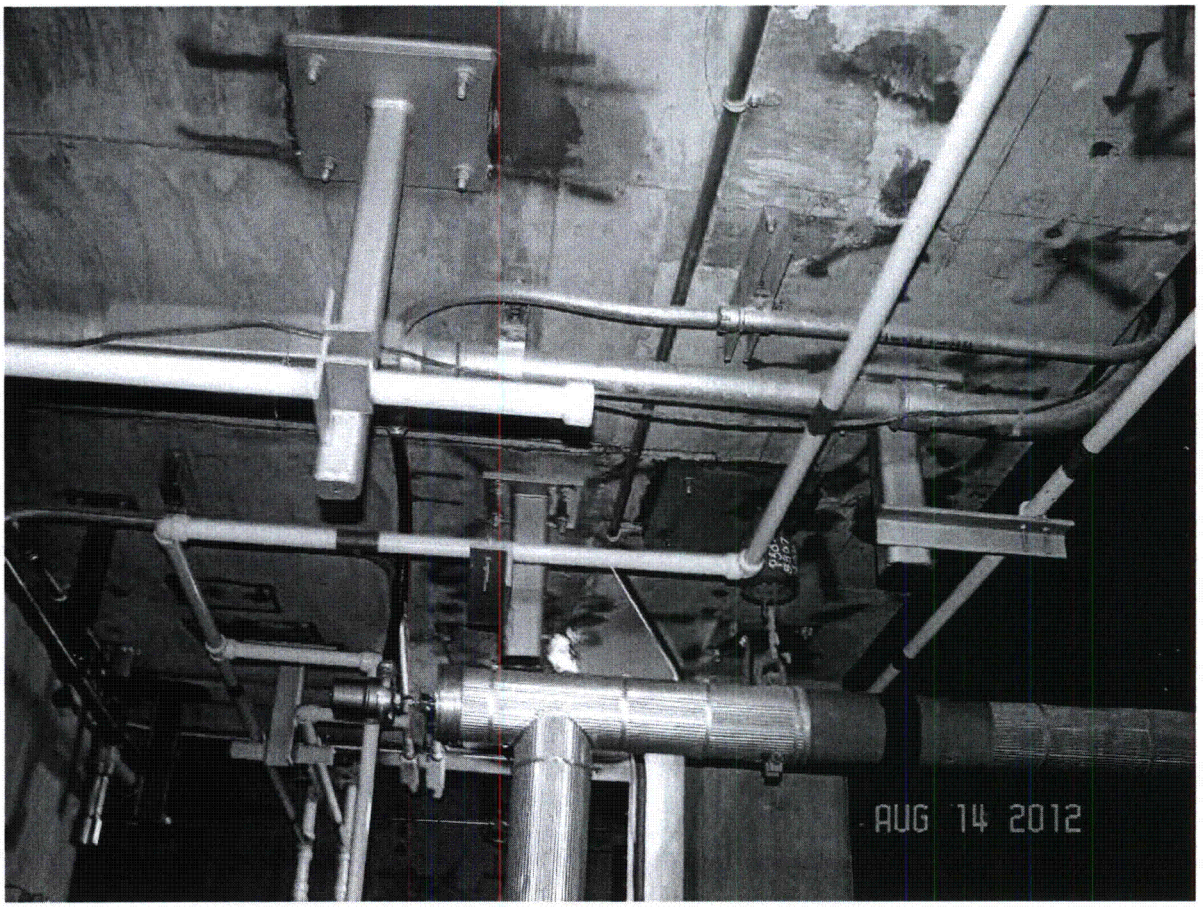


(Picture #4)

Seismic Walkdown Pictures

Equipment ID No. *P5002D001* Equipment Class: *12-Air Compressor*

Equipment Description *Div I Control Air Compressor*



(Picture #6)

Seismic Walkdown Checklist (SWC)

Equipment ID No. *P50P402B* Equip. Class[1] *20-Instrumentation and Control Panels*

Equipment Description *CA Dryer Relay Pnl Instr Rack*

Location: Bldg. *AB* Floor El. *555'-0"* Room, Area *B-04, Col. G-12*

Manufacturer, Model, Etc. (optional but recommended) *Elm-Electro-Mechanics, Inc 40200*

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   All anchors present and securely tightened. Have "E" designation at end denoting Hilti Kwik Bolt 3. (See picture 2.)

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion is observed on the anchorage. The anchors have anchor lock putty on them.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The shims used for leveling of the box do not create a loss of structural integrity. (See picture 3.)

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   Drawing C1-2080 provides spacing and location. Drawing I-2554-04* gives diameter equal to 3/8" per spec 3071-226.**
   DJK 10/12/12

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   The hatch door has a few loose bolts that will that are not a seismic concern but should be tightened. Calc. DC-5634 calls for Phillips wedge anchors; however, the anchors observed are Hilti Kwik Bolt 3's. This is acceptable. See comment section.*
   DJK 10/12/12

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

MPS 10/4/12

* REFERENCE DOCUMENT (LATEST REVISION) HAS NO APPLICABLE POSTINGS. ~ DJK 10/12/12

Seismic Walkdown Checklist (SWC)

Equipment ID No. *P50P402B* Equip. Class[1] *20-Instrumentation and Control Panels*

Equipment Description *CA Dryer Relay Pnl Instr Rack*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   There were no potential sources of impact observed nearby.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   There is minimal equipment in the area and all of it is appropriately anchored.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The conduit is attached to Unistruts which serve as energy absorbers and sliding restraints. (See Picture 1.)

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

Other Adverse Conditions

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

Note: Per NEI Focus Group response to Frequently Asked Questions (FAQ) dated September 18, 2012, a supplemental walk down was conducted on October 1, 2012 to open the panel and visually inspect inside. The supplemental SWC follows this SWC.

JAM 10/22/12

Seismic Walkdown Checklist (SWC)

Equipment ID No. P50P402B Equip. Class[1] 20 - Instrumentation and Ctrl. Panels

Equipment Description CA Dryer Relay Pnl. Instr. Rack

Comments (Additional pages may be added as necessary)

The anchor bolts observed in the field are designated with lettering denoting Hilti Kwik Bolt 3's. Calc. DC-5634, however, calls for Phillips wedge anchors (of the same diameter). This is acceptable for designs made prior to Spec. 3071-226, Rev. 14 (1991). Note that Drawing I-2524-04, Rev. B was prepared in 1986.

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #1 : Michael P. Sasso Date: 8/10/12

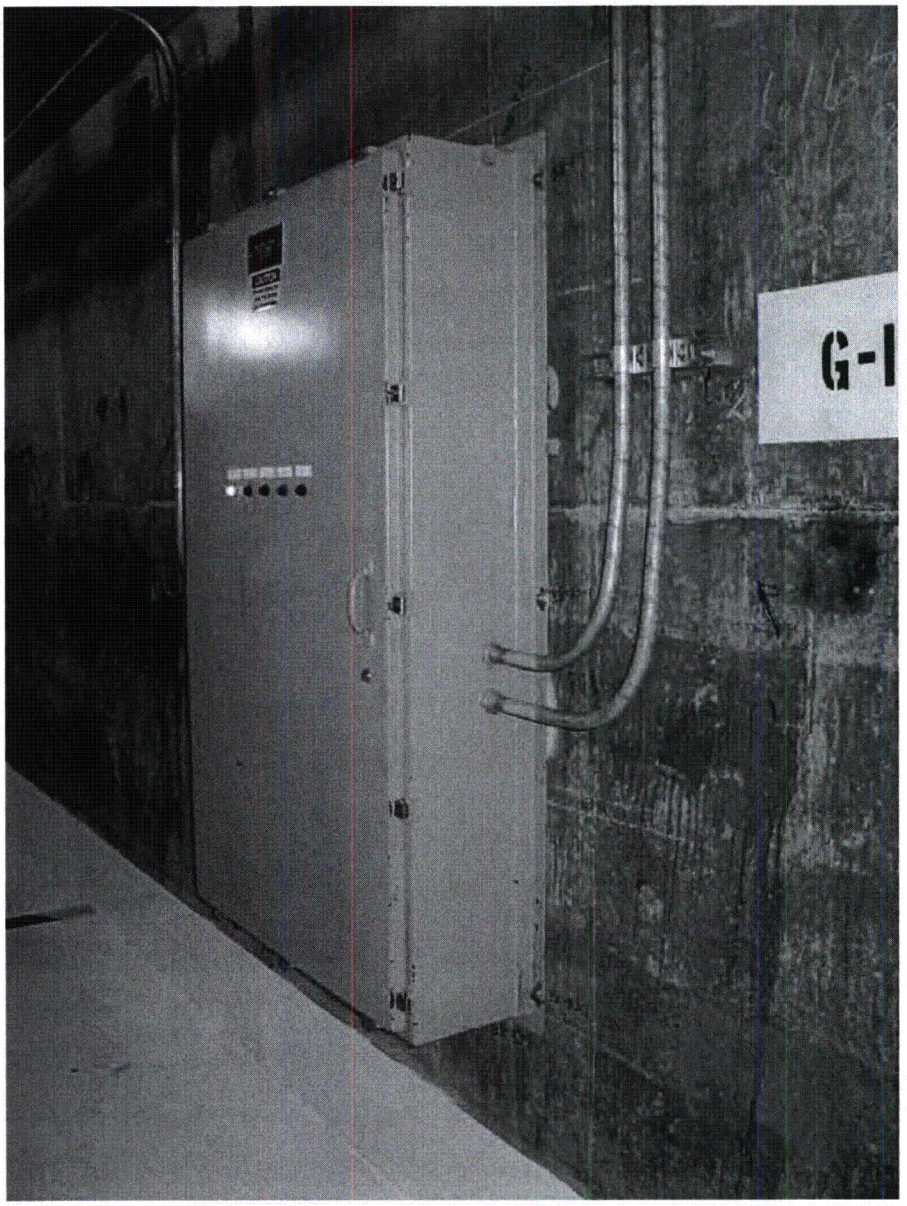
☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #2 : Scott Bauer Date: 8/10/12

Seismic Walkdown Pictures

Equipment ID No. *P50P402B* Equipment Class: *20, Instrumentation and Control Panels*

Equipment Description *CA DRYER RELAY PNL INSTR RACK*



(Picture #1)

Seismic Walkdown Pictures

Equipment ID No. *P50P402B* Equipment Class: *20, Instrumentation and Control Panels*

Equipment Description *CA DRYER RELAY PNL INSTR RACK*

(Picture #2)

Seismic Walkdown Pictures

Equipment ID No. *P50P402B* Equipment Class: *20, Instrumentation and Control Panels*

Equipment Description *CA DRYER RELAY PNL INSTR RACK*

(Picture #3)

Seismic Walkdown Checklist (SWC)

[Note: This Walkdown's scope was limited to cabinet internals per 9/18/12 NEI Focus Group response to Frequently Asked Questions.]

Equipment ID No. P50P402B Equip. Class[1] 20 - Instrument and Control Panels

Equipment Description *CA Driver Relay Pnl Instr Rack*

Location: Bldg. *AB* Floor El. *555'-0"* Room, Area *Room B-4, Col. G-12*

Manufacturer, Model, Etc. (optional but recommended) *Elm-Electro-Mechanics, Inc 40200*

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☐
   Not applicable. See August 10, 2012, Seismic Walkdown Checklist and comment on page 3 on this checklist dated October 1, 2012.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   See August 10, 2012, Checklist and comment on page 3 on this checklist dated October 1, 2012.

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

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

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☒
   See August 10, 2012, Seismic Walkdown Checklist and comment on page 3 on this checklist dated October 1, 2012.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☐
   Not applicable. See August 10, 2012, Seismic Walkdown Checklist and comment on page 3 on this checklist dated October 1, 2012.

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. P50P402B Equip. Class[1] 20 - Instrument and Control Panels

Equipment Description *CA Driver Relay Pnl Instr Rack*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   See August 10, 2012, Seismic Walkdown Checklist and comment on page 3 on this checklist dated October 1, 2012.

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☒
   See above.

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    Not applicable. See August 10, 2012, Seismic Walkdown Checklist and comment on page 3 on this checklist dated October 1, 2012.

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☐
    The door on the instrument panel was opened to permit evaluating the adequacy of fasteners securing components mounted inside. None of the components weighed more than two pounds. Also inspected the integrity of a water-tight seal around the edge of the door. No adverse conditions were identified. See Photo 1, attached.

Seismic Walkdown Checklist (SWC)

[Note: This Walkdown's scope was limited to cabinet internals per 9/18/12 NEI Focus Group response to Frequently Asked Questions.]

Equipment ID No. P50P402B Equip. Class[1] 20 - Instrument and Control Panels

Equipment Description *CA Driver Relay Pnl Instr Rack*

Comments (Additional pages may be added as necessary)

Anchorage and Interaction Effects were evaluated during an August Walkdown and results reported in a Seismic Walkdown Checklist dated August 10, 2012. However, during the August 10 Walkdown, the door on the instrument panel was not opened to afford Seismic Walkdown Engineers an opportunity to inspect anchorage on components inside the panel. A September 18, 2012, NEI Focus Group response to Frequently Asked Questions about opening doors on electrical cabinets led to consider increasing the scope of the August Walkdown, Therefore, the scope of this Walkdown included unbolting and opening the panel door and evaluating fasteners securing components mounted inside.

☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 : _____ Date: 10/01/12

☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 : Michael P. Dasso Date: 10/01/12

Seismic Walkdown Pictures

Equipment ID No. *P50P402B* Equipment Class: 20 – Instrument and Control Panels

Equipment Description *CA Dryer Relay Pnl Instr Rack*

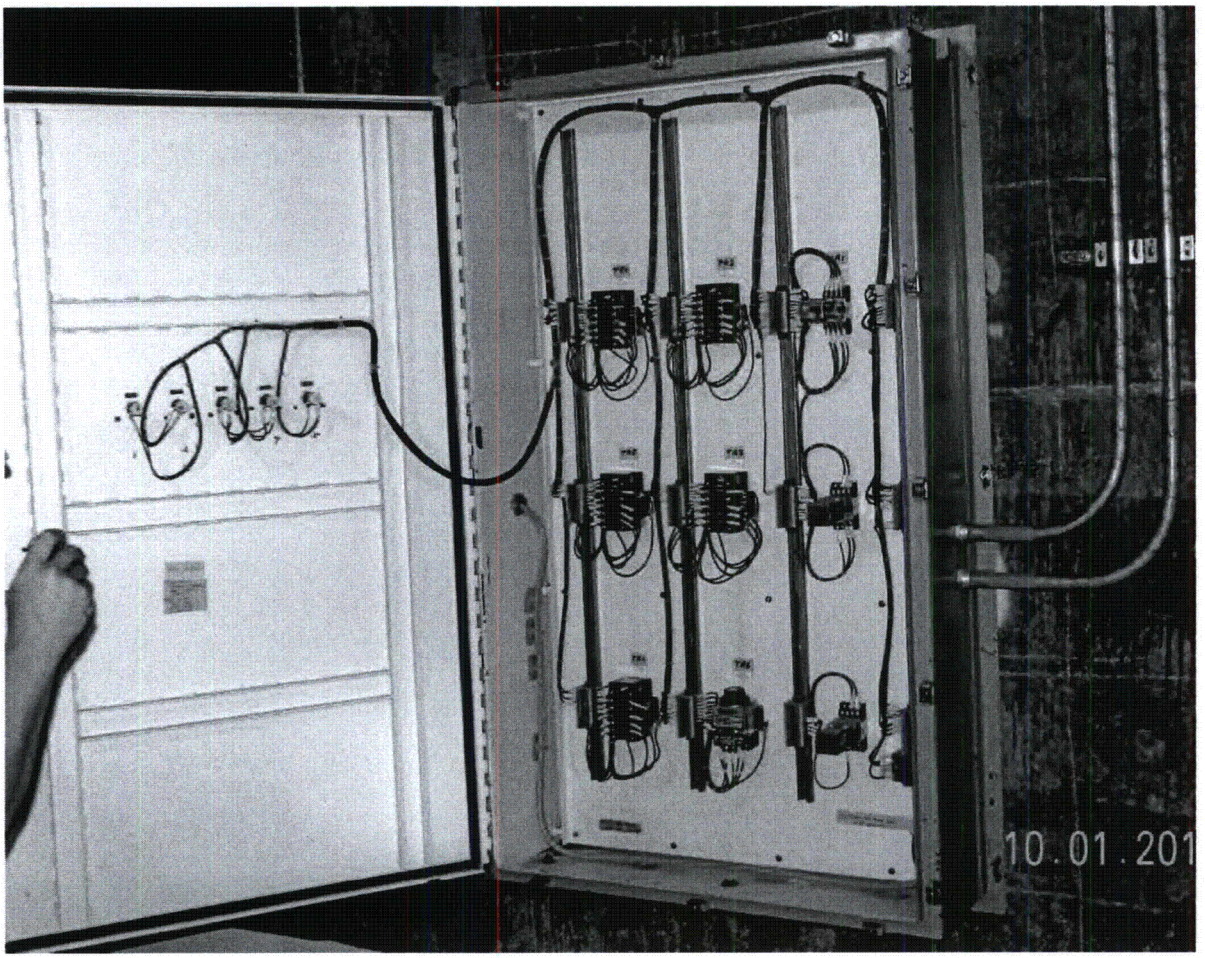


Photo 1, *Components Mounted Inside Instrument Panel*

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R1400S039B* Equip. Class[1] *4, Transformers*

Equipment Description *SWGR Div. 2, 480 V, ESS BUS 72ED, V REG*

Location: Bldg. *RHR* Floor El. *617'-0"* Room, Area *EDG14, Col. F-7*

Manufacturer, Model, Etc. (optional but recommended) *GE, 31D6222G1*

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   No missing or loose bolts. No cracked or broken bolts or welds. See Photos DSC 00324 thru DSC 00327.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion of weldments or bolts.

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

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   Anchorage configuration is consistent with Dwg. E-N-0033, Rev. F, (postings TCEDP 27108 & TCECR 27108-2, DPN 4); Dwg. C-N-2339, Rev. N (no postings); Dwg. C-N-2278, Rev. Z (no postings); and Calc. DC-5734, Rev. 0 (posting TCTSR 36438, Rev. 0). Additionally, size of weld joining ½" base plate to embedded angle is a ¼" fillet weld, which is consistent with EMD 019518, dated 10/17/1979 (no postings) and EMD 020168, dated 10/29/1979 (no postings).

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

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R1400S039B* Equip. Class[1] *4. Transformers*

Equipment Description *SWGR Div. 2, 480 V, ESS BUS 72ED, V REG*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   There are no nearby equipment or structures that would impact this equipment. Since cable trays and conduits are adequately supported, there are no impact concerns.

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☐
   Area has no masonry block walls or ceiling tiles. Cable trays/conduit are adequately supported.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   Since cables enter and leave the voltage regulator through floor penetrations, they are not visible for inspection. See Photo DCS 00323.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    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☐
    During 1996, lateral restraints were added to the voltage regulator per ECR-27108-2, Rev. 0. On page 4, the restraints are shown in Details "M" and "N". See Photos DSC 00324 and 00325. Found no other seismic conditions that could adversely affect the safety function of this equipment.

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R1400S039B* Equip. Class[1] *4, Transformers*

Equipment Description *SWGR Div. 2, 480 V, ESS BUS 72ED, V REG*

Comments (Additional pages may be added as necessary)

Welds and inter-cabinet bolts were visible and could be inspected without removing panels. Gaining access to inspect items mounted inside cabinet would have required extensive disassembly of the cabinet. Since the only major component inside the cabinet is a voltage regulator, disassembly is not considered necessary.

☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 : _____ Date: 8-9-12

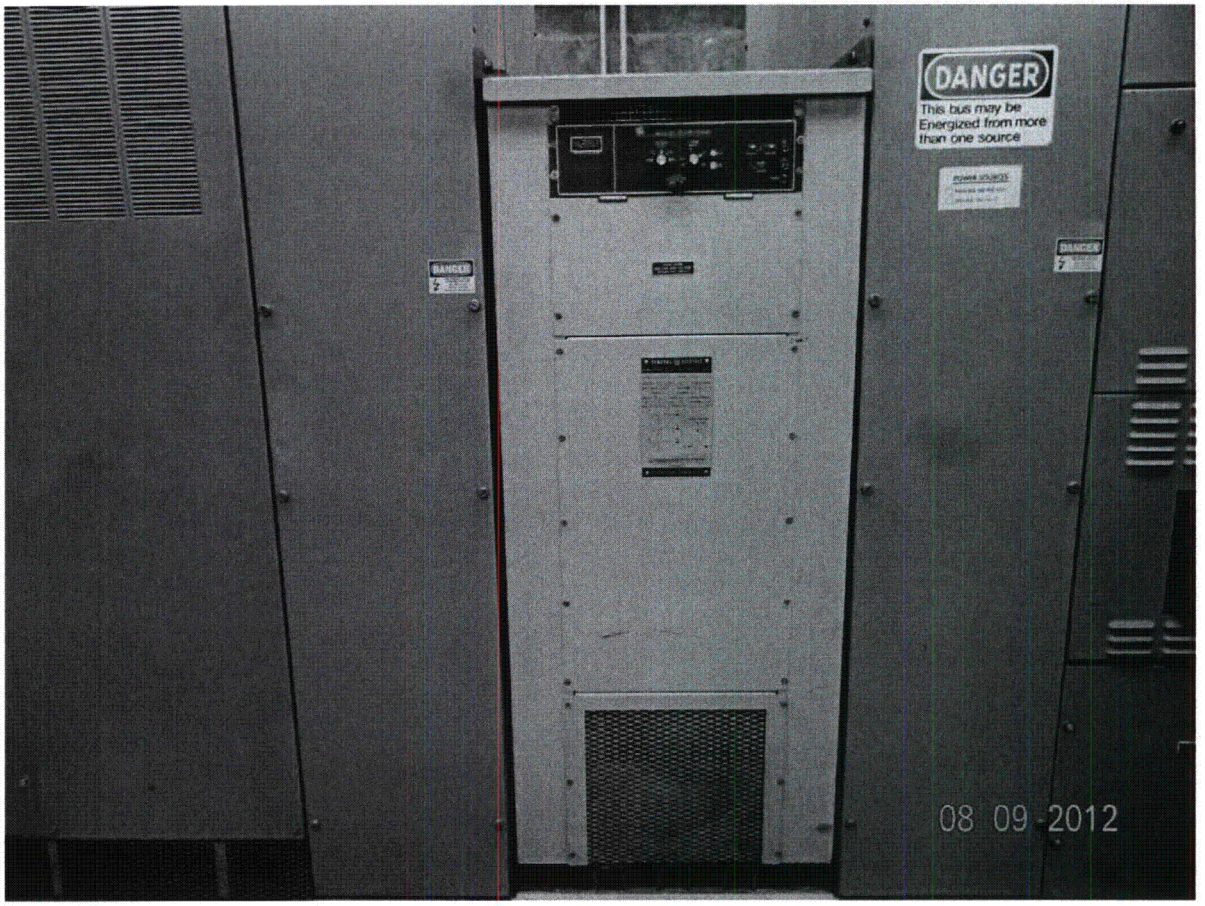
☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 : _____ Date: 08/09/12

Seismic Walkdown Pictures

Equipment ID No. *R1400S039B* Equipment Class: *4, Transformers*

Equipment Description *SWGR Div. 2, 480 V, ESS BUS 72ED, V REG*

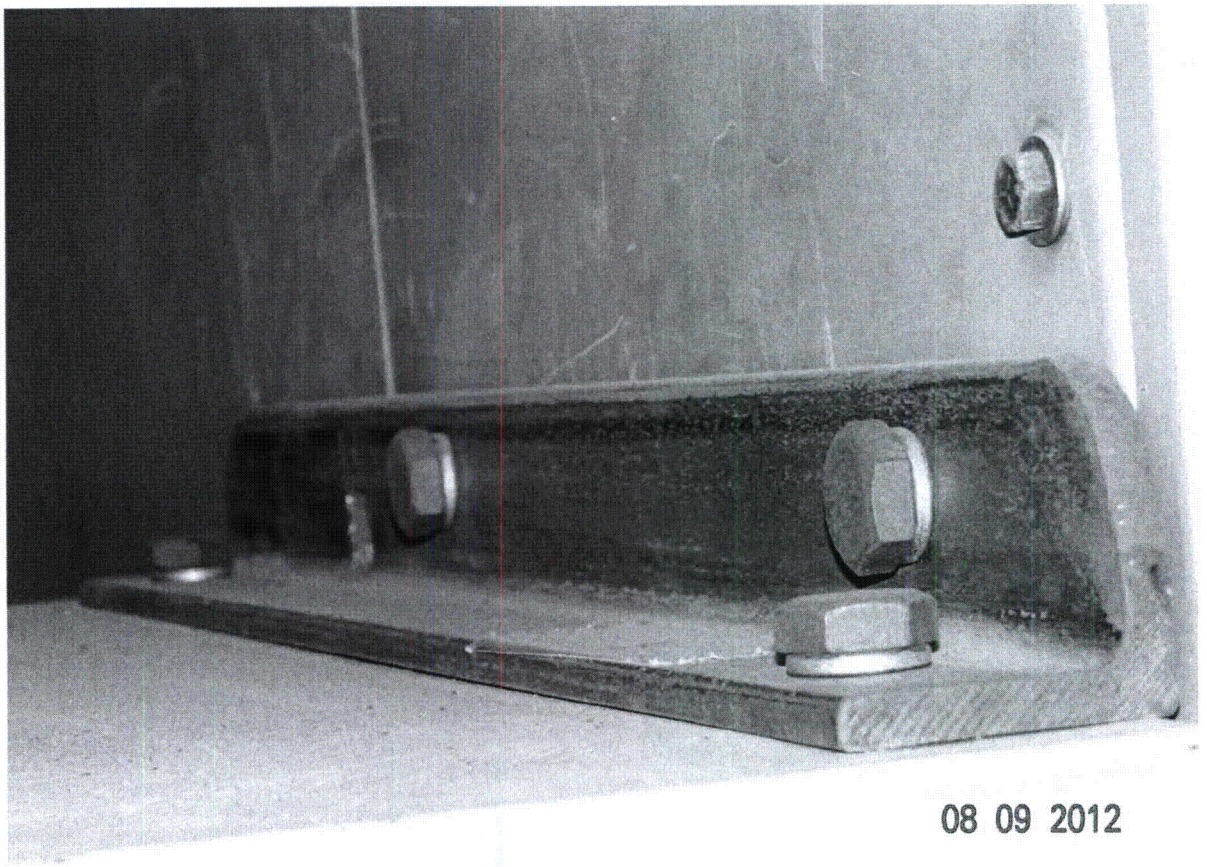


(DSC00323)

Seismic Walkdown Pictures

Equipment ID No. *R1400S039B* Equipment Class: *4, Transformers*

Equipment Description *SWGR Div. 2, 480 V, ESS BUS 72ED, V REG*



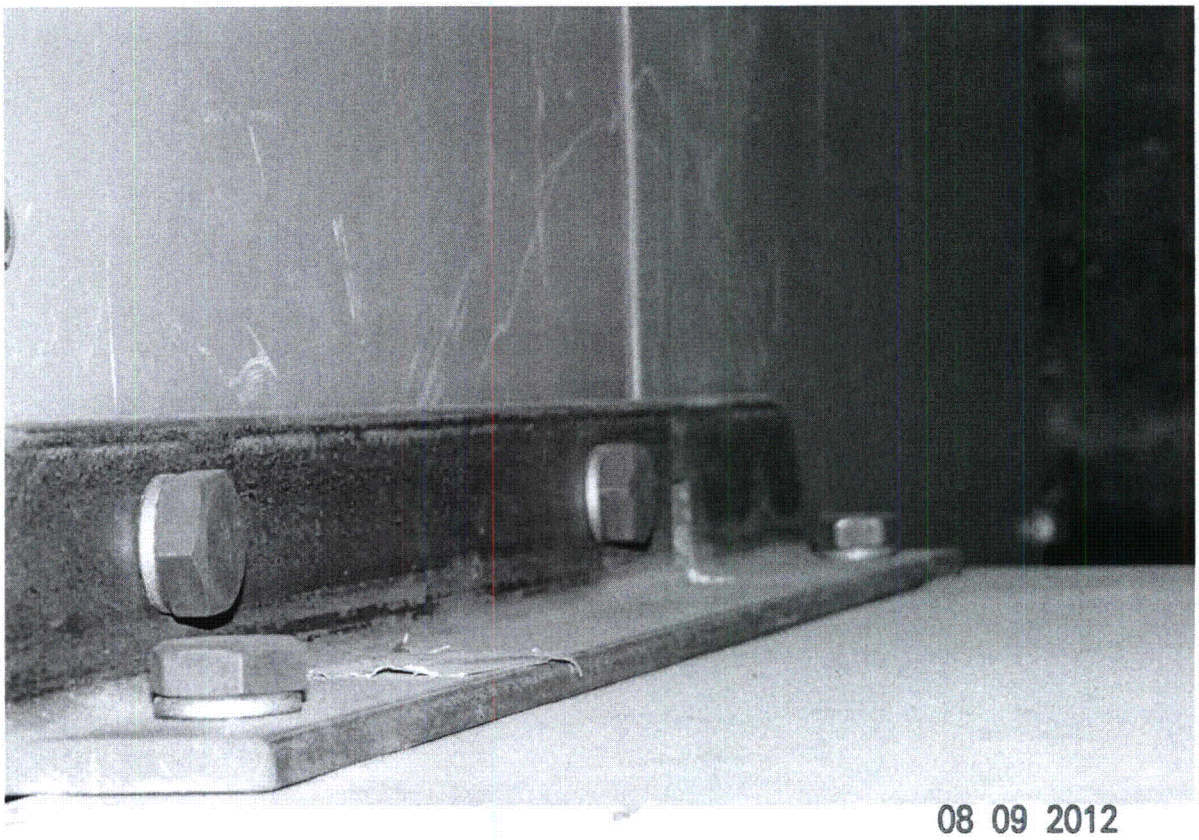
(DSC00324)

Side to Side Cabinet Bolted Connection

Seismic Walkdown Pictures

Equipment ID No. *R1400S039B* Equipment Class: *4, Transformers*

Equipment Description *SWGR Div. 2, 480 V, ESS BUS 72ED, V REG*



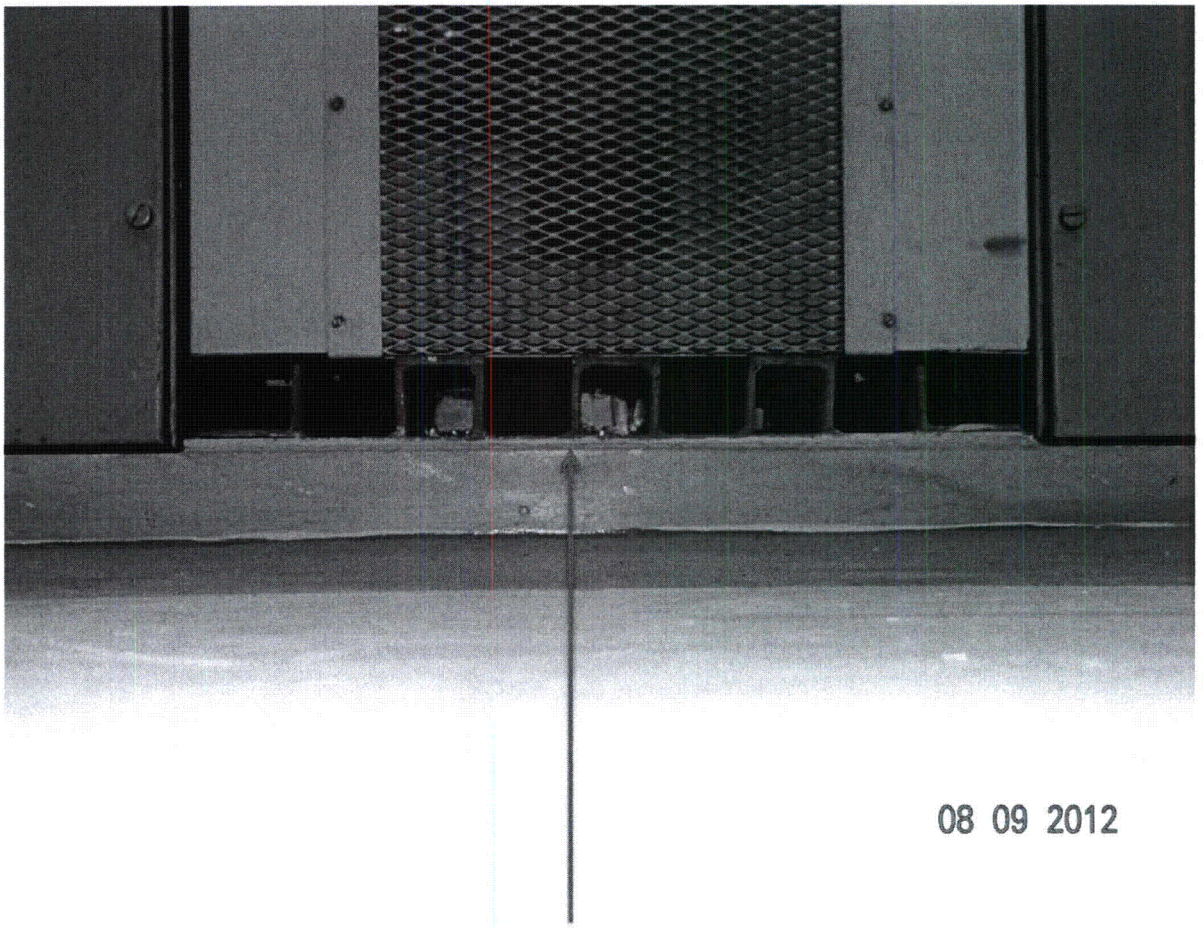
(DSC00325)

Side to Side Cabinet Bolted Connection

Seismic Walkdown Pictures

Equipment ID No. *R1400S039B* Equipment Class: *4, Transformers*

Equipment Description *SWGR Div. 2, 480 V, ESS BUS 72ED, V REG*



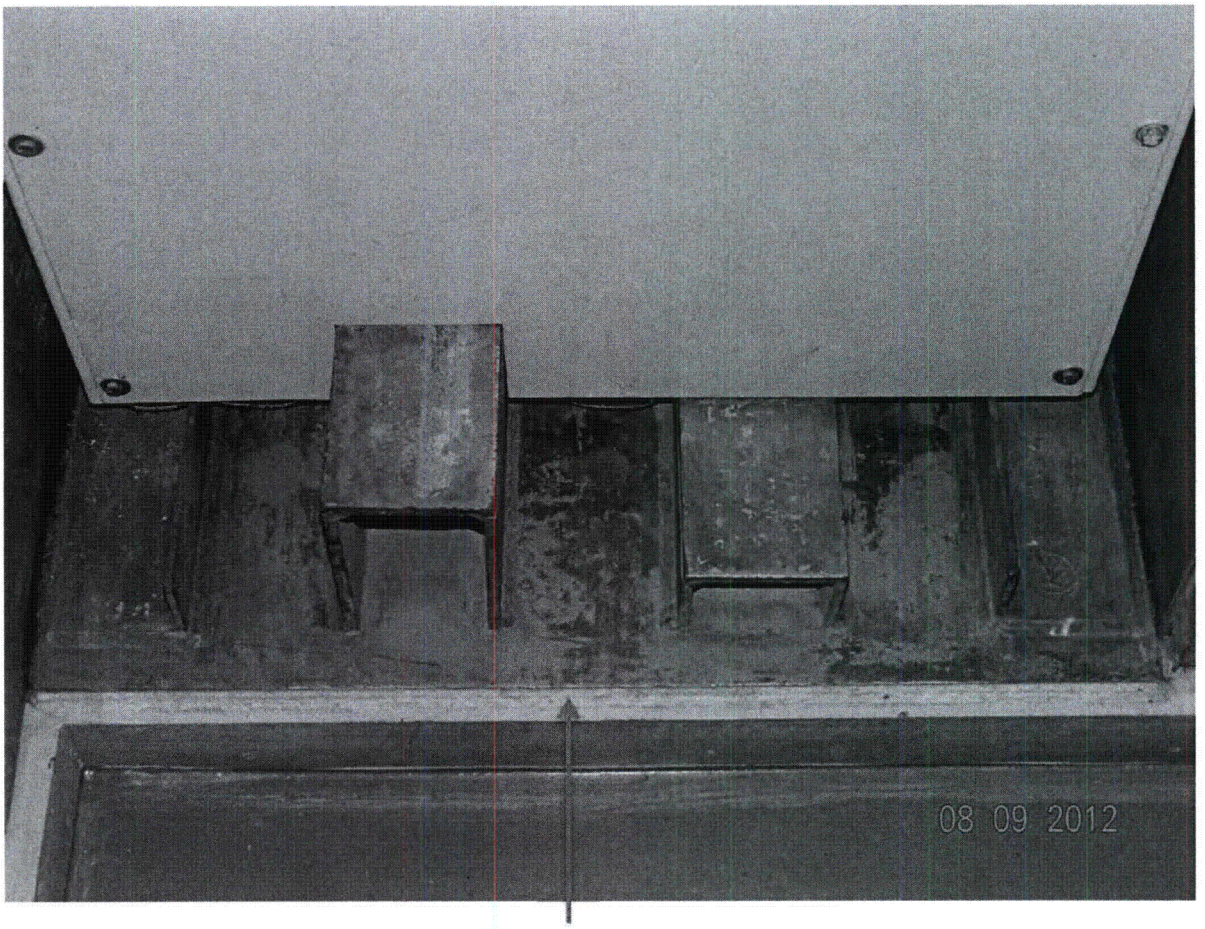
Weld Between Plate and Existing Angle Front of Voltage Regulator

(DSC00326)

Seismic Walkdown Pictures

Equipment ID No. *R1400S039B* Equipment Class: *4, Transformers*

Equipment Description *SWGR Div. 2, 480 V, ESS BUS 72ED, V REG*



Weld Between Plate and Base

(DSC00327)

Seismic Walkdown Checklist (SWC)

Equipment ID No: *R1400S050* Equip. Class[1] *1, MCC & Wall-Mounted Contactors*

Equipment Description *SWGR AE DIV 1 480V MCC 72 C-F Isolating Contactor*

Location: Bldg. *AB* Floor El. *613'-6"* Room, Area *B-19, Col. G-10*

Manufacturer, Model, Etc. (optional but recommended) *GE, CR305G226AAN*

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   All anchorage is present and securely tightened. (See pictures DSCN0748 and DSCN0749)

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

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

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   All measured dimensions match up with Detail A and Section I-I on drawing E-2838-22L Rev. J. (NO APPLICABLE POSTINGS) – DJK 10/12/12

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

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R1400S050* Equip. Class[1] *1, MCC & Wall-Mounted Contactors*

Equipment Description *SWGR AE DIV 1 480V MCC 72 C-F Isolating Contactor*

Interaction Effects

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

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☐
   Lights are chained/cabled, there are no ceiling tiles or masonry block walls. All other overhead items are securely supported. (See pictures DSCN0758 and DSCN0764)

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   All of the attached lines are flex conduit with adequate flexibility. (See picture DSCN0758)

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

Other Adverse Conditions

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. R1400S050 Equip. Class[1] 1, MCC & WALL-MOUNTED CONTACTORS

Equipment Description SWGR AE DIV 1 480V MCC-72C-F ISOLATING

Comments (Additional pages may be added as necessary)

Note: Per NEI Focus Group response to Frequently Asked Questions (FAQ) dated September 18, 2012, a supplemental seismic walkdown was conducted on October 8, 2012, to open the cabinet and visually inspect inside. The supplemental SWC follows this SWC.

JAM 10/22/12

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #1 : [signature] Date: 8/22/12

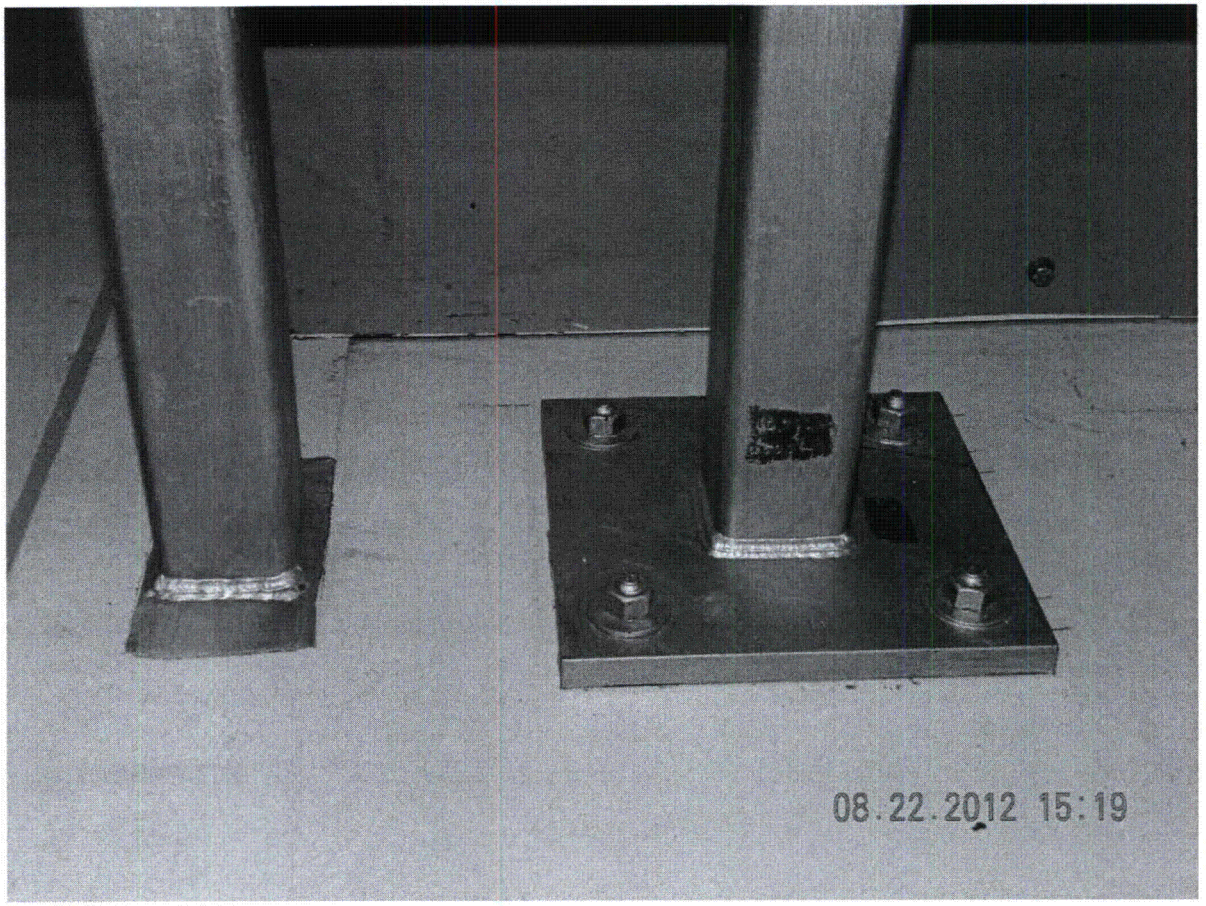
☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #2 : Scott Bauer Date: 8/22/12

Seismic Walkdown Pictures

Equipment ID No. *R1400S050* Equipment Class: *1, Motor Control Center and Wall-Mounted Contactors*

Equipment Description *SWGR AE DIV1 480V MCC 72C-F Isolating Contactor*

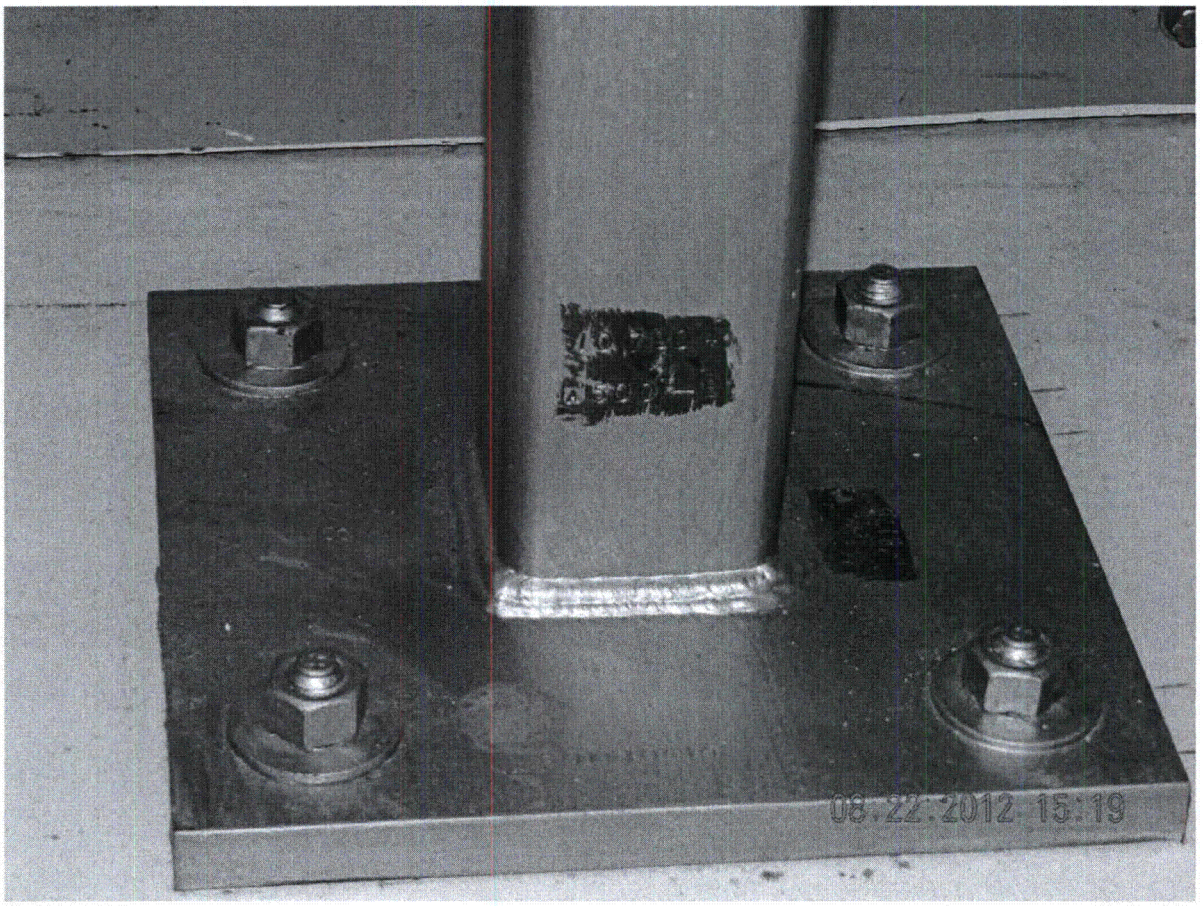


(DSCN0748)

Seismic Walkdown Pictures

Equipment ID No. *R1400S050* Equipment Class: *1, Motor Control Center and Wall-Mounted Contactors*

Equipment Description *SWGR AE DIV1 480V MCC 72C-F Isolating Contactor*

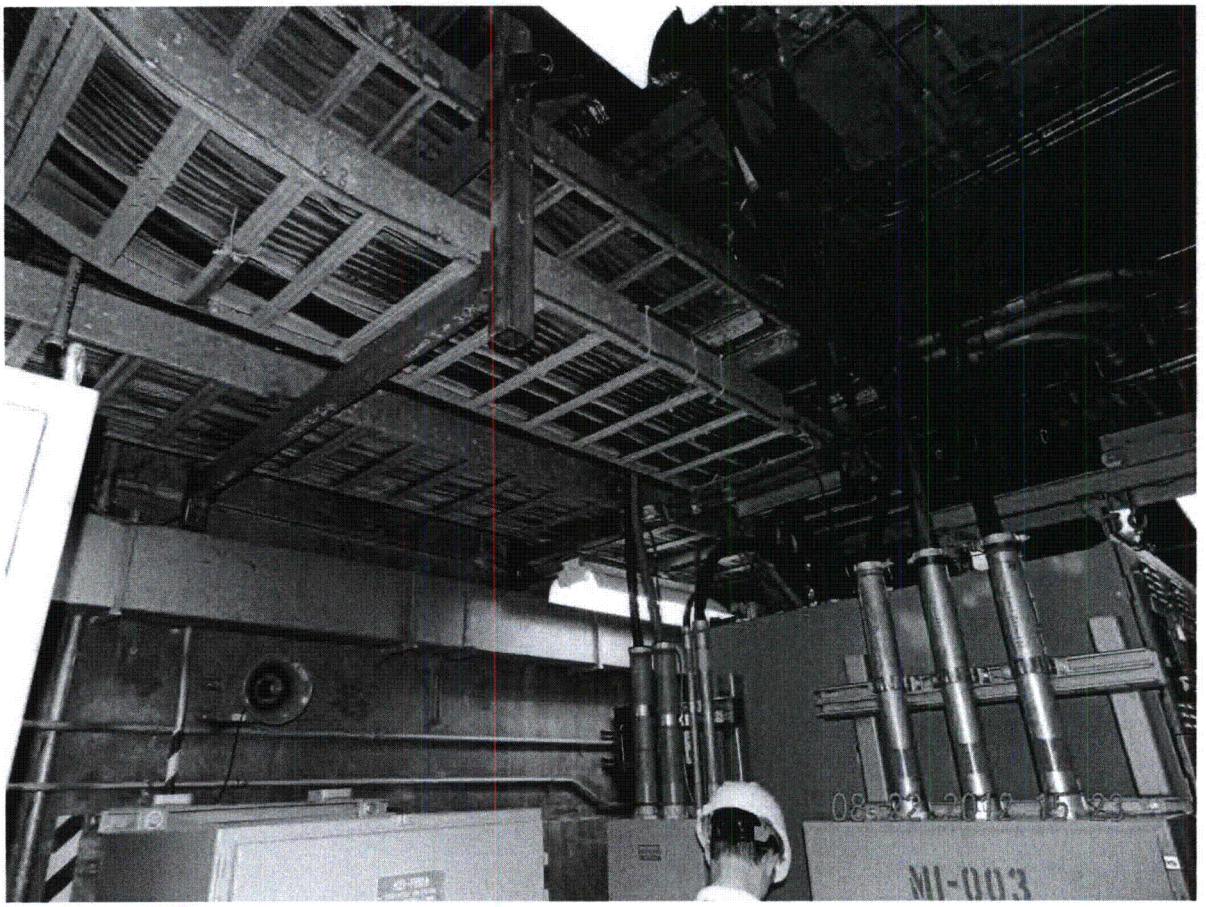


(DSCN0749)

Seismic Walkdown Pictures

Equipment ID No. *R1400S050* Equipment Class: *1, Motor Control Center and Wall-Mounted Contactors*

Equipment Description *SWGR AE DIV1 480V MCC 72C-F Isolating Contactor*

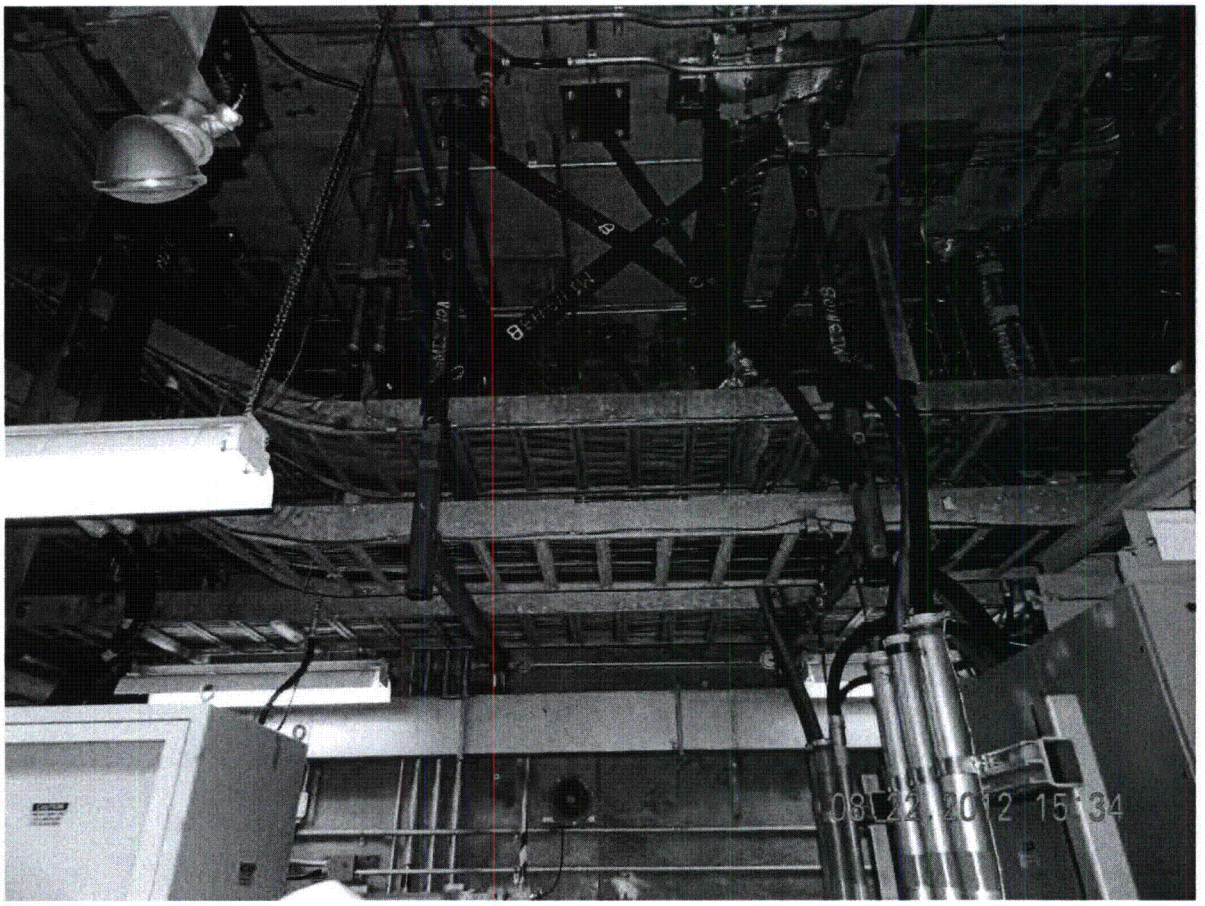


(DSCN0758)

Seismic Walkdown Pictures

Equipment ID No. *R1400S050* Equipment Class: *1, Motor Control Center and Wall-Mounted Contactors*

Equipment Description *SWGR AE DIV1 480V MCC 72C-F Isolating Contactor*



(DSCN0764)

NJPR-12-0043

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

[Note: This Walkdown's scope was limited to cabinet internals per 9/18/12 NEI Focus Group response to Frequently Asked Questions.]

Equipment ID No. R1400S050 Equip. Class[1] *1, MCC & Wall-Mounted Contactors*

Equipment Description *Swgr AE Div. 1, 480VDC 72 C-F Isolating Contactor*

Location: Bldg. *AB2* Floor El. *613'-6"* Room, Area *Room B-19, Col. G-10*

Manufacturer, Model, Etc. (optional but recommended) *GE, Model CR305G226AAN*

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☐
   Not applicable. See August 22, 2012, Seismic Walkdown Checklist and comment on page 3 on this checklist dated October 8, 2012.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   See August 22, 2012, Seismic Walkdown Checklist and comment on page 3 on this checklist dated October 8, 2012.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   See response to Question 2, above.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   See response to Question 2, above.

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☒
   See response to Question 2, above.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☐
   Not applicable. See August 22, 2012, Seismic Walkdown Checklist and comment on page 3 on this checklist dated October 8, 2012.

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

Seismic Walkdown Checklist (SWC)

[Note: This Walkdown's scope was limited to cabinet internals per 9/18/12 NEI Focus Group response to Frequently Asked Questions.]

Equipment ID No. R1400S050 Equip. Class[1] *1, MCC & Wall-Mounted Contactors*

Equipment Description *Swgr AE Div. 1, 480VDC 72 C-F Isolating Contactor*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   See August 22, 2012, Seismic Walkdown Checklist and comment on page 3 on this checklist dated October 8, 2012.

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☒
   See response to Question 7, above.

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☒
   See response to Question 7, above.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    Not applicable. See August 22, 2012, Seismic Walkdown Checklist and comment on page 3 on this checklist dated October 8, 2012.

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☐
    The door on the electrical cabinet was opened to permit evaluating the adequacy of fasteners securing components mounted inside. Only one major component was present which was well-secured. No adverse conditions were identified. See Photos 1 & 2, attached.

NJPR-12-0043

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

[Note: This Walkdown's scope was limited to cabinet internals per 9/18/12 NEI Focus Group response to Frequently Asked Questions.]

Equipment ID No. R1400S050 Equip. Class[1] *1, MCC & Wall-Mounted Contactors*

Equipment Description *Swgr AE Div. 1, 480VDC 72 C-F Isolating Contactor*

Comments (Additional pages may be added as necessary)

Anchorage and Interaction Effects were evaluated during an August Walkdown and results reported in a Seismic Walkdown Checklist dated August 22, 2012. However, during the Walkdown, the door on the instrument panel was not opened to afford Seismic Walkdown Engineers an opportunity to inspect anchorage on components inside the panel. A September 18, 2012, NEI Focus Group response to Frequently Asked Questions about opening cabinet doors led to consider increasing the scope of the August 22 Walkdown. Therefore, the scope of this Walkdown included unlocking and opening the panel door and evaluating fasteners securing components mounted inside.

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #1 : _____ Date: 10/08/12

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #2 : Michael P. Lasso Date: 10/08/12

Seismic Walkdown Pictures

Equipment ID No. *R1400S050* Equipment Class: *1, MCCs & Wall-Mounted Contactors*

Equipment Description *Swgr AE Div. 480V MCC 72 C-F Isolating Contactor*

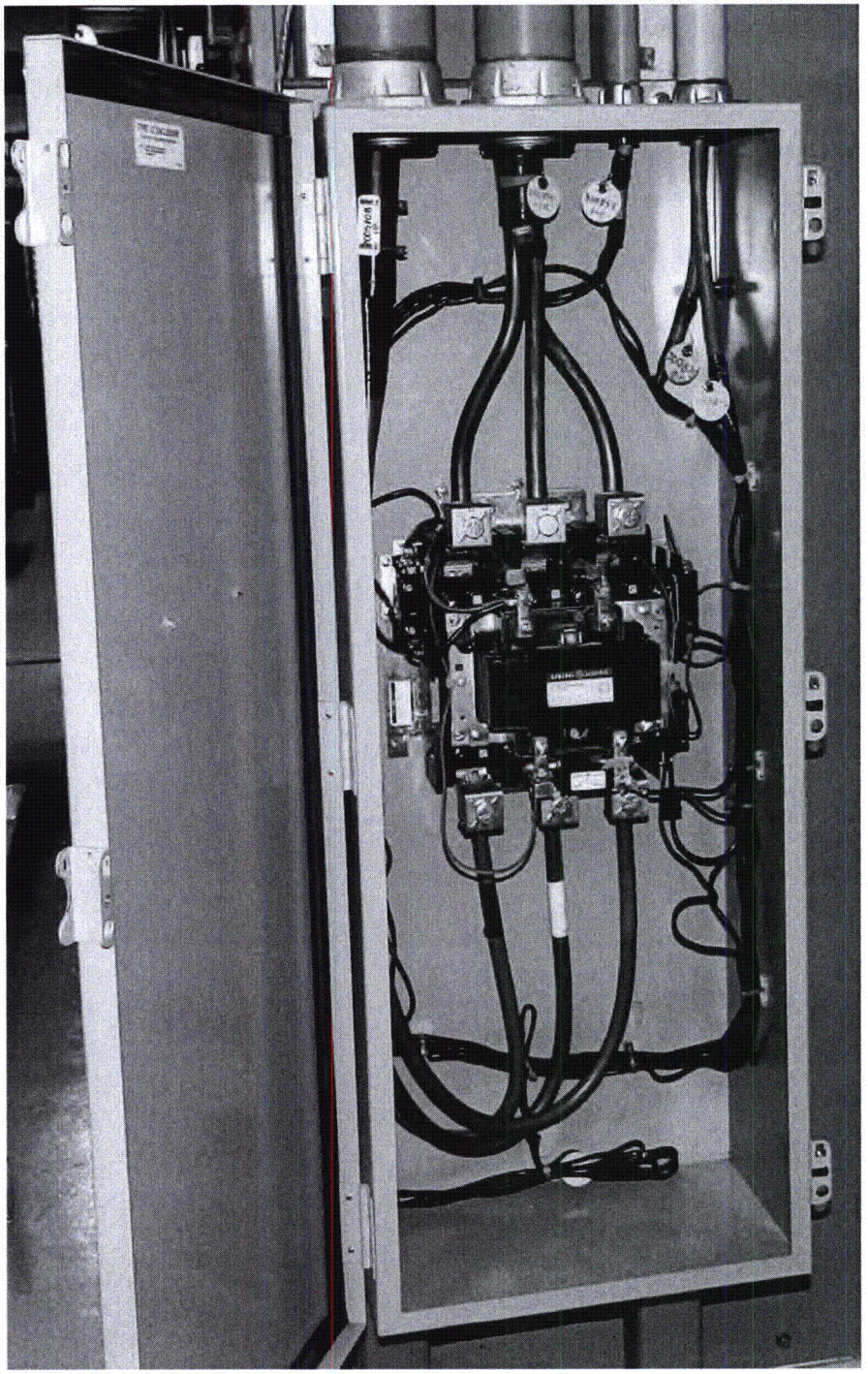


Photo 1, *View of Inside of Cabinet*

Seismic Walkdown Pictures

Equipment ID No. *R1400S050* Equipment Class: *1, MCCs & Wall-Mounted Contactors*

Equipment Description *Swgr AE Div. 480V MCC 72 C-F Isolating Contactor*

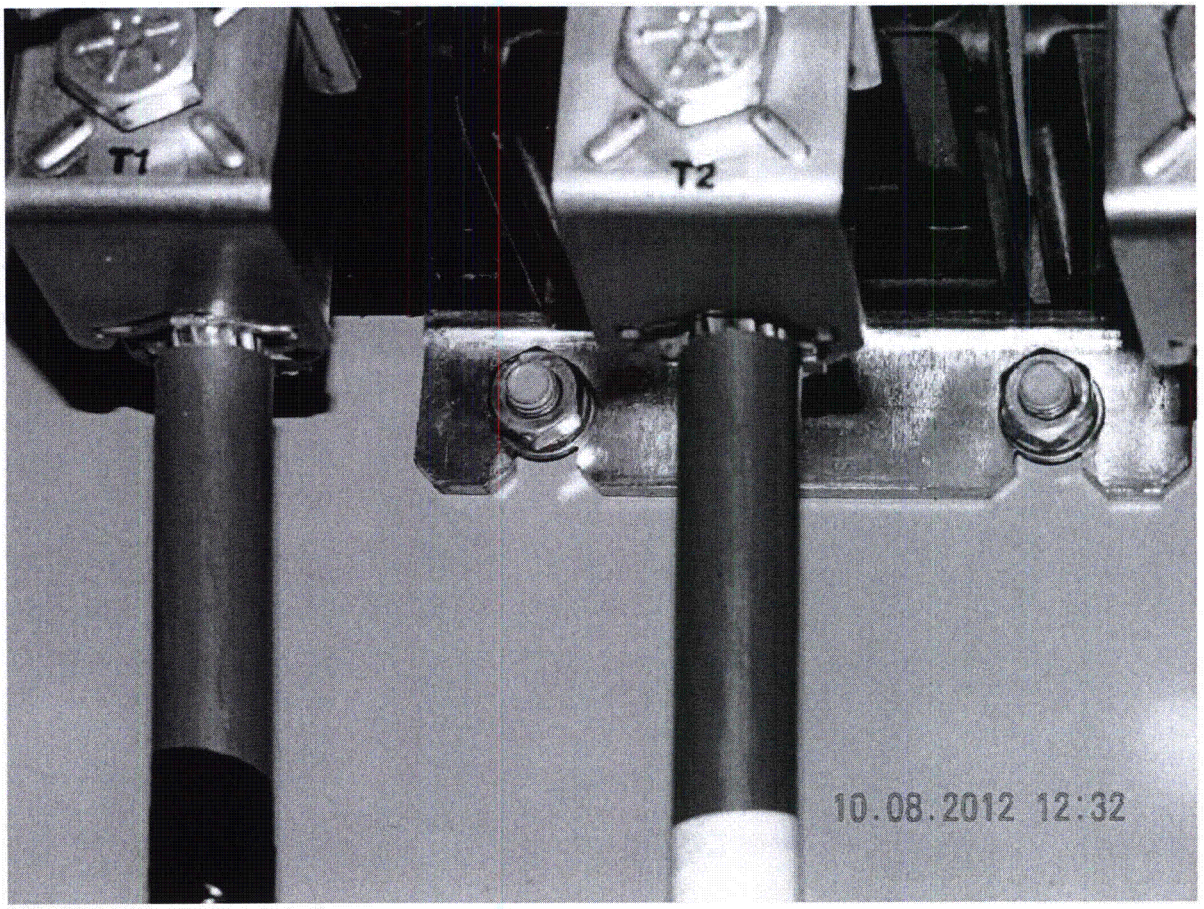


Photo 2, *Close-Up View of Bolts Securing Contactor to Mounting Plate*

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R1600S019A* Equip. Class[1] *1-Motor Control Centers &Wall Mounted Contactors*

Equipment Description *MCC/Dist CAB 480V MCC No 72ED-2D*

Location: Bldg. *RHR* Floor El. *617'-0"* Room, Area *EDG-14 (Col E-8)*

Manufacturer, Model, Etc. (optional but recommended) *ITE Gould Corp. Series 5600*

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Existing weld between channel member and an angle is adequate. See Photos DSC 00111 and DSC 00339.

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

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

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☐
   Configuration of weld around base of MCC is consistent with Dwg. E-N-0037, Rev N, Section C-C (no postings).

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

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R1600S019A* Equip. Class[1] *1-Motor Control Centers &Wall Mounted Contactors*

Equipment Description *MCC/Dist CAB 480V MCC No 72ED-2D*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No nearby equipment or other items will impact this MCC. Cable trays, HVAC ductwork and lights are adequately supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   HVAC ductwork, cable trays and light fixtures are adequately supported. No ceiling tiles or block walls in the area.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   Electrical cables have adequate flexibility above the MCC. See Photo DSC 00112.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    No seismic interaction concerns were identified.

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☐
    Missing 1 out of 4 fasteners on panel at Position 4C (see Photo DSC 00338). Initiated CARD 12-27475 to install missing fastener.

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R1600S019A* Equip. Class[1] *1-Motor Control Centers &Wall Mounted Contactors*

Equipment Description *MCC/Dist CAB 480V MCC No 72ED-2D*

Comments (Additional pages may be added as necessary)

Welds were visible and could be inspected without removing panels. Gaining access to inspect inner and inter-cabinet bolting would require opening panels and disengaging buckets. Since the MCC's five cabinets were bolted together in the manufacturer's shop, shipped to Fermi 2, off-loaded, lifted into place, and installed as a single unit, inter-cabinet bolting is considered load-tested and not a concern (see Vendor Manual VME5-7.1, Rev. E Series 5600 MCCs, p. 10, no postings). The only major components in the cabinets are electrical breakers which are not bolted or welded into place and not subject to seismic walkdown inspections.

☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 :*Rohit Vadhar* Date: 8-30-12

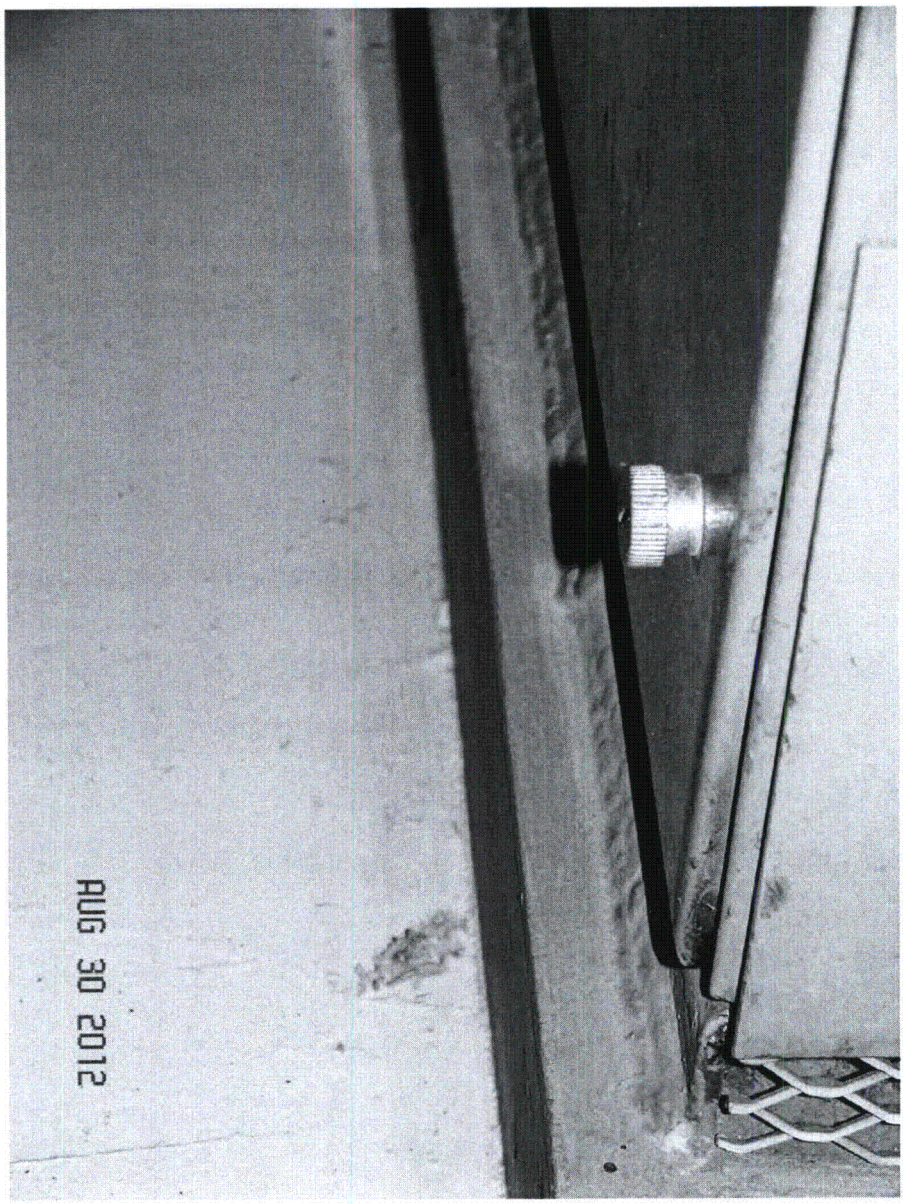
☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 :*Marc Meyer* Date: 08/30/12

Seismic Walkdown Pictures

Equipment ID No. *R1600S019A* Equipment Class: *1-Motor Control Centers &Wall Mounted Contactors*

Equipment Description *MCC/Dist CAB 480V MCC No 72ED-2D*



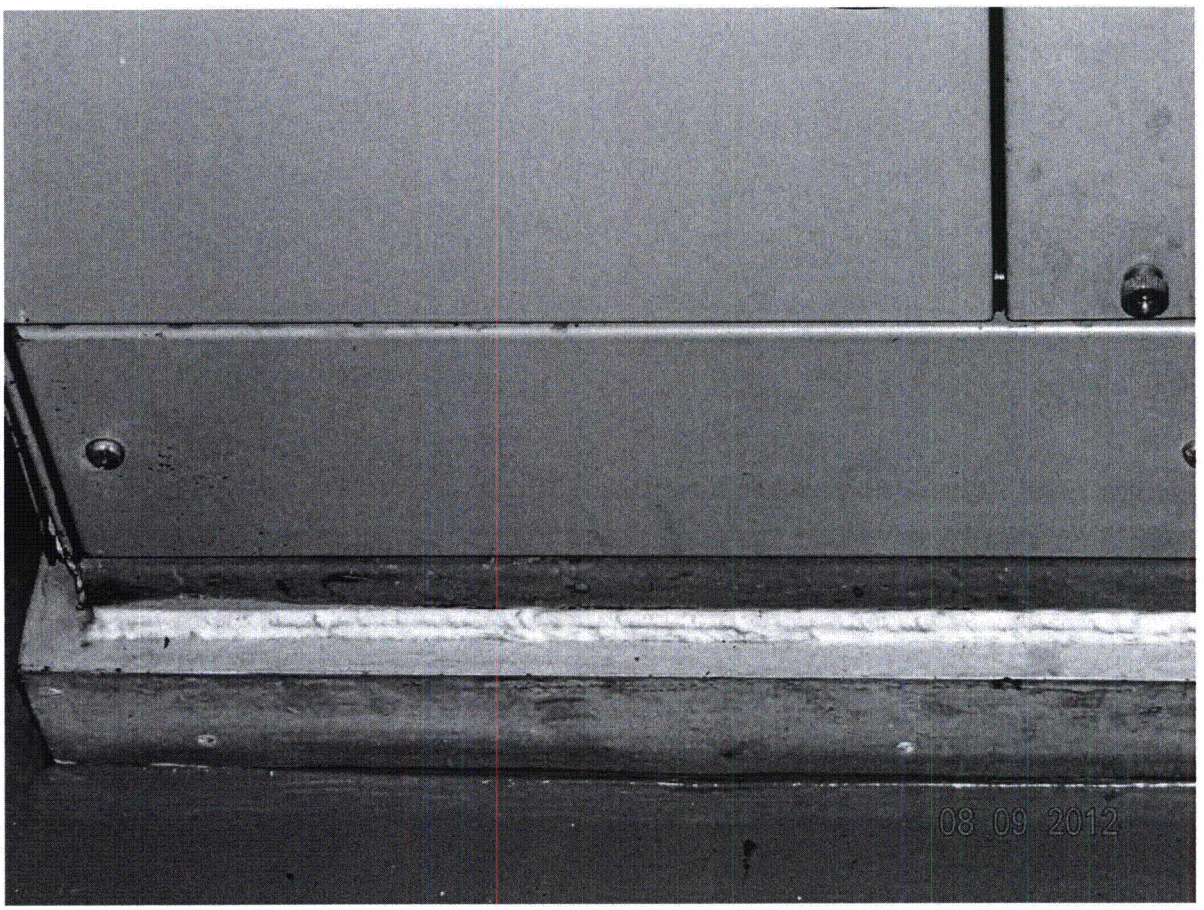
(DSC 00111)

"Elevation Weld"

Seismic Walkdown Pictures

Equipment ID No. *R1600S019A* Equipment Class: *1-Motor Control Centers &Wall Mounted Contactors*

Equipment Description *MCC/Dist CAB 480V MCC No 72ED-2D*



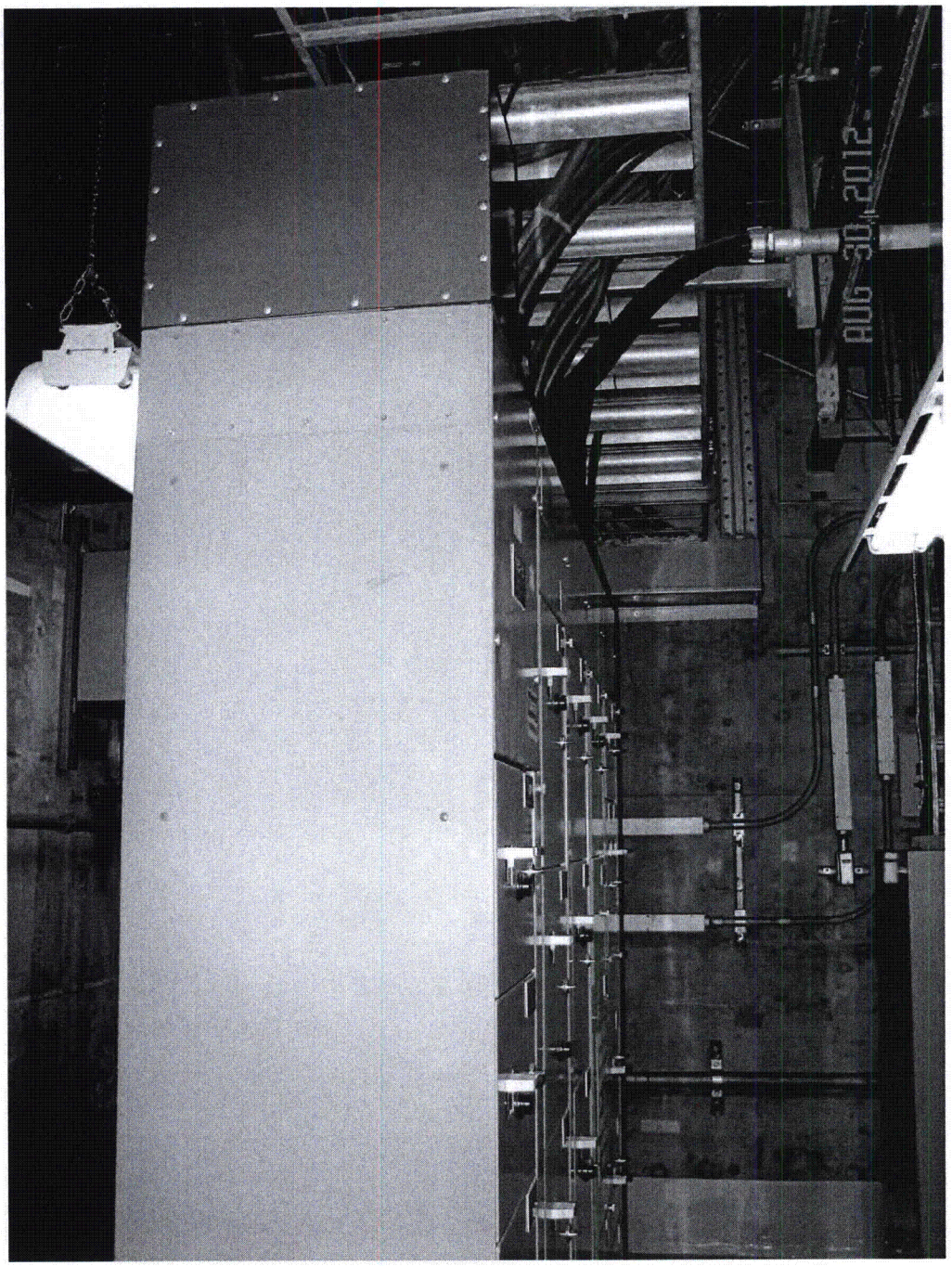
(DSC 00339)

"Weld"

Seismic Walkdown Pictures

Equipment ID No. *R1600S019A* Equipment Class: *1-Motor Control Centers &Wall Mounted Contactors*

Equipment Description *MCC/Dist CAB 480V MCC No 72ED-2D*



(DSC 00112)

"Overhead equipment, etc"

Seismic Walkdown Pictures

Equipment ID No. *R1600S019A* Equipment Class: *1-Motor Control Centers &Wall Mounted Contactors*

Equipment Description *MCC/Dist CAB 480V MCC No 72ED-2D*

(DSC 00338)

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3000A011 Equip. Class[1] 21, Tanks and Heat Exchangers

Equipment Description *EDG 11 W Starting Air Receiver*

Location: Bldg. *RHR* Floor El. *590'-0"* Room, Area *EDG11, Col. C-6*

Manufacturer, Model, Etc. (optional but recommended) *LASK, 30" OD Air Tank*

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Anchorage is in good condition. (See Photo DSCN 0522 and 0524).

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Bolts are painted; no corrosion present.

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

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   Anchorage configuration is consistent with Dwg. M-N-2090-4, Rev. P (four postings, none related to this asset); Dwg. M-N-2090-5, Rev. Q (no postings); and Dwg. S 214 2, Rev. 2 (no postings).

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   No adverse seismic conditions.

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3000A011 Equip. Class[1] 21, Tanks and Heat Exchangers

Equipment Description *EDG 11 W Starting Air Receiver*

Interaction Effects

7. Are soft targets free from impact by nearby equipment? Y☒ N☐ U☐ N/A☐
   Valves are only soft targets. Everything above and alongside these small valves are well-secured. Therefore, valves are free from impact by nearby equipment.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   No ceiling tiles or lighting over equipment. Electrical junction boxes and conduits are secured to ceiling/walls.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   Attached lines have adequate flexibility. (See Photos DSCN 0525and 0526)

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    No adverse conditions were identified.

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☐
    Piping attached to air receiver tanks readily sways back and forth if lightly bumped. This condition was identified earlier by others. It was determined that the piping is "as designed" and was analyzed in Calc DC-2932, Rev. 0. Since field conditions match the design (Dwg. 6WM-R30-N2173-1, Rev. D), the piping is adequate and acceptable.

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3000A011 Equip. Class[1] 21, Tanks and Heat Exchangers

Equipment Description *EDG 11 W Starting Air Receiver*

Comments (Additional pages may be added as necessary)

N/A

☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 : _____ Date: 8-17-12

☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 : _____ Date: 08/17/12

Seismic Walkdown Pictures

Equipment ID No. *R3000A011* Equipment Class: *21, Tanks and Heat Exchangers*

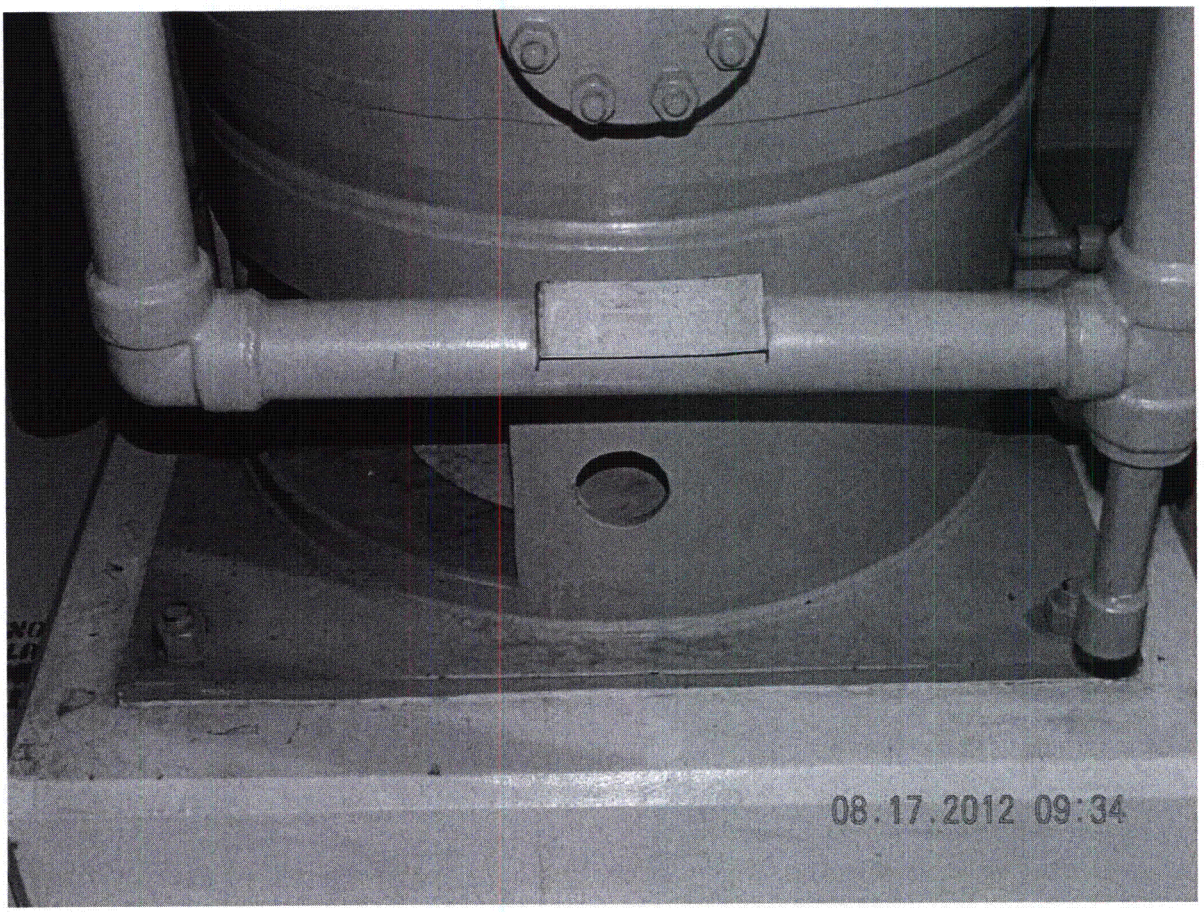
Equipment Description *EDG 11 W Starting Air Receiver*

(DSCN 0522)

Seismic Walkdown Pictures

Equipment ID No. *R3000A011* Equipment Class: *21, Tanks and Heat Exchangers*

Equipment Description *EDG 11 W Starting Air Receiver*

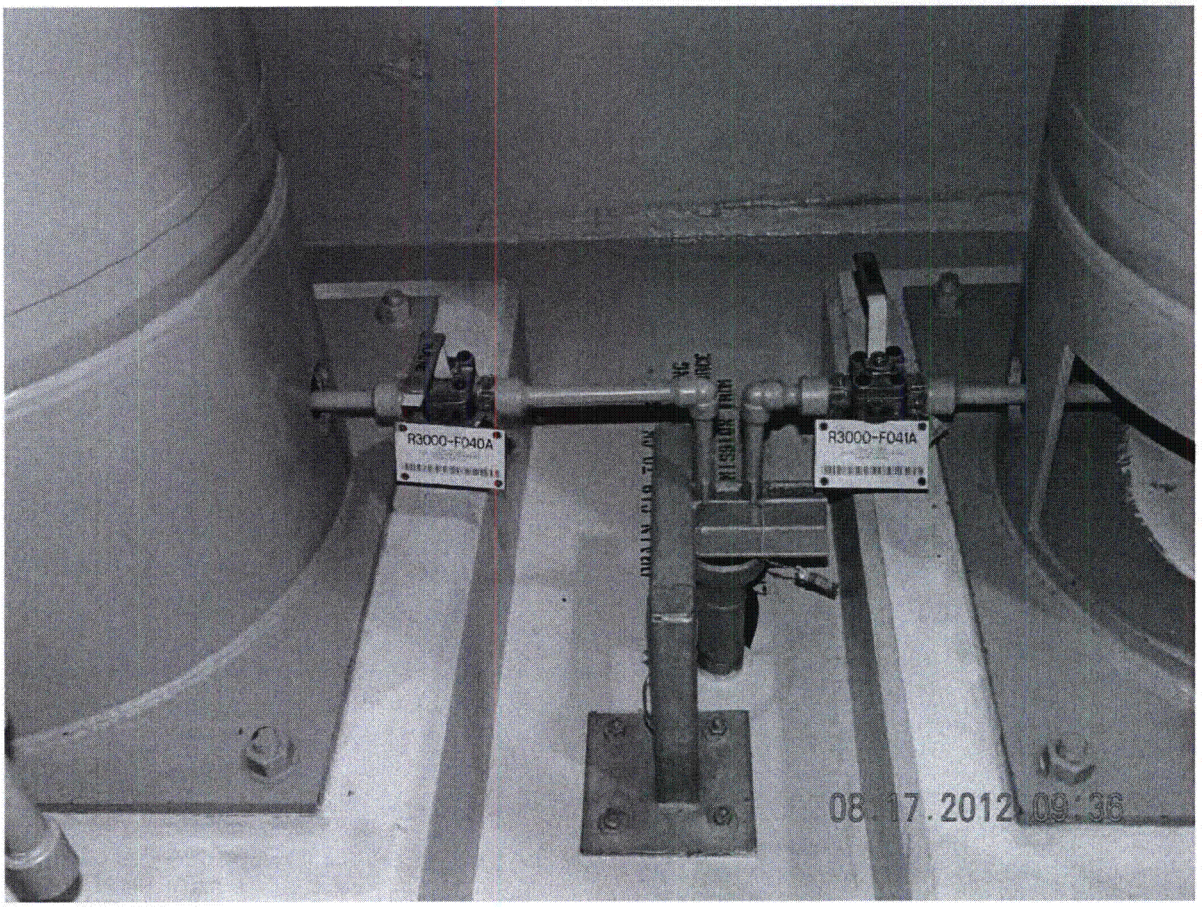


(DSCN 0524)

Seismic Walkdown Pictures

Equipment ID No. *R3000A011* Equipment Class: *21, Tanks and Heat Exchangers*

Equipment Description *EDG 11 W Starting Air Receiver*

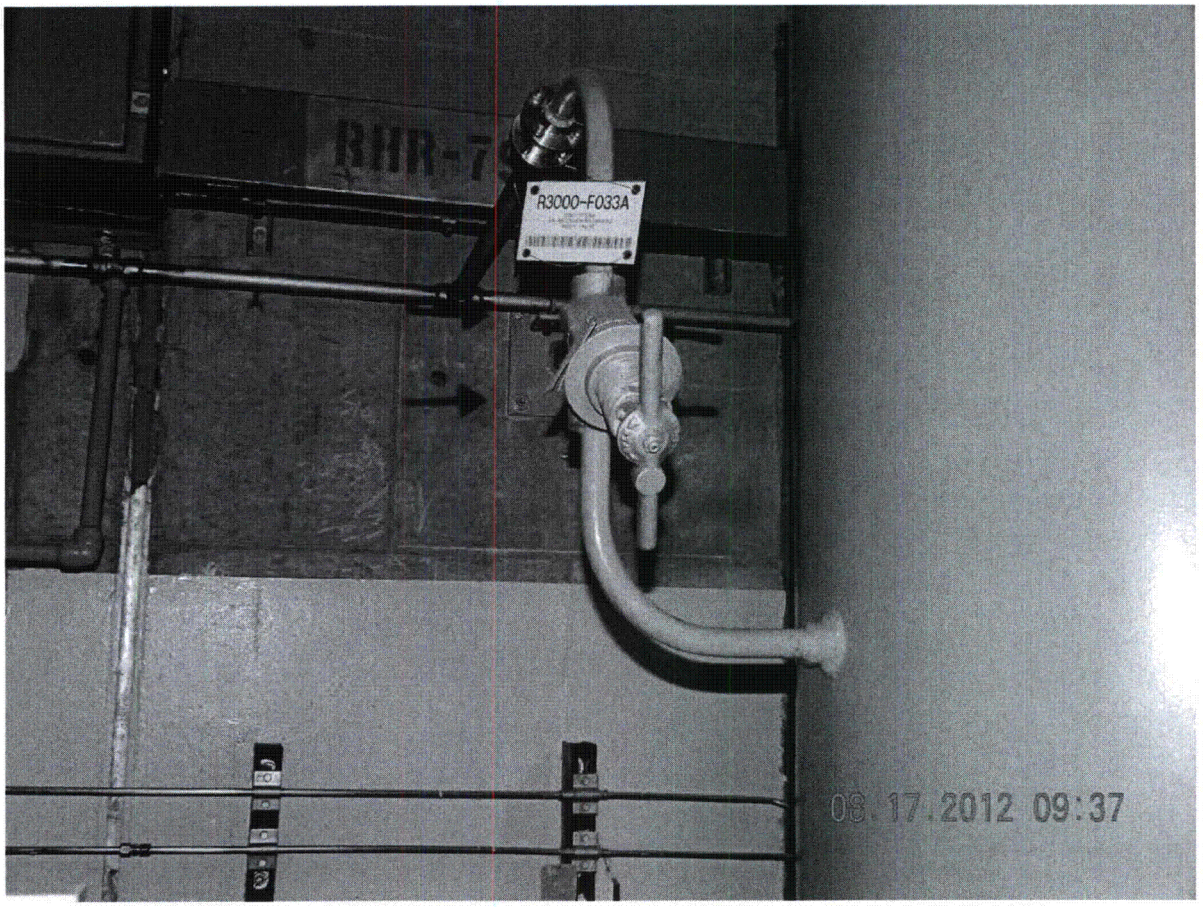


(DSCN 0525)

Seismic Walkdown Pictures

Equipment ID No. *R3000A011* Equipment Class: *21, Tanks and Heat Exchangers*

Equipment Description *EDG 11 W Starting Air Receiver*



(DSCN 0526)

NJPR-12-0043 Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3000D002 Equip. Class[1] 12, Air Compressors

Equipment Description *EDG 12 Starting Air Compressor*

Location: Bldg. *RHR* Floor El. *590'-0"* Room, Area *EDG12, Col. C-5.1*

Manufacturer, Model, Etc. (optional but recommended) *Quin, 325-104 (Air)*

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☑ N☐ U☐ N/A☐
   No bent, broken, missing or loose hardware around the air compressor.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☑ N☐ U☐ N/A☐
   No corrosion present. Some debris and dust particles around bolts.

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

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☑ N☐ U☐ N/A☐
   Anchorage configuration is consistent with Dwg. M-N-2090-6, Rev. AD (no postings);Dwg. M-N-2090-4, Rev. P (four postings, none related to this asset); and Calc. No. 750702 "Seismic Calculations for Nuclear Standby Generating Equipment" Section 12, July 1975, pp.21 to 29 (three postings, none related to this asset). See Photo DSC 01374 for typical anchorage configuration.

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

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3000D002 Equip. Class[1] 12, Air Compressors

Equipment Description *EDG 12 Starting Air Compressor*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☑ N☐ U☐ N/A☐
   Nearby components are adequately supported. Impact to the air compressor is not a concern.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☑ N☐ U☐ N/A☐
   No ceiling tiles, block walls or lighting. Junction boxes, cables, and conduits are also adequately supported.

9. Do attached lines have adequate flexibility to avoid damage? Y☑ N☐ U☐ N/A☐
   Attached lines have adequate flexibility (see Photo DSC 01374).

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☑ N☐ U☐
    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☐
    Also looked at shear load on adjustable motor hold-down bolts (see Photo DSC 01381). Based on pages 28 & 29 of vendor calculation (Calc. No. 750702, Section 12) shear stresses are very low and design margin is high. Therefore, bolts are not a concern.

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3000D002 Equip. Class[1] 12, Air Compressors

Equipment Description *EDG 12 Starting Air Compressor*

Comments (Additional pages may be added as necessary)

N/A

☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 : _____ Date: 8-7-12

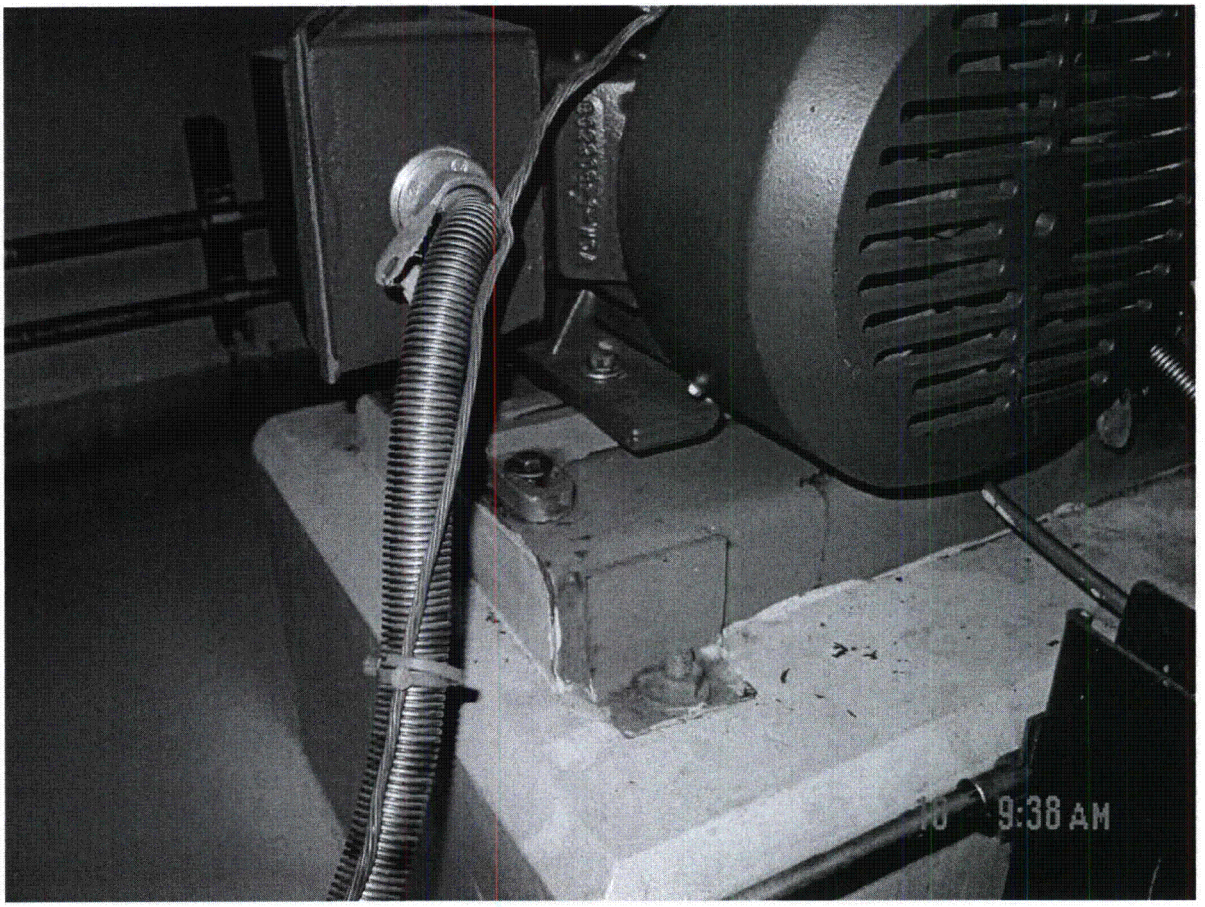
☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 : _____ Date: 08/07/12

Seismic Walkdown Pictures

Equipment ID No. *R3000D002* Equipment Class: *12, Air Compressors*

Equipment Description *EDG 12 Starting Air Compressor*



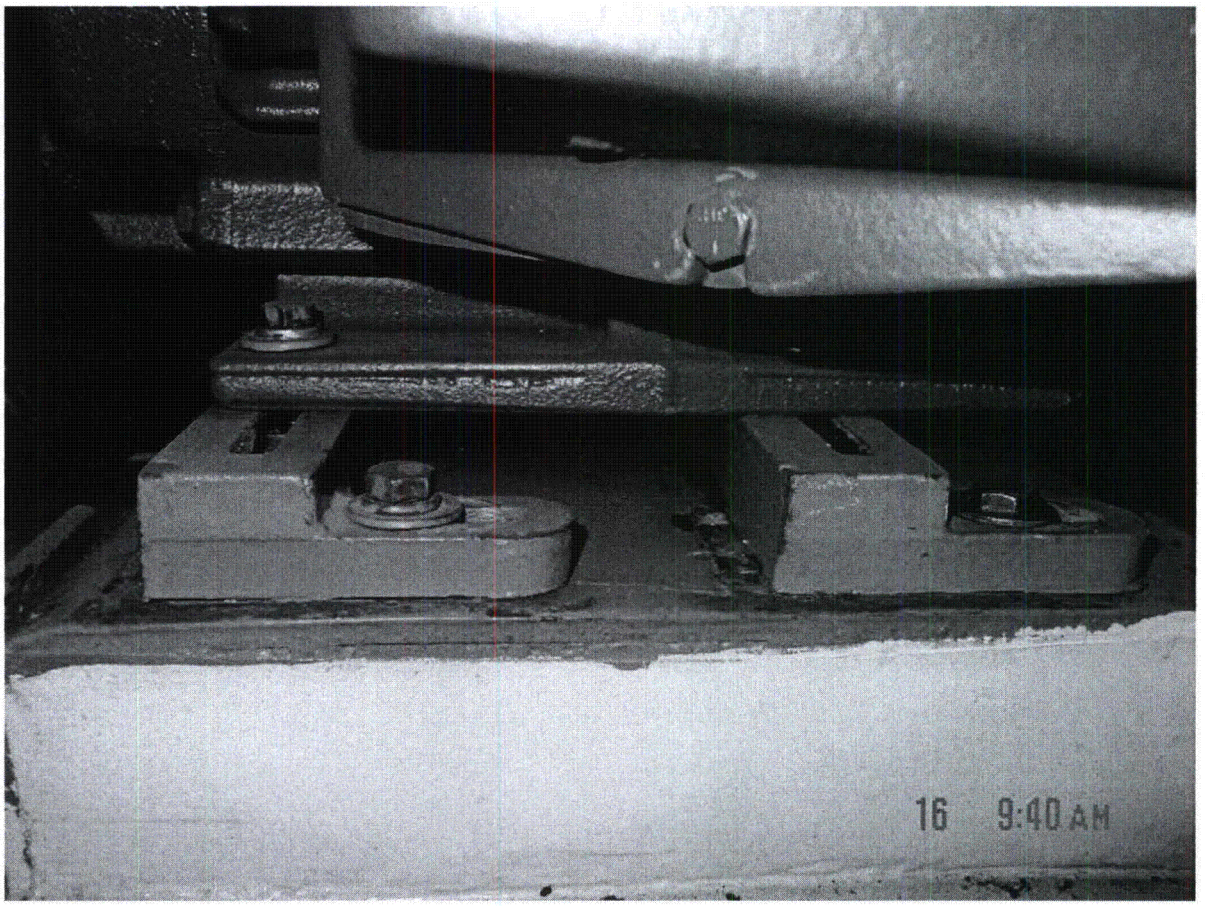
(DSC01374)

FLEXIBLE HOSE & BOLT CONFIGURATION

Seismic Walkdown Pictures

Equipment ID No. *R3000D002* Equipment Class: *12, Air Compressors*

Equipment Description *EDG 12 Starting Air Compressor*



(DSC 01381)

ADJUSTABLE MOTOR HOLD-DOWN BOLTS

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R3000F023D* Equip. Class[1] *7-Pneumatic-Operated Valves*

Equipment Description *EDG 14 ACS 3-Way Temp Ctrl Vlv*

Location: Bldg. *RHR* Floor El. *1 (590'-0")* Room, Area *EDG14, Col. E-8*

Manufacturer, Model, Etc. (optional but recommended) *Robert Shaw Controls Model VC-231*

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The assets anchorage connections are not attached to a civil structure. The asset is a valve (line-mounted) on a pipeline with hardware that is in good condition. (See Picture 1)

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No observed corrosion. (See Picture 1)

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Not anchored to concrete.

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

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

MPS 10/4/12

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R3000F023D* Equip. Class[1] *7-Pneumatic-Operated Valves*

Equipment Description *EDG 14 ACS 3-Way Temp Ctrl Vlv*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Attached drum below the asset is ~2½" from nearby item. It is rigidly attached, so there not a rattle space concern (≤ 2" for rigid items). (See Picture 5)

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The only attached lines are small bore lines that are significantly smaller in diameter than the asset's piping system, and are therefore more flexible in comparison to the more robust piping system.

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

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
    None identified.

MPS 10/4/12

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3000F023D Equip. Class[1] 7 -- Pneumatic-Operated Valves

Equipment Description EDG 14 ACS 3-Way Temp Ctrl Vlv.

Comments (Additional pages may be added as necessary)

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #1 : Michael P. Dasso Date: 8/14/12

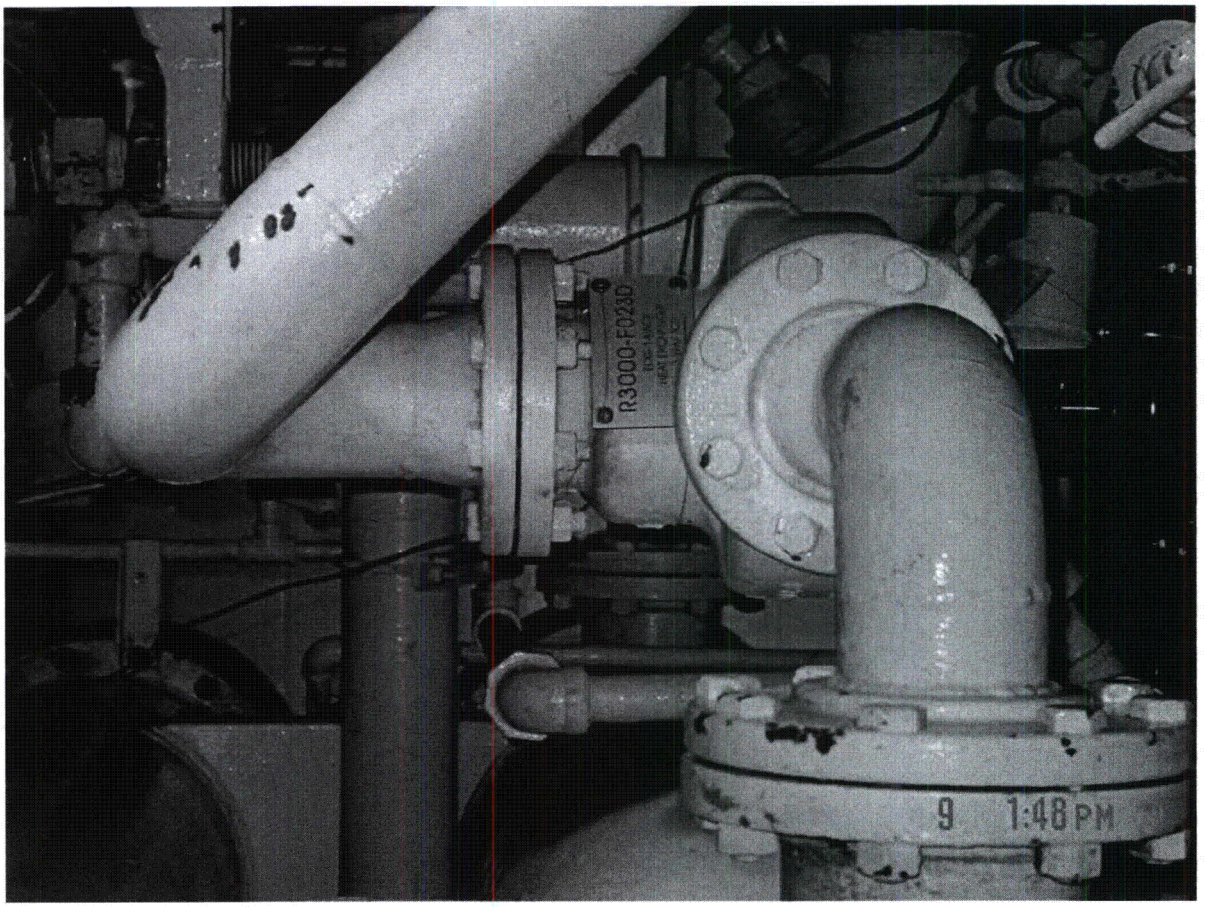
☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #2 : Scott Bauer Date: 8/14/12

Seismic Walkdown Pictures

Equipment ID No. *R3000F023D* Equipment Class: 7, Pneumatic-Operated Valves

Equipment Description *EDG 14 ACS 3-WAY TEMP CTRL VLV*

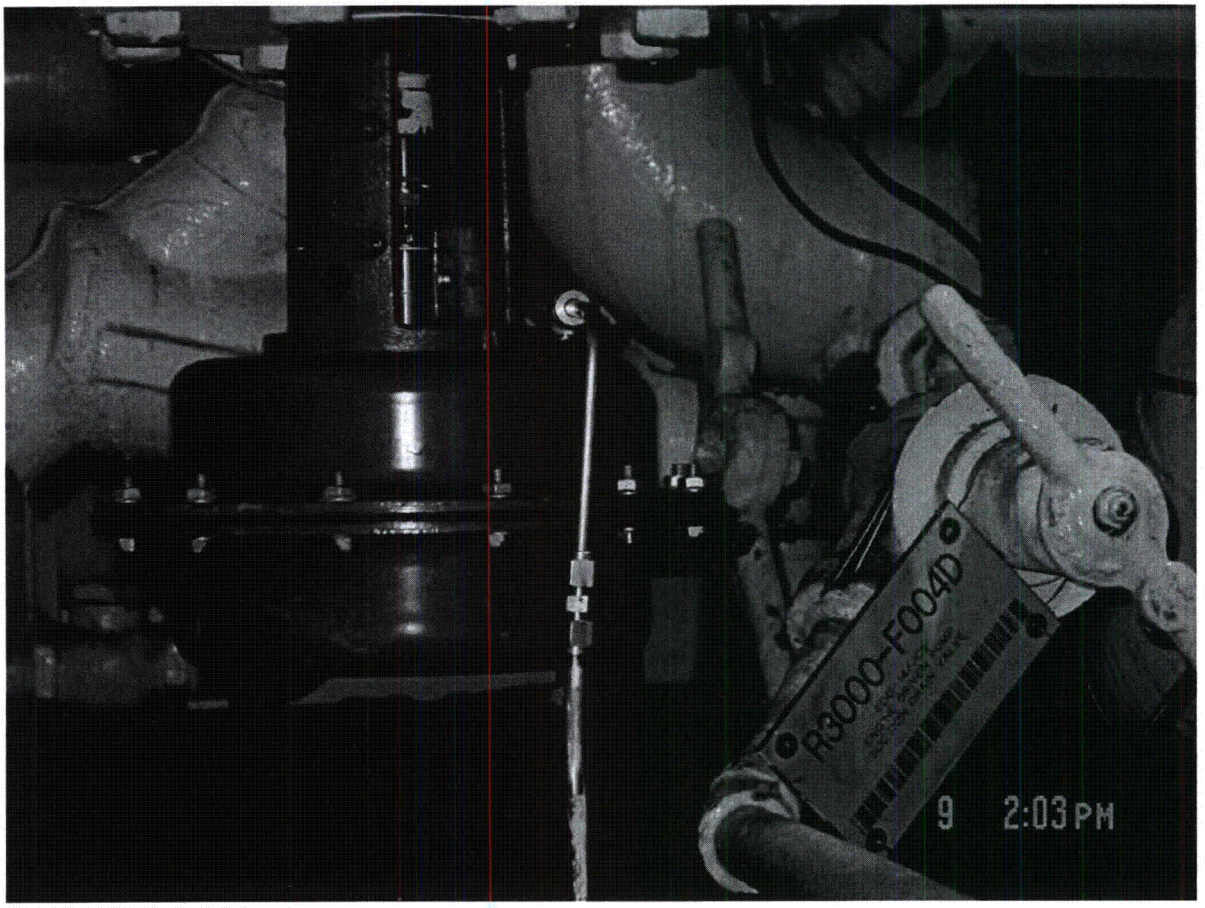


(Picture #1)

Seismic Walkdown Pictures

Equipment ID No. *R3000F023D* Equipment Class: 7, Pneumatic-Operated Valves

Equipment Description *EDG 14 ACS 3-WAY TEMP CTRL VLV*



(Picture #5)

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3001B004 Equip. Class[1] 21, Tanks and Heat Exchangers

Equipment Description *EDG 14 Lube Oil Hx*

Location: Bldg. *RHR* Floor El. *590'-0"* Room, Area *EDG14, Col. D-7.1*

Manufacturer, Model, Etc. (optional but recommended) *American Standard Model CPK*

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   All anchors are present and securely tightened.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Anchorage exhibits no corrosion.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Anchorage is to steel, not to concrete.(See picture 2.and 5) ~ Dok Ichiriz

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

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

MPS 10/4/12

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3001B004 Equip. Class[1] 21, Tanks and Heat Exchangers

Equipment Description *EDG 14 Lube Oil Hx*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   There are no observed impact sources. See pictures 3 & 4.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   All overhead equipment and distribution systems are appropriately anchored and restrained. Many of the embedded plates in the ceiling exhibit moderate surface corrosion, but this is not a significant seismic concern.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   Attached piping has adequate flexibility via flex joints/piping. See picture 4.

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

Other Adverse Conditions

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

MPS 10/4/12

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3001B004 Equip. Class[1] 21 - Tanks and Heat Exchangers

Equipment Description EDG 14 Lube Oil HX

Comments (Additional pages may be added as necessary)

☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 : Mil P. Dasso Date: 8/20/12

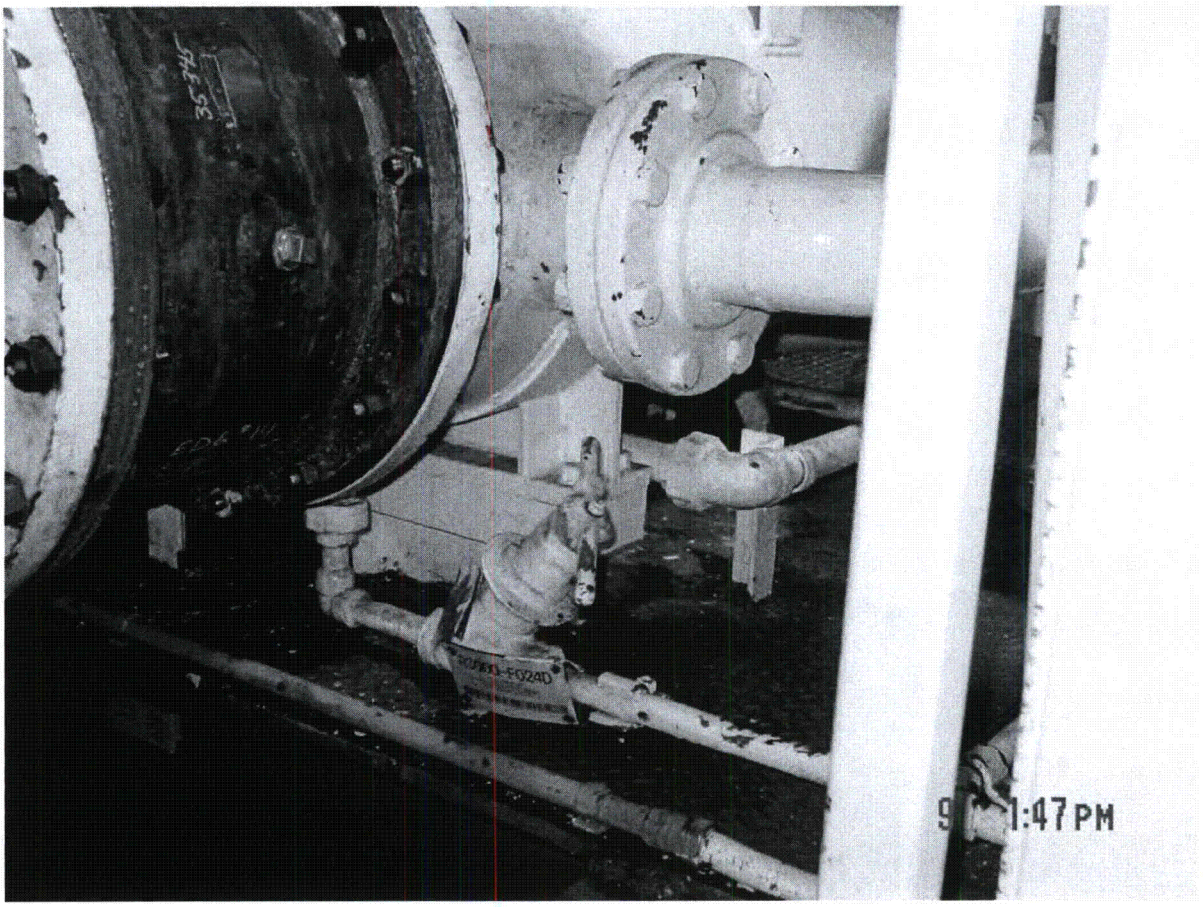
☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 : Scott Bauer Date: 8/20/12

Seismic Walkdown Pictures

Equipment ID No. *R3001B004* Equipment Class: *21, Tanks and Heat Exchangers*

Equipment Description *EDG 14 Lube Oil Heat Exchanger*

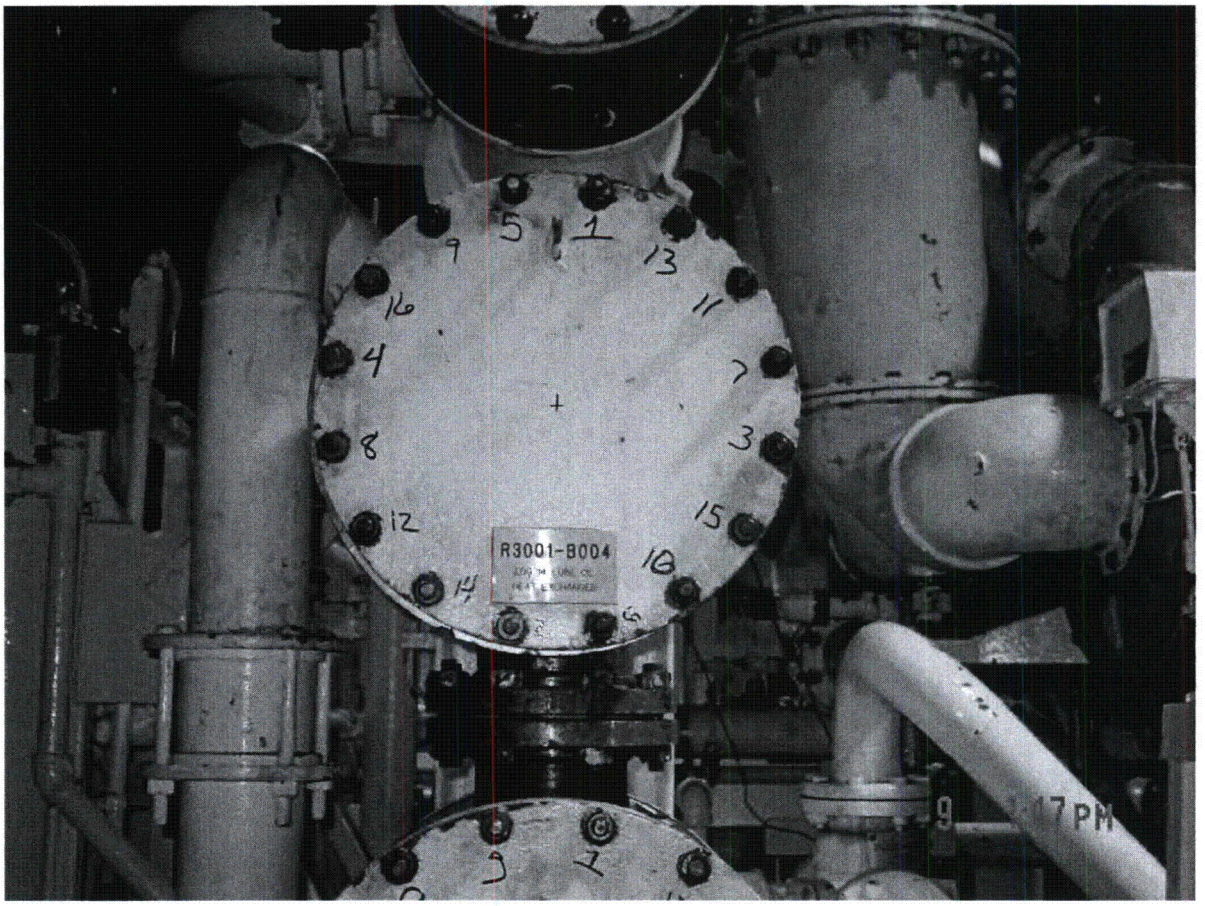


(Picture 2)

Seismic Walkdown Pictures

Equipment ID No. *R3001B004* Equipment Class: *21, Tanks and Heat Exchangers*

Equipment Description *EDG 14 Lube Oil Heat Exchanger*

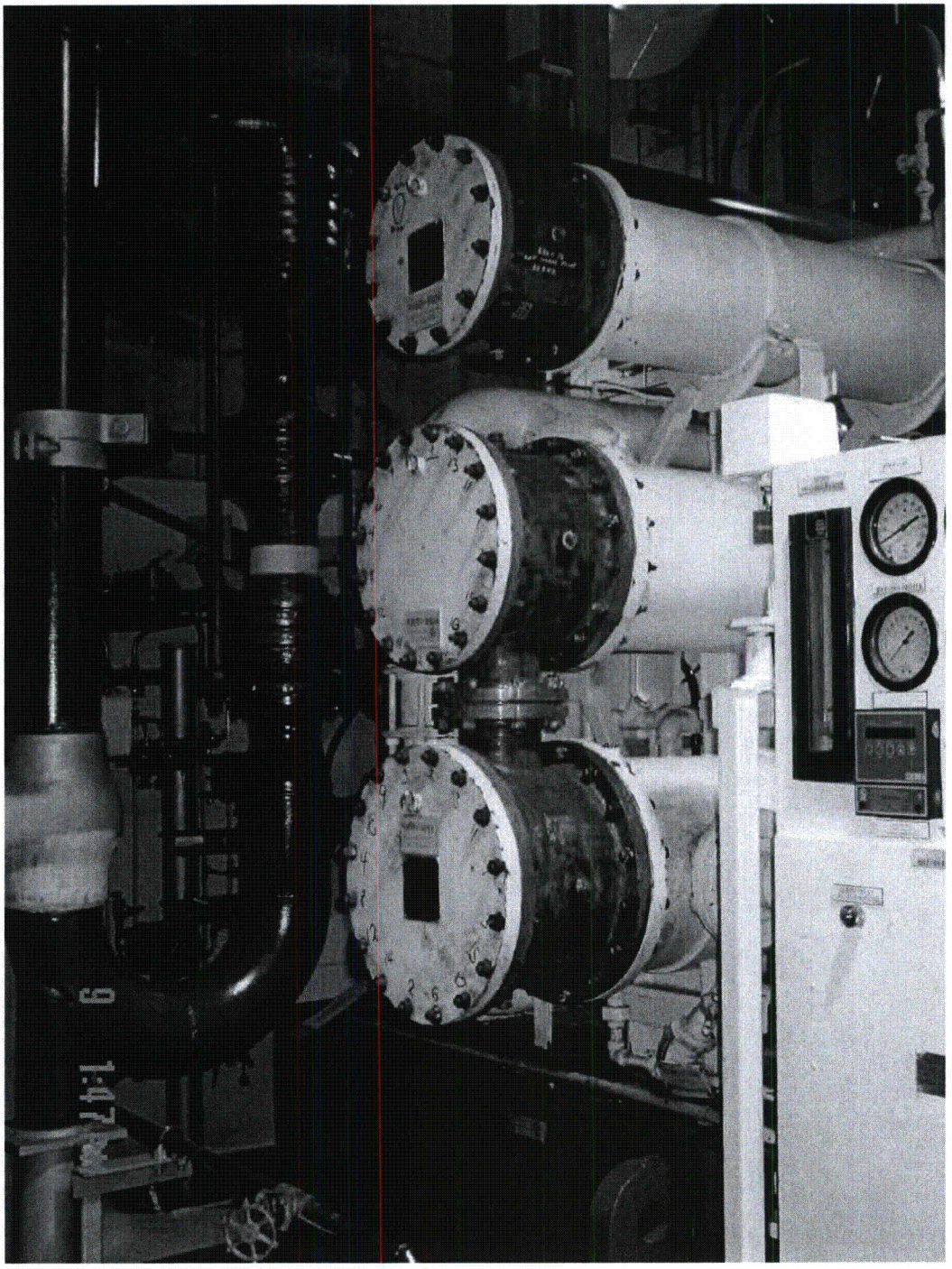


(Picture 3)

Seismic Walkdown Pictures

Equipment ID No. *R3001B004* Equipment Class: *21, Tanks and Heat Exchangers*

Equipment Description *EDG 14 Lube Oil Heat Exchanger*

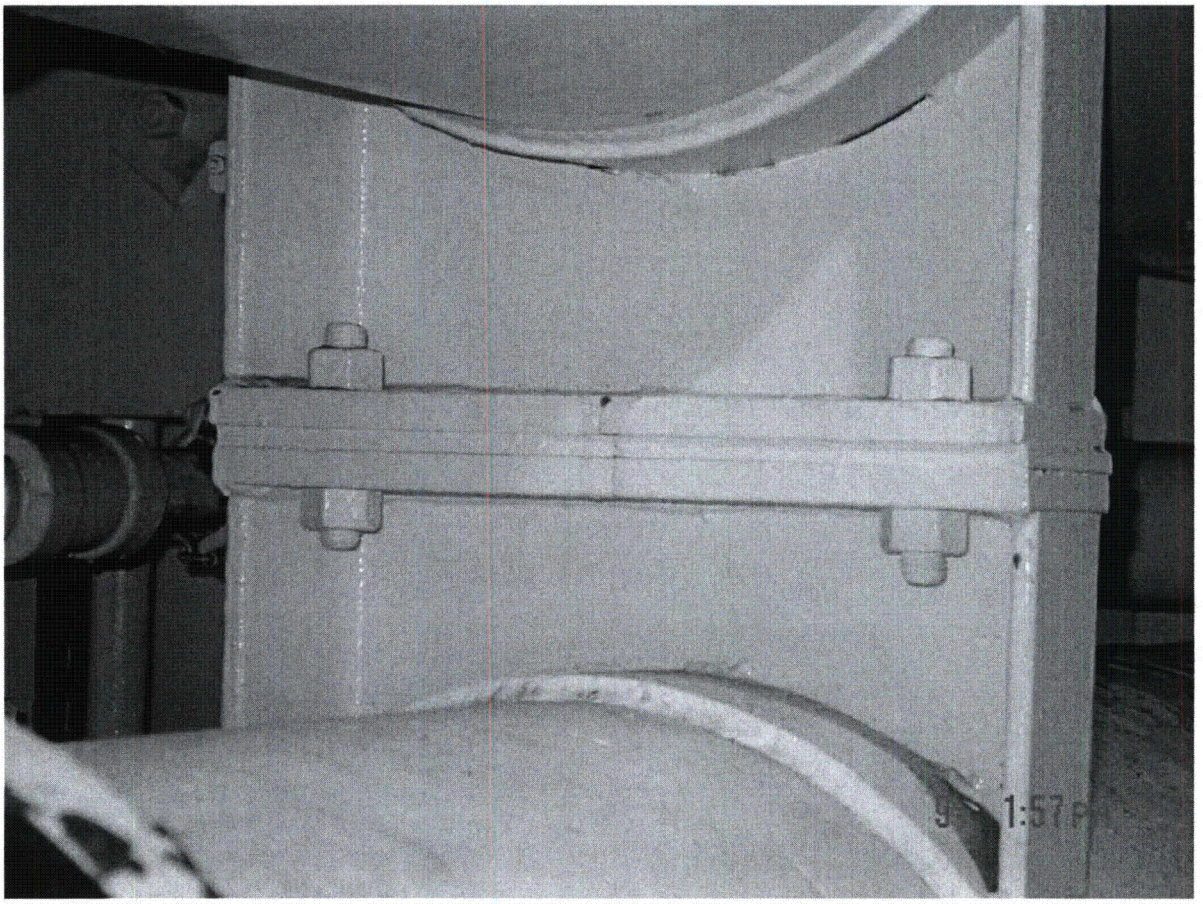


(Picture 4)

Seismic Walkdown Pictures

Equipment ID No. *R3001B004* Equipment Class: *21, Tanks and Heat Exchangers*

Equipment Description *EDG 14 Lube Oil Heat Exchanger*



(Picture 5)

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R3001C006* Equip. Class[1] *6, Vertical Pumps*

Equipment Description *EDG # 12 Service Water Pump*

Location: Bldg. *RHR* Floor El. *590'-0"* Room, Area *Room SRHRPR, Col E-6*

Manufacturer, Model, Etc. (optional but recommended) *Motor Reliance Elect-Motor 7173501-001-T1-JJ*

Instructions for Completing Checklist

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

Anchorage

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

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion found. Mineral deposits from past Service Water leaks were noted on the concrete pad. There are currently no active leaks. See Photo DSCN 0395.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No cracks on concrete pier or floor.

5. Is the anchorage configuration consistent with plant documentation? Y☒ N☐ U☐ N/A☐
   (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
   Anchorage configuration is consistent with the drawings M-N-2090-4, Rev. P, and M-N-2090-6,*Rev. AD.*
   * REFERENCE DOCUMENT HAS NO APPLICABLE POSTINGS.
   DJK 10/12/12

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

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R3001C006* Equip. Class[1] 6, Vertical Pumps

Equipment Description *EDG # 12 Service Water Pump*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Since piping and conduit is adequately supported, impacts to pump or attached accessories are not a concern.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   No ceiling tiles or masonry block walls in this area. Lights are adequately supported.

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

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

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☐ N☒ U☐
    *Four diagonal braces were added between the base of the pump and its motor that do not appear on Vendor Dwg. MD-21144, Sheet 1,*Rev. M. See Photos DSCN 0394 & 0395. CARD 12-26977 was initiated to revise the drawing to reference or incorporate applicable details from Dwgs. R30-C005-G01,*Rev. 0, thru R30-C008-G01,*Rev. 0.*

    *NO APPLICABLE POSTINGS AGAINST REFERENCE DOCUMENT.

DSR 10/12/12

NJPR-12-0043

Status: Y (N) U

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R3001C006* Equip. Class[1] 6, Vertical Pumps

Equipment Description *EDG # 12 Service Water Pump*

Comments (Additional pages may be added as necessary)

☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #1 : [signature] Date: 8-15-12

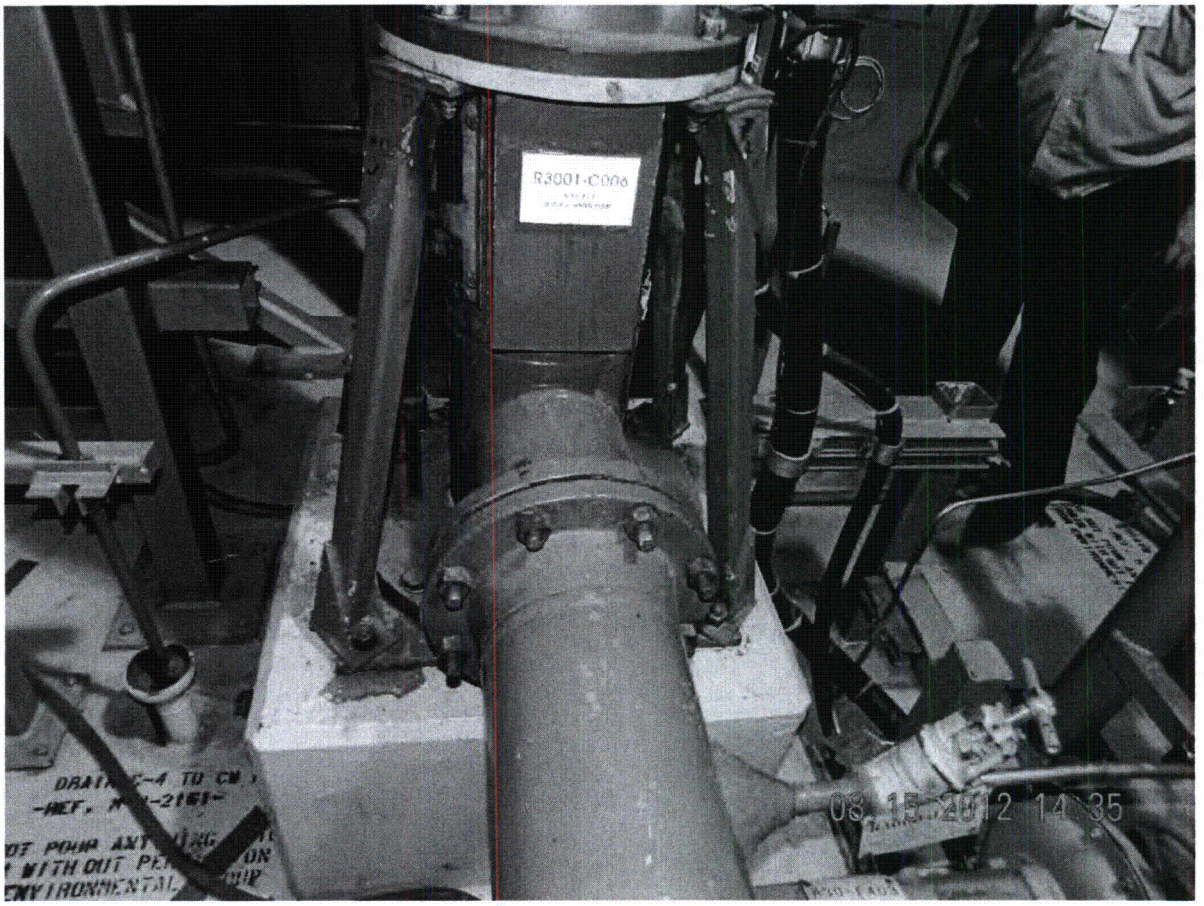
☒ *Seismic Engineer Walkdown PSE-53 Qualified*

Evaluator #2 : [signature] Date: 08/15/12

Seismic Walkdown Pictures

Equipment ID No. *R3001C006* Equipment Class: *6, Vertical Pumps*

Equipment Description *EDG # 12 Service Water Pump*



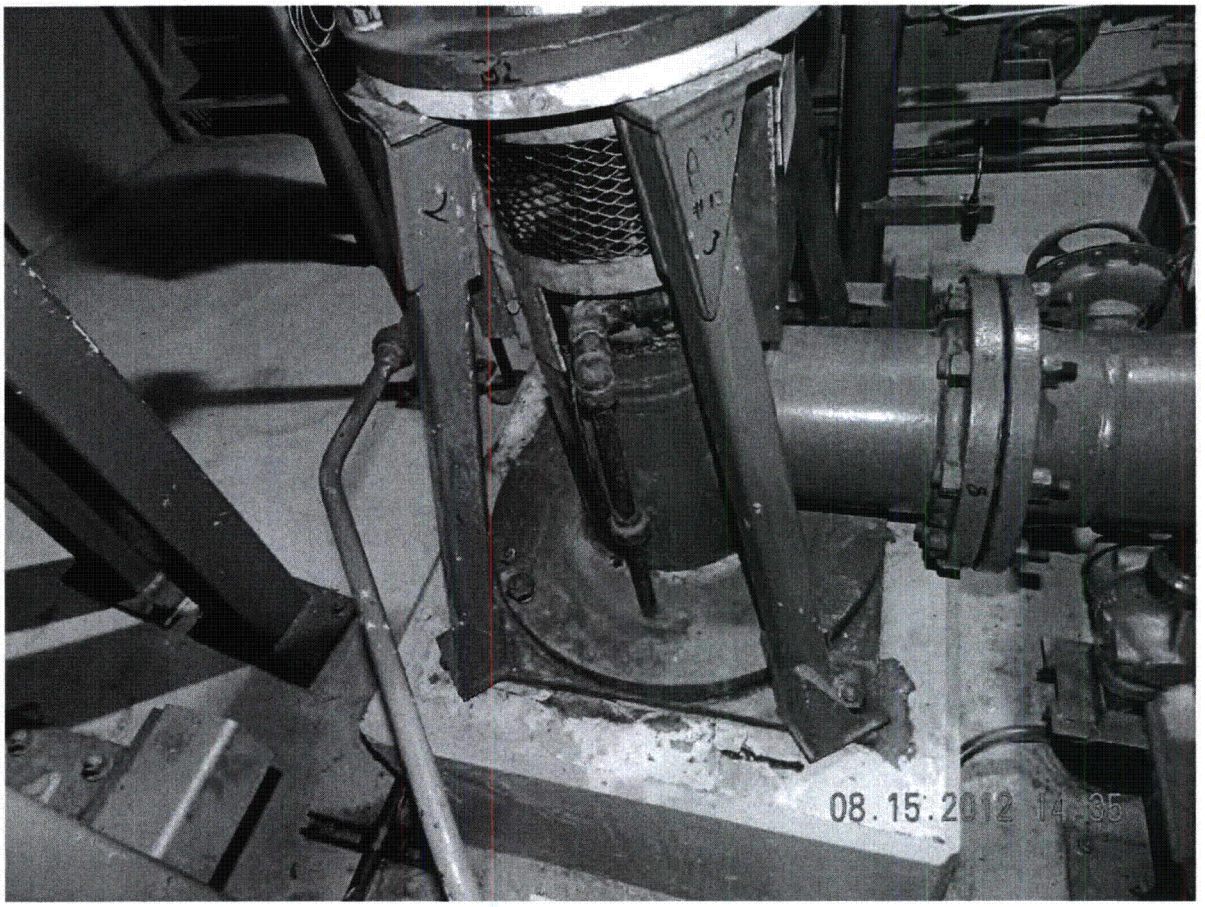
(DSCN 0394)

Bolt Configuration

Seismic Walkdown Pictures

Equipment ID No. *R3001C006* Equipment Class: *6, Vertical Pumps*

Equipment Description *EDG # 12 Service Water Pump*



(DSCN 0395)

Bolt Configuration

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3001S001 Equip. Class[1] 17, Engine Generator

Equipment Description *EDG 11 4160V*

Location: Bldg. *RHR* Floor El. *590'-0"* Room, Area *EDG11, E-6.1*

Manufacturer, Model, Etc. (optional but recommended) *Colt Industries – 38TD8 1/8*

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☐
   All anchors are visible.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   All bolts are in good condition and complete.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   All bolts are corrosion free.
   (SEE PICTURE DSC00072) ~ DSK 10/11/12

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

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☐
   Bolt location verified – Ref. Dwg. M-N-2090-5, REV. Q (NO POSTINGS)
   Bolt size verified as 1 1/4" diameter per Dwg. M-N-2090-5, REV. Q (NO POSTINGS) DSK 10/12/12

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   No adverse conditions were observed.

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

JML

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3001S001 Equip. Class[1] 17, Engine Generator

Equipment Description *EDG 11 4160V*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   All panels, piping, conduit and other attached equipment are robustly mounted, and seismically adequate.
   (SEE PICTURES DSC00073, DSC00076) ~ DSK 10/11/12
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☐
   No block walls or ceiling tiles. Lights have redundant cable, and will not impact adjacent equipment.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   All attached lines have adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
    All equipment in the area is robust, and appears to be seismically mounted.

JML

Seismic Walkdown Checklist (SWC)

Equipment ID No. R3001S001 Equip. Class[1] 17- ENGINE GENERATOR

Equipment Description EDG 11 -4160V

Comments (Additional pages may be added as necessary)

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #1 : David G Pickens Date: 8/21/2012.

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #2 : Joseph M Palka Date: 08/22/2012

Seismic Walkdown Pictures

Equipment ID No. *R3001S001* Equipment Class: *17, Engine Generator*

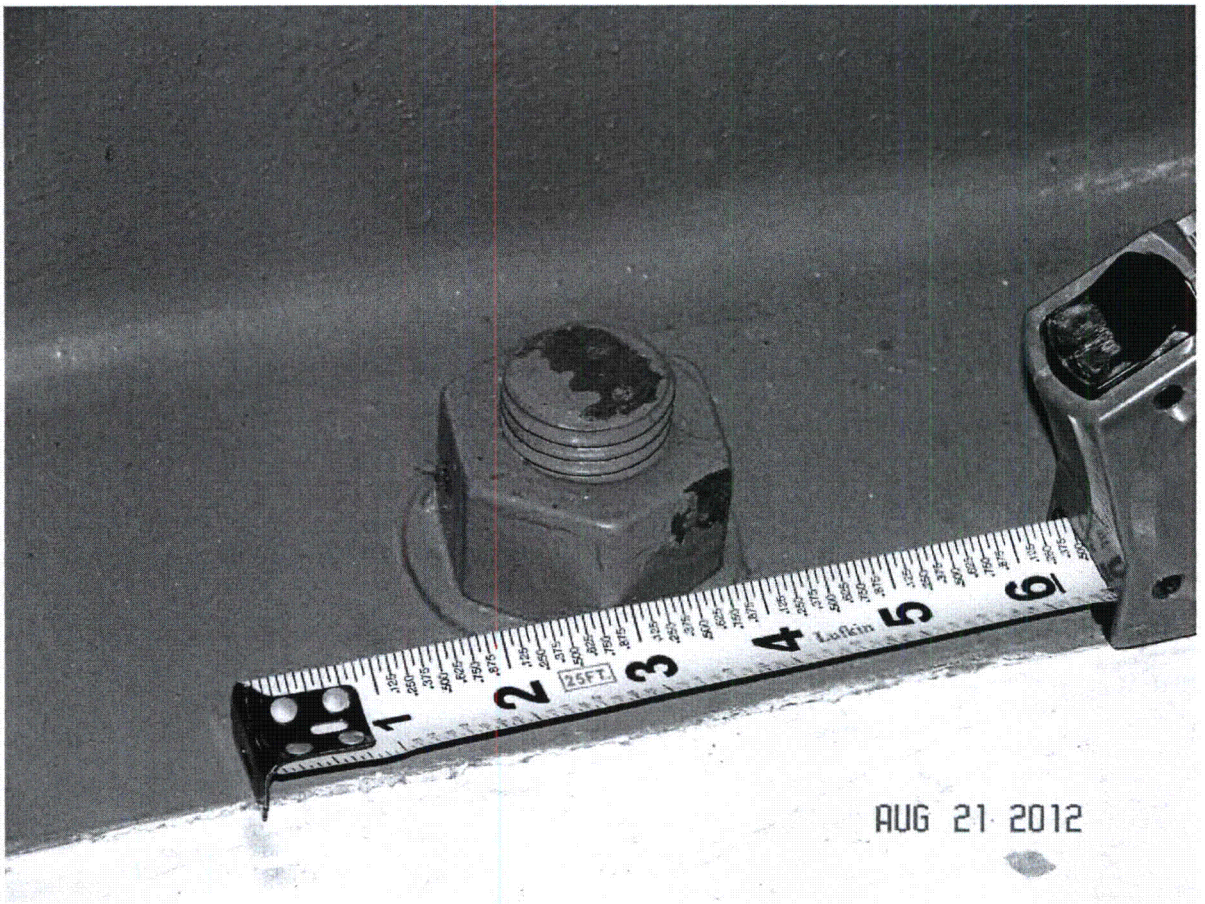
Equipment Description *EDG 11 4160V*

(DSC00068)

Seismic Walkdown Pictures

Equipment ID No. *R3001S001* Equipment Class: *17, Engine Generator*

Equipment Description *EDG 11 4160V*

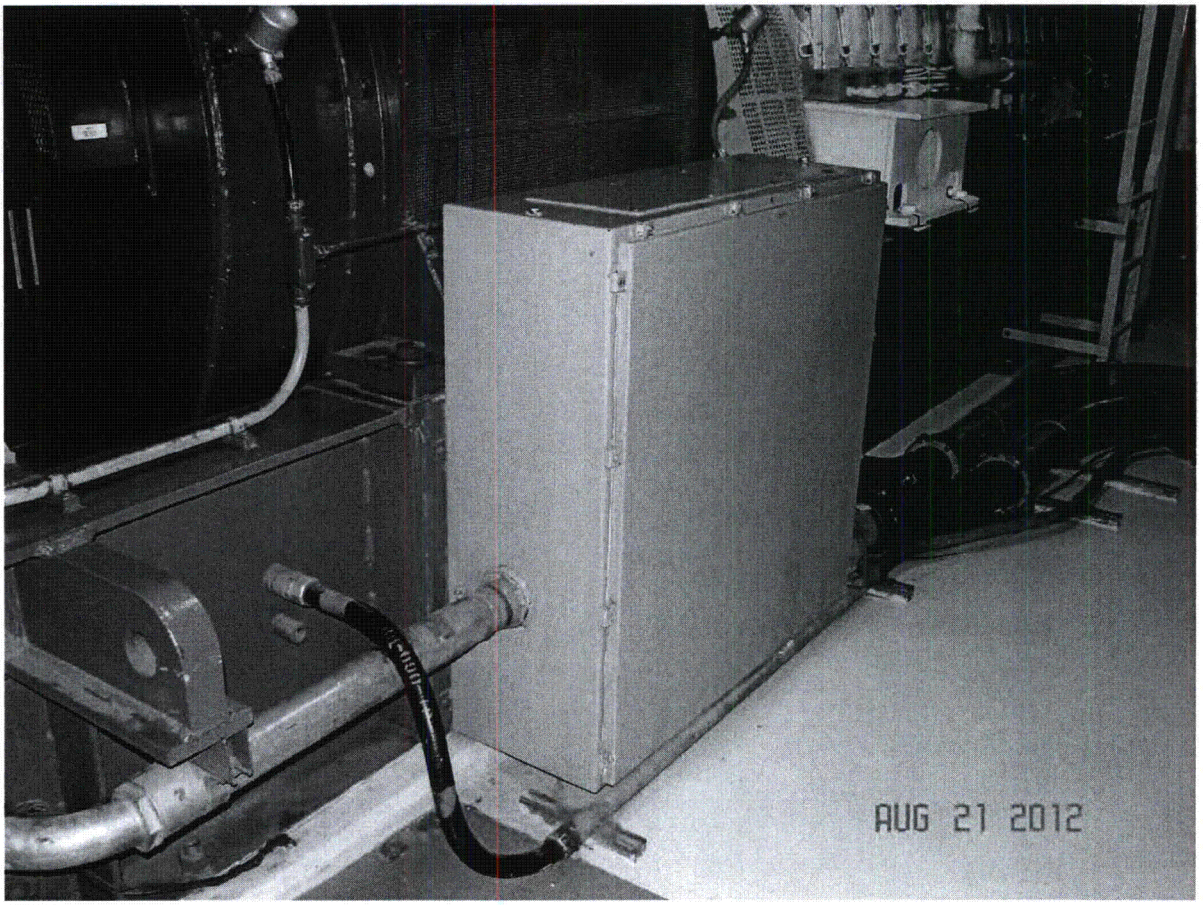


(DSC00072)

Seismic Walkdown Pictures

Equipment ID No. *R3001S001* Equipment Class: *17, Engine Generator*

Equipment Description *EDG 11 4160V*

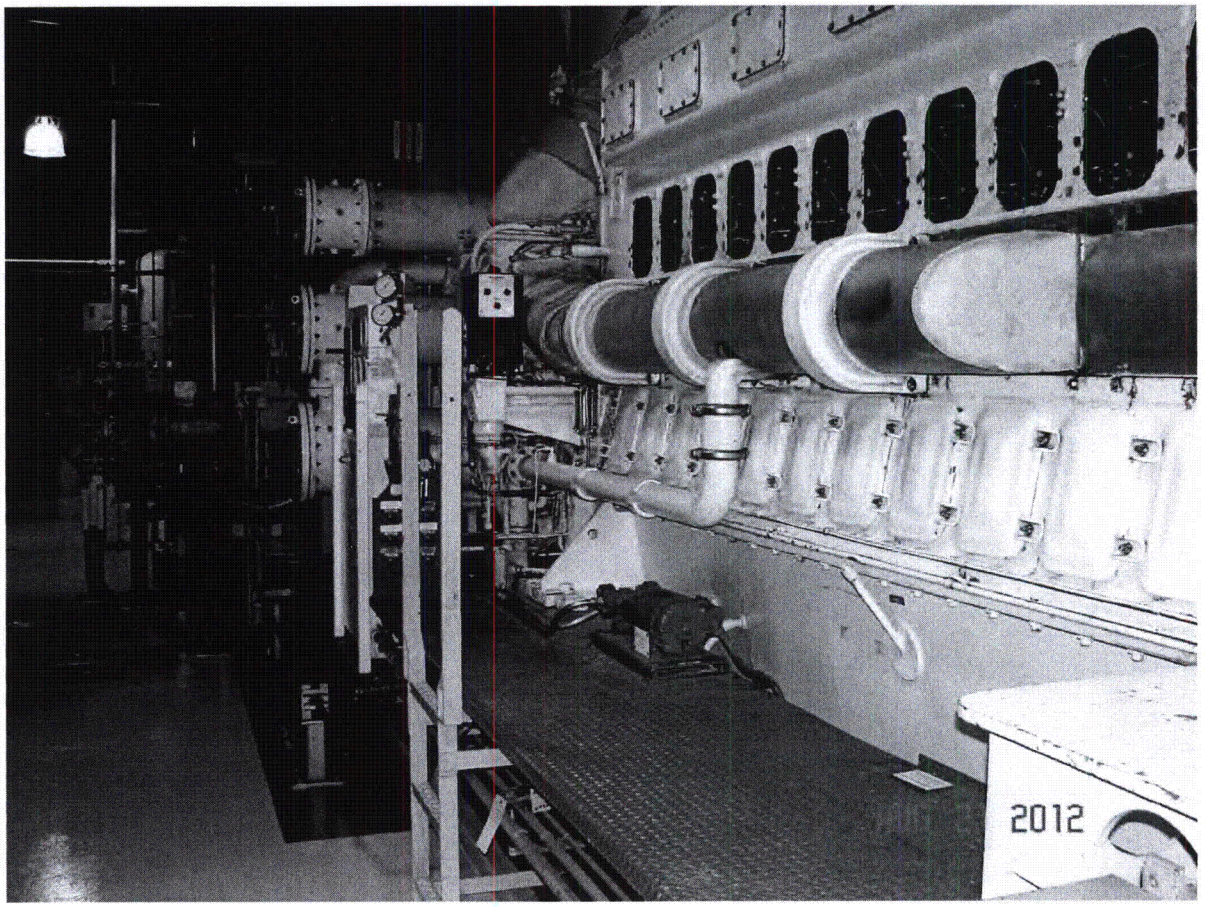


(DSC00073)

Seismic Walkdown Pictures

Equipment ID No. *R3001S001* Equipment Class: *17, Engine Generator*

Equipment Description *EDG 11 4160V*



(DSC00076)

NJPR-12-0043 Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R30FA05B* Equip. Class *8-Motor-Operated and Solenoid-Operated Valves*

Equipment Description *EDG 13 3-Way Air Start Cyl 1-6 SOV*

Location: Bldg. *RHR* Floor El. *590'-0"* Room, Area *EDG13, Col. E-9*

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

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   There are no structural anchors for this asset. Asset is attached to its piping system. This piping system supports were visually inspected as part of the Area Walk-By. See picture 1.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   See comments for 2. There is essentially no corrosion. See picture 7.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   See comments for 2. Asset not anchored to concrete.

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

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

MPS 10/4/12

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R30FA05B* Equip. Class *8-Motor-Operated and Solenoid-Operated Valves*

Equipment Description *EDG 13 3-Way Air Start Cyl 1-6 SOV*

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Asset is approximately 1 1/2" from a 4"diameter pipe. However, both the pipe and the asset are laterally supported at this location, so by engineering judgment, both items are rigid enough to avoid impact. See picture 1.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   All overhead equipment and piping are adequately restrained from movement. See picture 9 showing the view above the asset. There are no masonry black walls in the vicinity.

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

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

Other Adverse Conditions

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

MPS 10/4/12

Seismic Walkdown Checklist (SWC)

Equipment ID No. R30FA05B Equip. Class[1] 8—Motor-Operated and Solenoid-Operated Valves

Equipment Description EDG 13 3-Way Air Start Cyl 1-6 Sov

Comments (Additional pages may be added as necessary)

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #1 : Michael P. Lasso Date: 8/14/12

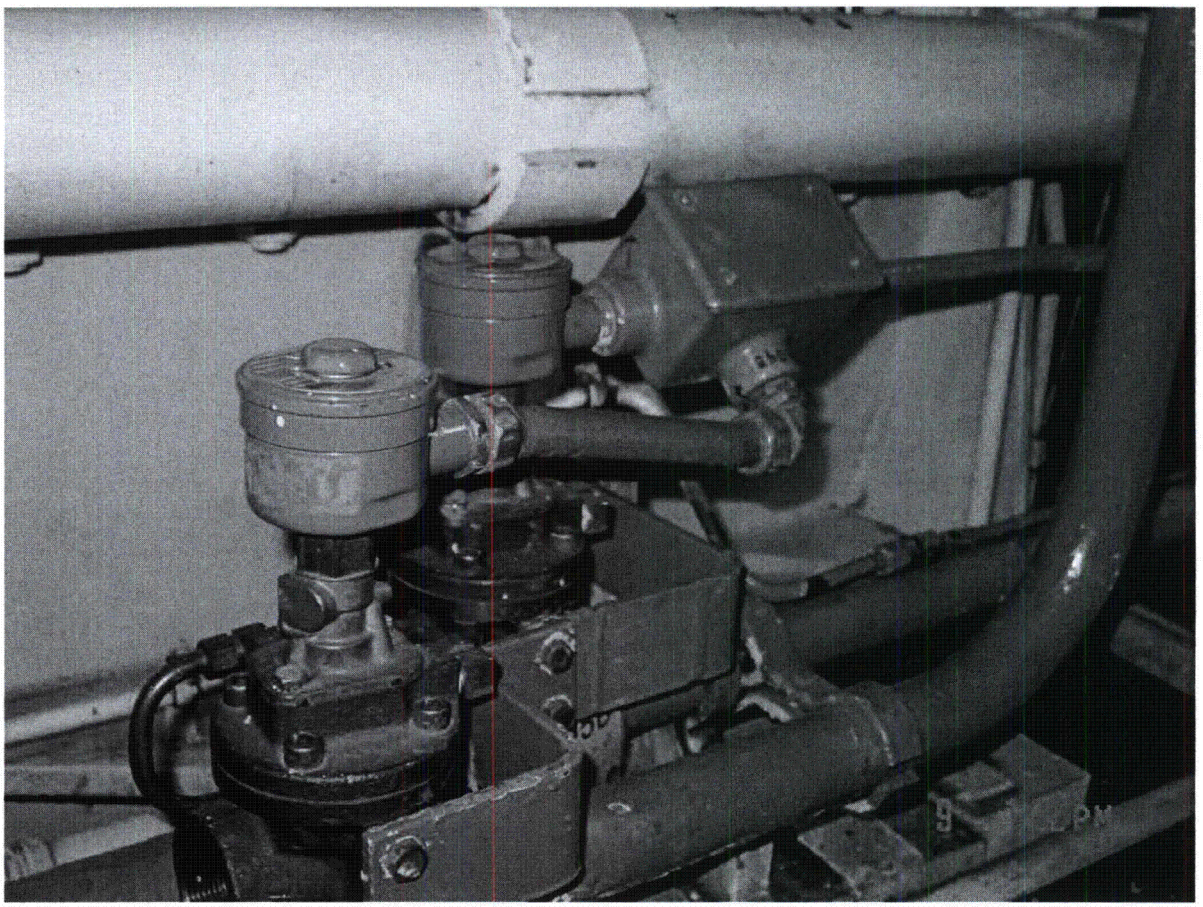
☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #2 : Scott Bauer Date: 8/14/12

Seismic Walkdown Pictures

Equipment ID No. *R30FA05B* Equipment Class: *8, Motor/Solenoid Operated Valves*

Equipment Description *EDG 13 3-Way Air Start Cyl 1-6 SOV*

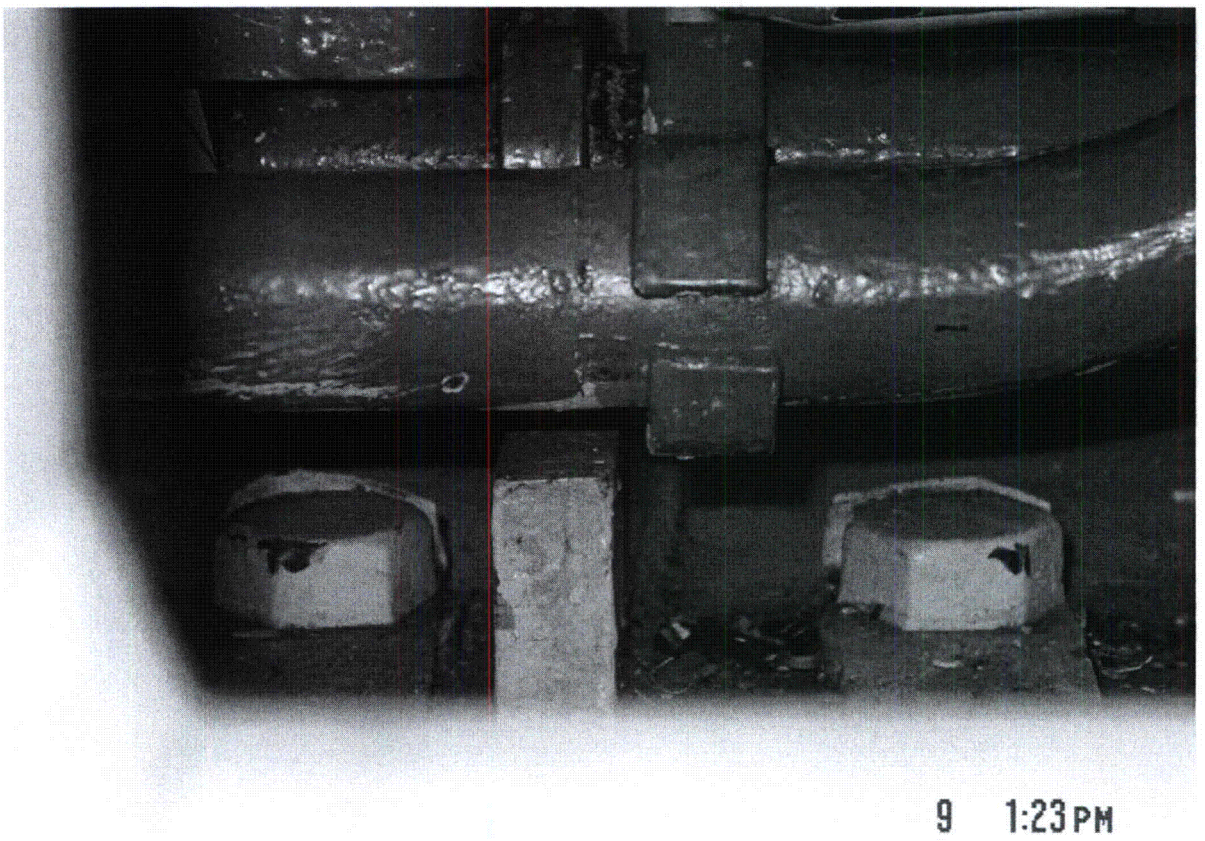


(Picture 1)

Seismic Walkdown Pictures

Equipment ID No. *R30FA05B* Equipment Class: *8, Motor/Solenoid Operated Valves*

Equipment Description *EDG 13 3-Way Air Start Cyl 1-6 SOV*

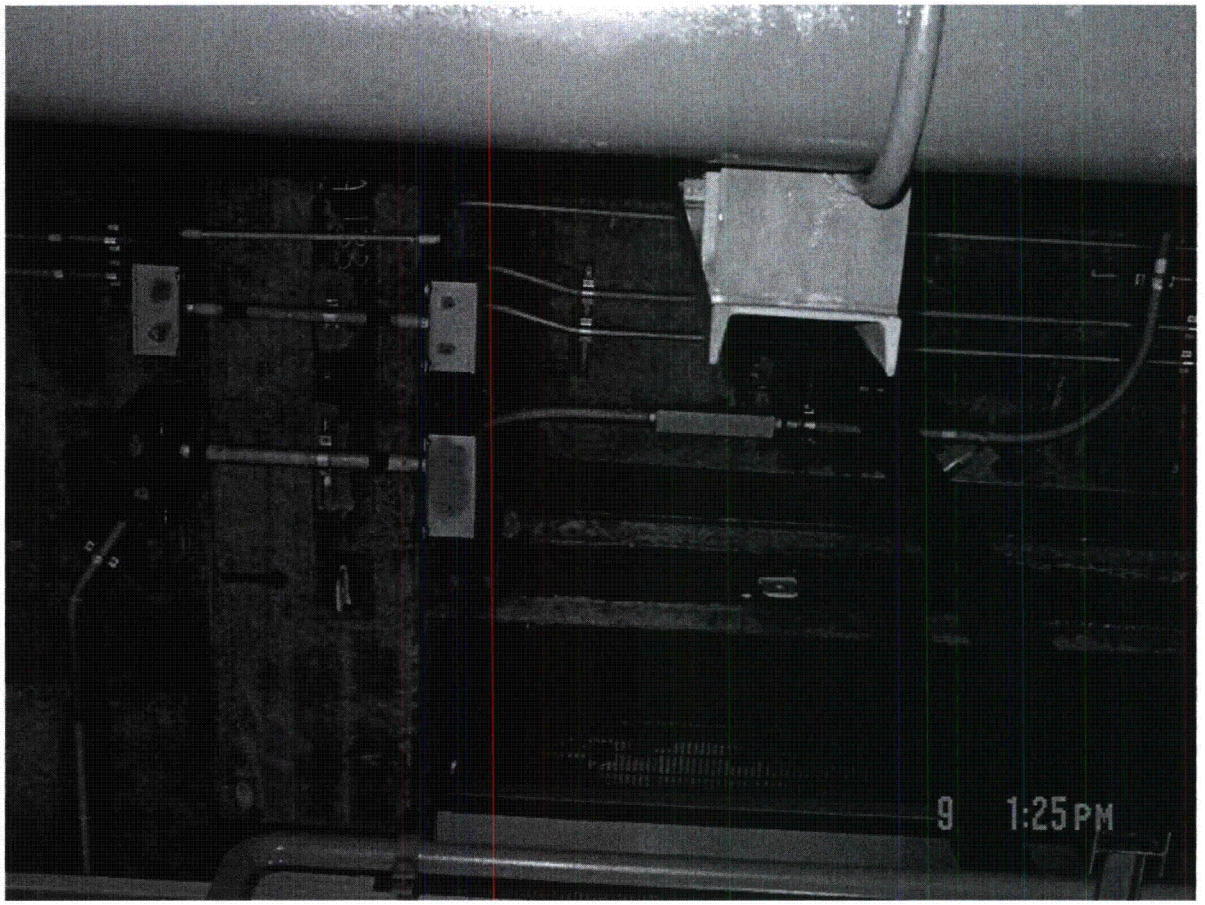


(Picture 7)

Seismic Walkdown Pictures

Equipment ID No. *R30FA05B* Equipment Class: *8, Motor/Solenoid Operated Valves*

Equipment Description *EDG 13 3-Way Air Start Cyl 1-6 SOV*



(Picture 9)

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R30NA17A* Equip. Class[1] *O-Other*

Equipment Description *Magnetic Pick-Up/Speed Sensor*

Location: Bldg. *RHR* Floor El. *590'-0"* Room, Area *RHR Complex, EDG 11, Col. E-6 to E-7*

Manufacturer, Model, Etc. (optional but recommended) *Electro Products Laboratories Model 3030-AN*

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☐
   All anchors visible.

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Mounted on generator, not on concrete.
   (SEE PICTURE DSC00093) ~ DJK 10/11/12

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   Three bolts verified 3/8"Ø at 1 5/8" center to center, as shown on vendor drawing 16205123 (EDISON FILE C1-5694), REV. 1 (NO POSTINGS) ~ DJK 10/12/12
   (SEE PICTURE DSC00094) ~ DJK 10/11/12

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

JML

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R30NA17A* Equip. Class[1] *O-Other*

Equipment Description *Magnetic Pick-Up/Speed Sensor*

Interaction Effects

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

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☐
   Fully protected by shaft guard.

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

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

Other Adverse Conditions

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

JML

NJPR-12-0043

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. R30NA17A Equip. Class[1] O-OTHER

Equipment Description MAGNETIC PICK-UP/SPEED SENSOR

Comments (Additional pages may be added as necessary)

☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #1 : David G Dickinson Date: 8/21/2012.

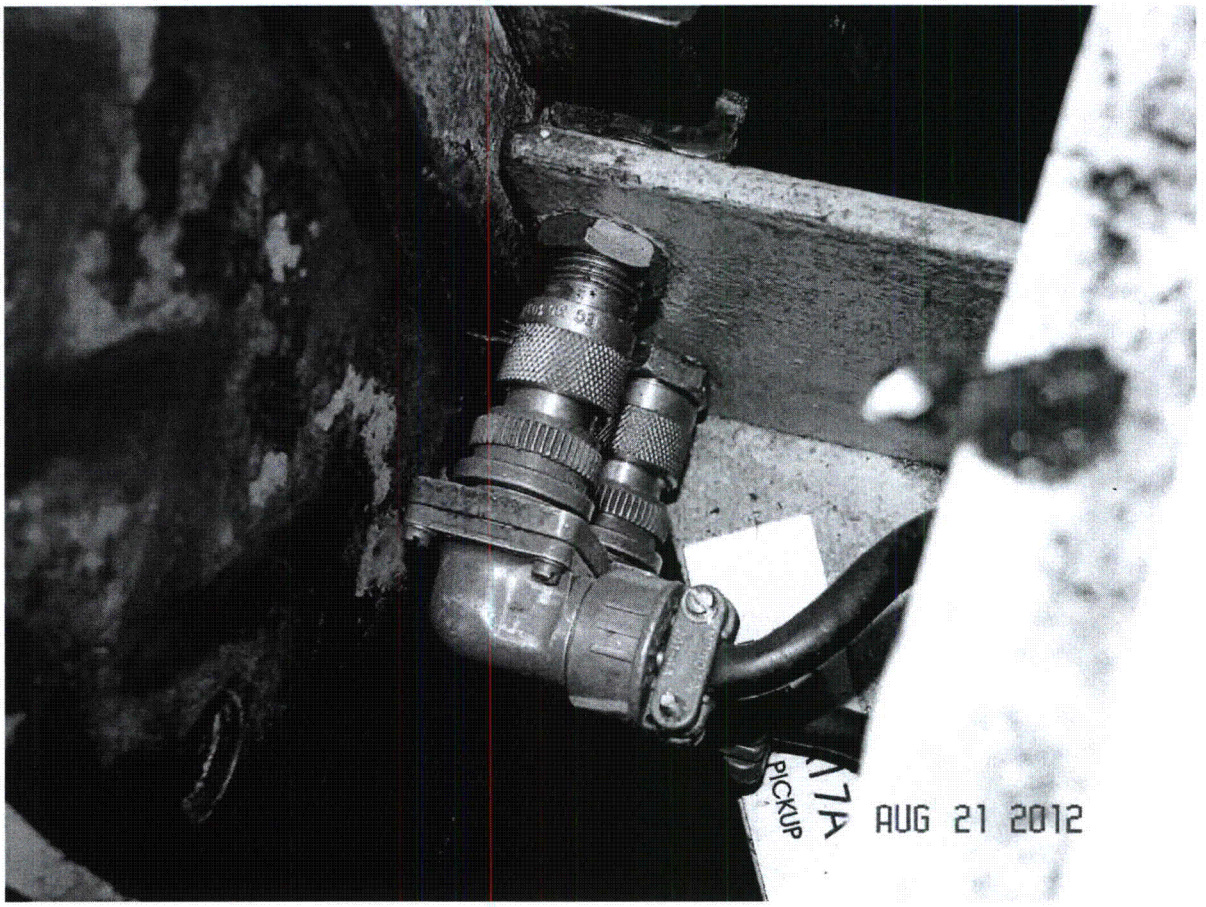
☒ *Seismic Engineer Walkdown PSE-53Qualified*

Evaluator #2 : Joseph M DeVore Date: 08/21/2012

Seismic Walkdown Pictures

Equipment ID No. *R30N017A* Equipment Class: *0, Others*

Equipment Description *Magnetic Pick-up Speed Sensor*

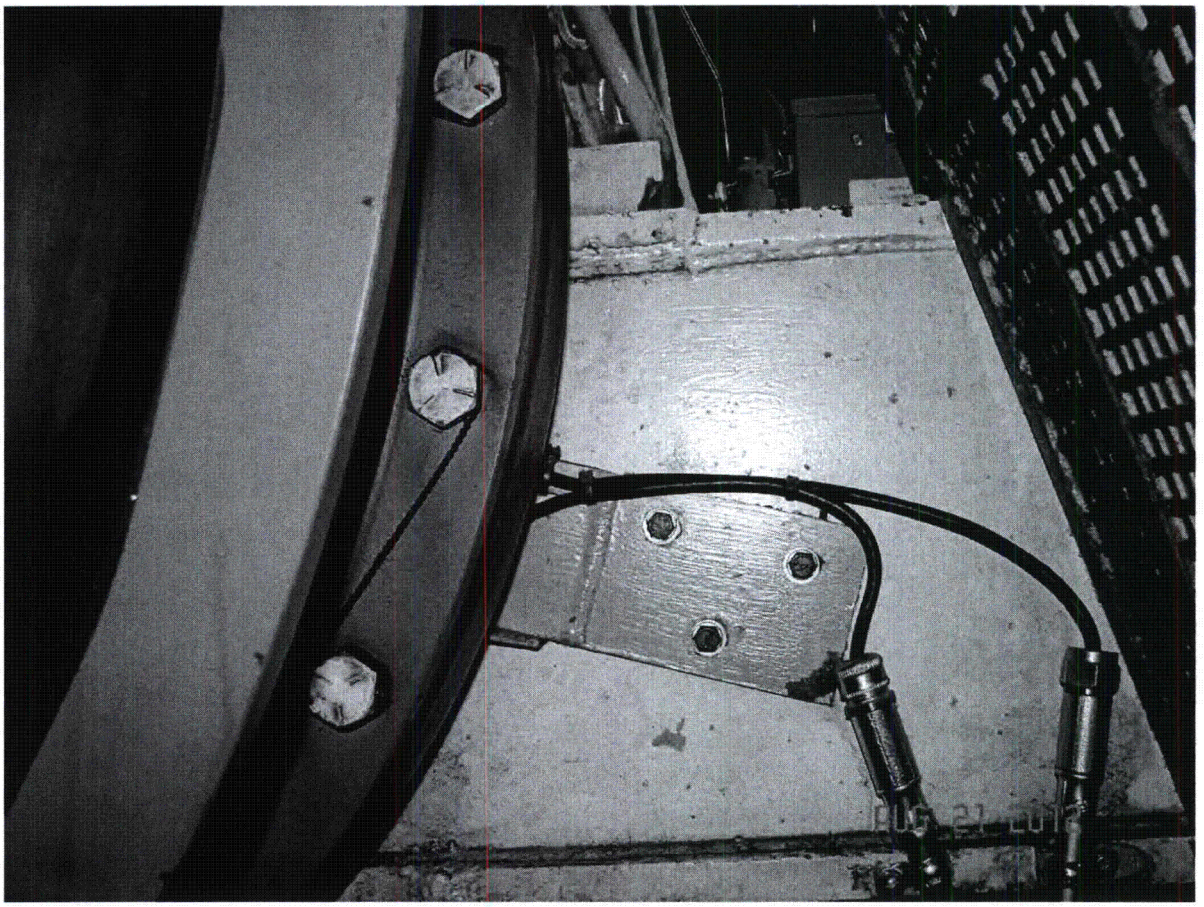


(DSC00093)

Seismic Walkdown Pictures

Equipment ID No. *R30N017A* Equipment Class: *0, Others*

Equipment Description *Magnetic Pick-up Speed Sensor*



(DSC00094)

NJPR-12-0043 Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. *R30P320* Equip. Class[1] *20, Instrumentation and Control Panel*

Equipment Description *EDG 12 – Engine Gauge Panel*

Location: Bldg. *RHR* Floor El. *590'-0"* Room, Area *EDG12, Col. E-5 to E-6*

Manufacturer, Model, Etc. (optional but recommended) *Colt Industries – Model N/A*

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may 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☐
   All welds are visible. (SEE PICTURES DSC00098, DSC00102, DSC00104) ~ DJK 10/11/12

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   All welds are complete. (SEE PICTURES DSC00098, DSC00102, DSC00104) ~ DJK 10/11/12

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion observed. (SEE PICTURES DSC00098, DSC00102, DSC00104) ~ DJK 10/11/12

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Anchorage is not into concrete. (SEE PICTURES DSC00098, DSC00102, DSC00104) ~ DJK 10/11/12

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The horizontal weld between the shelf plate and the generator frame is different to the weld shown on vendor drawing #11868778. The drawing called for intermittent fillet weld 1"@4" center to center alternating top and bottom of the plate. As installed the weld is 2"@4" center to center top side only. By engineering judgment this is acceptable as more weld has been provided than shown on the vendor drawing. All other welds were verified.*
   DJK 10/12/12

   * Dwg 11868778 in VENDOR MANUAL VME8-1.1, REV. U HAS NO APPLICABLE POSTINGS ~ DJK 10/12/12

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

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

JML