

# **JAF-RPT-12-00015**

## **Rev. 0**

**JAF SEISMIC WALKDOWN REPORT  
FOR RESOLUTION OF FUKUSHIMA  
NEAR-TERM TASK FORCE  
RECOMMENDATION 2.3 SEISMIC**

**NOVEMBER 2012**

**BOOK 2 OF 3**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-456Equipment ID No. 71BMCC-6 Equip. Class<sup>1</sup> 1- Motor Control CenterEquipment Description Reactor building Motor Control CenterLocation: Bldg. RB Floor El. 272' Room, Area Col 8, Line Y

Manufacturer, Model, Etc. (optional but recommended) \_\_\_\_\_

## Instructions for Completing Checklist

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

## Anchorage

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

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.



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ATTACHMENT 9.6

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SEISMIC WALKDOWN CHECKLIST FORM

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Sheet 2 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1-456**Equipment ID No. 71BMCC-6 Equip. Class 1- Motor Control CenterEquipment Description Reactor building Motor Control Center

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

**Interaction Effects**

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

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-456Equipment ID No. 71BMCC-6 Equip. Class 1- Motor Control CenterEquipment Description Reactor building Motor Control Center**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: A.G. PorchDate: 10/31/2012C. Sawatzke10/31/2012

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-456Equipment ID No. 71BMCC-6 Equip. Class 1- Motor Control CenterEquipment Description Reactor building Motor Control Center

## Photographs

**Note:** 71BMCC-6 Front View**Note:** 71BMCC-6 Attached Lines

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-456Equipment ID No. 71BMCC-6 Equip. Class 1- Motor Control CenterEquipment Description Reactor building Motor Control CenterNote: 71BMCC-6 Side View

Note:

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-457Equipment ID No. 71DC-A2 Equip. Class<sup>1</sup> 14 – Distribution PanelsEquipment Description Relay Room Distribution CabinetLocation: Bldg. RR Floor El. 284.8 Room, Area Col. 10, Line F

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 ☐  
*The bottom right hand corner Unistrut Channel nut has failed. The resolution to this deficiency is to be tracked by CR-JAF-2012-07954*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*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 free of visible cracks in the concrete near the anchors.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-457Equipment ID No. 71DC-A2 Equip. Class 14 – Distribution PanelsEquipment Description Relay Room Distribution Cabinet

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*The anchorage configuration is consistent with the SEWS for 71DC-A2 (Rev. 0). The panel is anchored with four 3/8" bolts to a pair of unistrut channels, which are welded to a steel building column.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☐ N ☒ U ☐

Interaction Effects

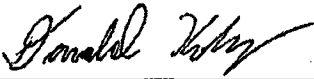
7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*The soft targets are free from impact by nearby equipments and structures.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-457**Equipment ID No. 71DC-A2 Equip. Class 14 – Distribution PanelsEquipment Description Relay Room Distribution Cabinet**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Donald KobergDate: 9/24/12Pouria Pourghobadi9/24/12



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-457Equipment ID No. 71DC-A2 Equip. Class 14 – Distribution PanelsEquipment Description Relay Room Distribution Cabinet

## Photographs

**Note:** 71DC-A2 Cabinet**Note:** Failed Unistrut Channel Nut, Refer to question 2.



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 462Equipment ID No. 71DSC-11561 Equip. Class<sup>1</sup> 3 Medium Voltage, Metal clad SwitchgearEquipment Description L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SWLocation: Bldg. RB Floor El. 300 Room, Area Col 2 Line R

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 ☐  
*The anchorage is not visible for anchorage.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☒ N/A ☐
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☒ N/A ☐

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 462Equipment ID No. 71DSC-11561 Equip. Class 3 Medium Voltage, Metal clad SwitchgearEquipment Description L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*No soft targets.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐  
*8' lighting fixture would not likely to hit SWEL Item. If chain ( 1 of 2 ) break, SWEL is secured- no seismic concern.*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

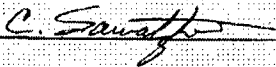
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 462Equipment ID No. 71DSC-11561 Equip. Class 3 Medium Voltage, Metal clad SwitchgearEquipment Description L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SWOther Adverse Conditions

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

Comments (Additional pages may be added as necessary)Evaluated by: A. G. PorchDate: 11/01/2012C. Sawatzke11/01/2012

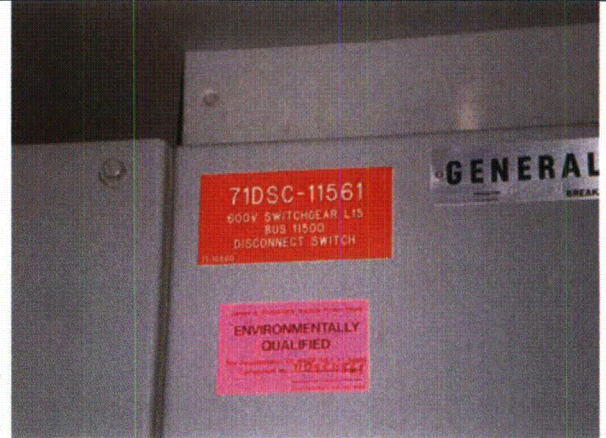
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 462Equipment ID No. 71DSC-11561 Equip. Class 3 Medium Voltage, Metal clad SwitchgearEquipment Description L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW

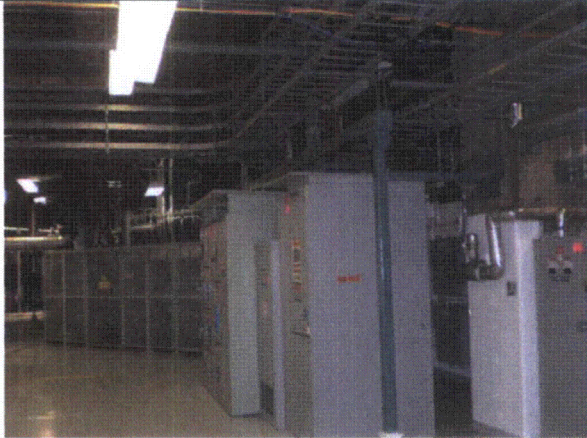
## Photographs

Note: 71DSC-11561Note: 71DSC-11561

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 462Equipment ID No. 71DSC-11561 Equip. Class 3 Medium Voltage, Metal clad SwitchgearEquipment Description L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SWNote: 71DSC-11561

Note:

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-470Equipment ID No. 71INV-3A Equip. Class<sup>1</sup> 16-Battery Chargers and InvertersEquipment Description LPCI MOV Indep Power Supply A InverterLocation: Bldg. RB Floor El. 344.6' Room, Area RB 344.6', Col.5.5, Line P

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 one of the 50% of SWEL items requiring anchorage configuration verification.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☐ N ☐ U ☒ N/A ☐  
*The expansion anchors and mounting bolts are free of bent, broken, missing or loose hardware.*  
*Panels need to be removed and anchorage of internal components needs to be checked.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*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 ☐  
*There are hair line cracks in the grout on top of concrete foundation, and are deemed insignificant based on engineering judgment.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-470Equipment ID No. 71INV-3A Equip. Class 16-Battery Chargers and InvertersEquipment Description LPCI MOV Indep Power Supply A Inverter

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.)  
*The 5/8", 3/4", and 1" Hilti Kwik Bolt 3 anchors and the 1/2" ASTM A449 mounting bolts are configured in accordance with the JAF-CALC-09-00042 calculation, Rev. 3 per EC-17239, DWG. No 1.26-2 and 1.26-102.* Y ☒ N ☐ U ☐ N/A ☐
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?  
*The external anchorage is free of potentially adverse seismic conditions.*  
*Panels need to be removed and anchorage of internal components needs to be checked.* Y ☐ N ☐ U ☒

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures?  
*Soft targets are free from impact from nearby equipment or structures.* Y ☒ N ☐ U ☐ N/A ☐
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*Light fixtures near the SWEL item need safety latches to prevent it from falling down during a seismic event. However the light fixtures will not damage the SWEL item.* Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage?  
*The lines attached to the SWEL item have adequate flexibility to avoid damage.* Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?  
*Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.* Y ☒ N ☐ U ☐

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4


Status: Y ☐ N ☒ U ☒**Seismic Walkdown Checklist (SWC) SWEL1-470**Equipment ID No. 71INV-3A Equip. Class 16-Battery Chargers and InvertersEquipment Description LPCI MOV Indep Power Supply A Inverter**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 seismic conditions that could adversely affect the safety functions of the equipment in the area were found.*

**Comments** (Additional pages may be added as necessary)

*No additional comments.*

Evaluated by: Harpreet GhumanDate: 09/30/2012Yaroslav Losev09/30/2012



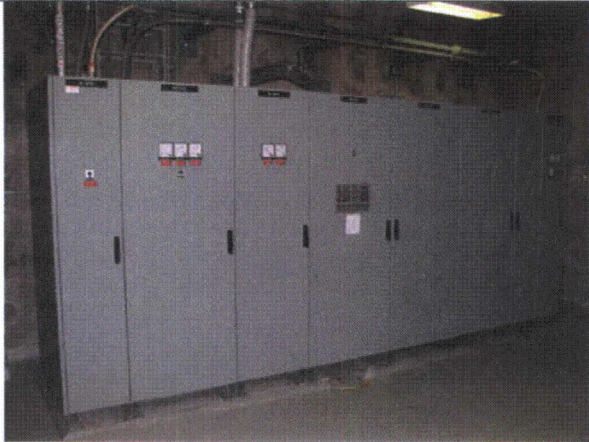
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-470Equipment ID No. 71INV-3A Equip. Class 16-Battery Chargers and InvertersEquipment Description LPCI MOV Indep Power Supply A Inverter

## Photographs

**Note:** *Picture of equipment 71INV-3A.***Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 474Equipment ID No. 71L25 Equip. Class<sup>1</sup> 2 Low Voltage Switch gear and Breaker PanelEquipment Description 600V Switchgear Distribution (Bus 12500)Location: Bldg. EG Floor El. 272 Room, Area Col 18.5 Line A1

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 ☒  
*Tha anchorage is not visible-Deferred.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☐ N ☐ U ☒ N/A ☐
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☒ N/A ☐
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☒ N/A ☐

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1- 474**Equipment ID No. 71L25 Equip. Class 2 Low Voltage Switch gear and Breaker PanelEquipment Description 600V Switchgear Distribution (Bus 12500)

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

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

**Interaction Effects**

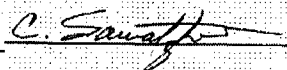
7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
No soft targets.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1- 474**Equipment ID No. 71L25 Equip. Class 2 Low Voltage Switch gear and Breaker PanelEquipment Description 600V Switchgear Distribution (Bus 12500)**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)Evaluated by: A PorchDate: 11/01/2012C. Sawatzke11/01/2012

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1- 474**Equipment ID No. 71L25 Equip. Class 2 Low Voltage Switch gear and Breaker PanelEquipment Description 600V Switchgear Distribution (Bus 12500)**Photographs****Note:** 71L25**Note:** 71L25

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-475Equipment ID No. 71L26 Equip. Class<sup>1</sup> 2 – Low Voltage Switchgears and Breaker PanelsEquipment Description 600V Switchgear Distribution BUS 12600Location: Bldg. EB Floor El. 272 Room, Area C: 18.5, L: B

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 ☐  
*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 ☐  
*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 free of visible cracks in the concrete near the anchors.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-475**Equipment ID No. 71L26 Equip. Class 2 – Low Voltage Switchgears and Breaker PanelsEquipment Description 600V Switchgear Distribution BUS 12600

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*The anchorage configuration is consistent with the SEWS for 71L26 (Rev. 0). The plug welds were confirmed.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*The soft targets are free from impact by nearby equipment and structure.*
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 ☐  
*Masonry block wall divides the East and West Electric bay. Modifications were made to enhance the walls as part of IE Bulliten 80-11. (Ref. Calculation No. C012, "HCLPF for block walls EB-272-1,2")*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐  
*The 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 ☐  
*The equipment is free of adverse seismic interaction effect.*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-475**Equipment ID No. 71L26 Equip. Class 2 – Low Voltage Switchgears and Breaker PanelsEquipment Description 600V Switchgear Distribution BUS 12600**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Donald KobergDate: 9/25/12Pouria Pourghobadi9/25/12



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

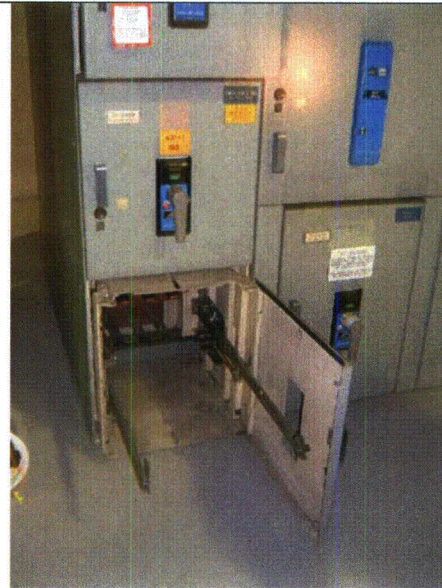
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Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-475Equipment ID No. 71L26 Equip. Class 2 – Low Voltage Switchgears and Breaker PanelsEquipment Description 600V Switchgear Distribution BUS 12600

## Photographs



Note: 71L26



Note: Bottom Corner Panel Open

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-475Equipment ID No. 71L26 Equip. Class 2 – Low Voltage Switchgears and Breaker PanelsEquipment Description 600V Switchgear Distribution BUS 12600**Note:** Cabinet Base Plug Weld**Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 481Equipment ID No. 71MCC-161 Equip. Class<sup>1</sup> 1 Motor Control CenterEquipment Description 600V Motor Control Center (Bus 116100)Location: Bldg. RB Floor El. 272 Room, Area Col 1.5 Line W

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 ☐  
*Not Readily accessible.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☒ N/A ☐
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☒ N/A ☐

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1- 481**Equipment ID No. 71MCC-161 Equip. Class 1 Motor Control CenterEquipment Description 600V Motor Control Center (Bus 116100)

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

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

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*No soft targets.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1- 481**Equipment ID No. 71MCC-161 Equip. Class 1 Motor Control CenterEquipment Description 600V Motor Control Center (Bus 116100)**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)

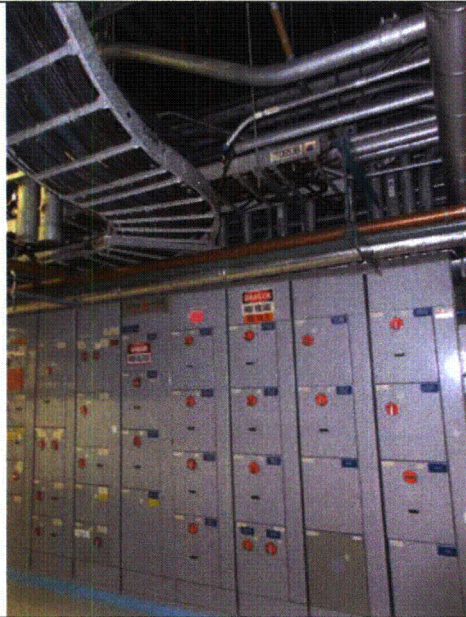
*Area above 71MCC-161 is highly congested; cable trays, piping and conduits appear well supported. Supports, hardware etc are intact.*

Evaluated by: A. Porch  Date: 10/31/2012C. Sawatzke  10/31/2012



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC)** SWEL1- 481Equipment ID No. 71MCC-161 Equip. Class 1 Motor Control CenterEquipment Description 600V Motor Control Center (Bus 116100)**Photographs****Note:** 71MCC-161**Note:** 71MCC-161

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 481Equipment ID No. 71MCC-161 Equip. Class 1 Motor Control CenterEquipment Description 600V Motor Control Center (Bus 116100)Note: 71MCC-161

Note:

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 487Equipment ID No. 71MCC-252 Equip. Class<sup>1</sup> 1 Motor Control Centers and Wall-mounted contactorsEquipment Description 600V Motor Control Center ( Bus 125200)Location: Bldg. EB Floor El. 272 Room, Area Col. 18 Line A

Manufacturer, Model, Etc. (optional but recommended) \_\_\_\_\_

## Instructions for Completing Checklist

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

## Anchorage

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

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1- 487**Equipment ID No. 71MCC-252 Equip. Class 1 Motor Control Centers and Wall-mounted  
contactorsEquipment Description 600V Motor Control Center ( Bus 125200)

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

**Interaction Effects**

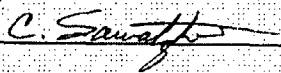
7. Are soft targets free from impact by nearby equipment or structures?  
*No soft targets.* Y ☐ N ☐ U ☐ N/A ☒
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,  
and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free  
of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 487Equipment ID No. 71MCC-252 Equip. Class 1 Motor Control Centers and Wall-mounted contactorsEquipment Description 600V Motor Control Center ( Bus 125200)**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)Evaluated by: A. Porch /Date: 11/1/2012C. Sawatzke11/1/2012

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC)** SWEL1- 487Equipment ID No. 71MCC-252 Equip. Class 1 Motor Control Centers and Wall-mounted contactorsEquipment Description 600V Motor Control Center ( Bus 125200)**Photographs****Note:** 71MCC-252**Note:** 71MCC-252

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL 1- 489**Equipment ID No. 71MCC-254 Equip. Class Motor Control Centers and Wall-mounted ContactorsEquipment Description 600V Motor Control Center (Bus 125400)Location: Bldg. EG Floor El. 272 Room, Area Col 23 line A1

Manufacturer, Model, Etc. (optional but recommended) \_\_\_\_\_

**Instructions for Completing Checklist**

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

**Anchorage**

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL 1- 489**Equipment ID No. 71MCC-254 Equip. Class Motor Control Centers and Wall-mounted ContactorsEquipment Description 600V Motor Control Center (Bus 125400)

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

**Interaction Effects**

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

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL 1- 489Equipment ID No. 71MCC-254 Equip. Class Motor Control Centers and Wall-mounted ContactorsEquipment Description 600V Motor Control Center (Bus 125400)Other Adverse Conditions

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

Y ☒ N ☐ U ☐Comments (Additional pages may be added as necessary)Evaluated by: R CasellaRich CasellaDate: 10-31-12A PorchA. C. Porch10-31-12

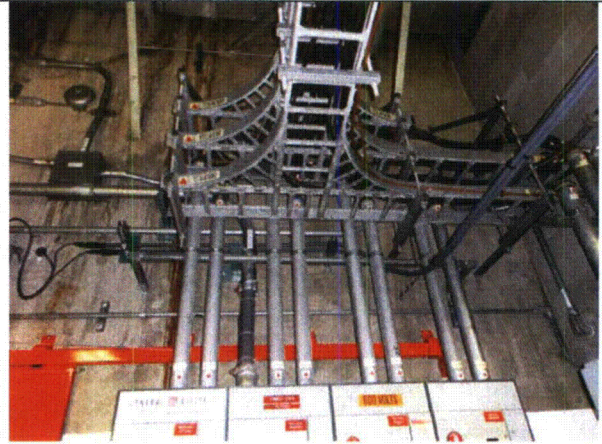
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL 1- 489Equipment ID No. 71MCC-254 Equip. Class Motor Control Centers and Wall-mounted ContactorsEquipment Description 600V Motor Control Center (Bus 125400)

## Photographs

**Note:** 71MCC-254**Note:** Conduit, duct, and cable tray above 71MCC-254



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL 1-489Equipment ID No. 71MCC-254 Equip. Class Motor Control Centers and Wall-mounted ContactorsEquipment Description 600V Motor Control Center (Bus 125400)**Note:** Fillet welds at base of 71MCC-254**Note:**



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-491Equipment ID No. 71MCC-262 Equip. Class<sup>1</sup> 1 – Motor Control Centers and Wall Mounted ContractorsEquipment Description 600V Motor Control Center (BUS 12600)Location: Bldg. EB Floor El. 272 Room, Area Col. 18, Line B

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 ☐  
*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 ☐  
*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 free of visible cracks in the concrete near the anchors.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-491Equipment ID No. 71MCC-262 Equip. Class 1 – Motor Control Centers and Wall Mounted ContractorsEquipment Description 600V Motor Control Center (BUS 12600)

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*The anchorage configuration is consistent with SEWS for 71MCC-262. The 1/8" fillets 2" Long 20" center were field verified in accordance with DWG. No. 1.43-88.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

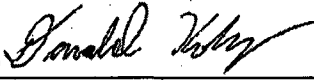
7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*The soft targets are free from impact by nearby equipment and structures*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐  
*Masonry block wall divides the East and West Electric bay. Modifications were made to enhance the walls as part of IE Bulliten 80-11. (Ref. Calculation No. C012, "HCLPF for block walls EB-272-1,2")*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐  
*The 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 ☐  
*The equipment is free of potentially adverse seismic interaction effects.*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

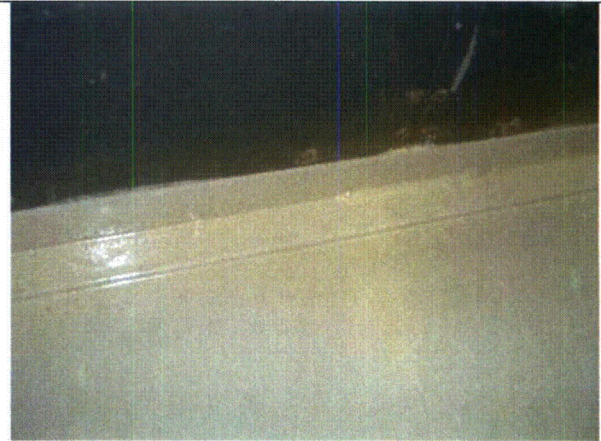
Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-491**Equipment ID No. 71MCC-262Equip. Class 1 – Motor Control Centers and Wall Mounted ContractorsEquipment Description 600V Motor Control Center (BUS 12600)**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Donald KobergDate: 9/25/12Pouria Pourghobadi9/25/12

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-491**Equipment ID No. 71MCC-262 Equip. Class 1 – Motor Control Centers and Wall Mounted ContractorsEquipment Description 600V Motor Control Center (BUS 12600)**Photographs****Note:** 71MCC-262**Note:** Base Welds

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-493Equipment ID No. 71MCC-264 Equip. Class<sup>1</sup> 1 – Motor Control Centers and Wall Mounted ContractorsEquipment Description 600V Motor Control Center (BUS 126400)Location: Bldg. EB Floor El. 272 Room, Area Col. 25.5, Line A1

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 ☐
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☒ N/A ☐
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☒ N/A ☐

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-493Equipment ID No. 71MCC-264 Equip. Class 1 – Motor Control Centers and Wall Mounted ContractorsEquipment Description 600V Motor Control Center (BUS 126400)

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

Interaction Effects


7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*The soft targets are free from impact by nearby equipment and 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 ☐  
*masonry block walls have been evaluated and enhanced according to DC# D1-96-011, Rev 0 as part IPEEE evaluations.*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐  
*The 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 ☐  
*The equipment is free of potentially adverse seismic interaction effects.*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) S SWEL1-493**Equipment ID No. 71MCC-264 Equip. Class 1 – Motor Control Centers and Wall Mounted ContractorsEquipment Description 600V Motor Control Center (BUS 126400)**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)Evaluated by: Harpreet GhumanDate: 9/25/12Yaroslav Losev9/25/12



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-493Equipment ID No. 71MCC-264 Equip. Class 1 – Motor Control Centers and Wall Mounted ContractorsEquipment Description 600V Motor Control Center (BUS 126400)

## Photographs



Note: 71MCC-264

Note:

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-494Equipment ID No. 71PT-71ACA2 Equip. Class<sup>1</sup> 4 - TransformersEquipment Description Emergency Distribution 15kVA Transformer 71MCC-253-OD3Location: Bldg. CS Floor El. 272 Room, Area Col. 11, Line C

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 ☐  
*Anchorage is free of bent, broken, missing or loose hardware.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*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 ☐  
*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 free of visible cracks in the concrete near the anchors.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-494Equipment ID No. 71PT-71ACA2 Equip. Class 4 - TransformersEquipment Description Emergency Distribution 15kVA Transformer 71MCC-253-OD3

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

*The anchorage configuration is consistent with SEWS for 71PT-71ACA2 (Rev. 0). The transformer is wall mounted with four ½" shells.*

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

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*The soft targets are free from impact by nearby equipments and 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 overhead equipment and distribution systems are not likely to collapse onto the equipment.*

9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐  
*The 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 ☐  
*The equipment is free of potentially adverse seismic interaction effects.*

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-494Equipment ID No. 71PT-71ACA2 Equip. Class 4 - TransformersEquipment Description Emergency Distribution 15kVA Transformer 71MCC-253-OD3**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Donald KobergDate: 9/25/12Pouria Pourghobadi9/25/12

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-494Equipment ID No. 71PT-71ACA2 Equip. Class 4 - TransformersEquipment Description Emergency Distribution 15kVA Transformer 71MCC-253-OD3

## Photographs

**Note:** 71PT-71ACA2Transformer**Note:** 71PT-71ACA2Transformer

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 495Equipment ID No. 71PT-71ACA4 Equip. Class 4-TransformersEquipment Description Emergency Distribution 7.5 Kva TransformerLocation: Bldg. EG Floor El. 272' Room, Area Col. 24 Line A

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 ☐  
*The anchorage has all necessary hardware*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*There are no signs of any corrosion on the anchorage*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐  
*There are no cracks in the concrete near the anchorage*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 495**Equipment ID No. 71PT-71ACA4 Equip. Class 4-TransformersEquipment Description Emergency Distribution 7.5 Kva Transformer

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

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures?  
Only soft target is anchored cable Y ☒ N ☐ U ☐ N/A ☐
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,  
and masonry block walls not likely to collapse onto the equipment?  
All conduit located overhead is all well supported. Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage?  
Only has attached conduit and armored cable. Both have adequate  
flexibility Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free  
of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 495Equipment ID No. 71PT-71ACA4 Equip. Class 4-TransformersEquipment Description Emergency Distribution 7.5 Kva Transformer**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: R. Casella /Rich CasellaDate: 10-26-12A.G. Porch /A.G. Porch10-26-12

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 495Equipment ID No. 71PT-71ACA4 Equip. Class 4-TransformersEquipment Description Emergency Distribution 7.5 Kva Transformer

## Photographs



Note: 71PT-71ACA4

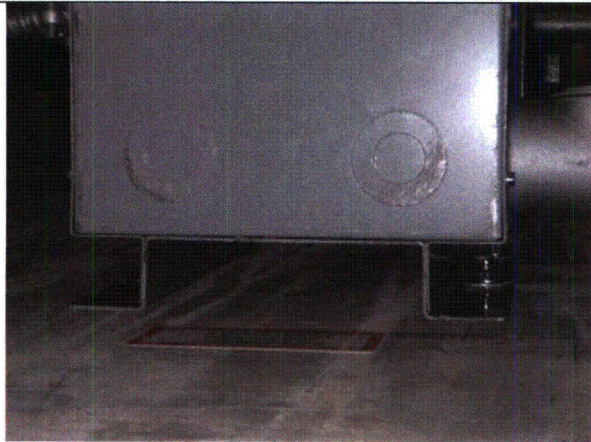
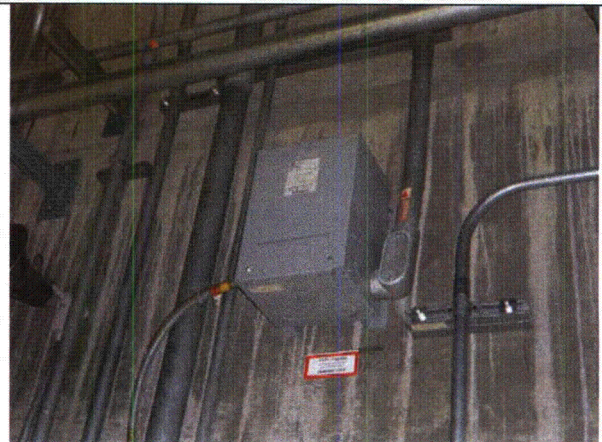


Note: 71PT-71ACA4 anchorage

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 495Equipment ID No. 71PT-71ACA4 Equip. Class 4-TransformersEquipment Description Emergency Distribution 7.5 Kva Transformer**Note:** 71PT-71ACA4 anchorage**Note:** 71PT-71ACA4

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-498Equipment ID No. 71PT-71ACUPS Equip. Class<sup>1</sup> 04-TransformersEquipment Description Uninterruptable Bus 37.5KVA Transformer 71MCC-252-OD2Location: Bldg. RB Floor El. 272' Room, Area RB South East, Col. 14, Line A

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 one of the 50% of SWEL items requiring anchorage configuration verification.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*Only three anchors actually penetrate through the block wall and are fastened to the back side with a plate and an L2x2 structural angle. This is acceptable since the SEWS evaluation addressed this anchorage configuration and found that it was acceptable.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*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 ☐  
*The transformer unit is anchored to a block wall. There are no visible cracks on the wall.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-498Equipment ID No. 71PT-71ACUPS Equip. Class 04-TransformersEquipment Description Uninterruptable Bus 37.5KVA Transformer 71MCC-252-OD2

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.)  
*Four (4), 1/2" anchors attach the transformer to the wall. Only three out of four anchors penetrate through the wall and are fastened on the back of the wall by structural members and a steel plate. Only three anchors are utilized in the analysis. The 4, 1/2" anchors are configured in accordance with the SEWS document for equipment 71PT-71ACUPS, Rev. 0.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐  
*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 ☒  
*There are no soft targets on the 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 ☐  
*The masonry block walls were evaluated in calculation C012, "HCLPF for Block Walls EB-272-1,2" under project USI A-46/IPEEE Seismic Evaluation Project, and were found to be acceptable. The overhead equipment, distribution systems, ceiling tiles and lighting not likely to collapse onto the equipment.*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐  
*The lines attached to the SWEL item 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 free of potentially adverse seismic interaction effects.*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-498**Equipment ID No. 71PT-71ACUPS Equip. Class 04-TransformersEquipment Description Uninterruptable Bus 37.5KVA Transformer 71MCC-252-OD2**Other Adverse Conditions**

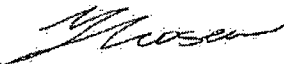
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?

Y ☒ N ☐ U ☐

*No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.*

**Comments** (Additional pages may be added as necessary)

*No additional comments.*

Evaluated by: Harpreet GhumanDate: 09/28/2012Yaroslav Losev09/28/2012



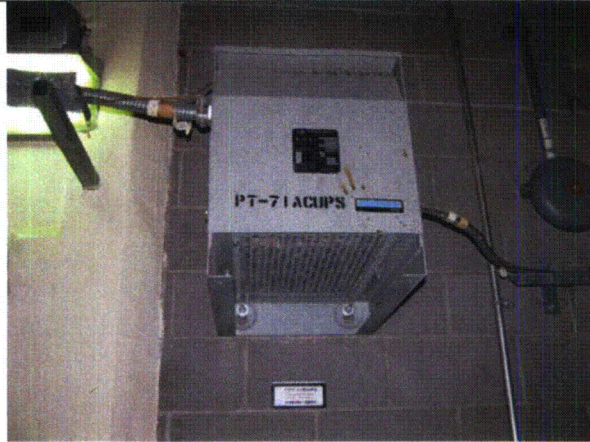
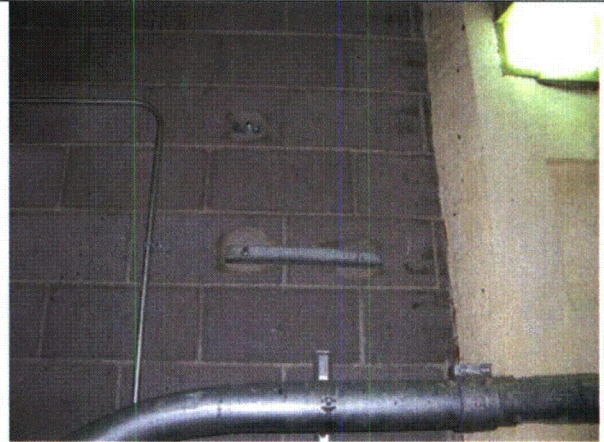
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-498Equipment ID No. 71PT-71ACUPS Equip. Class 04-TransformersEquipment Description Uninterruptable Bus 37.5KVA Transformer 71MCC-252-OD2

## Photographs

**Note:** Picture of equipment 71PT-71ACUPS.**Note:** Picture of the anchorage attachment to the wall on the back side.



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 501Equipment ID No. 71SB-1 Equip. Class 15 - Battery RacksEquipment Description 125 Volt Station Battery ALocation: Bldg. BR Floor El. 272 Room, Area Col 12 Line E

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 ☐  
The anchorage has all necessary hardware
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
Minor paint chipping was found at specific locations. This is not a structural concern
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐  
The concrete is free of cracking in the areas near the anchorage

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 501**Equipment ID No. 71SB-1 Equip. Class 15 - Battery RacksEquipment Description 125 Volt Station Battery A

5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
(Ref. 1.20-3, 1.20-8, associated SEWS document) Y ☒ N ☐ U ☐ N/A ☐
6. Based on the above anchorage evaluations, is the anchorage free of  
potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

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

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ATTACHMENT 9.6

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SEISMIC WALKDOWN CHECKLIST FORM

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Sheet 3 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 501Equipment ID No. 71SB-1 Equip. Class 15 - Battery RacksEquipment Description 125 Volt Station Battery A

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**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 ☐

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**Comments** (Additional pages may be added as necessary)

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Evaluated by: Rick Casella*Rick Casella*Date: 10/30/12*A. C. Danch*Al Porch10/30/12

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

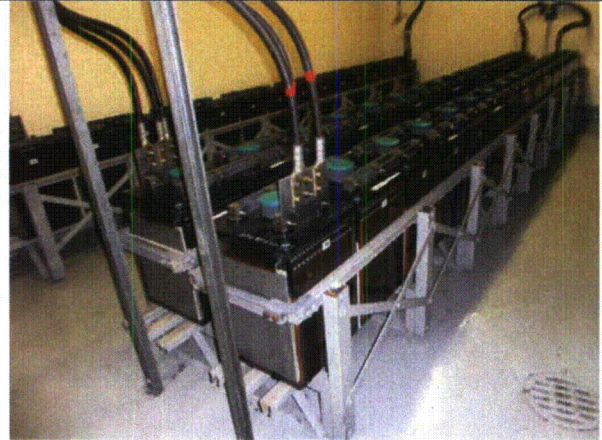
Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 501Equipment ID No. 71SB-1 Equip. Class 15 - Battery RacksEquipment Description 125 Volt Station Battery A

## Photographs



Note: 71SB-1

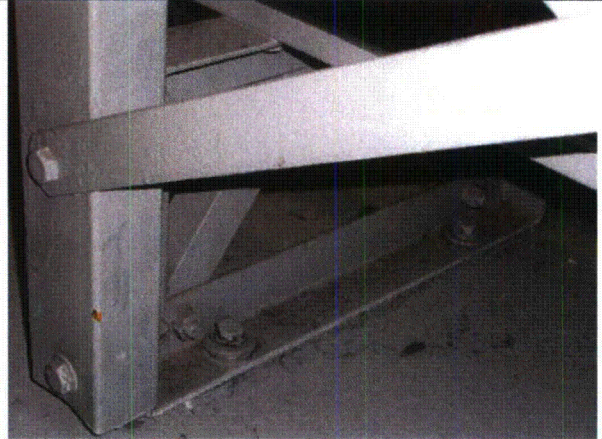


Note: 71SB-1

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 501Equipment ID No. 71SB-1 Equip. Class 15 - Battery RacksEquipment Description 125 Volt Station Battery A**Note:** 71SB-1 anchorage**Note:** 71SB-1 anchorage

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-502Equipment ID No. 71SB-2 Equip. Class<sup>1</sup> 15-Battery RacksEquipment Description 125 Volt Station Battery BLocation: Bldg. BR Floor El. 272' Room, Area BR3, Col.12, Line F

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 one of the 50% of SWEL items requiring anchorage configuration verification.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*The seventy two (72), 1/2" diameter expansion anchors 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 ☐  
*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 ☐  
*There are no visible cracks in the concrete near the anchors.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-502Equipment ID No. 71SB-2 Equip. Class 15-Battery RacksEquipment Description 125 Volt Station Battery B

5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*The frames of the racks are spaced at 27" on center. There are two racks mounted to each other (back to back) at the center location. The racks on the sides are by themselves. The 72, 1/2" expansion anchors (18 for the side racks, and 36 for the center rack) are configured in accordance with the EC36608 and drawing 1.20-3.* Y ☒ N ☐ U ☐ N/A ☐
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?  
*Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.* Y ☒ N ☐ U ☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures?  
*There are no soft targets on the equipment.* Y ☒ N ☐ U ☐ N/A ☐
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.* Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage?  
*The lines attached to the SWEL item have adequate flexibility to avoid damage.* Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?  
*Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.* Y ☒ N ☐ U ☐



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-502Equipment ID No. 71SB-2 Equip. Class 15-Battery RacksEquipment Description 125 Volt Station Battery B**Other Adverse Conditions**

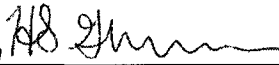
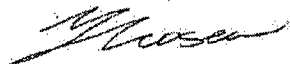
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?

Y ☒ N ☐ U ☐

*No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.*

**Comments** (Additional pages may be added as necessary)

*No additional comments.*

Evaluated by: Harpreet GhumanDate: 09/30/2012Yaroslav Losev09/30/2012

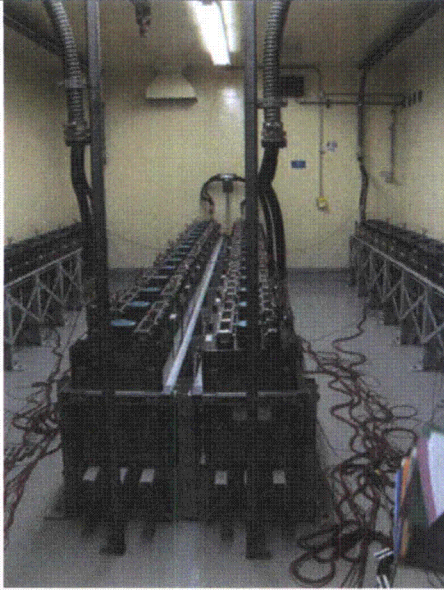
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-502Equipment ID No. 71SB-2 Equip. Class 15-Battery RacksEquipment Description 125 Volt Station Battery B

## Photographs

**Note:** *Picture of equipment 71SB-2.***Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 508Equipment ID No. 72AHU-30A Equip. Class 10. Air HandlersEquipment Description Battery Room A Air Handling UnitLocation: Bldg. BR Floor El. 282 Room, Area Col 12 line E

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 508**Equipment ID No. 72AHU-30A Equip. Class 10. Air HandlersEquipment Description Battery Room A Air Handling Unit

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

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

**Interaction Effects**

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

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

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

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

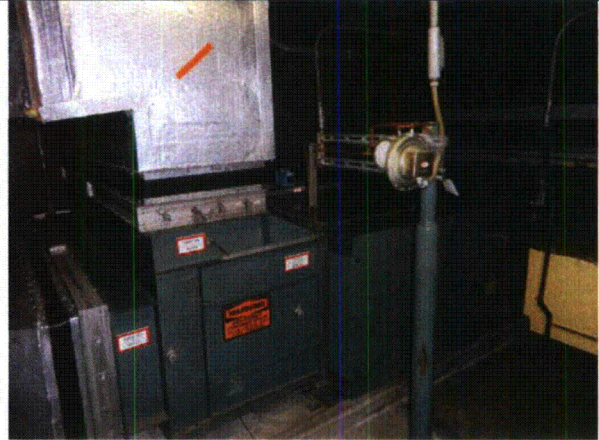
Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 508**Equipment ID No. 72AHU-30A Equip. Class 10. Air HandlersEquipment Description Battery Room A Air Handling Unit**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)*Missing mounting screws on door of unit**2 missing screws on west hinged door**1 missing screw on east hinged door**All screws missing on bottom row of door panel**The existing screws will keep the door secured. This condition will not create any credible adverse seismic interaction.**Although only a portion of the anchorage was visible, the existing SEWS for 72AHU-30A shows significant anchorage margin.*Evaluated by: R. Casella*Rich Casella*Date: 10-30-12A. Porch*A. Porch*10-30-12

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 508**Equipment ID No. 72AHU-30A Equip. Class 10. Air HandlersEquipment Description Battery Room A Air Handling Unit**Photographs****Note:** 72AHU-30A**Note:** 72AHU-30A

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 516Equipment ID No. 72FN-31A Equip. Class FansEquipment Description Battery Room A Recirc FanLocation: Bldg. BR Floor El. 282 Room, Area Col 12 line E

Manufacturer, Model, Etc. (optional but recommended) \_\_\_\_\_

## Instructions for Completing Checklist

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

## Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☒ N ☐
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*3/8" anchor bolts to floor (4 locations- 4 bolts per location) are slightly skewed. This condition was noted and accepted in the SEWS A-46 evaluation.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
The bolting shows signs of minor surface oxidation. This is not a structural concern
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐  
The concrete nearby the anchorage has no cracking



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 516**Equipment ID No. 72FN-31A Equip. Class FansEquipment Description Battery Room A Recirc Fan

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*The anchorage is consistent with A-46 SEWS for 72FN-31A.*

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

**Interaction Effects**

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 516**Equipment ID No. 72FN-31A Equip. Class FansEquipment Description Battery Room A Recirc Fan**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: R Casella *Rich Casella*Date: 10-30-12A Porch*A. C. Dorch*10-30-12

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 516Equipment ID No. 72FN-31A Equip. Class FansEquipment Description Battery Room A Recirc Fan

## Photographs



Note: 72FN-31A



Note: 72FN-31A anchorage

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 516Equipment ID No. 72FN-31A Equip. Class FansEquipment Description Battery Room A Recirc Fan

**Note:** 72FN-31A anchorage of fan assembly to vibration isolator and to floor

**Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 518Equipment ID No. 72FN-46A Equip. Class 09 - FansEquipment Description Battery Room A Exhaust FanLocation: Bldg. BR Floor El. 282 Room, Area 12, E

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 ☐  
*East Hat - SW & NE bolts slightly skewed but have contact with hat flange. SE & NE bolts have less than full thread encasement (<Threads below full encasement). Bolt size is 3/8 inch. Each hat secure to floor with bolts. These issues judged to not be a seismic concern.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*The bolting shows signs of minor surface oxidation. The oxidation is not a seismic concern*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐  
*No cracking was present*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 518**Equipment ID No. 72FN-46A Equip. Class 09 - FansEquipment Description Battery Room A Exhaust Fan

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.)  
*½ inch bolts at connection between fan/motor s/zid and vibration damper (1.79-474, SEWS document)* Y ☒ N ☐ U ☐ N/A ☐
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC)** SWEL1- 518Equipment ID No. 72FN-46A Equip. Class 09 - FansEquipment Description Battery Room A Exhaust Fan**Other Adverse Conditions**

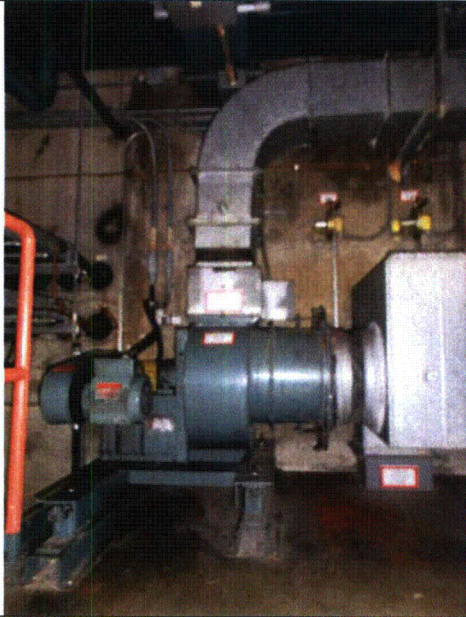
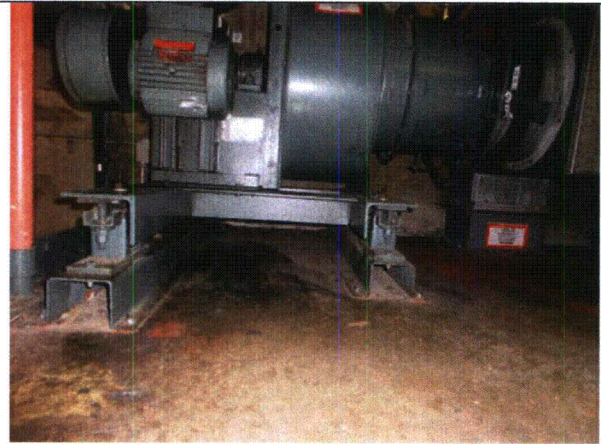
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y ☒ N ☐ U ☐

**Comments** (Additional pages may be added as necessary)Evaluated by: Rick Casella*Rick Casella*Date: 10/30/12*A. G. Danch*Al Porch10/30/12



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

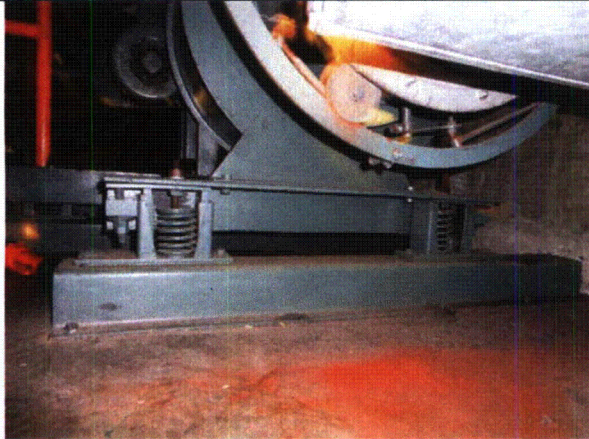
Sheet 4 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 518**Equipment ID No. 72FN-46A Equip. Class 09 - FansEquipment Description Battery Room A Exhaust Fan**Photographs****Note:** 72FN-46A**Note:** 72FN-46A anchorage

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 518Equipment ID No. 72FN-46A Equip. Class 09 - FansEquipment Description Battery Room A Exhaust Fan**Note:** 72FN-46A showing vibration isolators**Note:** 72FN-46A showing one anchor to floor installed at a slight skew

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-519**Equipment ID No. 72FN-46B Equip. Class<sup>1</sup> 09-FansEquipment Description Battery Room B Exhaust FanLocation: Bldg. BR Floor El. 282' Room, Area BR4, Col.12, Line F

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 one of the 50% of SWEL items requiring anchorage configuration verification.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☐ N ☒ U ☐ N/A ☐  
*One anchor is missing on the North East corner of the skid; however, this is already documented in the SEWS evaluation and was found to be acceptable. One anchor is loose on the North West corner of the skid. The resolution to this deficiency is tracked through CR-JAF-2012-06538*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*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 ☐  
*There are no visible cracks in the concrete near the SWEL item.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-519Equipment ID No. 72FN-46B Equip. Class 09-FansEquipment Description Battery Room B Exhaust Fan

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

*The 8, 1/4" expansion anchors are configured in accordance with the SEWS document for 72FN-46A, which has the same configuration as 72FN-46B, except for one missing bolt, which was evaluate in SEWS to be OK).*

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

*Based on the above anchorage evaluations, the anchorage is not free of potentially adverse seismic conditions. See item 2.*

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*Soft targets 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 ☐  
*The 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 ☐  
*The lines attached to the SWEL item 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 free of potentially adverse seismic interaction effects.*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-519**Equipment ID No. 72FN-46B Equip. Class 09-FansEquipment Description Battery Room B Exhaust Fan**Other Adverse Conditions**

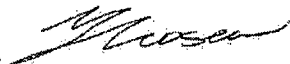
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?

Y ☒ N ☐ U ☐

*No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.*

**Comments** (Additional pages may be added as necessary)

*No additional comments.*

Evaluated by: Harpreet GhumanDate: 09/30/2012Yaroslav Losev09/30/2012



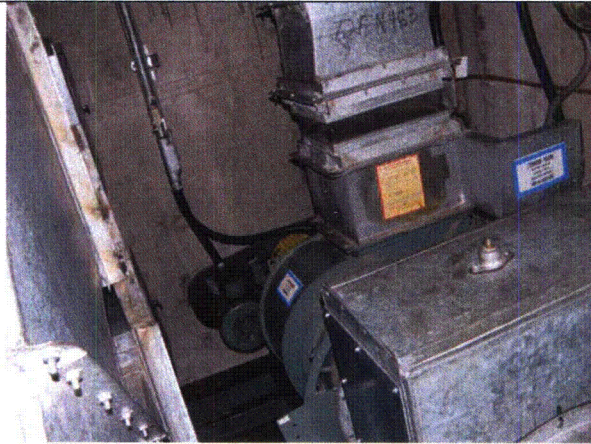
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-519Equipment ID No. 72FN-46B Equip. Class 09-FansEquipment Description Battery Room B Exhaust Fan

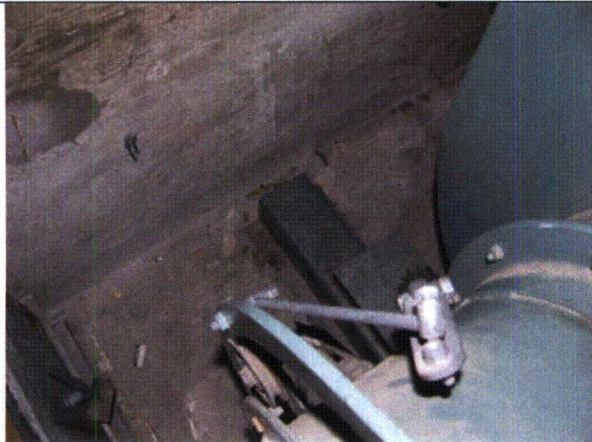
## Photographs

**Note:** Picture of equipment 72FN-46B.**Note:** Picture showing the missing anchor on the skid for the SWEL item.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-519Equipment ID No. 72FN-46B Equip. Class 09-FansEquipment Description Battery Room B Exhaust Fan

**Note:** Picture showing the loose anchor on the skid for the SWEL item.

**Note:**



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-522Equipment ID No. 72HV-7A Equip. Class<sup>1</sup> 20-Instrument and Control PanelsEquipment Description Admin Building Ventilation Control PanelLocation: Bldg. BR Floor El. 272' Room, Area BR5, Col.11.5, Line C

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 not one of the 50% of SWEL items requiring anchorage configuration verification.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*The equipment is stitch welded in four (4) locations and the welds are intact and do not appear damaged.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*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 ☐  
*There are no visible cracks in the concrete near the SWEL item.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-522Equipment ID No. 72HV-7A Equip. Class 20-Instrument and Control PanelsEquipment Description Admin Building Ventilation Control Panel

5. Is the anchorage configuration consistent with plant documentation? Y ☐ N ☐ U ☐ N/A ☒  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*Item is not one of the 50% for which an anchorage configuration verification is required.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐  
*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 ☐  
*Soft targets 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 ☐  
*Safety latches for the overhead light fixtures should be installed. There is a masonry block wall near the equipment; however, the wall was evaluated under IPEEE effort to reinforce the block walls under JAF-RPT-MISC-02211, Section 3.1.4.1, page 3-44, Table 3.1.4.1.*  
*There is a 1" gap between cable tray 1TC077R and the SWEL item; however, based on engineering judgment this is a sufficient amount of space during a seismic event to where there will be no interaction between SWEL equipment and raceway.*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐  
*The lines attached to the SWEL item 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 free of potentially adverse seismic interaction effects.*

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-522Equipment ID No. 72HV-7A Equip. Class 20-Instrument and Control PanelsEquipment Description Admin Building Ventilation Control Panel**Other Adverse Conditions**

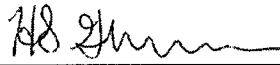
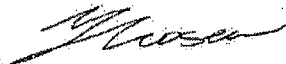
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?

Y ☒ N ☐ U ☐

*No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.*

**Comments** (Additional pages may be added as necessary)

*No additional comments.*

Evaluated by: Harpreet GhumanDate: 09/30/2012Yaroslav Losev09/30/2012

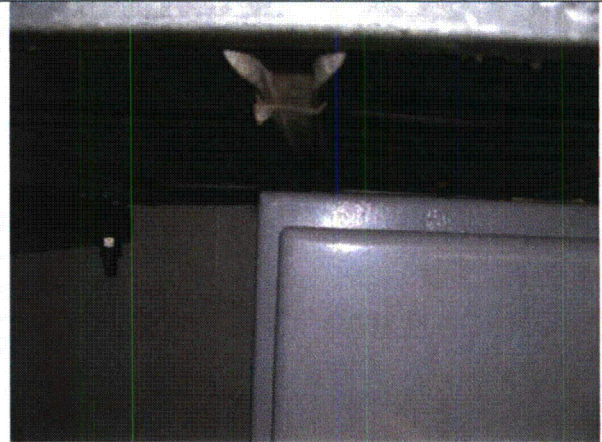
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-522Equipment ID No. 72HV-7A Equip. Class 20-Instrument and Control PanelsEquipment Description Admin Building Ventilation Control Panel

## Photographs

**Note:** Picture of equipment 72HV-7A.**Note:** Picture showing the 1" gap between the cable tray 1TC077R and the SWEL item.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 555Equipment ID No. 92FN-1A Equip. Class 9 - FansEquipment Description Emergency Diesel Generator A Vent Supply FanLocation: Bldg. EG Floor El. 272' Room, Area Col. 24 Line A1

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 ☐  
*Ability to discern condition of anchorage was difficult based on distance to anchorage from our location. Based on what we could see, anchorage was free of bent, broken or missing hardware.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*No corrosion was evident, based on limited view from floor.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*The component is connected to steel. There is no concrete.*

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 555Equipment ID No. 92FN-1A Equip. Class 9 - FansEquipment Description Emergency Diesel Generator A Vent Supply Fan

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures?  
*There are no soft targets on this equipment.* Y ☐ N ☐ U ☐ N/A ☒
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,  
and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage?  
*No attached lines* Y ☐ N ☐ U ☐ N/A ☒
10. Based on the above seismic interaction evaluations, is equipment free  
of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 555**Equipment ID No. 92FN-1A Equip. Class 9 - FansEquipment Description Emergency Diesel Generator A Vent Supply Fan**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)

Evaluated by: A.G. Porch /

A.G. PorchDate: 10/26/12

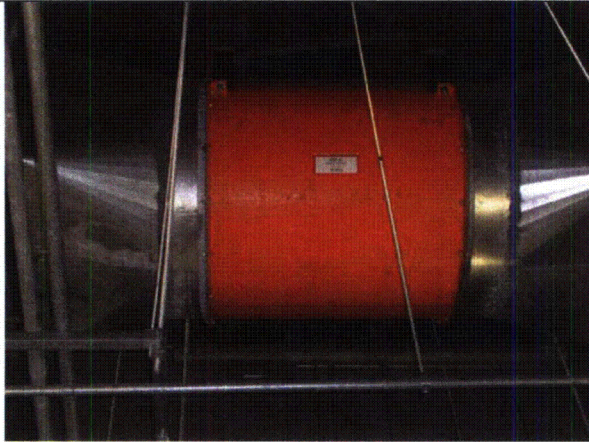
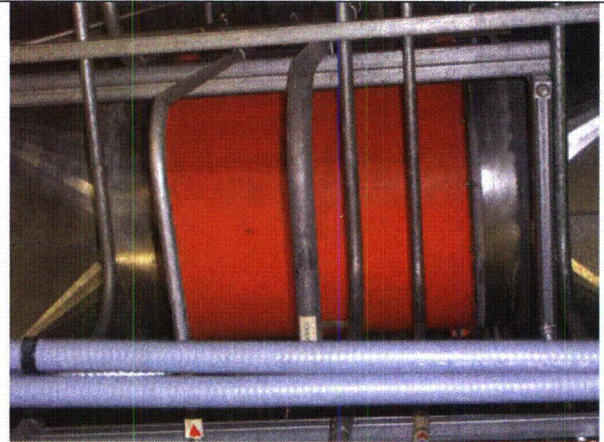
R. Casella /

Rich Casella10/26/12



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

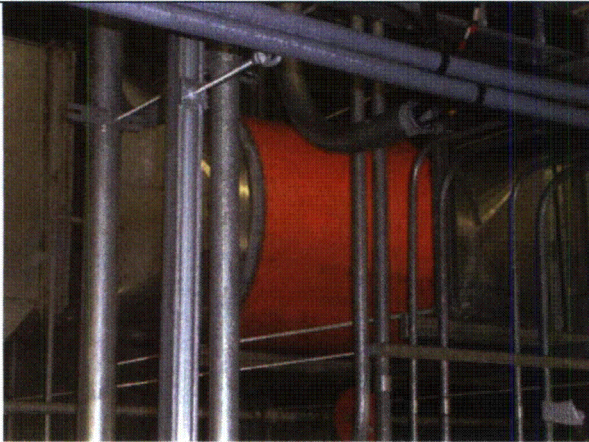
Sheet 4 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 555**Equipment ID No. 92FN-1A Equip. Class 9 - FansEquipment Description Emergency Diesel Generator A Vent Supply Fan**Photographs****Note:** 92FN-1A**Note:** 92FN-1A

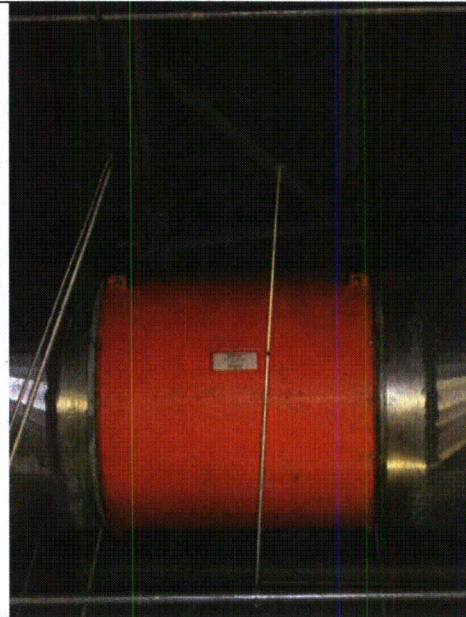
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 555Equipment ID No. 92FN-1A Equip. Class 9 - FansEquipment Description Emergency Diesel Generator A Vent Supply Fan

Note: 92FN-1A



Note: 92FN-1A

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 577Equipment ID No. 92RTD-101A Equip. Class 19 - Temperature SensorEquipment Description Emergency Diesel Generator Room A South Side Resist Temperature DetectorLocation: Bldg. EG Floor El. 300 Room, Area Col. 23 Line A2, AZ

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 ☐  
*Ability to discern condition of anchorage was difficult based on distance to anchorage from our location. Based on what we could see to the ceiling mounted component, it appeared to be secured to the flange of the roof steel.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*Ability to discern condition of anchorage was difficult based on distance to anchorage from our location. Based on what we could see to the ceiling mounted component, it appeared to be secured to the flange of the roof steel.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*There is no concrete. The component is mounted to steel beam flange.*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 577**Equipment ID No. 92RTD-101A Equip. Class 19 - Temperature SensorEquipment Description Emergency Diesel Generator Room A South Side Resist Temperature Detector

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

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

**Interaction Effects**

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☐ N ☐ U ☐ N/A ☒  
*Attached to overhead roof steel beam, there are no visible objects to fall on the SWEL item.*

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

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 577**Equipment ID No. 92RTD-101A Equip. Class 19 - Temperature SensorEquipment Description Emergency Diesel Generator Room A South Side Resist Temperature Detector**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)

(see photo)

Evaluated by: A.G. Porch /

A.G. PorchDate: 10/26/12

R. Casella /

Rich Casella10/26/12



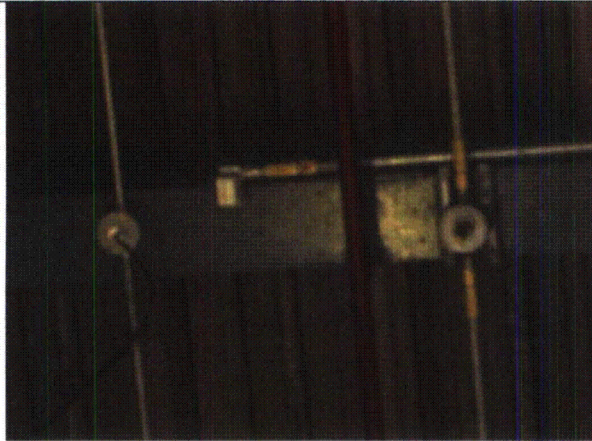
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

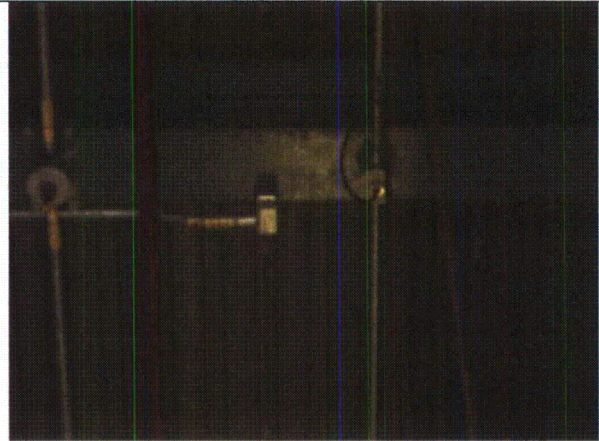
Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 577Equipment ID No. 92RTD-101A Equip. Class 19 - Temperature SensorEquipment Description Emergency Diesel Generator Room A South Side Resist Temperature Detector

## Photographs



Note: 92RTD-101A



Note: 92RTD-101A

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-578Equipment ID No. 92RTD-101B Equip. Class<sup>1</sup> 19 – Temperature SensorsEquipment Description EDG B Room South Side Resistance Temperature DetectorLocation: Bldg. EG Floor El. 272 Room, Area C: 27, L: A2

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 ☐  
*The unit is at high elevation. No close visual inspection is possible. Based on review of drawings, and weight of the equipment, the anchorage was determined to be adequate*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*The unit is at high elevation. No close visual inspection is possible*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐  
*The unit is at high elevation. No close visual inspection is possible*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-578Equipment ID No. 92RTD-101B Equip. Class 19 – Temperature SensorsEquipment Description EDG B Room South Side Resistance Temperature Detector

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*The soft targets are free from impact by nearby equipment and 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 ☐  
*Unit is mounted on a masonry block wall. The block walls have been evaluated and enhanced in accordance with DC# D1-96-011, Rev0 as part of IPEEE evaluations.*
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 ☐  
*The equipment is free of potentially adverse seismic interaction effects.*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-578**Equipment ID No. 92RTD-101B Equip. Class 19 – Temperature SensorsEquipment Description EDG B Room South Side Resistance Temperature Detector**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Pouria PourghobadiDate: 9/21/12Donald Koberg9/21/12

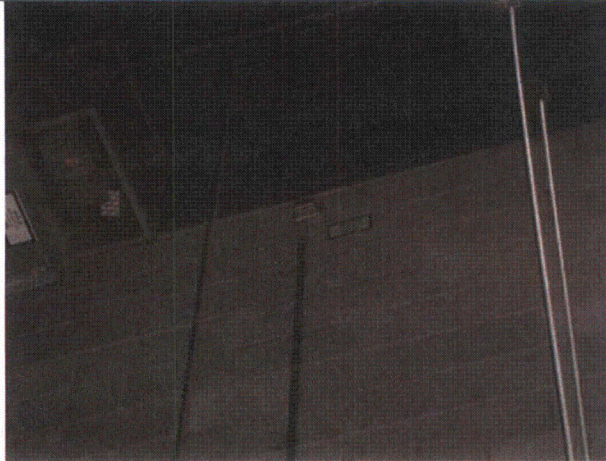
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-578Equipment ID No. 92RTD-101B Equip. Class 19 – Temperature SensorsEquipment Description EDG B Room South Side Resistance Temperature Detector

## Photographs



**Note:** 92RTD-101B Temperature sensor installed on concrete block.

**Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 581Equipment ID No. 93AC-A1 Equip. Class 12-Air CompressorsEquipment Description Emergency Diesel Generator A Air Start Compressor A1Location: Bldg. EG Floor El. 272' Room, Area Col. 24 Line A2

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 ☐  
Anchorage contains all necessary hardware
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
The anchorage has a small amount of paint chipping that is not a structural concern
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐  
There are no cracks in the concrete around the anchorage

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 581**Equipment ID No. 93AC-A1 Equip. Class 12-Air CompressorsEquipment Description Emergency Diesel Generator A Air Start Compressor A1

5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
(Ref. 1.12-2, associated SEWS document) Y ☒ N ☐ U ☐ N/A ☐
6. Based on the above anchorage evaluations, is the anchorage free of  
potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures?  
Soft targets = 1/4" tubing (cu) see photo; Cable trays, conduit and 2"  
diameter air piping well supported (Note tubing in tube track - secure -  
SAT). No soft target issues - SAT. Y ☒ N ☐ U ☐ N/A ☐
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,  
and masonry block walls not likely to collapse onto the equipment?  
Lighting, masonry wall, cable trays - all SAT. Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage?  
Flex.conduit and air hose (air start system ref.. 93RV-101A) - all SAT. Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free  
of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 581**Equipment ID No. 93AC-A1 Equip. Class 12-Air CompressorsEquipment Description Emergency Diesel Generator A Air Start Compressor A1**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)

Some cracks running E-W along masonry wall near concrete pad (see photo) - not an issue (i.e. shrinkage/settlement cracks). Not considered adverse to anchorage system.

Evaluated by: R. Casella /

*Rich Casella*Date: 10/26/12

A.G. Porch /

*A.G. Porch*10/26/12

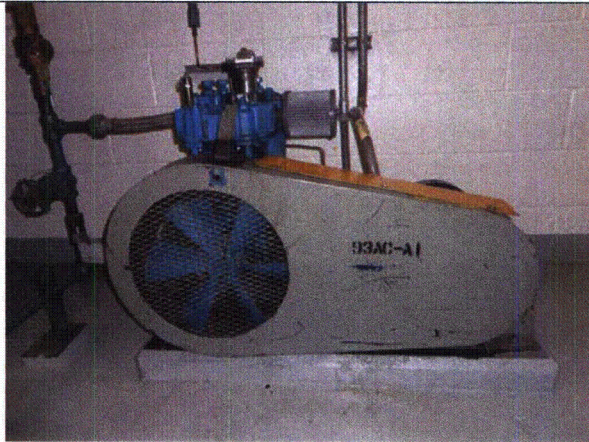
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 581Equipment ID No. 93AC-A1 Equip. Class 12-Air CompressorsEquipment Description Emergency Diesel Generator A Air Start Compressor A1

## Photographs



Note: 93AC-A1



Note: 93AC-A1 including anchorage on east end



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 581Equipment ID No. 93AC-A1 Equip. Class 12-Air CompressorsEquipment Description Emergency Diesel Generator A Air Start Compressor A1**Note:** 93AC-A1 anchorage**Note:** 93AC-A1

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 582**Equipment ID No. 93AR-A1 Equip. Class 21Equipment Description Emergency Diesel Generator A Air Start Receiver A1Location: Bldg. EG Floor El. 272' Room, Area 24, A2

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 ☐  
Anchorage contains all necessary hardware
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
Mild surface oxidation and paint chipping was observed - no structural concerns
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☒ U ☐ N/A ☐  
Settlement crack in slab along masonry block wall approximately 4" South of wall. Not an issue based on load on anchor - OK.  
Hairline crack (very light) - SAT.  
Welds - leg to base plate and tank - SAT

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 582**Equipment ID No. 93AR-A1 Equip. Class 21Equipment Description Emergency Diesel Generator A Air Start Receiver A1

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.)  
(Ref. 1.12-43, associated SEWS document)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
93EDG-701A (3/4" drain valve - air receiver drain valve) only soft target  
- free from seismic effects (ppg above is well supported) - SAT
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 582Equipment ID No. 93AR-A1 Equip. Class 21Equipment Description Emergency Diesel Generator A Air Start Receiver A1**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)

Other air tanks are typical of 93AR-A1

Evaluated by: R. Casella /

*Rich Casella*Date: 10/26/122

A.G. Porch /

*A.G. Porch*10/26/12

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 582Equipment ID No. 93AR-A1 Equip. Class 21Equipment Description Emergency Diesel Generator A Air Start Receiver A1

## Photographs

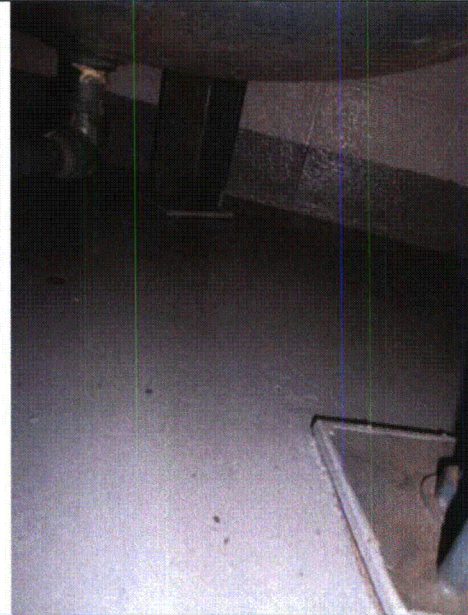
**Note:** 93AR-A1**Note:** 93AR-A1 including support legs (note – 3<sup>rd</sup> support leg in rear cannot be seen in this photo)



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 582Equipment ID No. 93AR-A1 Equip. Class 21Equipment Description Emergency Diesel Generator A Air Start Receiver A1**Note:** 93AR-A1 anchorage to floor**Note:** 93AR-A1 anchorage to floor at 2 of the 3 legs

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-594Equipment ID No. 93AR-B2 Equip. Class<sup>1</sup> 18-Instrument RacksEquipment Description EDG B Air Start Receiver B2Location: Bldg. EG Floor El. 272' Room, Area EG Room B, Col. 26.5

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 one of the 50% of SWEL items requiring anchorage configuration verification.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*The three (3), 3/8" expansion anchors 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 ☐  
*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 ☐  
*There are concrete hairline cracks within the vicinity of the anchors but they do not pass through the center of any of the anchors. Therefore, based on engineering judgment there will be no significant reduction in the anchor strength due to these cracks and is deemed acceptable.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-594Equipment ID No. 93AR-B2 Equip. Class 18-Instrument RacksEquipment Description EDG B Air Start Receiver B2

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.)  
*The configuration of the three (3), 3/8" expansion anchors are consistent with the SEWS documentation for equipment 93AR-A1 (same as 93AR-B2).* Y ☒ N ☐ U ☐ N/A ☐
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?  
*Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.* Y ☒ N ☐ U ☐

Interaction Effects

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-594**Equipment ID No. 93AR-B2 Equip. Class 18-Instrument RacksEquipment Description EDG B Air Start Receiver B2**Other Adverse Conditions**

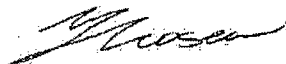
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?

Y ☒ N ☐ U ☐

*No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.*

**Comments** (Additional pages may be added as necessary)

*No additional comments.*

Evaluated by: Harpreet GhumanDate: 09/21/2012Yaroslav Losev09/21/2012

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-594Equipment ID No. 93AR-B2 Equip. Class 21-Tanks and Heat ExchangersEquipment Description EDG B Air Start Receiver B2

## Photographs

**Note:** *Picture of equipment 93AR-B2.***Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 624Equipment ID No. 93ECP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Engine Control PanelLocation: Bldg. EG Floor El. 272 Room, Area 24, G1

Manufacturer, Model, Etc. (optional but recommended) \_\_\_\_\_

## Instructions for Completing Checklist

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

## Anchorage

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1- 624**Equipment ID No. 93ECP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Engine Control Panel

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

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

**Interaction Effects**

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

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 624Equipment ID No. 93ECP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Engine Control Panel**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)

Conduit (rigid) is supported by unistrut vertical / laterally (via knee brace); There is approximately 5 feet of flex conduit at inter with top of panel. Therefore any seismic loads below rigid conduit support will be dissipated by flex.

Evaluated by: Rick CasellaDate: 10/29/12Al Porch10/29/12

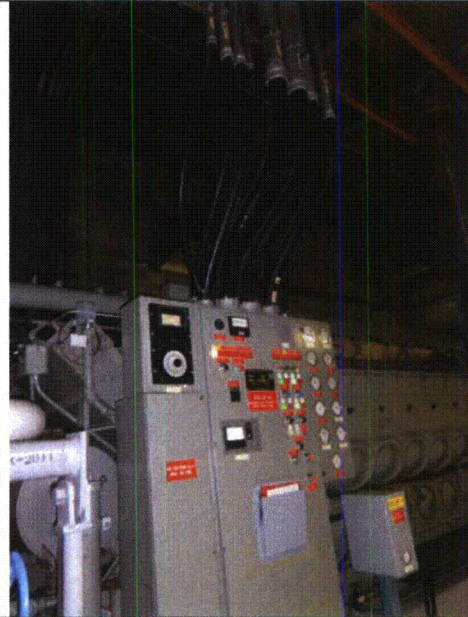
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 624Equipment ID No. 93ECP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Engine Control Panel

## Photographs

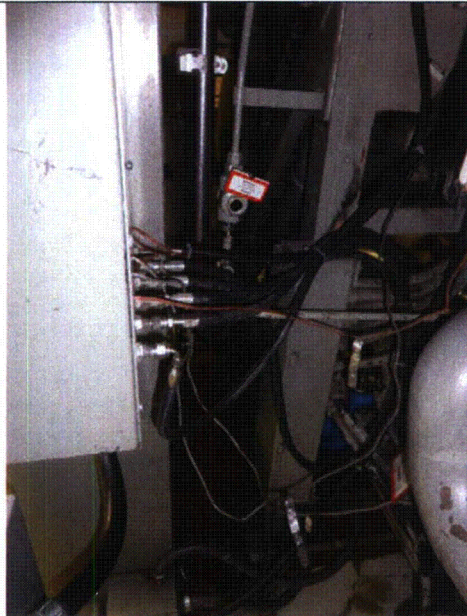
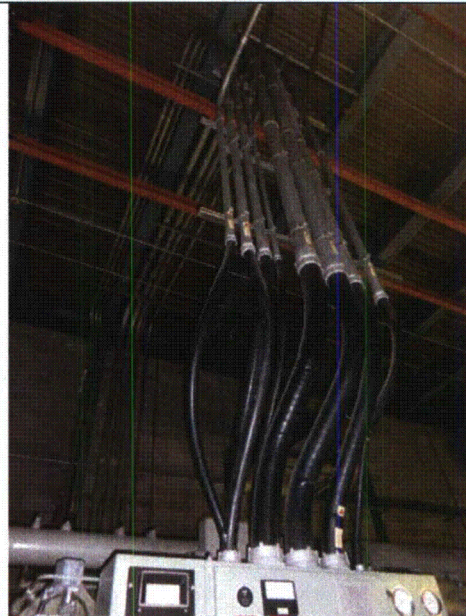
**Note:** 93ECP-A**Note:** 93ECP-A with flex conduit rising off top of panel



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 624Equipment ID No. 93ECP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Engine Control Panel**Note:** Soft targets (hoses) off back of 93ECP-A**Note:** Conduits supported above 93ECP-A

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-625Equipment ID No. 93ECP-B Equip. Class<sup>1</sup> 20-Instrument and Control PanelsEquipment Description EDG B Engine Control PanelLocation: Bldg. EG Floor El. 272' Room, Area EG Room B, Col. 26, Line A3

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 one of the 50% of SWEL items requiring anchorage configuration verification.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*The four (4) 3/4" expansion anchors 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 ☐  
*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 ☐  
*The anchors are free of visible cracks in the concrete.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-625**Equipment ID No. 93ECP-B Equip. Class 20-Instrument and Control PanelsEquipment Description EDG B Engine Control Panel

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*The configuration of the four (4), 3/4" expansion anchors is consistent with the SEWS documentation for equipment 93ECP-A (same as 93ECP-B).*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐  
*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 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 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 ☐  
*The lines attached to the SWEL item 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 free of potentially adverse seismic interaction effects.*

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-625Equipment ID No. 93ECP-B Equip. Class 20-Instrument and Control PanelsEquipment Description EDG B Engine Control Panel**Other Adverse Conditions**


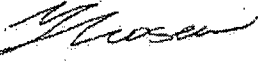
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?

Y ☐ N ☒ U ☐

*Top of the Control Panel is unsupported. The SWES evaluation determined that the panel is acceptable without these anchors; however the same evaluation does not include the load transferred from the overhead conduits attached to the panel. These conduits drop approximately 10 ft vertically into the panel without any lateral support to minimize the interaction load to the panel. Based on engineering judgment, during a seismic event a significant lateral load from the conduits will contribute to the moment arm transferred to the base anchors which potentially could result in failure of the anchors and overturn the panel. The resolution to this deficiency is tracked through LB-01.*

**Comments** (Additional pages may be added as necessary)

*No additional comments.*

Evaluated by: Harpreet GhumanDate: 09/21/2012Yaroslav Losev09/21/2012

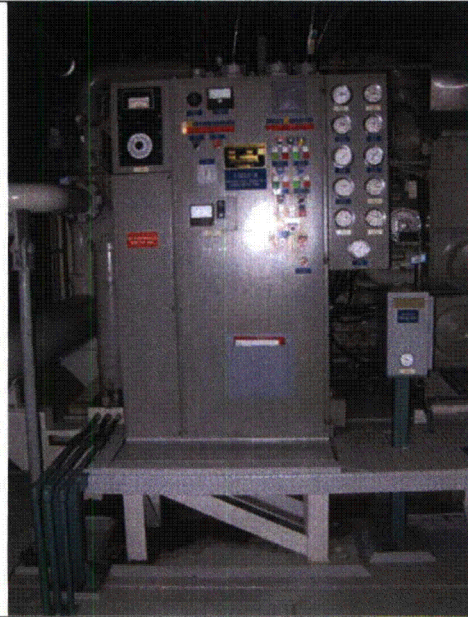
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-625Equipment ID No. 93ECP-B Equip. Class 20-Instrument and Control PanelsEquipment Description EDG B Engine Control Panel

## Photographs



**Note:** Picture of equipment 93ECP-B. Note: the conduits attached at the top of the panel are the ones that extend approximately 10' vertically.



**Note:** Picture showing that the control panel is not attached/supported at the top.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 628Equipment ID No. 93ECSP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Engine Control Sub-PanelLocation: Bldg. EG Floor El. 272 Room, Area 24, A4

Manufacturer, Model, Etc. (optional but recommended) \_\_\_\_\_

## Instructions for Completing Checklist

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

## Anchorage

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1- 628**Equipment ID No. 93ECSP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Engine Control Sub-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 ☒
6. Based on the above anchorage evaluations, is the anchorage free of  
potentially adverse seismic conditions? Y ☐ N ☐ U ☒

**Interaction Effects**

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



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1- 628**Equipment ID No. 93ECSP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Engine Control Sub-Panel**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)*Need support detail*Evaluated by: Rick Casella*Rick Casella*Date: 10/29/12*Al Porch**Al Porch*10/29/12

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 628Equipment ID No. 93ECSP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Engine Control Sub-Panel

## Photographs



Note: 93ECSP-A

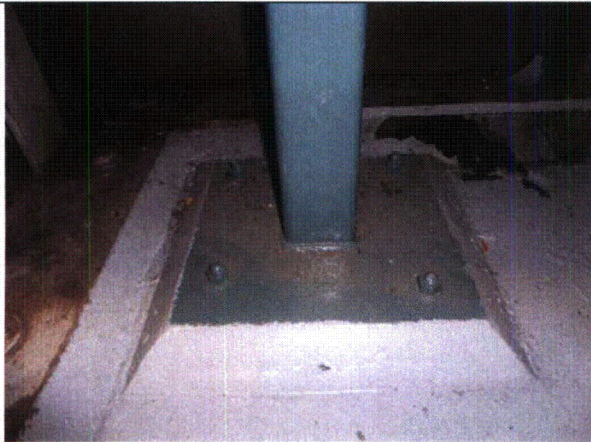
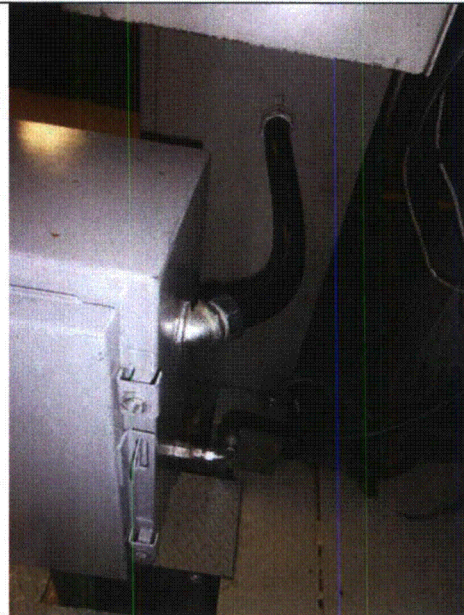


Note: 93ECSP-A including anchorage

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 628Equipment ID No. 93ECSP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Engine Control Sub-Panel**Note:** 93ECSP-A anchorage**Note:** Electrical connections to 93ECSP-A

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-629Equipment ID No. 93ECSP-B Equip. Class<sup>1</sup> 20 – Instrument and Control PanelsEquipment Description EDG-B Engine Control Sub PanelLocation: Bldg. EG Floor El. 272 Room, Area C: 26, L: A3

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 ☐  
*The four (4) 3/8" Hilti anchors are free of bent, broken, missing or loose hardware.*  
*Panels need to be removed and anchorage of internal components needs to be checked.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*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 ☐  
*The anchorage is free of visible cracks in the concrete near the anchors.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-629**Equipment ID No. 93ECSP-B Equip. Class 20 – Instrument and Control PanelsEquipment Description EDG-B Engine Control Sub 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.)  
*The configuration of the four (4), 3/8" Hilti Anchors is consistent with SEWS for 93 ECSP-A Rev 0, which is identical to ECSP-B.* Y ☒ N ☐ U ☐ N/A ☐
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?  
*Panels need to be removed and anchorage of internal components needs to be checked.* Y ☐ N ☐ U ☒

**Interaction Effects**

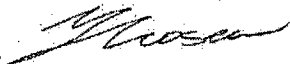
7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-629**Equipment ID No. 93ECSP-B Equip. Class 20 – Instrument and Control PanelsEquipment Description EDG-B Engine Control Sub Panel**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Harpreet GhumanDate: 9/21/12Yaroslav Losev9/21/12



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-629Equipment ID No. 93ECSP-B Equip. Class 20 – Instrument and Control PanelsEquipment Description EDG-B Engine Control Sub Panel

## Photographs

**Note:** 93ECSP-B Engine Control Sub Panel**Note:**



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 634**Equipment ID No. 93EDG-C Equip. Class Engine GeneratorsEquipment Description Emergency Diesel Generator CLocation: Bldg. EG Floor El. 272' Room, Area Col. 24 line A4, AZ

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 ☐  
Anchorage contains all necessary hardware
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
The anchorage is free of any corrosion
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☒ U ☐ N/A ☐  
Hairline cracks in grout at various bolt locations (previously addressed at 93EDG-D and documented in CR-JAF-2012-06090)

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 634**Equipment ID No. 93EDG-C Equip. Class Engine GeneratorsEquipment Description Emergency Diesel Generator C

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.)  
(Ref. 1.12-95, associated SEWS document)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
Numerous soft targets on EDG. No credible seismic impacts
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 634**Equipment ID No. 93EDG-C Equip. Class Engine GeneratorsEquipment Description Emergency Diesel Generator C**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)

Evaluated by: R. Casella /

*Rich Casella*Date: 10/26/12

A.G. Porch /

*A.G. Porch*10/26/12

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

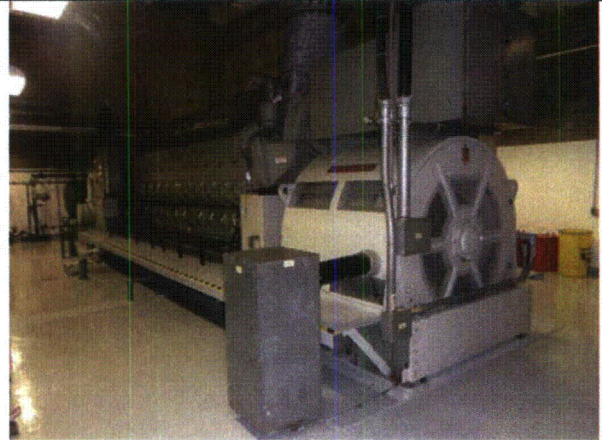
Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 634Equipment ID No. 93EDG-C Equip. Class Engine GeneratorsEquipment Description Emergency Diesel Generator C

## Photographs



Note: 93EDG-C

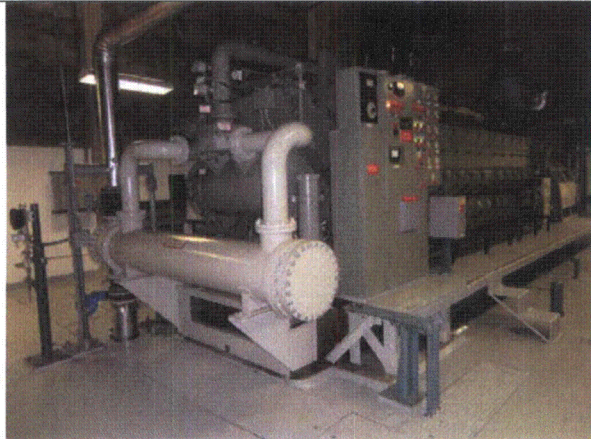


Note: 93EDG-C

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 634Equipment ID No. 93EDG-C Equip. Class Engine GeneratorsEquipment Description Emergency Diesel Generator C

Note: 93EDG-C

Note:

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-635Equipment ID No. 93EDG-D Equip. Class Engine GeneratorEquipment Description Emergency Diesel Generator DLocation: Bldg. EG Floor El. 272 Room, Area Col. 26.5Manufacturer, Model, Etc. (optional but recommended) EMD Engine Portec Gen

## 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 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 surface corrosion on the bolts. No impact on seismic adequacy.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐  
Anchors on north side of unit - Hairline crack in grout adjacent to the 3<sup>rd</sup> anchor from the Northeast corner. Crack continues on concrete at base of unit. Hairline crack 4" S of 5<sup>th</sup> anchor from northeast. Both the 7<sup>th</sup> and 8<sup>th</sup> bolts have hair line cracks at the bolts in the grout.  
Anchors on south side of unit - Additional hair line cracks similar to north side.  
The above condition is addressed in CR-JAF-2012-06345. As discussed in the response to CA #1, the existing condition is acceptable with no adverse seismic effects.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-635**Equipment ID No. 93EDG-D Equip. Class Engine GeneratorEquipment Description Emergency Diesel Generator D

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

**Interaction Effects**

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



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-635**Equipment ID No. 93EDG-D Equip. Class Engine GeneratorEquipment Description Emergency Diesel Generator D**Other Adverse Conditions**

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

Support for 2" air line has 2 bolts on each side that are either flush with the nuts or less than full thread engagement. This condition was addressed in CR-JAF-2012-06345. There is no adverse seismic impact resulting from this condition.

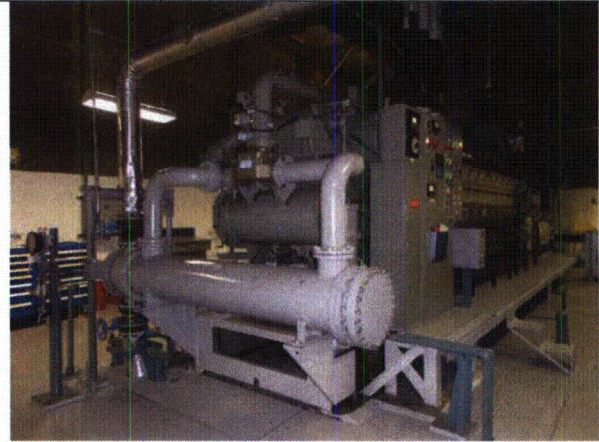
**Comments** (Additional pages may be added as necessary)

Hair line crack from support of south air start line. Vertical side less pronounced. This item is addressed in CR-JAF-2012-06345. This does not constitute an adverse seismic condition.

Evaluated by: Rick CasellaDate: 9-27-12Alan Porch9-27-12

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-635**Equipment ID No. 93EDG-D Equip. Class Engine GeneratorEquipment Description Emergency Diesel Generator D**Photographs****Note:** 93EDG-D**Note:** 93EDG-D

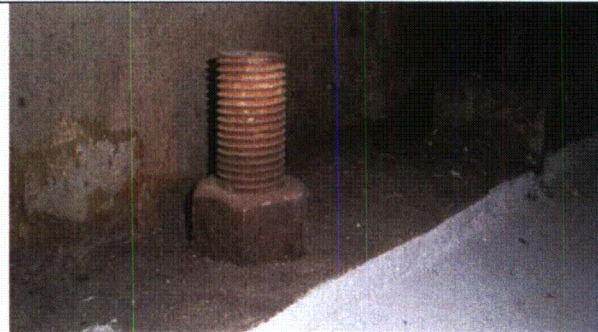
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-635Equipment ID No. 93EDG-D Equip. Class Engine GeneratorEquipment Description Emergency Diesel Generator D

**Note:** 93EDG-D crack in grout in proximity of anchor bolt



**Note:** 93EDG Anchor Bolt (8 on each side of Unit)

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-636Equipment ID No. 93EGP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Generator Control PanelLocation: Bldg. EG Floor El. 272 Room, Area 24, A1

Manufacturer, Model, Etc. (optional but recommended) \_\_\_\_\_

## Instructions for Completing Checklist

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

## Anchorage

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

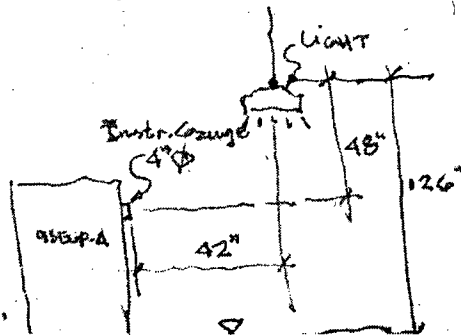
Sheet 2 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1-636**Equipment ID No. 93EGP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Generator Control Panel

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

**Interaction Effects**

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



See Comments.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-636Equipment ID No. 93EGP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Generator Control Panel**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)

Question 10: In a seismic event, if light fixture was decoupled from 1 of its 2 supporting chains, out-of-plane swinging motion ( i.e. toward 93EGO-A) would be limited and will not contact the panel. No adverse seismic interaction.

Evaluated by: Rick CasellaDate: 10/29/12Al Porch10/29/12



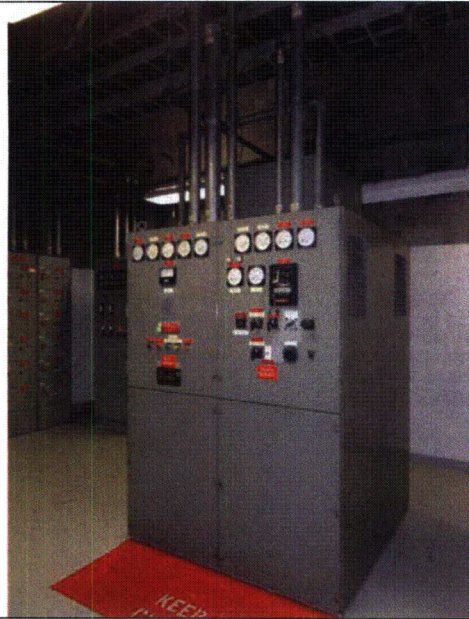
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-636Equipment ID No. 93EGP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Generator Control Panel

## Photographs



Note: 93EGP-A



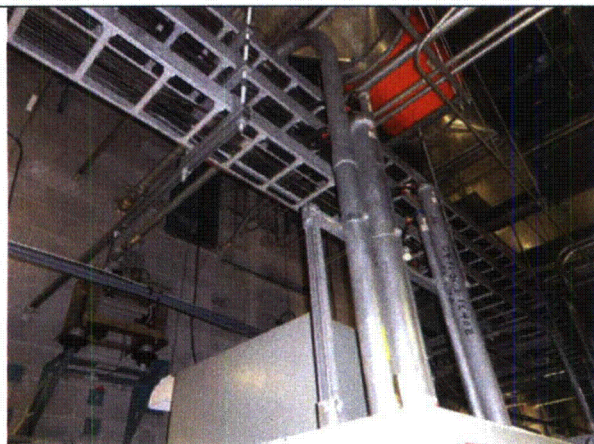
Note: Side view of 93EGP-A



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1-636Equipment ID No. 93EGP-A Equip. Class 20 - Instrument and Control PanelsEquipment Description EDG A Generator Control Panel**Note:** Conduit off top of 93EGP-A**Note:**

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-637**Equipment ID No. 93EGP-B Equip. Class<sup>1</sup> 20 – Instrumentation and Control PanelsEquipment Description Emergency Diesel Generator B Control PanelLocation: Bldg. EG Floor El. 272 Room, Area Col. 26, Line A1

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 ☐  
*External anchorage is free of bent, broken, missing or loose hardware.  
Panels need to be removed and anchorage of internal components needs to be checked.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*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 free of visible cracks in the concrete near the anchors.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-637**Equipment ID No. 93EGP-B Equip. Class 20 – Instrumentation and Control PanelsEquipment Description Emergency Diesel Generator B Control Panel

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*The anchorage configuration is consistent with the SEWS for 93EGP-B (Rev. 0). The front welding consists of six 1" x 1/8" fillets, the back welding consists of six 1" seam welds plus one 2" corner weld.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐  
*Cable from tray 1TC456B is overhanging the tray. Will not damage the cabinet in a seismic event*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-637Equipment ID No. 93EGP-B Equip. Class 20 – Instrumentation and Control PanelsEquipment Description Emergency Diesel Generator B Control Panel**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Donald KobergDate: 9/27/12Pouria Pourghobadi9/27/12

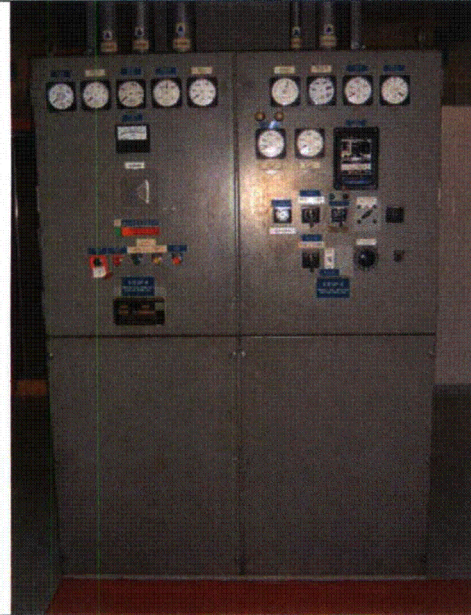
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

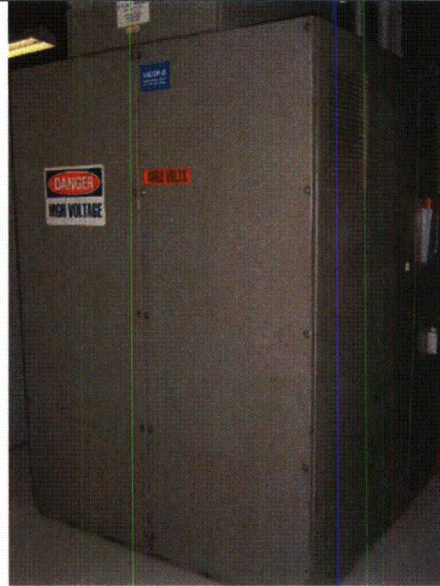
Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-637Equipment ID No. 93EGP-B Equip. Class 20 – Instrumentation and Control PanelsEquipment Description Emergency Diesel Generator B Control Panel

## Photographs



Note: 93EGP-B Panel



Note: 93EGP-B Panel



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-637Equipment ID No. 93EGP-B Equip. Class 20 – Instrumentation and Control PanelsEquipment Description Emergency Diesel Generator B Control Panel**Note:** 93EGP-B Panel base welds.**Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 640Equipment ID No. 93FPAC Equip. Class Instrumentation and Control PanelsEquipment Description Emergency Diesel Generator A and C Forced Paralleling PanelLocation: Bldg. EG Floor El. 272' Room, Area 24.5, A

Manufacturer, Model, Etc. (optional but recommended) \_\_\_\_\_

## Instructions for Completing Checklist

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

## Anchorage

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



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1- 640**Equipment ID No. 93FPAC Equip. Class Instrumentation and Control PanelsEquipment Description Emergency Diesel Generator A and C Forced Paralleling Panel

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

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

**Interaction Effects**

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC) SWEL1- 640**Equipment ID No. 93FPAC Equip. Class Instrumentation and Control PanelsEquipment Description Emergency Diesel Generator A and C Forced Paralleling Panel**Other Adverse Conditions**

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

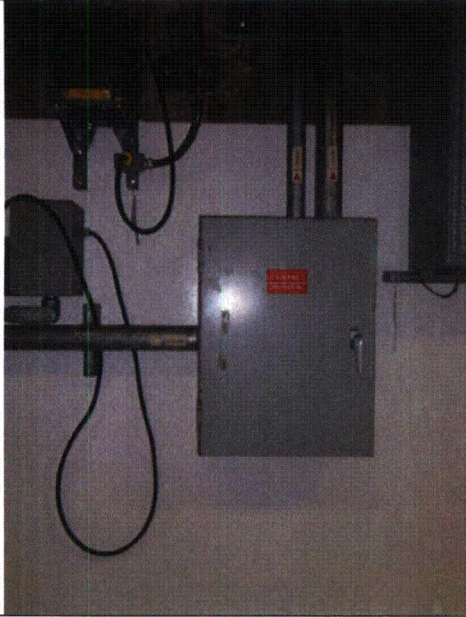
Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)

Conduits 1CK402RC and 1CC421RE off the top of 93FPAC 1st support is 3' 9" above top of box. This exceeds 3' spacing given in IS-E-05. Not a seismic concern low 'g' levels in EDG switchgear at Elevation 272.

Evaluated by: R. Casella /R. CasellaDate: 10/26/12A.G. Porch /A.G. Porch10/26/12

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

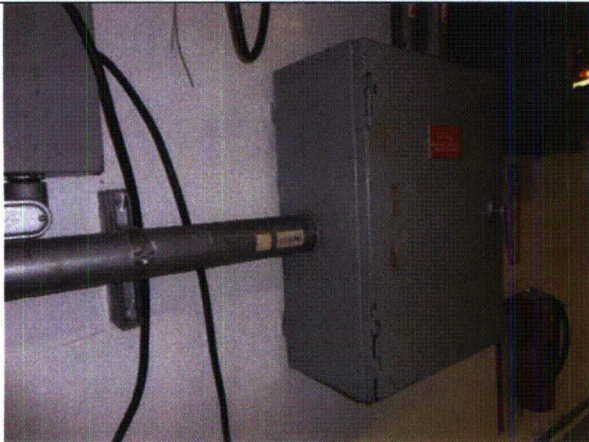
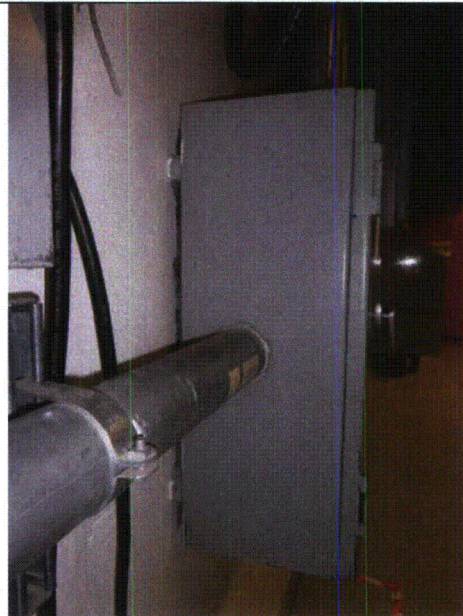
Sheet 4 of 5

Status: Y ☐ N ☐ U ☒**Seismic Walkdown Checklist (SWC)** SWEL1- 640Equipment ID No. 93FPAC Equip. Class Instrumentation and Control PanelsEquipment Description Emergency Diesel Generator A and C Forced Paralleling Panel**Photographs****Note:** 93FPAC**Note:** 93FPAC

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☐ N ☐ U ☒Seismic Walkdown Checklist (SWC) SWEL1- 640Equipment ID No. 93FPAC Equip. Class Instrumentation and Control PanelsEquipment Description Emergency Diesel Generator A and C Forced Paralleling Panel**Note:** 93FPAC**Note:** 93FPAC

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 642Equipment ID No. 93LI-102A Equip. Class 18 - Instrument RacksEquipment Description EDG A Fuel Oil Day Tank A Level IndicatorLocation: Bldg. BR Floor El. 282 Room, Area 12, E

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 642**Equipment ID No. 93LI-102A Equip. Class 18 - Instrument RacksEquipment Description EDG A Fuel Oil Day Tank A Level Indicator

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

**Interaction Effects**

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 642**Equipment ID No. 93LI-102A Equip. Class 18 - Instrument RacksEquipment Description EDG A Fuel Oil Day Tank A Level Indicator**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)

Attached to South side SWEL item 93ECP-A (see photo)

Evaluated by: Rick CasellaDate: 10/29/12Al Porch10/29/12



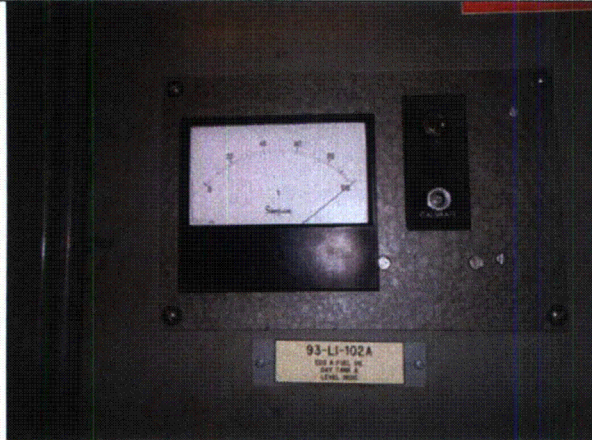
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 642Equipment ID No. 93LI-102A Equip. Class 18 - Instrument RacksEquipment Description EDG A Fuel Oil Day Tank A Level Indicator

## Photographs



Note: 93LI-102A (located on 93ECP-A)

Note:

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-643Equipment ID No. 93LI-102B Equip. Class<sup>1</sup> 18-Instrument RacksEquipment Description EDG B Fuel Oil Day Tank B Level IndicatorLocation: Bldg. EG Floor El. 272' Room, Area EG Room B, Col. 26, Line A4

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 evaluated item in this SWC is not part of the 50% of the SWEL items requiring anchorage configuration verification.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*The four (4) self-tapping screws 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 ☐  
*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 ☒  
*Gage/Instrument is attached to a steel panel.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-643**Equipment ID No. 93LI-102B Equip. Class 18-Instrument RacksEquipment Description EDG B Fuel Oil Day Tank B Level Indicator

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.)  
*Item is not 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?  
*Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.* Y ☒ N ☐ U ☐

**Interaction Effects**

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-643**Equipment ID No. 93LI-102B Equip. Class 18-Instrument RacksEquipment Description EDG B Fuel Oil Day Tank B Level Indicator**Other Adverse Conditions**

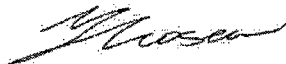
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?

Y ☒ N ☐ U ☐

*No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.*

**Comments** (Additional pages may be added as necessary)

*No additional comments.*

Evaluated by: Harpreet GhumanDate: 09/21/2012Yaroslav Lose

v

09/21/2012

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-643Equipment ID No. 93LI-102B Equip. Class 18-Instrument RacksEquipment Description EDG B Fuel Oil Day Tank B Level Indicator

## Photographs

**Note:** Picture of equipment 93LI-102B.**Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 646Equipment ID No. 93LOE-1A Equip. Class 21 - Tanks and Heat ExchangersEquipment Description EDG A Lube Oil CoolerLocation: Bldg. EG Floor El. 272 Room, Area 24 A4

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 646**Equipment ID No. 93LOE-1A Equip. Class 21 - Tanks and Heat ExchangersEquipment Description EDG A Lube Oil Cooler

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

**Interaction Effects**

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



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 646**Equipment ID No. 93LOE-1A Equip. Class 21 - Tanks and Heat ExchangersEquipment Description EDG A Lube Oil Cooler**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Rick Casella*Rick Casella*Date: 10/29/12*DC, Danich*  
Al Porch10/29/12

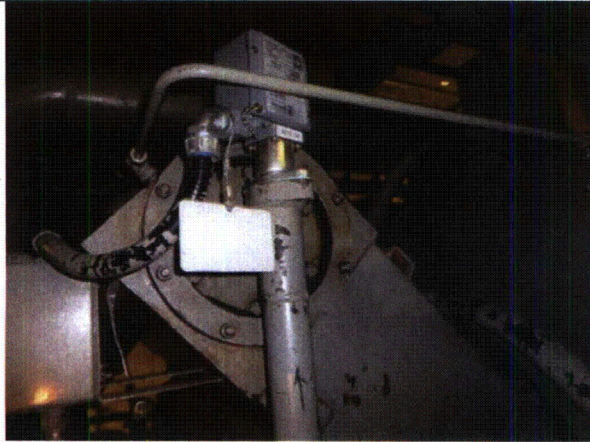
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

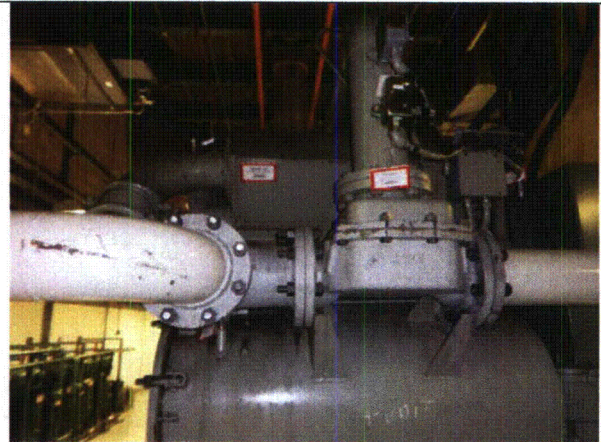
Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 646Equipment ID No. 93LOE-1A Equip. Class 21 - Tanks and Heat ExchangersEquipment Description EDG A Lube Oil Cooler

## Photographs



**Note:** 93LOE-1A (large rectangular component in center of picture)

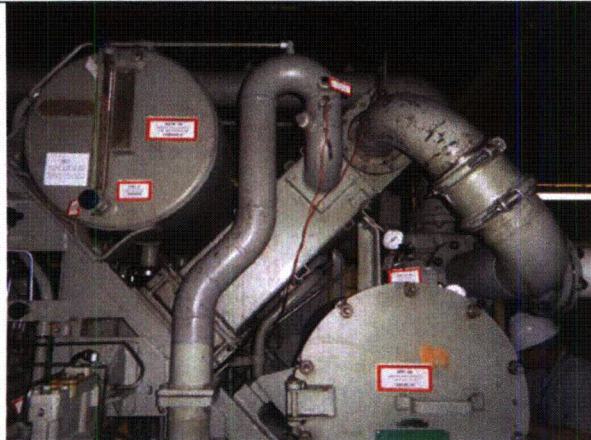


**Note:** 93LOE-1A (long rectangular component at top)

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 646Equipment ID No. 93LOE-1A Equip. Class 21 - Tanks and Heat ExchangersEquipment Description EDG A Lube Oil Cooler

**Note:** 93LOE-1A (it is the rectangular shaped component mounted on angle)

**Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-647**Equipment ID No. 93LOE-1B Equip. Class<sup>1</sup> 21 – Tanks and Heat ExchangersEquipment Description EDG B Lube Oil CoolerLocation: Bldg. EG Floor El. 272 Room, Area C: 26, L: A3

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

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-647**Equipment ID No. 93LOE-1B Equip. Class 21 – Tanks and Heat ExchangersEquipment Description EDG B Lube Oil Cooler

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

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures?  
*Soft targets in this SWEL item are gauges. They are free from any  
impact by nearby equipment.* Y ☒ N ☐ U ☐ N/A ☐
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,  
and masonry block walls not likely to collapse onto the equipment?  
*The north wall of the room, is a masonry block wall but it has been  
enhanced according to DC# D1-96-011, Rev 0 as part IPEEE  
evaluations.* Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage?  
*The attached line have adequate flexibility.* Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free  
of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐  
*The equipment is free of any adverse seismic interaction.*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-647**Equipment ID No. 93LOE-1B Equip. Class 21 – Tanks and Heat ExchangersEquipment Description EDG B Lube Oil Cooler**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Pouria PourghobadiDate: 9/21/12Donald Koberg9/21/12



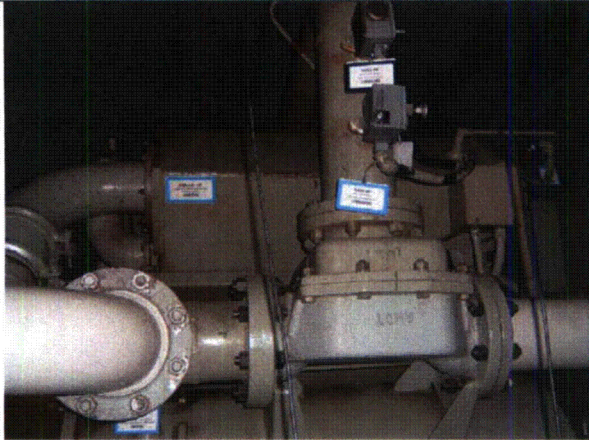
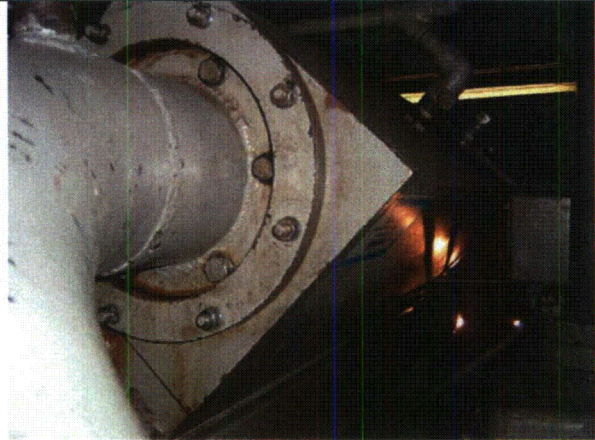
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-647Equipment ID No. 93LOE-1B Equip. Class 21 – Tanks and Heat ExchangersEquipment Description EDG B Lube Oil Cooler

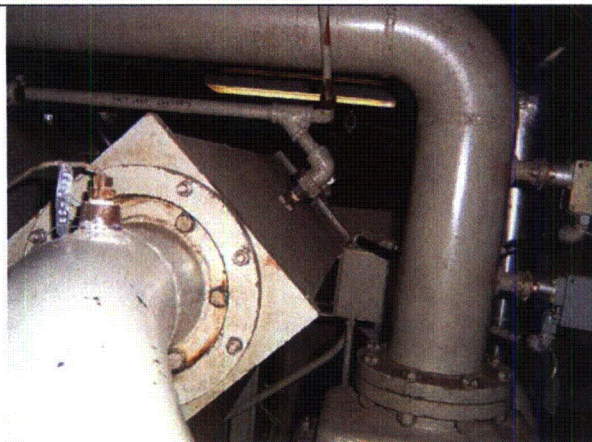
## Photographs

**Note:** 93LOE-1B EDG B Lube Oil Cooler**Note:** 93LOE-1B EDG B Lube Oil Cooler



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-647Equipment ID No. 93LOE-1B Equip. Class 21 – Tanks and Heat ExchangersEquipment Description EDG B Lube Oil Cooler**Note:** 93LOE-1B EDG B Lube Oil Cooler**Note:**

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 658**Equipment ID No. 93P1-C1 Equip. Class Horizontal PumpsEquipment Description Emergency Diesel Generator C Fuel Oil Transfer Pump C1Location: Bldg. EG Floor El. 272' Room, Area 24.5, A4

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 ☐  
The anchorage contains all necessary hardware
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
The anchorage has mild oxidation on its surface. There is no structural concern
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☒ N ☐ U ☐ N/A ☐  
There are no cracks in the concrete near the anchors

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 658**Equipment ID No. 93P1-C1 Equip. Class Horizontal PumpsEquipment Description Emergency Diesel Generator C Fuel Oil Transfer Pump C1

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.)  
(Ref. 1.12-99, associated SEWS document)
6. Based on the above anchorage evaluations, is the anchorage free of  
potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 658**Equipment ID No. 93P1-C1 Equip. Class Horizontal PumpsEquipment Description Emergency Diesel Generator C Fuel Oil Transfer Pump C1**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: R. Casella /Rich CasellaDate: 10/26/12A.G. Porch /A.G. Porch10/26/12

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 658Equipment ID No. 93P1-C1 Equip. Class Horizontal PumpsEquipment Description Emergency Diesel Generator C Fuel Oil Transfer Pump C1

## Photographs



Note: 93P1-C1



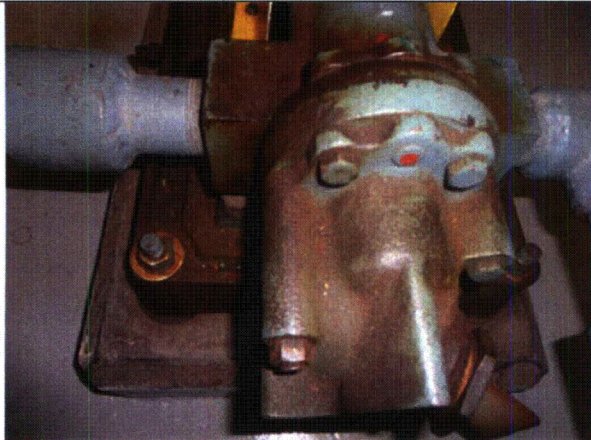
Note: 93P1-C1



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 658Equipment ID No. 93P1-C1 Equip. Class Horizontal PumpsEquipment Description Emergency Diesel Generator C Fuel Oil Transfer Pump C1**Note:** 93P1-C1 anchorage**Note:** 93P1-C1 general area

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-660Equipment ID No. 93P1-D1 Equip. Class<sup>1</sup> 05-Horizontal PumpEquipment Description EDG D Fuel Oil Transfer Pump D1Location: Bldg. EG Floor El. 272' Room, Area EG Room D, Col. 26.5, Line A4

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 one of the 50% of SWEL items requiring anchorage configuration verification.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*The 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 ☐  
*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 ☐  
*The anchorage is free of visible cracks in the concrete near the anchors.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-660**Equipment ID No. 93P1-D1 Equip. Class 05-Horizontal PumpEquipment Description EDG D Fuel Oil Transfer Pump D1

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.)  
*The configuration of the six (6), 1/2" Phillips studs is consistent with the SEWS documentation for equipment 93P1-A1 (same as 93P1-D1), Rev. 0 and drawing 1.12-99, Rev. 4.* Y ☒ N ☐ U ☐ N/A ☐
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?  
*Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.* Y ☒ N ☐ U ☐

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures?  
*There are no soft targets on the equipment.* Y ☐ N ☐ U ☐ N/A ☒
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?  
*The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.* Y ☒ N ☐ U ☐ N/A ☐
9. Do attached lines have adequate flexibility to avoid damage?  
*The lines attached to the SWEL item have adequate flexibility to avoid damage.* Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?  
*Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.* Y ☒ N ☐ U ☐

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

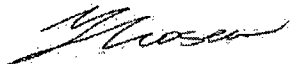
Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-660**Equipment ID No. 93P1-D1 Equip. Class 05-Horizontal PumpEquipment Description EDG D Fuel Oil Transfer Pump D1**Other Adverse Conditions**

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 seismic conditions that could adversely affect the safety functions of the equipment in the area were found.*

**Comments** (Additional pages may be added as necessary)

*No additional comments.*

Evaluated by: Harpreet GhumanDate: 09/21/2012Yaroslav Losev09/21/2012

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-660Equipment ID No. 93P1-D1 Equip. Class 05-Horizontal PumpEquipment Description EDG D Fuel Oil Transfer Pump D1

## Photographs

**Note:** *Picture of equipment 93P1-D1.***Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 662Equipment ID No. 93P-2A Equip. Class 06 - Vertical PumpsEquipment Description EDG A Circulating Lube Oil PumpLocation: Bldg. EG Floor El. 272 Room, Area 24 A4

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 ☒  
*93P-2A (SWEL 1-662) is not anchored. It is connected to its motor which is bolted, but the pump is in-line with no anchorage of its own.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒  
*93P-2A (SWEL 1-662) is not anchored. It is connected to its motor which is bolted, but the pump is in-line with no anchorage of its own.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*No concrete.*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 662**Equipment ID No. 93P-2A Equip. Class 06 - Vertical PumpsEquipment Description EDG A Circulating Lube Oil 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 ☒
6. Based on the above anchorage evaluations, is the anchorage free of  
potentially adverse seismic conditions? Y ☒ N ☐ U ☐  
*93P-2A (SWEL 1-662) is not anchored. It is connected to its motor  
which is bolted, but the pump is in-line with no anchorage of its own.*

**Interaction Effects**

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

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

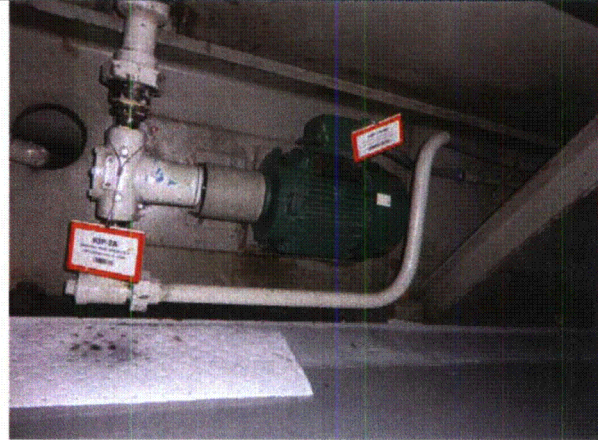
Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 662Equipment ID No. 93P-2A Equip. Class 06 - Vertical PumpsEquipment Description EDG A Circulating Lube Oil PumpOther Adverse Conditions

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

Y ☒ N ☐ U ☐Comments (Additional pages may be added as necessary)*See Photos*Evaluated by: Rick Casella*Rick Casella*Date: 10/29/12*Al Porch**Al Porch*10/29/12

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 662**Equipment ID No. 93P-2A Equip. Class 06 - Vertical PumpsEquipment Description EDG A Circulating Lube Oil Pump**Photographs****Note:** 93P-2A**Note:** 93P-2A



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 662Equipment ID No. 93P-2A Equip. Class 06 - Vertical PumpsEquipment Description EDG A Circulating Lube Oil Pump

Note: 93P-2A

Note:

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-663Equipment ID No. 93P-2B Equip. Class<sup>1</sup> 5 – Horizontal PumpEquipment Description Emergency Diesel Generator B Circulating Lube Oil PumpLocation: Bldg. EG Floor El. 272 Room, Area C: 26, L: A3

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

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-663**Equipment ID No. 93P-2B Equip. Class 5 – Horizontal PumpEquipment Description Emergency Diesel Generator B Circulating Lube Oil 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 ☒
6. Based on the above anchorage evaluations, is the anchorage free of  
potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

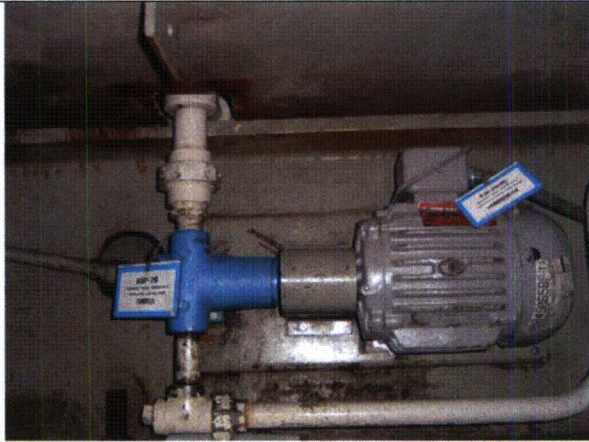
Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-663**Equipment ID No. 93P-2B Equip. Class 5 - Horizontal PumpEquipment Description Emergency Diesel Generator B Circulating Lube Oil Pump**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Donald KobergDate: 9/21/12Pouria Pourghobadi9/21/12

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-663**Equipment ID No. 93P-2B Equip. Class 5 – Horizontal PumpEquipment Description Emergency Diesel Generator B Circulating Lube Oil Pump**Photographs****Note:** 93P-2B Pump**Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 670Equipment ID No. 93P-4A Equip. Class 05 - Horizontal PumpsEquipment Description EDG A Fuel Oil PumpLocation: Bldg. EG Floor El. 272 Room, Area 24, A4

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 ☒  
*Dwg not available under 93P-3A ( Not used for anchorage )*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*Anchorage was free of bent, broken, missing and loose hardware.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*No corrosion was evident*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*There is no concrete*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 670**Equipment ID No. 93P-4A Equip. Class 05 - Horizontal PumpsEquipment Description EDG A Fuel Oil 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 ☒
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 seismic conditions.*

**Interaction Effects**

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



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC)** SWEL1- 670Equipment ID No. 93P-4A Equip. Class 05 - Horizontal PumpsEquipment Description EDG A Fuel Oil Pump**Other Adverse Conditions**

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

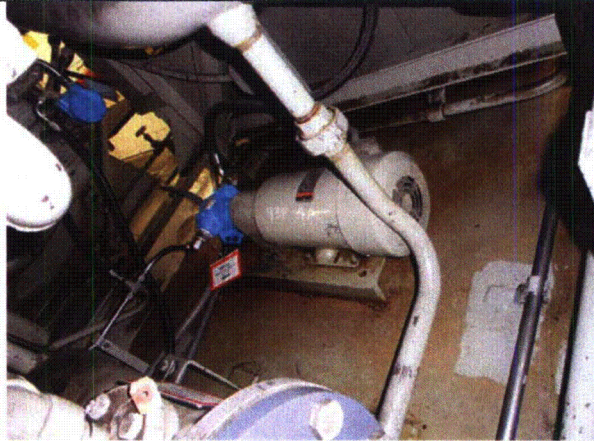
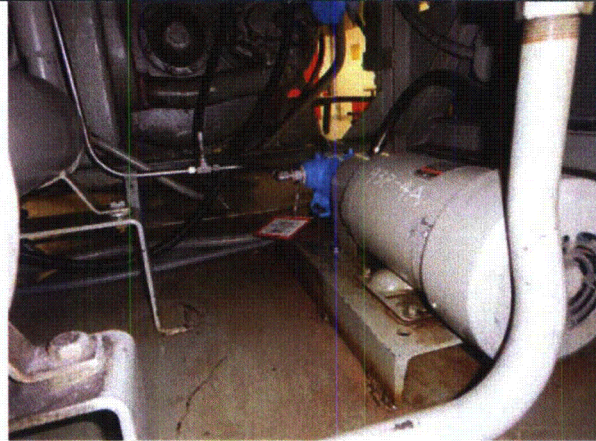
Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)

(Photos)

Evaluated by: Rick Casella*Rick Casella*Date: 10/29/12*Al Porch*Al Porch10/29/12

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 670**Equipment ID No. 93P-4A Equip. Class 05 - Horizontal PumpsEquipment Description EDG A Fuel Oil Pump**Photographs****Note:** 93P-4A**Note:** 93P-4A

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 670Equipment ID No. 93P-4A Equip. Class 05 - Horizontal PumpsEquipment Description EDG A Fuel Oil Pump

**Note:** 93P-4A (could not get any closer picture of anchorage)

**Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-671Equipment ID No. 93P-4B Equip. Class<sup>1</sup> 5 – Horizontal PumpsEquipment Description EDG B Fuel Oil PumpLocation: Bldg. EG Floor El. 272 Room, Area C: 26.5, L: A4

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 ☐  
*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 ☐  
*The anchorage is free of corrosion.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*No concrete. The equipment is mounted on the generator skid.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-671**Equipment ID No. 93P-4B Equip. Class <sup>2</sup> 5 – Horizontal PumpsEquipment Description EDG B Fuel Oil Pump

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

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

**Interaction Effects**

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

<sup>2</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-671Equipment ID No. 93P-4B Equip. Class <sup>3</sup> 5 – Horizontal PumpsEquipment Description EDG B Fuel Oil Pump**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)

*Pump missing equipment tag. The issue was brought to site personnel attention immediately.*

Evaluated by: Pouria PourghobadiDate: 9/21/12Donald Koberg9/21/12

<sup>3</sup> Enter the equipment class name from Appendix B: Classes of Equipment.



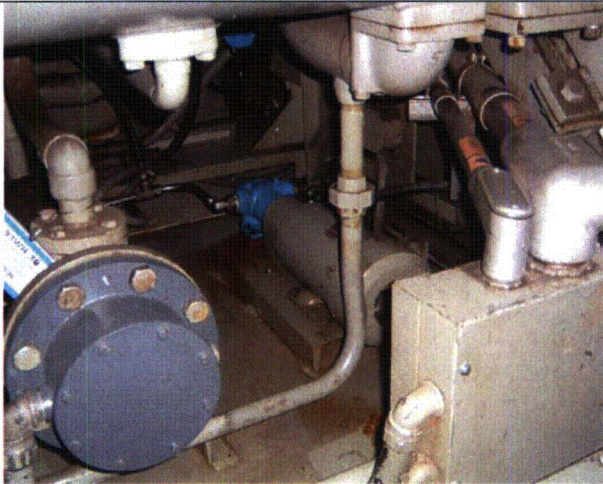
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-671Equipment ID No. 93P-4B Equip. Class 4 5 – Horizontal PumpsEquipment Description EDG B Fuel Oil Pump

## Photographs

Note: EDG B Fuel Oil Pump

Note:

<sup>4</sup> Enter the equipment class name from Appendix B: Classes of Equipment.



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 674Equipment ID No. 93TK-1A Equip. Class 21 - Tanks and Heat ExchangersEquipment Description EDG A Jacket Water Expansion TankLocation: Bldg. EG Floor El. 272 Room, Area 24, A4

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 ☐  
*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 ☐  
*No corrosion evident.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*There is no concrete.*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 674**Equipment ID No. 93TK-1A Equip. Class 21 - Tanks and Heat Exchangers

Equipment Description \_\_\_\_\_

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

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

**Interaction Effects**

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

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 674Equipment ID No. 93TK-1A Equip. Class 21 - Tanks and Heat Exchangers

Equipment Description \_\_\_\_\_

**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)

*Tank well supported; no interaction effects noted. Mounted on diesel skid / frame.*

Evaluated by: Rick CasellaDate: 10/29/12Al Porch10/29/12

## ATTACHMENT 9.6

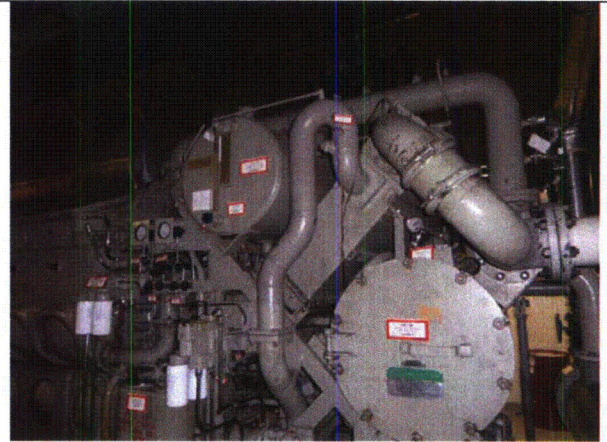
## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 674Equipment ID No. 93TK-1A Equip. Class 21 - Tanks and Heat Exchangers

Equipment Description \_\_\_\_\_

## Photographs

**Note:** 93TK-1A**Note:** 93TK-1A shown on EDG A unit

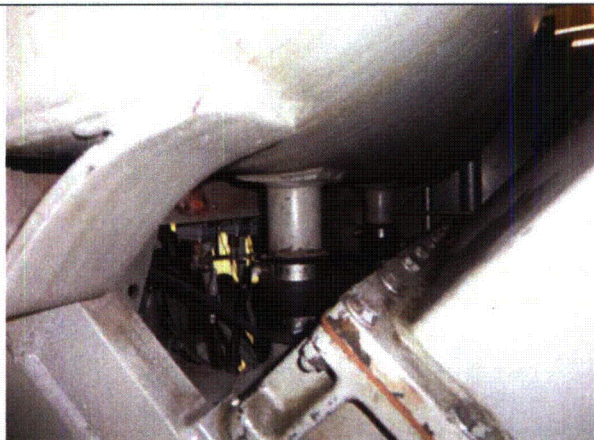
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 674Equipment ID No. 93TK-1A Equip. Class 21 - Tanks and Heat Exchangers

Equipment Description \_\_\_\_\_

**Note:** 93TK-1A underside**Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-675Equipment ID No. 93TK-1B Equip. Class<sup>1</sup> 21 – Tanks and Heat ExchangersEquipment Description Emergency Diesel Generator B Jacket Water Expansion TankLocation: Bldg. EG Floor El. 272 Room, Area Col. 26, Line A4

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 ☐  
*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 ☐  
*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 ☒

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-675**Equipment ID No. 93TK-1B Equip. Class <sup>2</sup> 21 – Tanks and Heat ExchangersEquipment Description Emergency Diesel Generator B Jacket Water Expansion 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 ☒
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

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

<sup>2</sup> Enter the equipment class name from Appendix B: Classes of Equipment.



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-675**Equipment ID No. 93TK-1B Equip. Class 3 21 – Tanks and Heat ExchangersEquipment Description Emergency Diesel Generator B Jacket Water Expansion Tank**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Pouria PourghobadiDate: 9/21/12Donald Koberg9/21/12

<sup>3</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

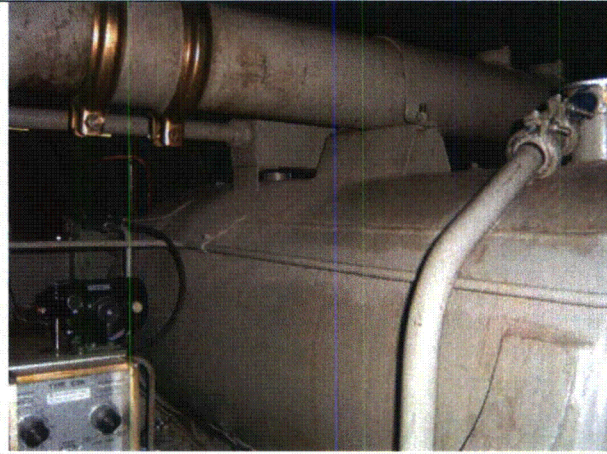
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-675Equipment ID No. 93TK-1B Equip. Class 4 21 – Tanks and Heat ExchangersEquipment Description Emergency Diesel Generator B Jacket Water Expansion Tank

## Photographs

**Note:** 93TK-1B Front view**Note:** 93TK-1B Side view<sup>4</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 682Equipment ID No. 93TK-7A Equip. Class 21 - Tanks and Heat ExchangersEquipment Description EDG A Fuel Oil Day TankLocation: Bldg. EG Floor El. 272 Room, Area 24,A4

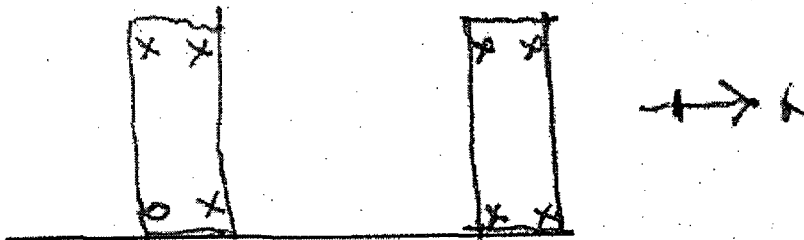
Manufacturer, Model, Etc. (optional but recommended) \_\_\_\_\_

## 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 ☐  
*Anchorage contains all necessary hardware*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*Anchorage contains no corrosion*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☒ U ☐ N/A ☐  
*Hairline cracks ( @ x ) at anchors primarily at top of concrete pedestal (refer to 93TK-7B and CR-JAF-2012-06090)*



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 682**Equipment ID No. 93TK-7A Equip. Class 21 - Tanks and Heat ExchangersEquipment Description EDG A Fuel Oil Day Tank

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
(Ref. 1.12-128, associated SEWS document)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

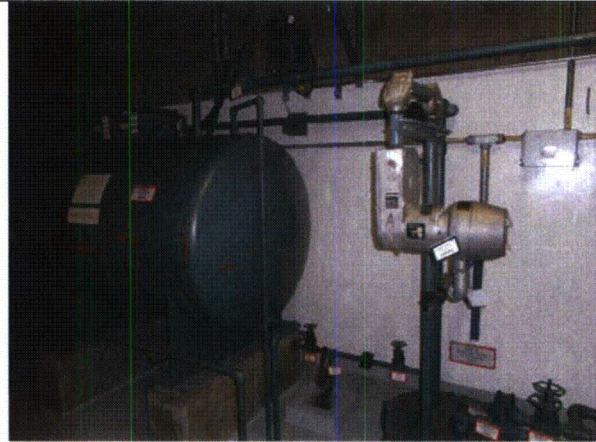
Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1- 682**Equipment ID No. 93TK-7A Equip. Class 21 - Tanks and Heat ExchangersEquipment Description EDG A Fuel Oil Day Tank**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)NoneEvaluated by: Rick CasellaRick CasellaDate: 10/29/12Al PorchAl Porch10/29/12

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC)** SWEL1- 682Equipment ID No. 93TK-7A Equip. Class 21 - Tanks and Heat ExchangersEquipment Description EDG A Fuel Oil Day Tank**Photographs****Note:** 93TK-7A**Note:** 93TK-7A



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 682Equipment ID No. 93TK-7A Equip. Class 21 - Tanks and Heat ExchangersEquipment Description EDG A Fuel Oil Day Tank

**Note:** 93TK-7A anchor bolt (note hairline crack in concrete right of bolt centerline)

**Note:**



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-683Equipment ID No. 93TK-7B Equip. Class<sup>1</sup> 21-Tanks & Heat ExchangersEquipment Description Emergency Diesel Generator B Fuel Oil Day TankLocation: Bldg. EG Floor El. 272 Room, Area EDG B Room, Column 26.5 Line A4Manufacturer, Model, Etc. (optional but recommended) T312 Trinity Equip Corp

## Instructions for Completing Checklist

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

## Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y ☒ N ☐  
*The anchorage configuration was verified and found to be acceptable.  
This item is part of the 50% of SWEL items.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*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 ☐  
*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 ☐  
*Multiple visible hairline cracks on the foundation, from bottom of floor elevation through the center line of 7/8" bolts/anchors on both saddles. On the North saddle West end there is noticeable damage to the concrete foundation due to interaction of the concrete wall and the Fuel Day Tank Drain Line. The resolution to this deficiency is tracked by CR-JAF-2012-06090.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-683Equipment ID No. 93TK-7B Equip. Class 21-Tanks & Heat ExchangersEquipment Description Emergency Diesel Generator B Fuel Oil Day Tank

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

*The anchorage configuration is consistent with DWG. No. 1.12-128 and SEWS for 93TK-7A, which has the same configuration as 93TK-7B.*

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

*Cracks in concrete pedestal at the anchorage and damage by the fuel day tank drain line jeopardizes the safety of the tank's support. The resolution to this deficiency is tracked by CR-JAF-2012-06090.*

Interaction Effects

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

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

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

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC)** SWEL1-683Equipment ID No. 93TK-7B Equip. Class 21-Tanks & Heat ExchangersEquipment Description Emergency Diesel Generator B Fuel Oil Day Tank**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Pouria PourghobadiDate: 01/21/2012Donald Kolberg01/21/2012

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-683**Equipment ID No. 93TK-7B Equip. Class 21-Tanks & Heat ExchangersEquipment Description Emergency Diesel Generator B Fuel Oil Day Tank**Photographs****Note:** Diesel Fuel Day Tan 93TK-7B**Note:** Damage to north concrete pedestal by the Diesel Fuel Day Tank Drain Line (Valve 93EDG-711B)

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 686Equipment ID No. 93WE-1C Equip. Class 21 - Tanks and Heat ExchangersEquipment Description Emergency Diesel Generator C Jacket Water Heat ExchangerLocation: Bldg. EG Floor El. 272 Room, Area Col. 25 line A4,AZ

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 has all necessary hardware*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*The anchorage has all necessary hardware*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☒ N ☐ U ☐ N/A ☐  
*The anchorage shows no signs of any type of corrosion*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*There are no cracks in the concrete near the anchors*

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 686Equipment ID No. 93WE-1C Equip. Class 21 - Tanks and Heat ExchangersEquipment Description Emergency Diesel Generator C Jacket Water Heat Exchanger

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.)  
(Ref. 1.12-35, 1.12-101, associated SEWS document)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐  
*46EXJ-9C, 10C are epoxy soft targets. No credible seismic interactions*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC)** SWEL1- 686Equipment ID No. 93WE-1C Equip. Class 21 - Tanks and Heat ExchangersEquipment Description Emergency Diesel Generator C Jacket Water 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 ☐

**Comments** (Additional pages may be added as necessary)Evaluated by: R. Casella /Rich CasellaDate: 10/26/12A.G. Porch /A.G. Porch10/26/12



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 686Equipment ID No. 93WE-1C Equip. Class 21 - Tanks and Heat ExchangersEquipment Description Emergency Diesel Generator C Jacket Water Heat Exchanger

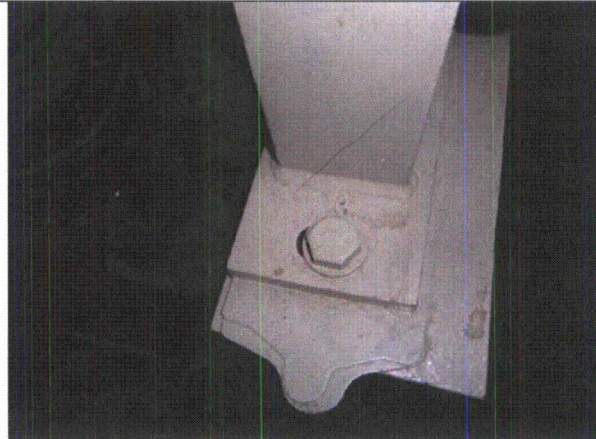
## Photographs

**Note:** 93WE-1C (looking East)**Note:** 93WE-1C

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1- 686Equipment ID No. 93WE-1C Equip. Class 21 - Tanks and Heat ExchangersEquipment Description Emergency Diesel Generator C Jacket Water Heat Exchanger**Note:** 93WE-1C Anchorage – Fixed Foot**Note:** 93WE-1C Anchorage – Sliding Foot

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-687Equipment ID No. 93WE-ID Equip. Class<sup>1</sup> 21 – Heat ExchangersEquipment Description Emergency Diesel Generator D Jacket Water Heat ExchangerLocation: Bldg. EG Floor El. 272 Room, Area EG Room D C: 27, L: A4

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 ☐  
*The four (4) bolts 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 ☐  
*The anchorage is free of any corrosion.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-687Equipment ID No. 93WE-ID Equip. Class 21 – Heat ExchangersEquipment Description Emergency Diesel Generator D Jacket Water Heat Exchanger

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.)  
*Item is not one of the 50% for which an anchorage configuration verification is required.*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐  
*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 ☒  
*This component does not have soft targets.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐  
*Masonry block wall divides the Delta and Bravo train in EDG. Modifications were made to enhance the walls as part of IE Bulletin 80-11. (Ref. Calculation No. JAF-CALC-EDG-02153 Rev 0) and IPEEE evaluations D1-96-011 Rev 0.*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐  
*The 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 ☐  
*The equipment is free of potentially adverse seismic interaction effects.*

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-687Equipment ID No. 93WE-ID Equip. Class 21 - Heat ExchangersEquipment Description Emergency Diesel Generator D Jacket Water 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 ☐

**Comments** (Additional pages may be added as necessary)Evaluated by: Pouria PourghobadiDate: 09/21/2012Donald Koberg09/21/2012



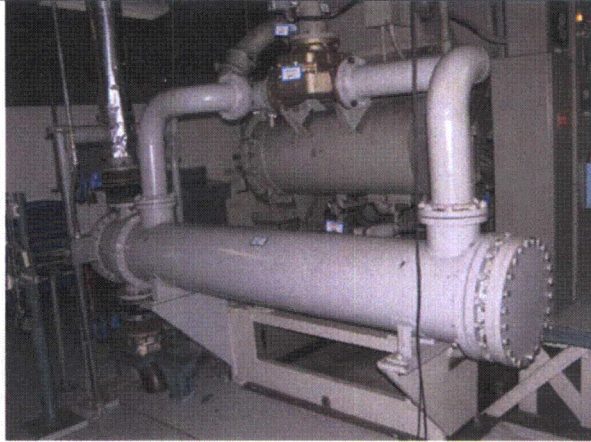
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-687Equipment ID No. 93WE-ID Equip. Class 21 – Heat ExchangersEquipment Description Emergency Diesel Generator D Jacket Water Heat Exchanger

## Photographs

Note: 93WE-ID

Note:

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-690Equipment ID No. IR-25-01 Equip. Class<sup>1</sup> 18 – Instrument RacksEquipment Description Core Spray System Channel A RackLocation: Bldg. RB Floor El. 242.8 Room, Area Col. 4, Line A

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 ☐  
*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 ☐  
*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 ☒  
*The component is not anchored in concrete.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.



**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-690**Equipment ID No. IR-25-01 Equip. Class 18 – Instrument RacksEquipment Description Core Spray System Channel A Rack

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

*The rack is bolted to steel plates which are welded to an I-beam. The spacing between the anchors is 15 inches. They are not 18 inches as shown 7.70-81D due to interference with an I-beam.*

*The resolution to this deficiency it tracked through CR-2012-JAF-08186.*

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

**Interaction Effects**

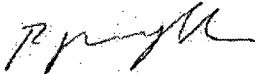
7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*The soft targets are free from impact by nearby equipment and structures.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-690**Equipment ID No. IR-25-01 Equip. Class 18 – Instrument RacksEquipment Description Core Spray System Channel A Rack**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Donald KobergDate: 9/25/12Pouria Pourghobadi9/25/12

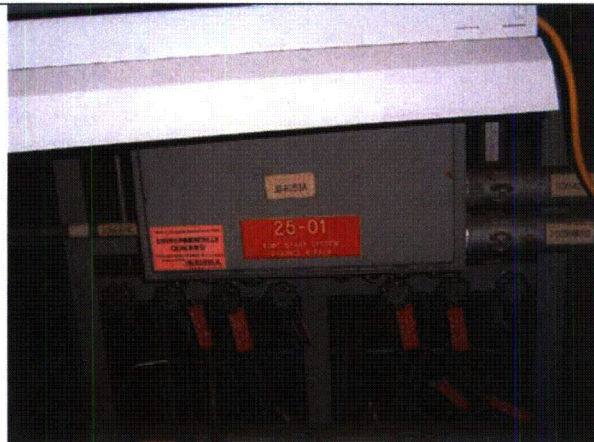
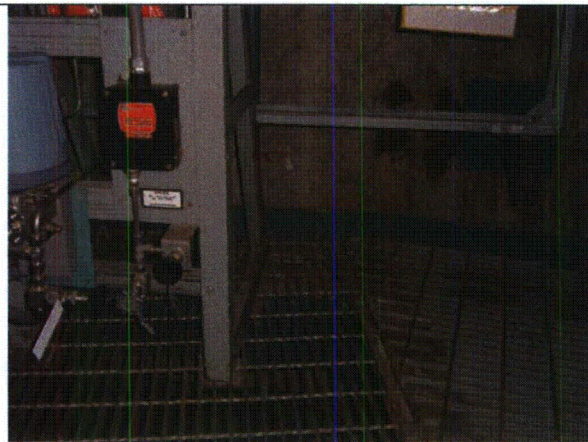
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-690Equipment ID No. IR-25-01 Equip. Class 18 – Instrument RacksEquipment Description Core Spray System Channel A Rack

## Photographs

**Note:** *Instrument Panel***Note:** *Rack Anchorage*

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL1-696Equipment ID No. IR-25-62 Equip. Class<sup>1</sup> 18 – Instrument RacksEquipment Description RHR Channel B Instrument RackLocation: Bldg. RB Floor El. 242 Room, Area Col 3 Line D

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 ☐  
*Anchorage configuration verification is required.*
2. Is the anchorage free of bent, broken, missing or loose hardware? Y ☒ N ☐ U ☐ N/A ☐  
*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 ☐  
*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 ☒  
*The anchorage is not embedded in concrete.*

<sup>1</sup> Enter the equipment class name from Appendix B: Classes of Equipment.

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-696**Equipment ID No. IR-25-62 Equip. Class 18 – Instrument RacksEquipment Description RHR Channel B Instrument Rack

5. Is the anchorage configuration consistent with plant documentation? Y ☒ N ☐ U ☐ N/A ☐  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*The anchorage configuration is consistent with SEWS for IR-25-62, DWG. No. 7.70-81*
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y ☒ N ☐ U ☐

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*The soft targets are free from impact by nearby equipments and 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 overhead equipments, distribution systems, ceiling tiles and lighting and masonry walls.*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐  
*The 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 ☐  
*The equipment is free of potentially adverse seismic interaction effects.*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

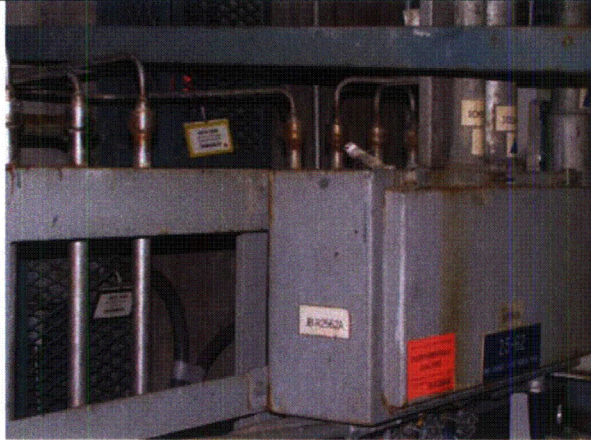
Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC)** SWEL1-696Equipment ID No. IR-25-62 Equip. Class 18 – Instrument RacksEquipment Description RHR Channel B Instrument Rack**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)Evaluated by: Donald KobergDate: 9/23/12Pouria Pourghobadi9/23/12

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL1-696**Equipment ID No. IR-25-62 Equip. Class 18 – Instrument RacksEquipment Description RHR Channel B Instrument Rack**Photographs****Note:** IR-25-62 Instrument rack**Note:**



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-001Equipment ID No. 19TK-8A Equip. Class Tanks and heat exchangersEquipment Description Fuel pool cooling skimmer surge tank ALocation: Bldg. RB Floor El. 344 Room, Area Col 4 Line D

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

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL2-001**Equipment ID No. 19TK-8A Equip. Class Tanks and heat exchangersEquipment Description Fuel pool cooling skimmer surge tank A

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

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

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*No soft targets on 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 ☐

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐  
*The tank is structurally robust. It is supported at El. 369'. Any minimal lateral tank movement will not impact any SSCs*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-001Equipment ID No. 19TK-8A Equip. Class Tanks and heat exchangersEquipment Description Fuel pool cooling skimmer surge tank A**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)Evaluated by: Rick CasellaDate: 9-28-12Alan Porch9-28-12

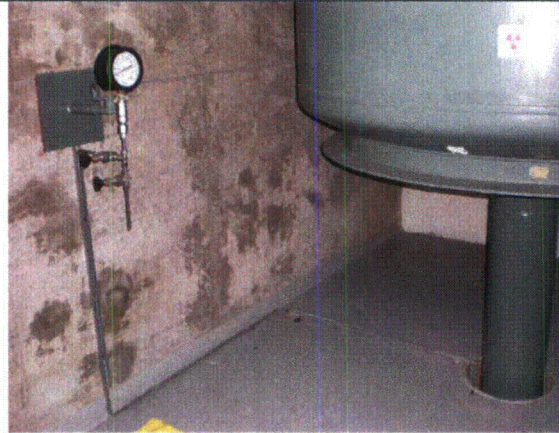
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-001Equipment ID No. 19TK-8A Equip. Class Tanks and heat exchangersEquipment Description Fuel pool cooling skimmer surge tank A

## Photographs

**Note:** 19TK-8A with anchorage at ceiling.

19TK-8A at base

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-003Equipment ID No. 19LS-65 Equip. Class 20. Instrumentation and Control PanelsEquipment Description Skimmer surge tank A high level switchLocation: Bldg. RB Floor El. 344 Room, Area Col 4 Line D

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 ☒  
*SWEL item is not independently supported; it is attached to a pipe stand running vertically which is supported at the top and bottom.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒  
*SWEL item is not independently supported; it is attached to a pipe stand running vertically which is supported at the top and bottom.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*SWEL item is not independently supported; it is attached to a pipe stand running vertically which is supported at the top and bottom.*

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-003Equipment ID No. 19LS-65 Equip. Class 20. Instrumentation and Control PanelsEquipment Description Skimmer surge tank A high level switch

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*Flexible conduit is a soft target near item. There are no credible seismic interactions.*
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 light in the room is located several feet from SWEL item. No interaction likely.*
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐  
*Conduit attached to the wall and has a flexible connection at the swell item. SWEL item is not independently supported, it is attached to a pipe stand running vertically which is supported at the top and bottom.*
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC)** SWEL2-003Equipment ID No. 19LS-65 Equip. Class 20. Instrumentation and Control PanelsEquipment Description Skimmer surge tank A high level switch**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)*No additional comments.*Evaluated by: Rick Casella*Rick Casella*Date: 9-28-12*DC, Danch*Alan Porch9-28-12



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-003Equipment ID No. 19LS-65 Equip. Class 20. Instrumentation and Control PanelsEquipment Description Skimmer surge tank A high level switch

## Photographs



Note: 19LS-65

Note:

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-004Equipment ID No. 19LS-67 Equip. Class 20. Instrumentation and Control PanelsEquipment Description Skimmer surge tank A low-low level switchLocation: Bldg. RB Floor El. 347 Room, Area Col 4 Line D

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 ☒  
*The item is not supported independently.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒  
*The item is not supported independently.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*The item is not supported independently. No concrete.*

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-004Equipment ID No. 19LS-67 Equip. Class 20. Instrumentation and Control PanelsEquipment Description Skimmer surge tank A low-low level switch

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

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

Interaction Effects

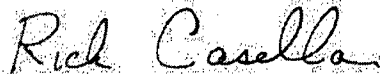
7. Are soft targets free from impact by nearby equipment or structures? Y ☒ N ☐ U ☐ N/A ☐  
*Flexible conduit is a soft target near item. There are no credible seismic interactions.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y ☐ N ☐ U ☐ N/A ☒
9. Do attached lines have adequate flexibility to avoid damage? Y ☒ N ☐ U ☐ N/A ☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC)** SWEL2-004Equipment ID No. 19LS-67 Equip. Class 20. Instrumentation and Control PanelsEquipment Description Skimmer surge tank A low-low level switch**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)Evaluated by: Rick CasellaDate: 9-28-12Alan Porch9-28-12

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-004Equipment ID No. 19LS-67 Equip. Class 20. Instrumentation and Control PanelsEquipment Description Skimmer surge tank A low-low level switch

## Photographs



Note: 19LS-67

Note:

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-005Equipment ID No. 19FPC-33 Equip. Class 07-Pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B to cndsr hotwell isol valve inlet isolLocation: Bldg. RB Floor El. 326.9 Room, Area Col 3 line R

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 ☒  
*The item is an inline valve*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒  
*The item is an inline valve*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*The item is an inline valve*

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ATTACHMENT 9.6

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SEISMIC WALKDOWN CHECKLIST FORM

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Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL2-005**Equipment ID No. 19FPC-33 Equip. Class 07-Pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B to cndsr hotwell isol valve inlet isol

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

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**Interaction Effects**

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



## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-005Equipment ID No. 19FPC-33 Equip. Class 07-Pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B to cndsr hotwell isol valve inlet isol**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)*No additional comments.*Evaluated by: Rick Casella*Rick Casella*Date: 9-28-12*Alan Porch*Alan Porch9-28-12

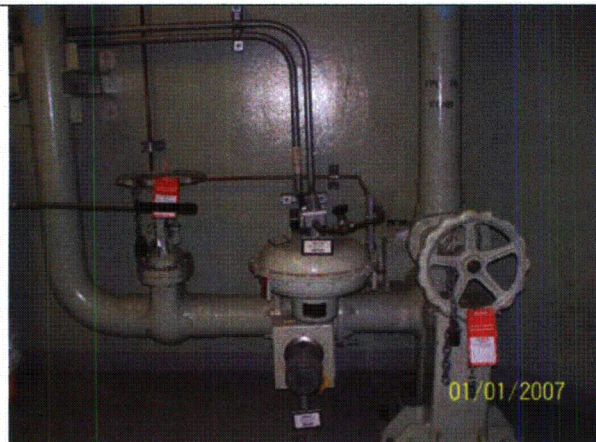
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-005Equipment ID No. 19FPC-33 Equip. Class 07- Pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B to cndsr hotwell isol valve inlet isol

## Photographs



**Note:** 19FPC-33 valve shown on left side of photo. (The date provided on the bottom right corner is not correct the date that the picture was taken. Malfunction with camera setting)



**Note:** 19FPC-33 (The date provided on the bottom right corner is not correct the date that the picture was taken. Malfunction with camera setting)

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-006Equipment ID No. 19AOV-09 Equip. Class 7. pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B to cndsr hotwell isol valveLocation: Bldg. RB Floor El. 326.9 Room, Area Col 3 line R

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 ☒  
*The item is an inline valve*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒  
*The item is an inline valve*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*The item is an inline valve*

**ATTACHMENT 9.6****SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL2-006**Equipment ID No. 19AOV-09 Equip. Class 7. pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B to cndsr hotwell isol 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 ☒
6. Based on the above anchorage evaluations, is the anchorage free of  
potentially adverse seismic conditions? Y ☒ N ☐ U ☐  
N/A

**Interaction Effects**

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

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-006Equipment ID No. 19AOV-09 Equip. Class 7. pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B to cndsr hotwell isol valve**Other Adverse Conditions**

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

**Comments** (Additional pages may be added as necessary)*No additional comments.*Evaluated by: Rick CasellaDate: 9-28-12Alan Porch9-28-12

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-006Equipment ID No. 19AOV-09 Equip. Class 7. pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B to cndsr hotwell isol valve

## Photographs



**Note:** 19AOV-09 valve shown in center of picture. (The date provided on the bottom right corner is not correct the date that the picture was taken. Malfunction with camera setting)

**Note:**

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-007Equipment ID No. 19FPC-01 Equip. Class 7. Pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B drain valveLocation: Bldg. RB Floor El. 326 Room, Area Col 3 line T

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 ☒  
*The item is an inline valve.*
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y ☐ N ☐ U ☐ N/A ☒  
*The item is an inline valve.*
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y ☐ N ☐ U ☐ N/A ☒  
*The item is an inline valve.*



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ATTACHMENT 9.6

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SEISMIC WALKDOWN CHECKLIST FORM

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Sheet 2 of 4

Status: Y ☒ N ☐ U ☐**Seismic Walkdown Checklist (SWC) SWEL2-007**Equipment ID No. 19FPC-01 Equip. Class 7. Pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B drain 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 ☒
6. Based on the above anchorage evaluations, is the anchorage free of  
potentially adverse seismic conditions? Y ☒ N ☐ U ☐

---

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Y ☐ N ☐ U ☐ N/A ☒
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,  
and masonry block walls not likely to collapse onto the equipment? Y ☒ N ☐ U ☐ N/A ☐  
*None overhead. Fluorescent light directly south will not damage hand  
wheel if it fails.*
9. Do attached lines have adequate flexibility to avoid damage? Y ☐ N ☐ U ☐ N/A ☒  
*No line attached.*
10. Based on the above seismic interaction evaluations, is equipment free  
of potentially adverse seismic interaction effects? Y ☒ N ☐ U ☐

## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-007Equipment ID No. 19FPC-01 Equip. Class 7. Pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B drain valve**Other Adverse Conditions**

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

Y ☒ N ☐ U ☐**Comments** (Additional pages may be added as necessary)*No additional comments.*Evaluated by: Rick Casella*Rick Casella*Date: 9-28-12*A. G. Danch*Alan Porch9-28-12

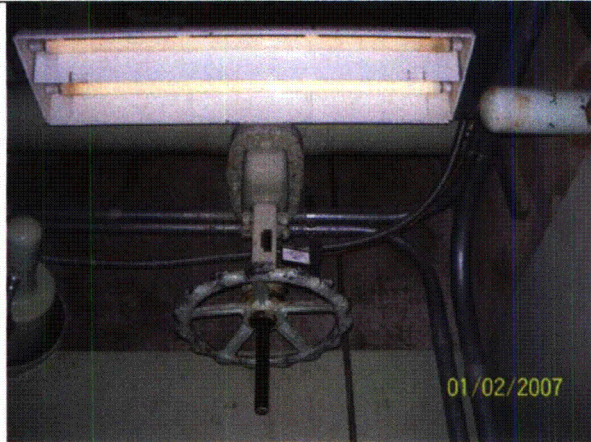
## ATTACHMENT 9.6

## SEISMIC WALKDOWN CHECKLIST FORM

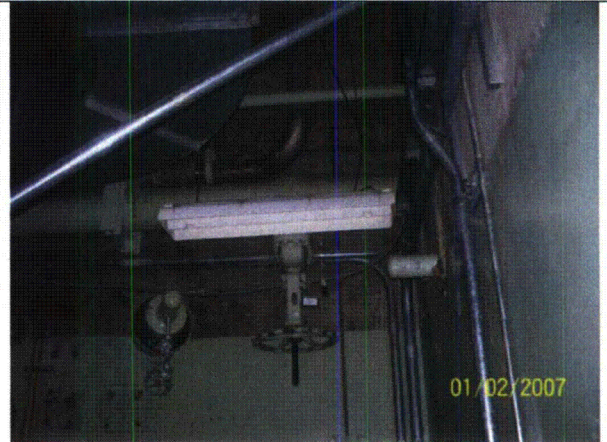
Sheet 4 of 4

Status: Y ☒ N ☐ U ☐Seismic Walkdown Checklist (SWC) SWEL2-007Equipment ID No. 19FPC-01 Equip. Class 7. Pneumatic-operated valvesEquipment Description Skimmer surge tanks A & B drain valve

## Photographs



**Note:** 19FPC-01 (The date provided on the bottom right corner is not correct the date that the picture was taken. Malfunction with camera setting)



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