

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1-025**

Equipment ID No. CV-0736A Equip. Class<sup>1</sup> 7 - PNEUMATIC-OPERATED VALVES

Equipment Description E-50B FLOW CONTROL

Location: Bldg. AUX Floor El. 570 Room, Area 005

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

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1-025

Equipment ID No. CV-0736A Equip. Class<sup>1</sup> 7 - PNEUMATIC-OPERATED VALVES

Equipment Description E-50B FLOW CONTROL

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

6. Based on the above anchorage evaluations, is the anchorage free of  
potentially adverse seismic conditions? Y  N  U   
*N/A In-Line Valve*

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- 025

Equipment ID No. CV-0736A Equip. Class<sup>1</sup> 7 - PNEUMATIC-OPERATED VALVES

Equipment Description E-50B FLOW CONTROL

**Other Adverse Conditions**

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

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

Evaluated by: Alex Smerch  Date: 10/09/2012

Paul Klein  10/09/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 025

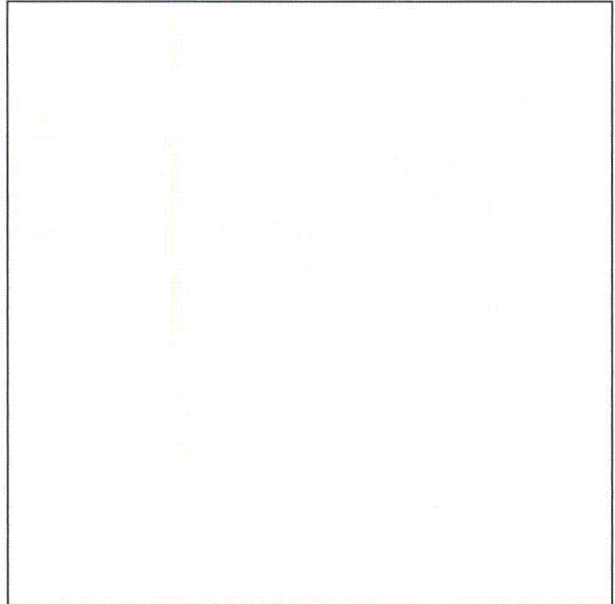
Equipment ID No. CV-0736A Equip. Class<sup>1</sup> 7 - PNEUMATIC-OPERATED VALVES

Equipment Description E-50B FLOW CONTROL

Photographs



Note: CV-0736A



Note:

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 026**

Equipment ID No. CV-0737A Equip. Class<sup>1</sup> 7 - PNEUMATIC-OPERATED VALVES

Equipment Description E-50A FLOW CONTROL

Location: Bldg. AUX Floor El. 570 Room, Area 005

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

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 026

Equipment ID No. CV-0737A Equip. Class<sup>1</sup> 7 - PNEUMATIC-OPERATED VALVES

Equipment Description E-50A FLOW CONTROL

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

6. Based on the above anchorage evaluations, is the anchorage free of  
potentially adverse seismic conditions? Y  N  U   
*N/A In-Line Valve*

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- 026

Equipment ID No. CV-0737A Equip. Class<sup>1</sup> 7 - PNEUMATIC-OPERATED VALVES

Equipment Description E-50A FLOW CONTROL

**Other Adverse Conditions**

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

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

Evaluated by: Alex Smerch  Date: 10/09/2012

Paul Klein  10/09/2012

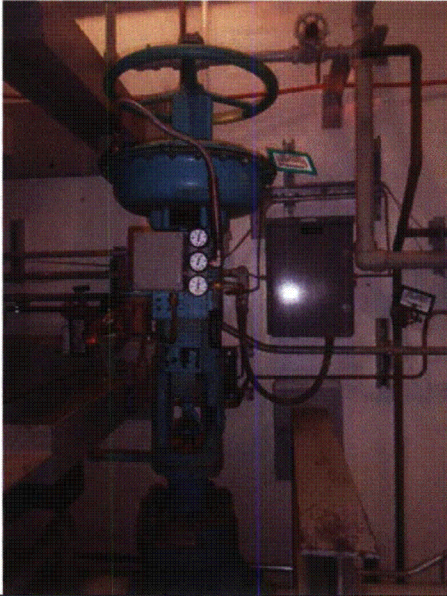
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 026

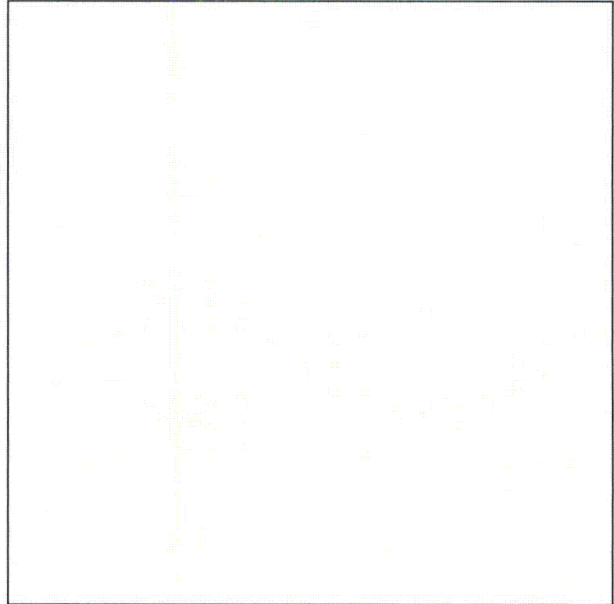
Equipment ID No. CV-0737A Equip. Class<sup>1</sup> 7 - PNEUMATIC-OPERATED VALVES

Equipment Description E-50A FLOW CONTROL

**Photographs**



**Note:** CV-0737A



**Note:**



Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 027**

Equipment ID No. CV-0861 Equip. Class<sup>1</sup> 7, PNEUMATIC-OPERATED VALVES

Equipment Description CAC VHX-1 HI CAPACITY SW OUTLET

Location: Bldg. CONT Floor El. 590 Room, Area 143

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 EPRI 1025286, 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- 027

Equipment ID No. CV-0861 Equip. Class<sup>1</sup> 7, PNEUMATIC-OPERATED VALVES

Equipment Description CAC VHX-1 HI CAPACITY SW OUTLET

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- 027

Equipment ID No. CV-0861 Equip. Class<sup>1</sup> 7, PNEUMATIC-OPERATED VALVES

Equipment Description CAC VHX-1 HI CAPACITY SW OUTLET

**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)

*Item is inaccessible and will be deferred*

Evaluated by: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1-027

Equipment ID No. CV-0861 Equip. Class<sup>1</sup> 7, PNEUMATIC-OPERATED VALVES

Equipment Description CAC VHX-1 HI CAPACITY SW OUTLET

Photographs

<b>Note:</b>

<b>Note:</b>

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 027**

Equipment ID No. CV-0861 Equip. Class<sup>1</sup> 7, PNEUMATIC-OPERATED VALVES

Equipment Description CAC VHX-1 HI CAPACITY SW OUTLET

<b>Note:</b>	<b>Note:</b>

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 028**

Equipment ID No. CV-1359 Equip. Class<sup>1</sup> 7, PNEUMATIC-OPERATED VALVES

Equipment Description NON-CRITICAL SW HEADER ISOLATION

Location: Bldg. TURB BLD Floor El. 617 Room, Area 136

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   
*N/A The valve is mounted in-line.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*N/A The valve is mounted in-line.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*N/A The valve is mounted in-line.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1-028**

Equipment ID No. CV-1359 Equip. Class<sup>1</sup> 7, PNEUMATIC-OPERATED VALVES

Equipment Description NON-CRITICAL SW HEADER ISOLATION

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

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

**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   
*An over head light was noted and not considered a potentially adverse  
seismic condition.*

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) SWEL1-028

Equipment ID No. CV-1359 Equip. Class<sup>1</sup> 7, PNEUMATIC-OPERATED VALVES

Equipment Description NON-CRITICAL SW HEADER ISOLATION

**Other Adverse Conditions**

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

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

Evaluated by: Alex Smerch  Date: 10-12-12

Paul Klein  10-12-12



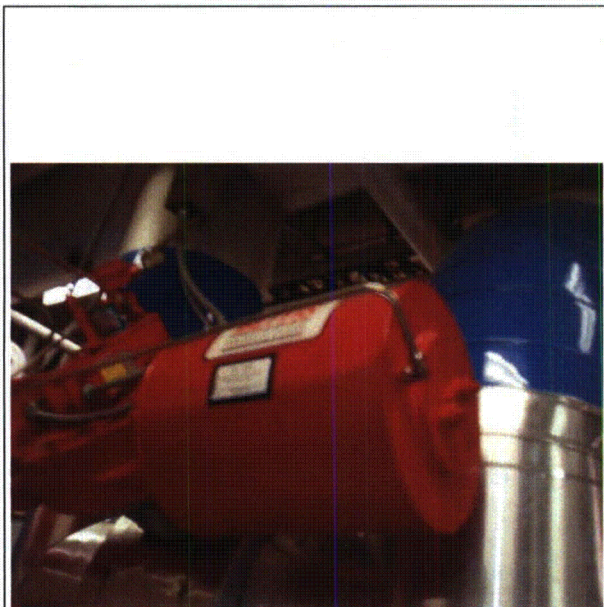
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 028

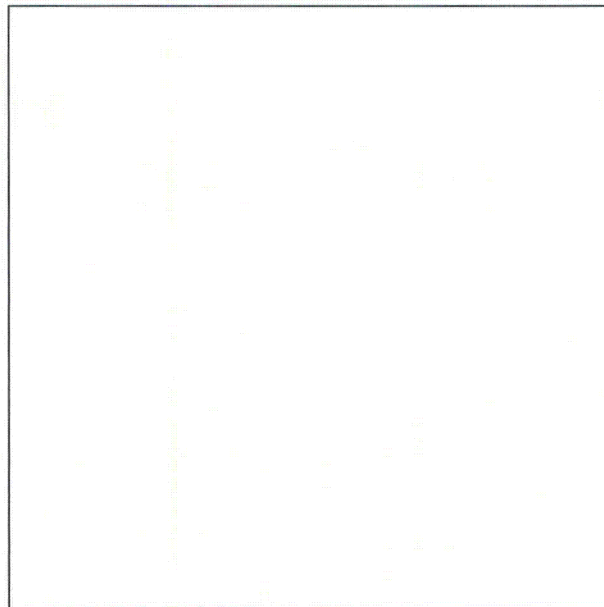
Equipment ID No. CV-1359 Equip. Class<sup>1</sup> 7, PNEUMATIC-OPERATED VALVES

Equipment Description NON-CRITICAL SW HEADER ISOLATION

**Photographs**



**Note:** CV-1359



**Note:**

Status: Y N U

**Seismic Walkdown Checklist (SWC) SWEL1- 029**

Equipment ID No. MO-3189 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID-OPERATED VALVES

Equipment Description LPSI PUMP P-67B SUCTION FROM SIRWT

Location: Bldg. AUX Floor El. 570 Room, Area 005

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

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 029

Equipment ID No. MO-3189 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID-OPERATED VALVES

Equipment Description LPSI PUMP P-67B SUCTION FROM SIRWT

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

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   
*An overhead light was examined and the suspension system was not visible from the floor. There were no signs that it was inadequately suspended and it was judged not to be a 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 4

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 029**

Equipment ID No. MO-3189 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID-OPERATED VALVES


Equipment Description LPSI PUMP P-67B SUCTION FROM SIRWT

**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: Alex Smerch  Date: 10/09/2012

Paul Klein  10/09/2012

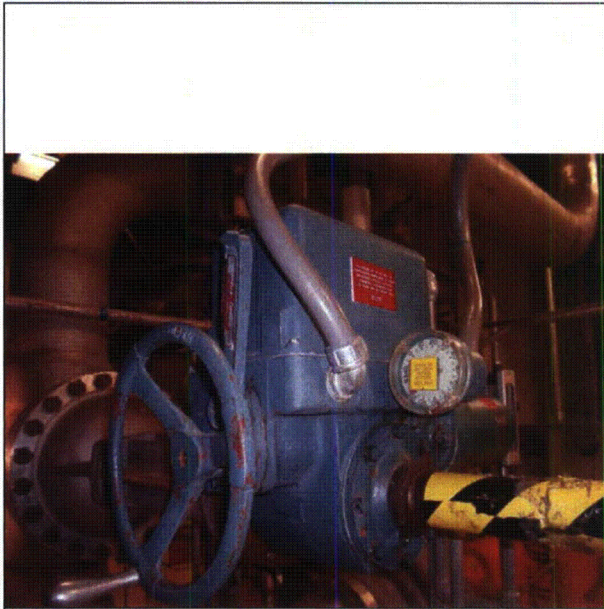
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 029

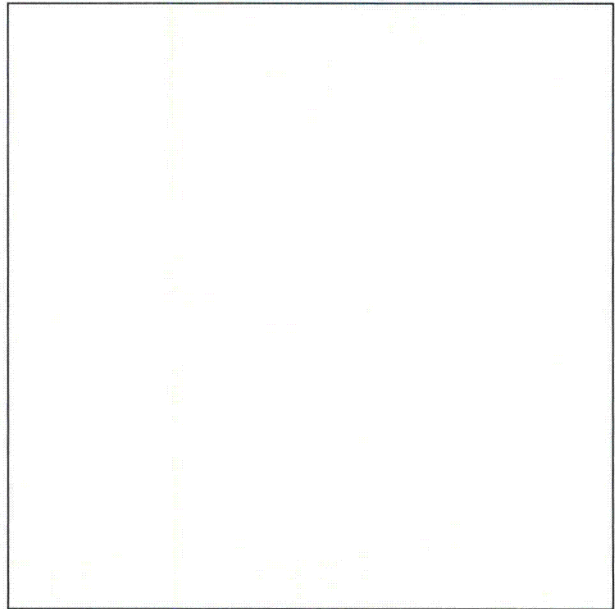
Equipment ID No. MO-3189 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID-OPERATED VALVES

Equipment Description LPSI PUMP P-67B SUCTION FROM SIRWT

Photographs



Note: MO-3189



Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 030

Equipment ID No. SV-1359 Equip. Class<sup>1</sup> 8 - MOTOR OPERATED AND SOLENOID VALVES

Equipment Description NONCRITICAL SERVICE WATER SHUTOFF

Location: Bldg. TURB Floor El. 590 Room, Area 136

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 equipment is mounted to the top of CV-1359.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A  
*The anchorage is painted. No corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A  
*The equipment is anchored to in-line valve.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 030

Equipment ID No. SV-1359 Equip. Class<sup>1</sup> 8 - MOTOR OPERATED AND SOLENOID VALVES

Equipment Description NONCRITICAL SERVICE WATER SHUTOFF

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?  
*The insulated overhead line is supported by a structural brace.* 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- 030

Equipment ID No. SV-1359 Equip. Class<sup>1</sup> 8 - MOTOR OPERATED AND SOLENOID VALVES

Equipment Description NONCRITICAL SERVICE WATER SHUTOFF

**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: Alex Smerch



Date: 10-12-12

Paul Klein



10-12-12



Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 030

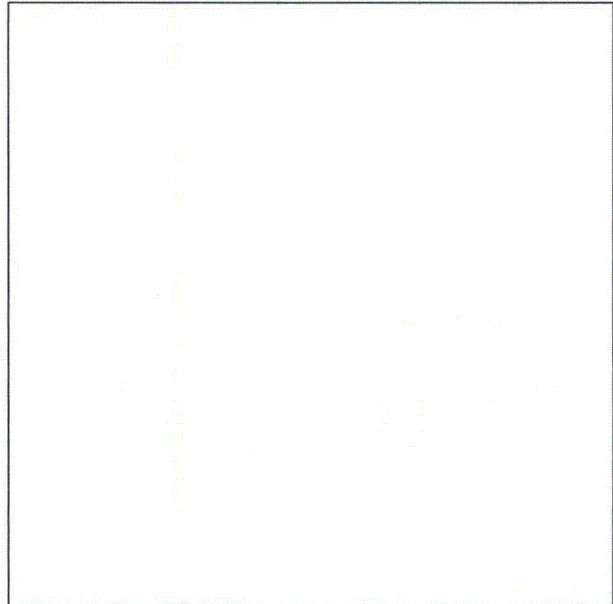
Equipment ID No. SV-1359 Equip. Class<sup>1</sup> 8 - MOTOR OPERATED AND SOLENOID VALVES

Equipment Description NONCRITICAL SERVICE WATER SHUTOFF

Photographs



Note: SV-1359



Note:

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 031**

Equipment ID No. SV-1470 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID OPERATED VALVES

Equipment Description EDG 1-1 FUEL OIL RESVR INLET FROM DAY TANK

Location: Bldg. AUX Floor El. 590 Room, Area 116

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

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 031**

Equipment ID No. SV-1470 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID OPERATED VALVES

Equipment Description EDG 1-1 FUEL OIL RESVR INLET FROM DAY 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   
*In-Line Valve*

**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- 031

Equipment ID No. SV-1470 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID OPERATED VALVES


Equipment Description EDG 1-1 FUEL OIL RESVR INLET FROM 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: Alex Smerch  Date: 10/03/2012

Paul Klein  10/03/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 031

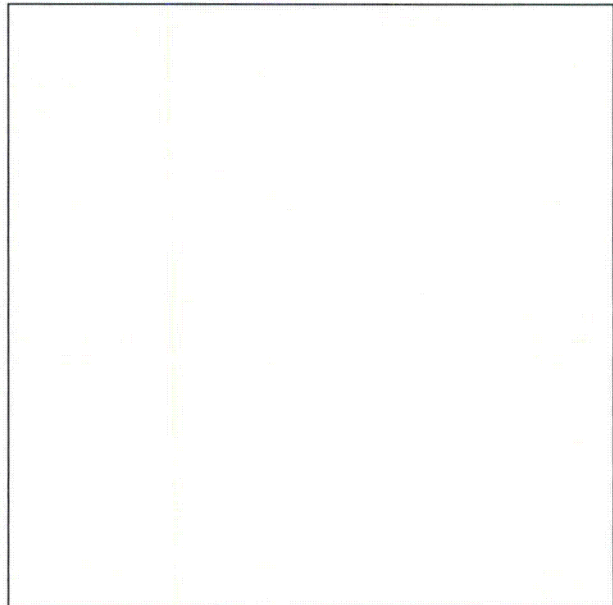
Equipment ID No. SV-1470 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID OPERATED VALVES

Equipment Description EDG 1-1 FUEL OIL RESVR INLET FROM DAY TANK

**Photographs**



**Note:** SV-1470



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 032**

Equipment ID No. SV-1471 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID-OPERATED VALVES

Equipment Description EDG 1-2 FUEL OIL RESVR INLET FROM DAY TANK

Location: Bldg. AUX Floor El. 590 Room, Area 116B

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

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 032**

Equipment ID No. SV-1471 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID-OPERATED VALVES

Equipment Description EDG 1-2 FUEL OIL RESVR INLET FROM DAY 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   
*In-line Valve*

**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   
*Air supply duct above is well supported.*

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- 032

Equipment ID No. SV-1471 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID-OPERATED VALVES

Equipment Description EDG 1-2 FUEL OIL RESVR INLET FROM 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: Alex Smerch  Date: 10-15-12

Paul Klein  10-15-12



ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

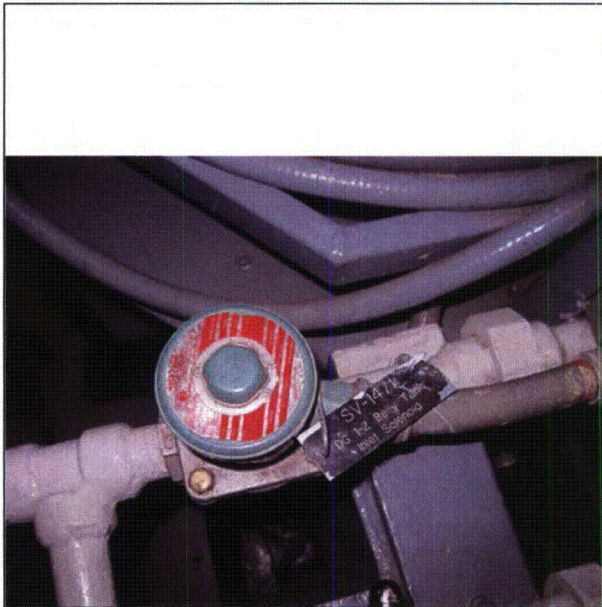
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 032

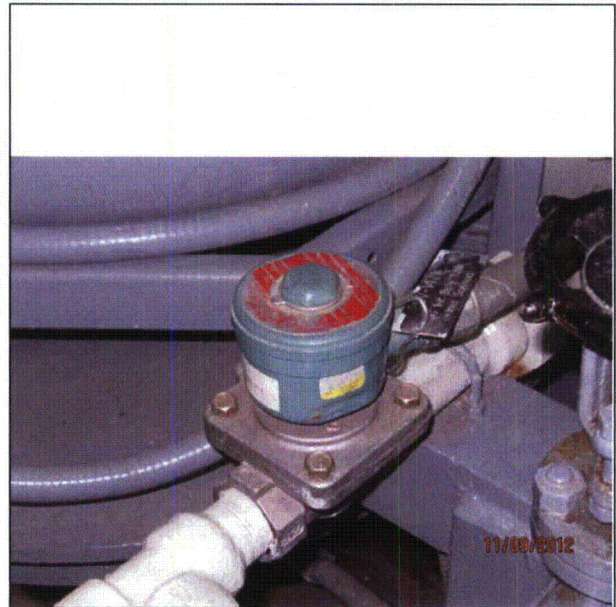
Equipment ID No. SV-1471 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID-OPERATED VALVES

Equipment Description EDG 1-2 FUEL OIL RESVR INLET FROM DAY TANK

**Photographs**



**Note:** SV-1471



**Note:** Close up of mounting.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

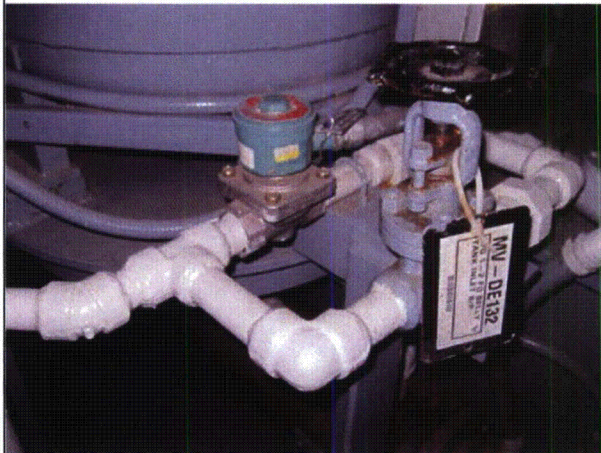
Sheet 5 of 5

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 032

Equipment ID No. SV-1471 Equip. Class<sup>1</sup> 8 - MOTOR-OPERATED AND SOLENOID-OPERATED VALVES

Equipment Description EDG 1-2 FUEL OIL RESVR INLET FROM DAY TANK



**Note:** SV-1471 general configuration.

**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 033**

Equipment ID No. V-24A Equip. Class<sup>1</sup> 9 - FANS

Equipment Description 5-6A DIESEL GENERATOR ROOM VENT FAN

Location: Bldg. AUX Floor El. 590 Room, Area 116

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   
*Fan is welded to plate channel framing embedded in concrete ceiling slab.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There was no corrosion visible.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The concrete ceiling supports the equipment.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 033

Equipment ID No. V-24A Equip. Class<sup>1</sup> 9 - FANS

Equipment Description 5-6A DIESEL GENERATOR ROOM VENT 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? 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?  
*Hanging just under ceiling slab.* 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- 033

Equipment ID No. V-24A Equip. Class<sup>1</sup> 9 - FANS

Equipment Description 5-6A DIESEL GENERATOR ROOM VENT 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: Alex Smerch  Date: 10/03/2012

Paul Klein  10/03/2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

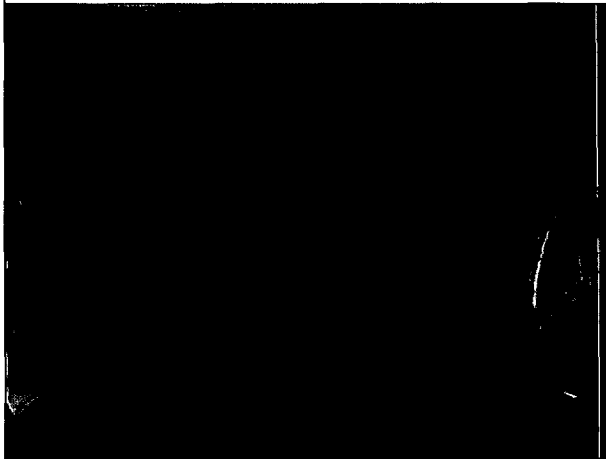
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 033

Equipment ID No. V-24A Equip. Class<sup>1</sup> 9 - FANS

Equipment Description 5-6A DIESEL GENERATOR ROOM VENT FAN

Photographs


<b>Note:</b> V-24A

<b>Note:</b>

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 034**

Equipment ID No. V-24C Equip. Class<sup>1</sup> 9 - FANS

Equipment Description K-6B DIESEL GENERATOR ROOM VENT FAN

Location: Bldg. AUX Floor El. 590 Room, Area 116B

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 fan is connected to the west side of the duct going through the floor above with 3 short bent plates each welded to the fan inlet and the duct.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*Mild surface corrosion was observed. The duct thru the floor above and the bent plates appear to be unpainted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The fan appears to be supported from the duct. No support from the concrete was observed.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 034

Equipment ID No. V-24C Equip. Class<sup>1</sup> 9 - FANS

Equipment Description K-6B DIESEL GENERATOR ROOM VENT 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? 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?  
*Duct downstream of the fan is flexible.* 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- 034

Equipment ID No. V-24C Equip. Class<sup>1</sup> 9 - FANS

Equipment Description K-6B DIESEL GENERATOR ROOM VENT 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: Alex Smerch  Date: 10-15-12

Paul Klein  10-15-12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

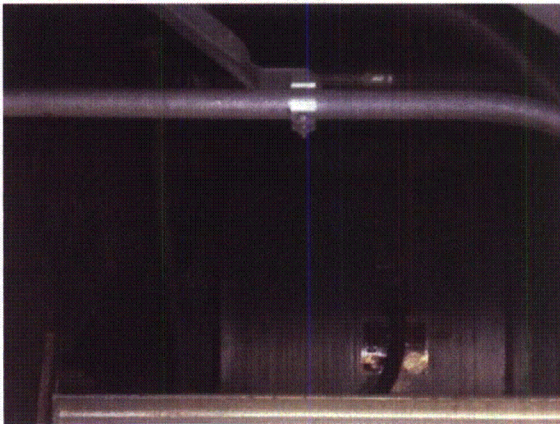
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 034

Equipment ID No. V-24C Equip. Class<sup>1</sup> 9 - FANS

Equipment Description K-6B DIESEL GENERATOR ROOM VENT FAN

**Photographs**



**Note:** Fan V-24C

**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 035**

Equipment ID No. V-3A Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTAINMENT COOLER RECIRCULATION FAN

Location: Bldg. CONT Floor El. 590 Room, Area 143

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 EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 035**

Equipment ID No. V-3A Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTAINMENT COOLER RECIRCULATION 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? 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- 035

Equipment ID No. V-3A Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTAINMENT COOLER RECIRCULATION 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)

*Item is inaccessible and is deferred.*

Evaluated by: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 035

Equipment ID No. V-3A Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTAINMENT COOLER RECIRCULATION FAN

**Photographs**

<b>Note:</b>

<b>Note:</b>

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 036**

Equipment ID No. V-95 Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTROL ROOM VENTILATION MAIN SUPPLY FAN

Location: Bldg. AUX Floor El. 629.17 Room, Area 300

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   
*Equipment anchorage consists of 8 bolts to the flanges of beams that comprise a platform.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*Minor oxidation noted on the bolts.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*Equipment is mounted on a steel platform.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 036

Equipment ID No. V-95 Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTROL ROOM VENTILATION MAIN 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.)  
*The equipment anchorage configuration is consistent with drawings M-90, Sh. 10, Rev. I and C-456, Rev. 11.* 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?  
*Item is not a soft target.* 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?  
*Fluorescent light fixtures supported by chains and attached with S hooks noted adjacent to equipment. The light fixtures and bulbs are judged not to be a credible or significant interaction.* 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- 036

Equipment ID No. V-95 Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTROL ROOM VENTILATION MAIN 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)

*The bolts along the northeast and east sides of the equipment were visually inspected from the underside of the platform.*

Evaluated by: *Kevin Bessell*



Date: 10/3/2012

*Tim Crocker*



10/3/2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 036

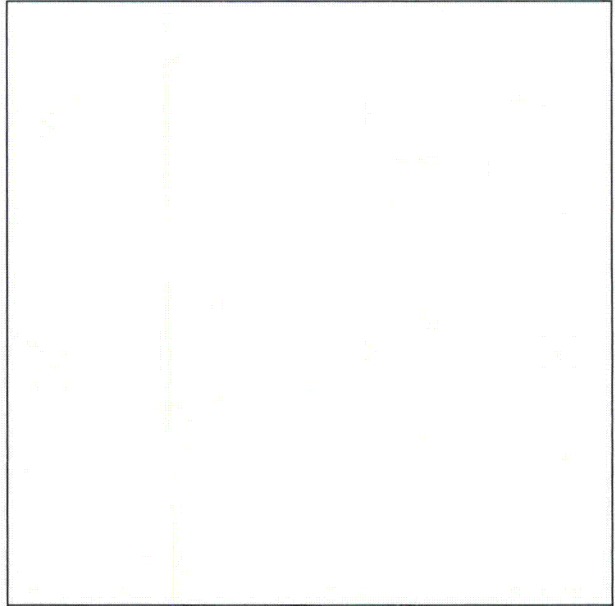
Equipment ID No. V-95 Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTROL ROOM VENTILATION MAIN SUPPLY FAN

**Photographs**



**Note:** *Equipment.*



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 037**

Equipment ID No. V-96 Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTROL ROOM VENTILATION MAIN SUPPLY FAN

Location: Bldg. AUX Floor El. 629.17 Room, Area 300A

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   
*Equipment anchorage consists of 8 bolts to the flanges of beams that comprise a platform.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*Minor oxidation noted on the north and south bolt at the west end of the unit.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*Equipment is mounted on a steel platform.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 037**

Equipment ID No. V-96 Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTROL ROOM VENTILATION MAIN 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?  
*Item is not a soft target.* 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?  
*Fluorescent light fixtures supported by chains and attached with S  
hooks noted adjacent to equipment. The light fixtures and bulbs are  
judged not to be a credible or significant interaction.* 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- 037

Equipment ID No. V-96 Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTROL ROOM VENTILATION MAIN 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)

*The bolt on the north side of the unit, west end, was visually inspected from the underside of the unit since this bolt was inaccessible from the topside of the platform. The bolts along the west side of the unit were visually inspected by climbing an a-frame ladder which we had set next to the door to the room.*

Evaluated by: Kevin Bessell  Date: 10/16/2012

John Kao  10/16/2012

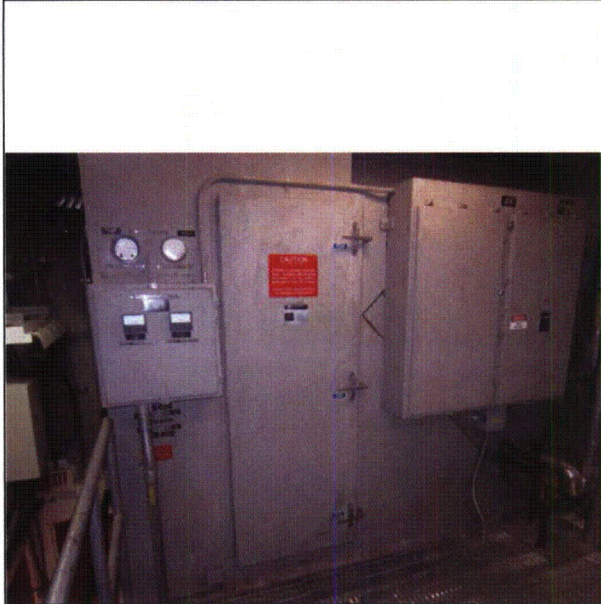
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 037

Equipment ID No. V-96 Equip. Class<sup>1</sup> 9, FANS

Equipment Description CONTROL ROOM VENTILATION MAIN SUPPLY FAN

Photographs



**Note:** Equipment view on top of steel platform looking west.



**Note:** View of anchorage beneath platform looking up.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 040**

Equipment ID No. VHX-1 Equip. Class<sup>1</sup> 10, AIR HANDLERS

Equipment Description CONTAINMENT AIR COOLER

Location: Bldg. CONT Floor El. 590 Room, Area 143

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 EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 040**

Equipment ID No. VHX-1 Equip. Class<sup>1</sup> 10, AIR HANDLERS

Equipment Description CONTAINMENT AIR 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? 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



Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 040

Equipment ID No. VHX-1 Equip. Class<sup>1</sup> 10, AIR HANDLERS

Equipment Description CONTAINMENT AIR 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)

*Item is inaccessible and will be deferred.*

Evaluated by: \_\_\_\_\_ Date: \_\_\_\_\_

\_\_\_\_\_

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

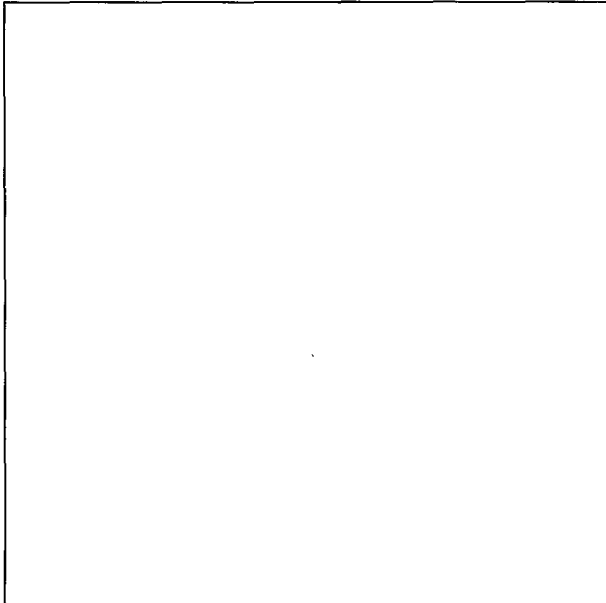
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 040

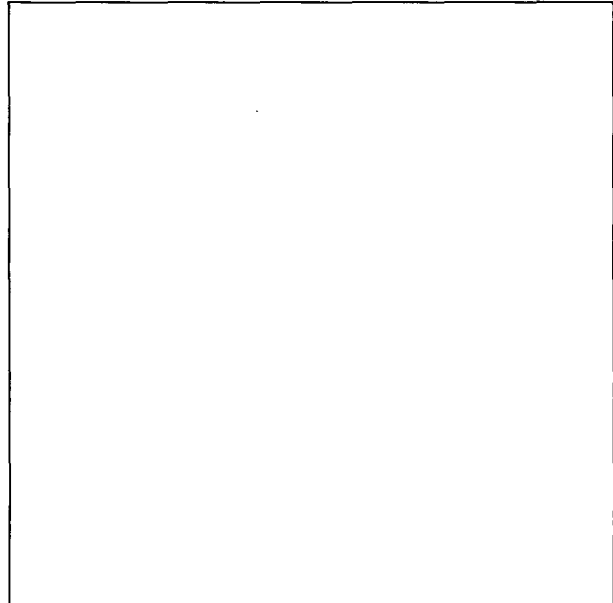
Equipment ID No. VHX-1 Equip. Class<sup>1</sup> 10, AIR HANDLERS

Equipment Description CONTAINMENT AIR COOLER

**Photographs**



**Note:**



**Note:**

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 040

Equipment ID No. VHX-1 Equip. Class<sup>1</sup> 10, AIR HANDLERS

Equipment Description CONTAINMENT AIR COOLER

<b>Note:</b>	<b>Note:</b>

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 042**

Equipment ID No. VC-10 Equip. Class<sup>1</sup> 11, CHILLERS

Equipment Description CONTROL ROOM HVAC REFRIG CONDENSING UNIT

Location: Bldg. AUX Floor El. 629.17 Room, Area 300A

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   
*Equipment is anchored to a pedestal on the floor. Anchorage consists of 4 cast in place anchors per pedestal, 8 anchor bolts in total.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*Anchors are galvanized.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*Surface cracks noted on the south side of the east pedestal.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 042**

Equipment ID No. VC-10 Equip. Class<sup>1</sup> 11, CHILLERS

Equipment Description CONTROL ROOM HVAC REFRIG CONDENSING UNIT

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   
*Fluorescent light fixtures overhead of instruments on chiller. Light  
fixtures hanging from chains with S hooks. Light fixtures judged not to  
come off S hooks due to vertical seismic acceleration < 1.0g. Some of  
the hooks are crimped and there is also large cable attached at top of  
light providing stiffness in the vertical direction preventing upwards  
deflection. Fluorescent light is a credible interaction, however judged  
insignificant due to relatively low mass.*

9. Do attached lines have adequate flexibility to avoid damage? Y  N  U  N/A   
*Attached with flex conduit and lines/ducts have flexible support  
configurations/bends.*

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- 042

Equipment ID No. VC-10 Equip. Class<sup>1</sup> 11, CHILLERS

Equipment Description CONTROL ROOM HVAC REFRIG CONDENSING 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   
*Minor oil leaks noted on pedestals.*

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

Evaluated by: Kevin Bessell  Date: 10/16/2012

John Kao  10/16/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 042

Equipment ID No. VC-10 Equip. Class<sup>1</sup> 11, CHILLERS

Equipment Description CONTROL ROOM HVAC REFRIG CONDENSING UNIT

Photographs



**Note:** Equipment view looking southwest.



**Note:** Equipment view looking northwest.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y  N  U

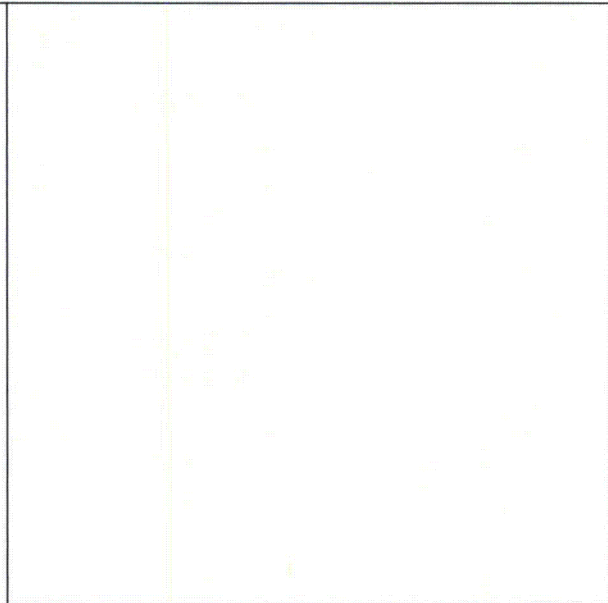
Seismic Walkdown Checklist (SWC) SWEL1- 042

Equipment ID No. VC-10 Equip. Class<sup>1</sup> 11, CHILLERS

Equipment Description CONTROL ROOM HVAC REFRIG CONDENSING UNIT



**Note:** *Equipment anchorage, east pedestal.*



**Note:**



Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 043**

Equipment ID No. VC-11 Equip. Class<sup>1</sup> 11, CHILLERS

Equipment Description CONTROL ROOM HVAC REFRIG CONDENSING UNIT

Location: Bldg. AUX Floor El. 629.17 Room, Area 300

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   
*Equipment is anchored to a pedestal on the floor. Anchorage consists of 4 cast in place anchors per pedestal, 8 anchor bolts in total.*

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*Minor temperature and shrinkage cracks observed in pedestal and floor. Cracks are not a concern.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 043

Equipment ID No. VC-11 Equip. Class<sup>1</sup> 11, CHILLERS

Equipment Description CONTROL ROOM HVAC REFRIG CONDENSING UNIT

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 equipment anchorage configuration is consistent with drawing C-455(Q), Rev. 12.* 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?  
*Fluorescent light fixtures overhead of instruments on chiller. Light fixtures hanging from chains with S hooks. Light fixtures judged not to come off S hooks due to vertical seismic acceleration < 1.0g. Some of the hooks are crimped and there is also large cable attached at top of light providing stiffness in the vertical direction preventing upwards deflection. Fluorescent light is a credible interaction, however judged insignificant due to relatively low mass.* 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?  
*A large heater, VEH-37A, hangs over the east side of the chiller. This heater is supported with large tube steel and anchored to wall with large anchors and judged not to be a credible interaction. A plastic exit sign is anchored with 2 small screws over the west side of the chiller. The weight of the sign is judged to be relatively small and the screws are adequate to support the sign, therefore no credible interaction.* Y  N  U  N/A
9. Do attached lines have adequate flexibility to avoid damage?  
*Attached with flex conduit and lines/ducts have flexible support configurations/bends.* 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- 043

Equipment ID No. VC-11 Equip. Class<sup>1</sup> 11, CHILLERS

Equipment Description CONTROL ROOM HVAC REFRIG CONDENSING 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)

Evaluated by: Kevin Bessell  Date: 10/3/2012

Tim Crocker  10/3/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 043

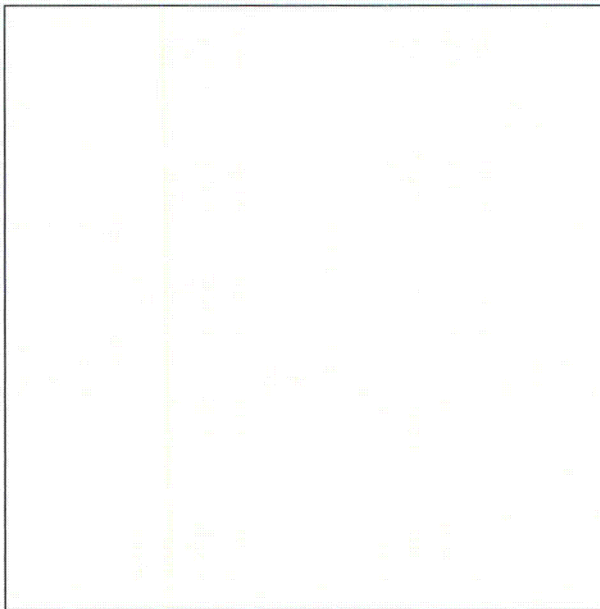
Equipment ID No. VC-11 Equip. Class<sup>1</sup> 11, CHILLERS

Equipment Description CONTROL ROOM HVAC REFRIG CONDENSING UNIT

**Photographs**



**Note:** *Equipment.*



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 044**

Equipment ID No. ED-11A Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description 125 VOLTS DC DISTRIBUTION PANEL

Location: Bldg. AUX Floor El. 590 Room, Area 116A

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   
*Equipment is anchored to concrete wall with expansion anchors.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is no corrosion on the anchors.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*Equipment is anchored to concrete wall. No cracks observed.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 044

Equipment ID No. ED-11A Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description 125 VOLTS DC DISTRIBUTION 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.)  
*Anchorage configuration is consistent with drawing VEN-E13, Sh. 36, Rev. 76 and SEWS Sht. 5 of 9.*
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   
*Fluorescent light noted above, however, interaction judged insignificant due to small mass and stiffness of source relative to target.*
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- 044

Equipment ID No. ED-11A Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

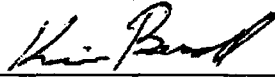
Equipment Description 125 VOLTS DC DISTRIBUTION PANEL

**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   
*The panel was unable to be opened due to plant sensitive equipment. Equipment has been deferred for inspection.*

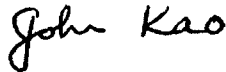
**Comments** (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/3/2012

John Kao



10/3/2012

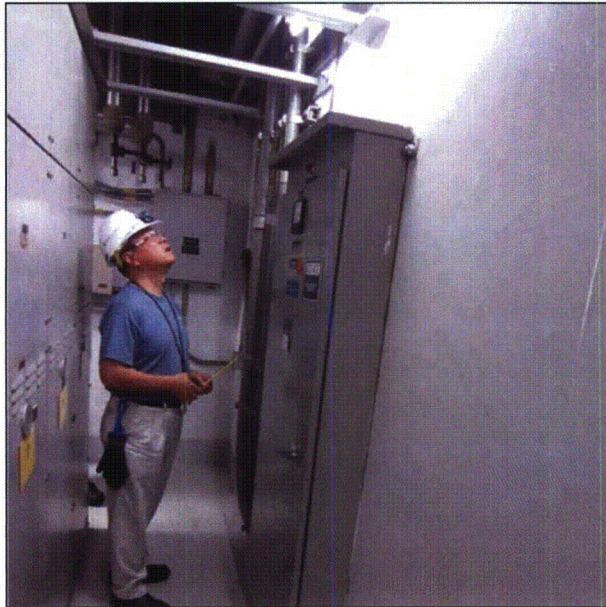
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 044

Equipment ID No. ED-11A Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description 125 VOLTS DC DISTRIBUTION PANEL

Photographs



Note: Equipment.



Note: Equipment.



Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 045**

Equipment ID No. ED-21A Equip. Class<sup>1</sup> 14 - DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description 125 VOLTS DC DISTRIBUTION PANEL

Location: Bldg. AUX Floor El. 590 Room, Area 116B

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   
*ED-21A is bolted to a unistrut frame with 4-bolts thru tabs on the outside of the panel and the frame is mounted to the concrete wall with 8-concrete anchors.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*No oxidation in excess of mild surface oxidation was noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*Unistrut frame supporting ED-21A anchored to concrete wall with 8 Concrete anchors.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 045

Equipment ID No. ED-21A Equip. Class<sup>1</sup> 14 - DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description 125 VOLTS DC DISTRIBUTION 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?  
*Block wall next to panel is qualified by C-104.  
Emergency lighting above appears to be 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) SWEL1- 045

Equipment ID No. ED-21A Equip. Class<sup>1</sup> 14 - DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES


Equipment Description 125 VOLTS DC DISTRIBUTION 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   
*Panel needs to be opened. Item is currently deferred with partial walkdown of exterior and anchorage completed.*

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

Evaluated by: Alex Smerch  Date: 10-15-12

Paul Klein  10-15-12

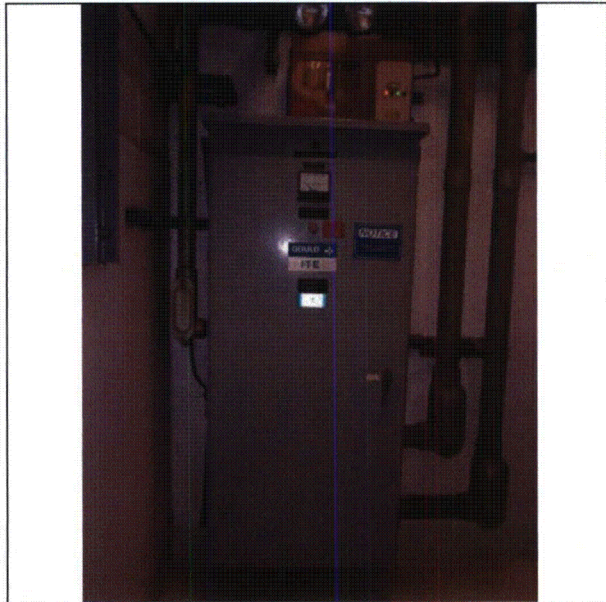
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 045

Equipment ID No. ED-21A Equip. Class<sup>1</sup> 14 - DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description 125 VOLTS DC DISTRIBUTION PANEL

Photographs



**Note:** Front View of ED-21A



**Note:** Side view of ED-21A

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 046**

Equipment ID No. EY-10 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO. 1 INVERTER

Location: Bldg. AUX Floor El. 607 Room, Area 224

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 component is a breaker distribution panel which is mounted internally with 6 flat head cap screws.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*No corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The component is mounted internally to the cabinet.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 046**

Equipment ID No. EY-10 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO. 1 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.) 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?  
*The component panel is mounted in the interior of cabinet ED-06.  
Refer to SWEL1-052.* Y  N  U  N/A
9. Do attached lines have adequate flexibility to avoid damage?  
*No lines observed, only breakers.* 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- 046

Equipment ID No. EY-10 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES


Equipment Description PREFERRED AC BUS NO. 1 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

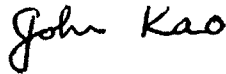
**Comments** (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/17/2012

John Kao



10/17/2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

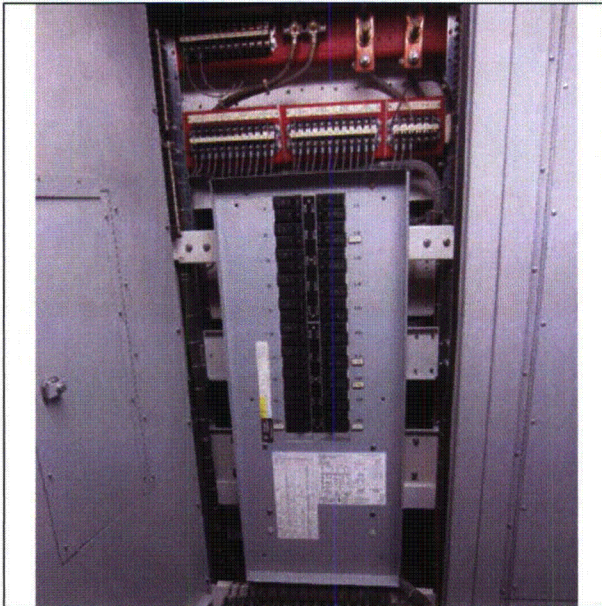
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 046

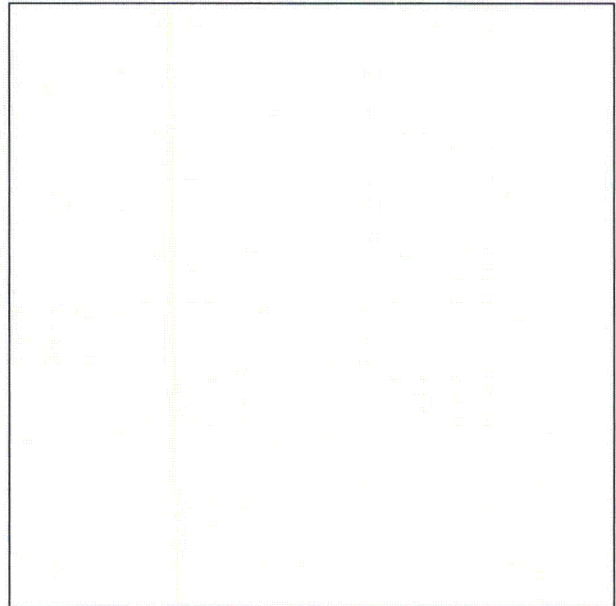
Equipment ID No. EY-10 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO. 1 INVERTER

**Photographs**



**Note:** Equipment.



**Note:**



ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 047

Equipment ID No. EY-20 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO. 2 INVERTER

Location: Bldg. AUX Floor El. 607 Room, Area 224

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 component is a breaker distribution panel which is mounted internally with 6 flat head cap screws.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*No corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The component is mounted internally to the cabinet.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 047

Equipment ID No. EY-20 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description: PREFERRED AC BUS NO. 2 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.) 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?  
*The component panel is mounted in the interior of cabinet ED-07.  
Refer to SWEL1-053.* Y  N  U  N/A
9. Do attached lines have adequate flexibility to avoid damage?  
*No lines observed, only breakers.* 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- 047

Equipment ID No. EY-20 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO. 2 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

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

Evaluated by: Kevin Bessell  Date: 10/17/2012

John Kao  10/17/2012

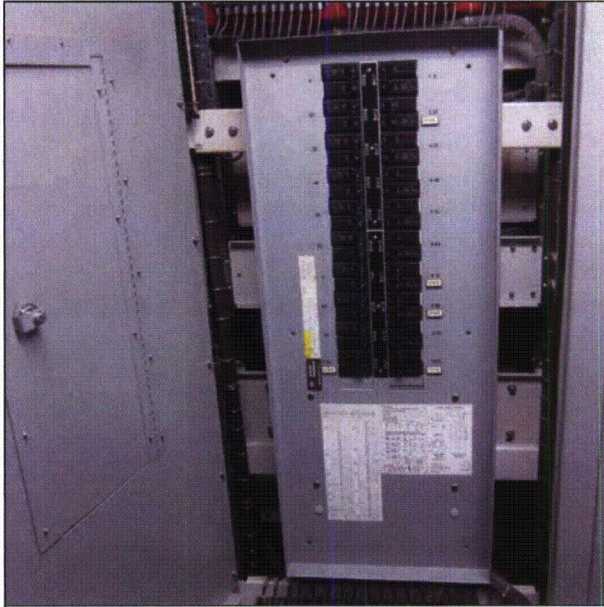
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 047

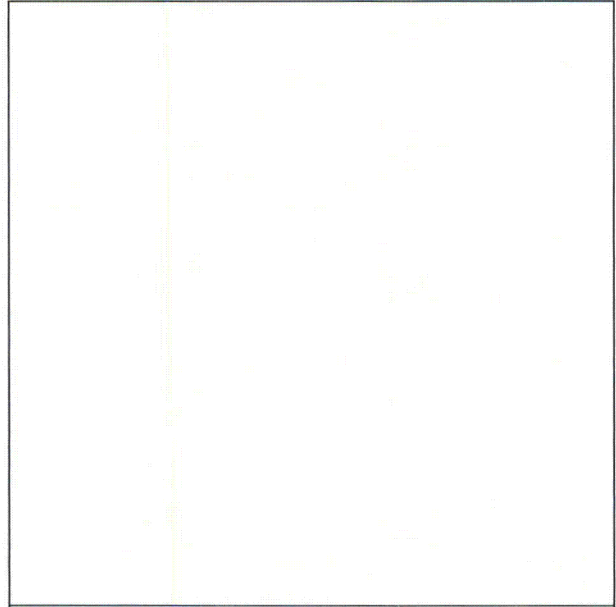
Equipment ID No. EY-20 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO. 2 INVERTER

**Photographs**



**Note:** *Equipment.*



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 048**

Equipment ID No. EY-30 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO. 3 INVERTER

Location: Bldg. AUX Floor El. 607 Room, Area 224

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 component is a breaker distribution panel which is mounted internally with 6 flat head cap screws.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*No corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The component is mounted internally to the cabinet.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 048

Equipment ID No. EY-30 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO. 3 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.) 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?  
*The component panel is mounted in the interior of cabinet ED-08.  
Refer to SWEL1-054.* Y  N  U  N/A
9. Do attached lines have adequate flexibility to avoid damage?  
*No lines observed, only breakers.* 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- 048

Equipment ID No. EY-30 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO. 3 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

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

Evaluated by: Kevin Bessell  Date: 10/17/2012

John Kao  10/17/2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 048

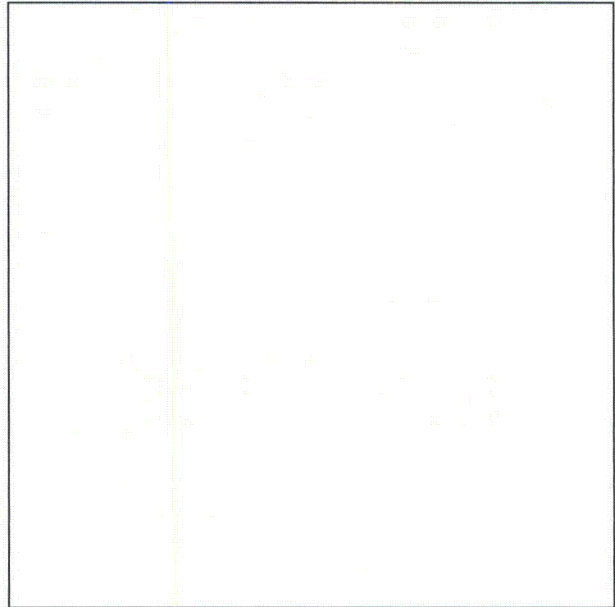
Equipment ID No. EY-30 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO. 3 INVERTER

**Photographs**



**Note:** *Equipment.*



**Note:**



Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 049**

Equipment ID No. EY-40 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO.4 INVERTER

Location: Bldg. AUX Floor El. 607 Room, Area 224

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 component is a breaker distribution panel which is mounted internally with 6 flat head screws.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*No corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The component is mounted internally to the cabinet.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 049

Equipment ID No. EY-40 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO.4 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.) 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?  
*The component panel is mounted in the interior of cabinet ED-09.  
Refer to SWEL1-055.* Y  N  U  N/A
9. Do attached lines have adequate flexibility to avoid damage?  
*No lines observed, only breakers.* 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- 049

Equipment ID No. EY-40 Equip. Class<sup>1</sup> 14. DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO.4 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

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

Evaluated by: Kevin Bessell



Date: 10/17/2012

John Kao



10/17/2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

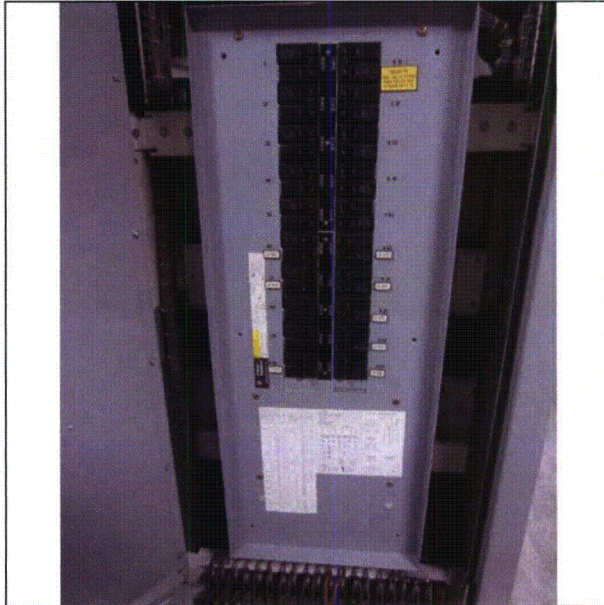
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 049

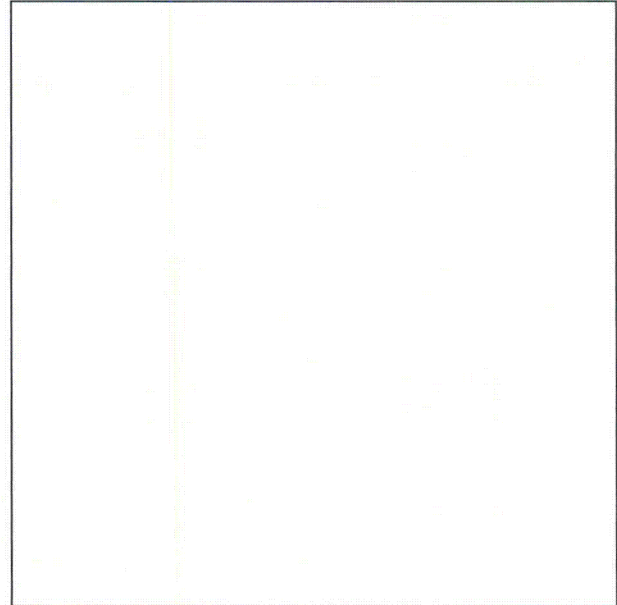
Equipment ID No. EY-40 Equip. Class<sup>1</sup> 14, DISTRIBUTION PANELS AND AUTOMATIC TRANSFER SWITCHES

Equipment Description PREFERRED AC BUS NO.4 INVERTER

**Photographs**



**Note:** *Equipment.*



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 050**

Equipment ID No. ED-01 Equip. Class<sup>1</sup> 15, BATTERY RACKS

Equipment Description MAIN STATION BATTERY LEFT CHANNEL

Location: Bldg. AUX Floor El. 607 Room, Area 225A

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 equipment is supported on steel framed racks and is anchored with either 5/8" anchors or 1/2" expansion anchors to the concrete floor. There is minimal thread engagement noted on the second support from the south wall on the west rack. The top of the anchor closest to the wall is flush with the top of the nut. This thread engagement is judged to be acceptable.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is a white powdery substance on a small number of the anchors most likely due to a small battery acid leak. Anchors, however, are not degraded.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The floor is painted and no cracks were observed.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 050**

Equipment ID No. ED-01 Equip. Class<sup>1</sup> 15, BATTERY RACKS

Equipment Description MAIN STATION BATTERY LEFT CHANNEL

5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y  N  U  N/A   
*The anchorage is consistent with drawings C-103, Sh. 4, Rev. 4, C-103, Sh. 10, Rev. 1 and SEWS Shts. 3 through 9 of 15.*  
*Anchorage dimensional check for the anchorage for the rack along the west wall was difficult to perform. Measurements were taken of the anchor bolts at the ends of the rack and also of the rack frame. A visual comparison considering relative distances and spacing were used to judge anchor dimensions and spacing for the remainder of the rack along the west wall and verified to be consistent with plant documentation.*
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   
*There are seismically qualified block walls, C107.17/Q and C107.16/Q, per drawing C-107, Sh. 1, Rev. 28, north and east of the equipment, respectively.*
9. Do attached lines have adequate flexibility to avoid damage? Y  N  U  N/A   
*There are flexible leads to the batteries.*
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- 050

Equipment ID No. ED-01 Equip. Class<sup>1</sup> 15, BATTERY RACKS

Equipment Description MAIN STATION BATTERY LEFT CHANNEL

**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: Kevin Bessell  Date: 10/9/2012

John Kao  10/9/2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

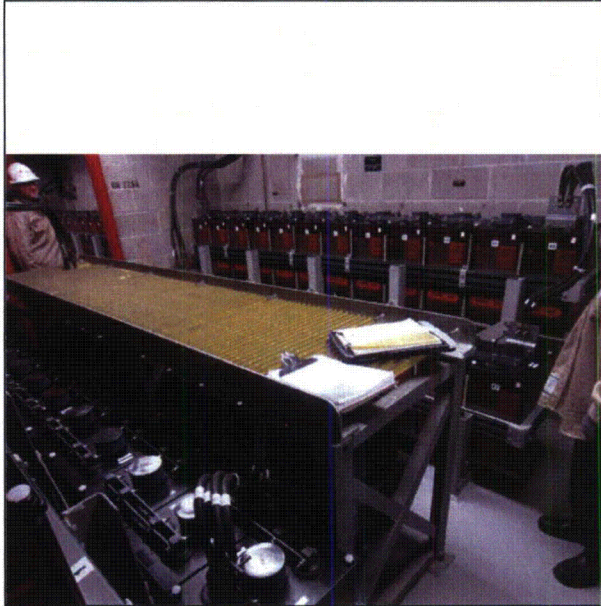
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 050

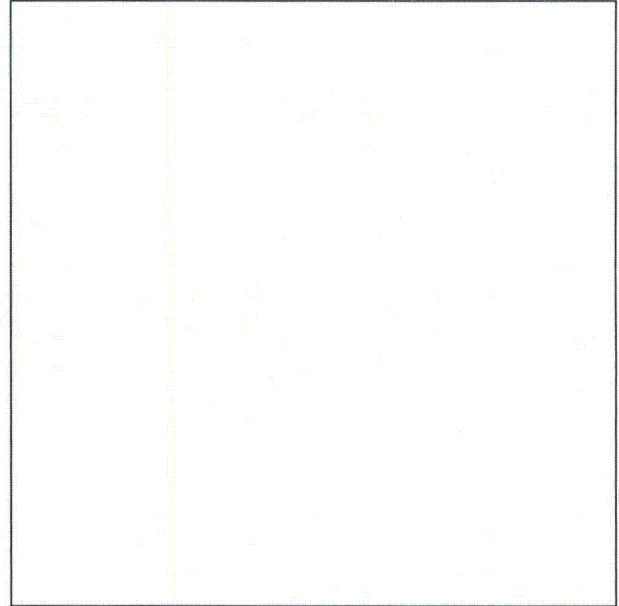
Equipment ID No. ED-01 Equip. Class<sup>1</sup> 15, BATTERY RACKS

Equipment Description MAIN STATION BATTERY LEFT CHANNEL

**Photographs**



**Note:** *Equipment.*



**Note:**



Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 051**

Equipment ID No. ED-02 Equip. Class<sup>1</sup> 15, BATTERY RACKS

Equipment Description MAIN STATION BATTERY RIGHT CHANNEL

Location: Bldg. AUX Floor El. 607 Room, Area 225

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 equipment is supported on steel framed racks and is anchored with either 5/8" anchors or 1/2" expansion anchors to the concrete floor. There is minimal thread engagement noted on the third braced bay support, west end of middle rack. The top of the anchor is flush with the top of the nut. This thread engagement is judged to be acceptable.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is a white powdery substance on a small number of the anchors most likely due to a small battery acid leak. Anchors, however, are not degraded.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The floor is painted and no cracks were observed.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 051**

Equipment ID No. ED-02 Equip. Class<sup>1</sup> 15, BATTERY RACKS

Equipment Description MAIN STATION BATTERY RIGHT CHANNEL

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?  
*There are seismically qualified block walls, C107.18/Q, C107.17/Q and  
C107.16/Q, per drawing C-107, Sh. 1, Rev. 28, north, south and east of  
the equipment, respectively.* Y  N  U  N/A
9. Do attached lines have adequate flexibility to avoid damage?  
*There are flexible leads to the batteries.* 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- 051

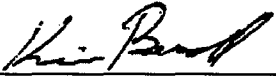
Equipment ID No. ED-02 Equip. Class<sup>1</sup> 15, BATTERY RACKS

Equipment Description MAIN STATION BATTERY RIGHT CHANNEL

**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: Kevin Bessell  Date: 10/9/2012

John Kao  10/9/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 051

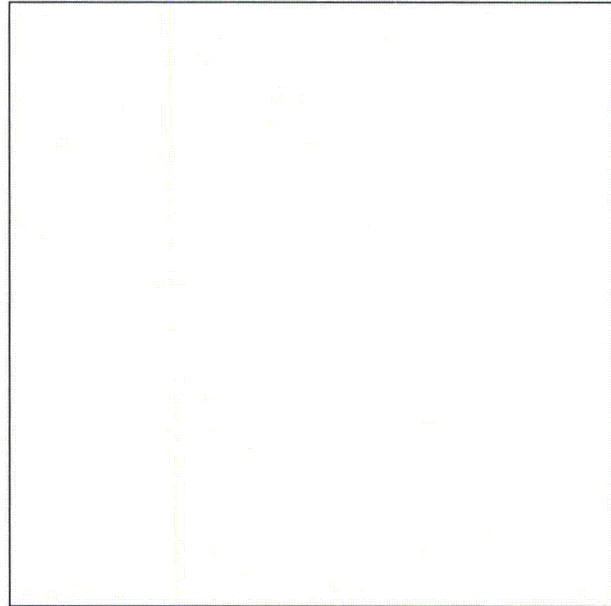
Equipment ID No. ED-02 Equip. Class<sup>1</sup> 15, BATTERY RACKS

Equipment Description MAIN STATION BATTERY RIGHT CHANNEL

Photographs



Note: *Equipment.*



Note:

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 052**

Equipment ID No. ED-06 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 1

Location: Bldg. AUX Floor El. 607 Room, Area 224

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 equipment consists of an electrical cabinet. The cabinet base is welded to clip angles along both sides of the cabinet that are embedded into the concrete pedestal.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*The angles and welds are painted, no corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The cabinet is mounted on top of a concrete pedestal which sits atop the concrete floor. Minor surface cracks are noted in the pedestal which is judged to not affect the integrity of the anchorage.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 052**

Equipment ID No. ED-06 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 1

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 anchorage configuration is consistent with drawing C-103, Sh. 11, Rev. 1 for the weld detail, clip angle and clip spacing. The anchor bolts attached through the clip angle are embedded in the concrete pedestal and are not considered part of the configuration verification since they are not accessible.* 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 exists a cable tray support structure consisting of a tube steel moment frame in one direction (north-south) and a braced frame in the other direction (east-west) immediately adjacent to the inverter. There exists a 2" gap (north-south) between tube steel column for the support and the inverter. There is a 3/4" gap (north-south) between the sheet metal roof deflector on the inverter and the tube steel column. This structure is judged to be robust and will have minimal deflection in the north-south direction based on the rigidity of the frame, minimal load on the frame (lightly loaded cable tray), and height of the column. The strong axis of the cabinet is in the north-south direction, so deflection of the cabinet is judged to be minimal, therefore out of phase contact is judged not to be credible.* 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?  
*There are overhead cable tray and HVAC ducts overhead which are well supported.* Y  N  U  N/A
9. Do attached lines have adequate flexibility to avoid damage?  
*Flexible cable and conduit feed the top of the cabinet.* Y  N  U  N/A

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 052

Equipment ID No. ED-06 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 1

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

**Other Adverse Conditions**

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

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

Evaluated by: Kevin Bessell

*Kevin Bessell*

Date: 10/17/2012

John Kao

*John Kao*

10/17/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 052

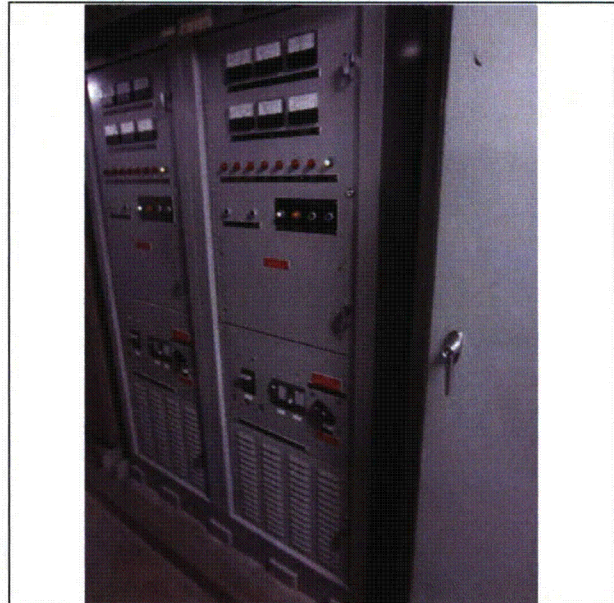
Equipment ID No. ED-06 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 1

**Photographs**



**Note:** Back panel of equipment.



**Note:** Front panel of equipment.

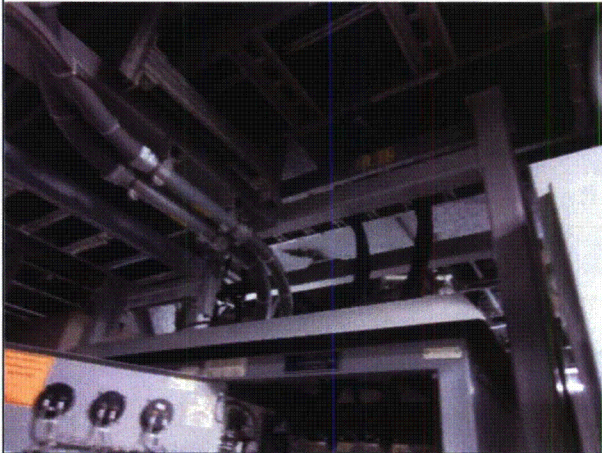


Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 052

Equipment ID No. ED-06 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 1



**Note:** *Small gap noted between cable tray support structure column and side of cabinet near top of cabinet.*

**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 053**

Equipment ID No. ED-07 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 2

Location: Bldg. AUX Floor El. 607 Room, Area 224

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 equipment consists of an electrical cabinet. The cabinet base is welded to clip angles along both sides of the cabinet that are embedded into the concrete pedestal.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*The angles and welds are painted, no corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The cabinet is mounted on top of a concrete pedestal which sits atop the concrete floor. Minor surface cracks are noted in the pedestal which is judged to not affect the integrity of the anchorage.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 053

Equipment ID No. ED-07 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 2

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   
*Fluorescent light fixtures overhead. Light fixtures ruggedly mounted to  
unistrut. Fluorescent bulb is not a credible interaction since the cabinet  
is outside the bulb's zone of influence.*  
*Masonry block wall, C-107.16/Q, is located west of the cabinet. This  
block wall is qualified per drawing C-107, Sh. 1, Rev. 28.*
9. Do attached lines have adequate flexibility to avoid damage? Y  N  U  N/A   
*Flexible cable is fed through the top of the cabinet.*
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- 053

Equipment ID No. ED-07 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 2

**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

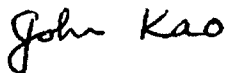
**Comments** (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/17/2012

John Kao



10/17/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 053

Equipment ID No. ED-07 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 2

Photographs



**Note:** Back panel of equipment.



**Note:** Front panel of equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 054**

Equipment ID No. ED-08 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 3

Location: Bldg. AUX Floor El. 607 Room, Area 224

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 equipment consists of an electrical cabinet. The cabinet base is welded to clip angles along both sides of the cabinet that are embedded into the concrete pedestal.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*The angles and welds are painted, no corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The cabinet is mounted on top of a concrete pedestal which sits atop the concrete floor. Minor surface cracks are noted in the pedestal which is judged to not affect the integrity of the anchorage.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 054**

Equipment ID No. ED-08 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 3

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 drawing C-103, Sh. 11, Rev. 1 for the weld detail, clip angle and clip spacing. The anchor bolts attached through the clip angle are embedded in the concrete pedestal and are not considered part of the configuration verification since they are not accessible.*
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   
*There exists a cable tray support structure consisting of a tube steel moment frame in one direction (north-south) and a braced frame in the other direction (east-west) immediately adjacent to the inverter. There exists a 2" gap (north-south) between tube steel column for the support and the inverter. There is a 3/4" gap (north-south) between the sheet metal roof deflector on the inverter and the tube steel column. This structure is judged to be robust and will have minimal deflection in the north-south direction based on the rigidity of the frame, minimal load on the frame (lightly loaded cable tray), and height of the column. The strong axis of the cabinet is in the north-south direction, so deflection of the cabinet is judged to be minimal, therefore out of phase contact is judged not to be credible.*
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y  N  U  N/A   
*There are overhead cable tray and HVAC ducts overhead which are well supported.*
9. Do attached lines have adequate flexibility to avoid damage? Y  N  U  N/A   
*Flexible cable and conduit feed the top of the cabinet.*

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 054

Equipment ID No. ED-08 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 3

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

**Other Adverse Conditions**

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

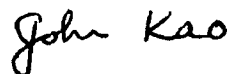
**Comments** (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/17/2012

John Kao



10/17/2012



Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 054

Equipment ID No. ED-08 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 3

**Photographs**



**Note:** Front panel of equipment.



**Note:** Back panel of equipment.

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 054

Equipment ID No. ED-08 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 3



**Note:** *Small gap noted between cable tray support structure column and side of cabinet near top of cabinet.*

**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 055**

Equipment ID No. ED-09 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 4

Location: Bldg: AUX Floor El. 607 Room, Area 224

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 equipment consists of an electrical cabinet. The cabinet base is welded to clip angles along both sides of the cabinet that are embedded into the concrete pedestal.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*The angles and welds are painted, no corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The cabinet is mounted on top of a concrete pedestal which sits atop the concrete floor. Minor surface cracks are noted in the pedestal which is judged to not affect the integrity of the anchorage.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 055**

Equipment ID No. ED-09 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 4

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?  
*Masonry block wall, C-107.16/Q, is located west of the cabinet. This  
block wall is qualified per drawing C-107, Sh. 1, Rev. 28.* Y  N  U  N/A
9. Do attached lines have adequate flexibility to avoid damage?  
*Flexible cable is fed through the top of the cabinet.* 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- 055

Equipment ID No. ED-09 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 4

**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

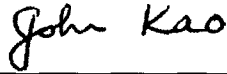
**Comments** (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/17/2012

John Kao



10/17/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 055

Equipment ID No. ED-09 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description INVERTER NO. 4

**Photographs**



**Note:** Back panel of equipment.



**Note:** Front panel of equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 056**

Equipment ID No. ED-15 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 1

Location: Bldg. AUX Floor El. 607 Room, Area 224

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 equipment consists of an electrical cabinet. The cabinet base is welded to clip angles along both sides of the cabinet that are embedded into the concrete pedestal.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*The angles and welds are painted, no corrosion noted.*

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The cabinet is mounted on top of a concrete pedestal which sits atop the concrete floor. Cracks are noted in the pedestal which is judged to not affect the integrity of the anchorage since the cabinet is anchored to the floor.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 056**

Equipment ID No. ED-15 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 1

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 anchorage configuration is consistent with drawing C-103, Sh. 11, Rev. 1 for the weld detail, clip angle and clip spacing. The anchor bolts attached through the clip angle are embedded in the concrete pedestal and are not considered part of the configuration verification since they are not accessible.* 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?  
*Fluorescent light fixtures overhead. Light fixtures hanging from chains with S hooks. Light fixtures judged not to come off S hooks due to vertical seismic acceleration < 1.0g. Fluorescent bulb is not a credible interaction since the cabinet is outside the bulb's zone of influence. Masonry block wall, C-107.16/Q, is located west of the cabinet. This block wall is qualified per drawing C-107, Sh. 1, Rev. 28.* Y  N  U  N/A
9. Do attached lines have adequate flexibility to avoid damage?  
*Flexible cable and conduit feed the top of the cabinet.* 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



Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 056**

Equipment ID No. ED-15 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 1

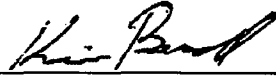
**Other Adverse Conditions**

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)

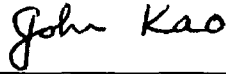
*Inspection of the underside of the cabinet, looking from floor level, revealed a hole in the cabinet base for an anchor. This hole was part of the original vendor provided anchorage detail, however, more robust anchorage was required and embedded clip angles were installed around the perimeter of the cabinet as identified in the plant drawings.*

Evaluated by: Kevin Bessell



Date: 10/17/2012

John Kao



10/17/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 056

Equipment ID No. ED-15 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 1

**Photographs**



**Note:** Back panel of equipment.



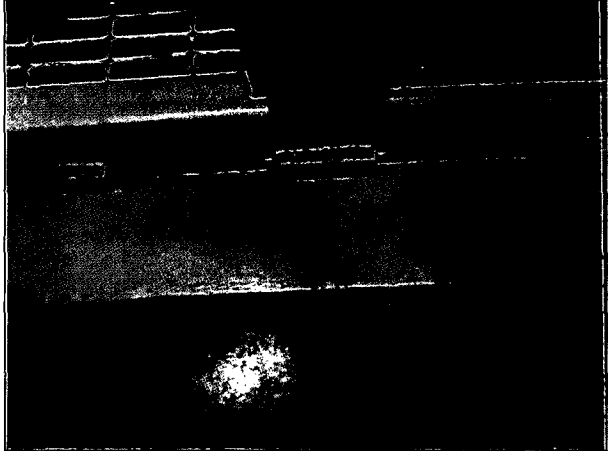
**Note:** Front panel of equipment.

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 056

Equipment ID No. ED-15 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 1

	
<p><b>Note:</b> <i>Cracks noted in pedestal.</i></p>	<p><b>Note:</b></p>

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 057**

Equipment ID No. ED-16 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 2

Location: Bldg. AUX Floor El. 607 Room, Area 224

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 equipment consists of an electrical cabinet. The cabinet base is welded to clip angles along both sides of the cabinet that are embedded into the concrete pedestal.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*The angles and welds are painted, no corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The cabinet is mounted on top of a concrete pedestal which sits atop the concrete floor. Minor surface cracks are noted in the pedestal which is judged to not affect the integrity of the anchorage.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 057**

Equipment ID No. ED-16 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 2

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   
*Fluorescent light fixtures overhead. Light fixtures ruggedly mounted to  
unistrut. Fluorescent bulb is not a credible interaction since the cabinet  
is outside the bulb's zone of influence.*  
*Masonry block wall, C-107.16/Q, is located west of the cabinet. This  
block wall is qualified per drawing C-107, Sh. 1, Rev. 28.*
9. Do attached lines have adequate flexibility to avoid damage? Y  N  U  N/A   
*Flexible cable is fed through the top of the cabinet.*
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- 057

Equipment ID No. ED-16 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 2

**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

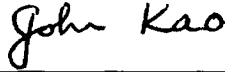
**Comments** (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/17/2012

John Kao



10/17/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 057

Equipment ID No. ED-16 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 2

Photographs



**Note:** Back panel of equipment.



**Note:** Front panel of equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 058**

Equipment ID No. ED-17 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 3

Location: Bldg. AUX Floor El. 607 Room, Area 224

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 equipment consists of an electrical cabinet. The cabinet base is welded to clip angles along both sides of the cabinet that are embedded into the concrete pedestal.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*The angles and welds are painted, no corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The cabinet is mounted on top of a concrete pedestal which sits atop the concrete floor. Cracks are noted in the pedestal which is judged to not affect the integrity of the anchorage since the cabinet is anchored to the floor.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.



Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 058**

Equipment ID No. ED-17 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 3

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 drawing C-103, Sh. 11, Rev. 1 for the weld detail, clip angle and clip spacing. The anchor bolts attached through the clip angle are embedded in the concrete pedestal and are not considered part of the configuration verification since they are not accessible.*
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   
*Fluorescent light fixtures overhead. Light fixtures hanging from chains with S hooks. Light fixtures judged not to come off S hooks due to vertical seismic acceleration < 1.0g. Fluorescent bulb is not a credible interaction since the cabinet is outside the bulb's zone of influence. Masonry block wall, C-107.16/Q, is located west of the cabinet. This block wall is qualified per drawing C-107, Sh. 1, Rev. 28.*
9. Do attached lines have adequate flexibility to avoid damage? Y  N  U  N/A   
*Flexible cable and conduit feed the top of the cabinet.*
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- 058

Equipment ID No. ED-17 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 3

**Other Adverse Conditions**

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

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

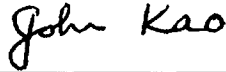
*Inspection of the underside of the cabinet, looking from floor level, revealed a hole in the cabinet base for an anchor. This hole was part of the original vendor provided anchorage detail, however, more robust anchorage was required and embedded clip angles were installed around the perimeter of the cabinet as identified in the plant drawings.*

Evaluated by: Kevin Bessell



Date: 10/17/2012

John Kao



10/17/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 058

Equipment ID No. ED-17 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 3

**Photographs**



**Note:** Back panel of equipment.



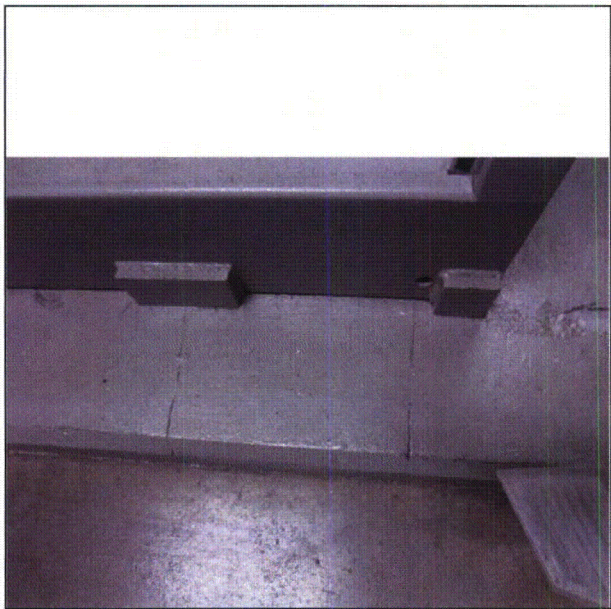
**Note:** Front panel of equipment.

Status: Y  N  U

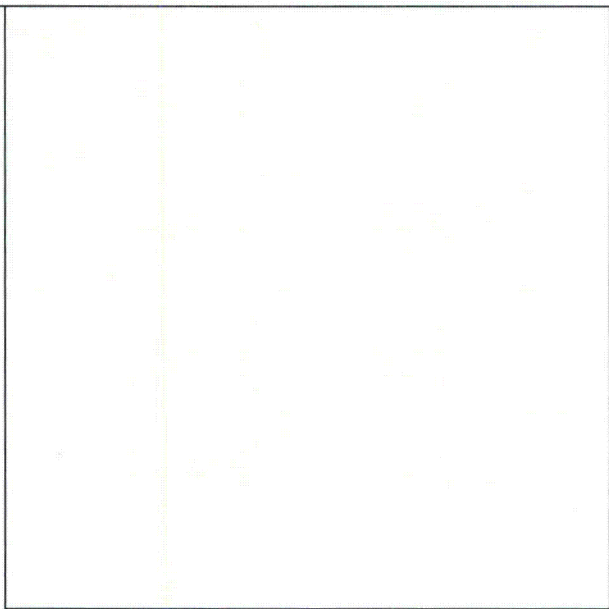
Seismic Walkdown Checklist (SWC) SWEL1- 058

Equipment ID No. ED-17 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 3



**Note:** Cracks noted in pedestal.



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 059**

Equipment ID No. ED-18 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 4

Location: Bldg. AUX Floor El. 607 Room, Area 224

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 equipment consists of an electrical cabinet. The cabinet base is welded to clip angles along both sides of the cabinet that are embedded into the concrete pedestal.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*The angles and welds are painted, no corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The cabinet is mounted on top of a concrete pedestal which sits atop the concrete floor. No cracks are observed.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 059**

Equipment ID No. ED-18 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 4

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   
*Fluorescent light fixtures overhead. Light fixtures ruggedly mounted to  
unistrut. Fluorescent bulb is not a credible interaction since the cabinet  
is outside the bulb's zone of influence.*  
*Masonry block wall, C-107.16/Q, is located west of the cabinet. This  
block wall is qualified per drawing C-107, Sh. 1, Rev. 28.*
9. Do attached lines have adequate flexibility to avoid damage? Y  N  U  N/A   
*Flexible cable is fed through the top of the cabinet.*
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- 059

Equipment ID No. ED-18 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 4

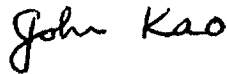
**Other Adverse Conditions**

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: Kevin Bessell  Date: 10/17/2012

John Kao



10/17/2012

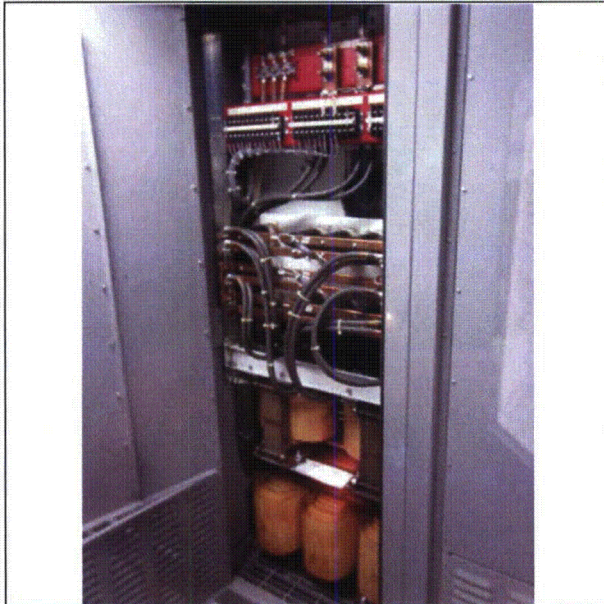
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 059

Equipment ID No. ED-18 Equip. Class<sup>1</sup> 16, BATTERY CHARGERS AND INVERTERS

Equipment Description BATTERY CHARGER NO. 4

**Photographs**



**Note:** Back panel of equipment with panel door open.



**Note:** Front panel of equipment.



Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 060**

Equipment ID No. K-6A Equip. Class<sup>1</sup> 17- ENGINE GENERATORS

Equipment Description EMERGENCY DIESEL GENERATOR 1-1

Location: Bldg. AUX Floor El. 590 Room, Area 116

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   
*Generator was anchored to ground using cast in place bolts through base plate.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There was some mild surface oxidation.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The generator is anchored to the concrete floor slab.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 060**

Equipment ID No. K-6A Equip. Class<sup>1</sup> 17- ENGINE GENERATORS

Equipment Description EMERGENCY DIESEL GENERATOR 1-1

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.)  
*Due to large distances a (+ or -)1/2" tolerance was allowed for  
measurement. Anchorage was verified using SEWS Package EA-  
POC0007899-SEWS-K6A.* 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?  
*Masonry block wall west of K-6A qualified by DWG. C-104.* Y  N  U  N/A
9. Do attached lines have adequate flexibility to avoid damage?  
*Diesel exhaust was noted to have flexible fitting in middle of line.* 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- 060

Equipment ID No. K-6A Equip. Class<sup>1</sup> 17- ENGINE GENERATORS


Equipment Description EMERGENCY DIESEL GENERATOR 1-1

**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: Alex Smerch  Date: 10/3/12

Paul Klein  10/3/12

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 060

Equipment ID No. K-6A Equip. Class<sup>1</sup> 17- ENGINE GENERATORS

Equipment Description EMERGENCY DIESEL GENERATOR 1-1

**Photographs**

<p><b>This photo contains security-sensitive information. It is available for review at the Palisades Nuclear Plant.</b></p>
<p><b>Note:</b> K-6A</p>

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

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 061**

Equipment ID No. K-6B Equip. Class<sup>1</sup> 17, ENGINE GENERATORS

Equipment Description EMERGENCY DIESEL GENERATOR 1-2

Location: Bldg. AUX Floor El. 590 Room, Area 116B

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 equipment is anchored to the floor on a grout pad with large anchors directly through the equipment mounting skid. There are also smaller anchors attached through side plate stiffeners welded to the side of the equipment skid.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*The anchorage is painted. No corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The concrete floor and grout pad are painted. Minor spalling noted on the grout pad on the west side of the equipment and is judged not to affect seismic capacity of equipment.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 061**

Equipment ID No. K-6B Equip. Class<sup>1</sup> 17, ENGINE GENERATORS

Equipment Description EMERGENCY DIESEL GENERATOR 1-2

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?  
*Item is not a soft target.* Y  N  U  N/A

8. Are overhead equipment, distribution systems, ceiling tiles and lighting,  
and masonry block walls not likely to collapse onto the equipment? Y  N  U  N/A   
*There is a qualified block wall, C104.21/Q per drawing C-104, Rev. 33  
to the East of the equipment.  
Damper D-29, which is at the end of a 3'-0" diameter sheet metal duct  
for V-24D is supported vertically with rod and thin straps adjacent to K-  
6B along the west side. There is minimal horizontal gap, <2", observed  
between tubing on K-6B and damper. The only lateral support noted  
was on the wall at the north end of the room where the duct enters.  
Due to the heavier mass at the end of the duct (i.e. damper) and  
flexible supports, deflections of duct expected to hit into diesel.  
Document EA-PO0007899-K6A-B-1, Rev. 1, was reviewed and the  
frequency of the system and load given in this document would provide  
deflections > 2", thus impacting the generator. Further evaluation is  
required to determine potential for damage due to impact. Licensing  
basis evaluation, LB-18, has been initiated.*

9. Do attached lines have adequate flexibility to avoid damage?  
*Associated lines and ducting contain multiple bends and expansion  
fittings.* Y  N  U  N/A

ATTACHMENT 9.6  
Sheet 3 of 5

SEISMIC WALKDOWN CHECKLIST FORM

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) - SWEL1- 061**

Equipment ID No. K-6B Equip. Class<sup>1</sup> 17, ENGINE GENERATORS

Equipment Description EMERGENCY DIESEL GENERATOR 1-2

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

*Damper D-29, which is at the end of a 3'-0" diameter sheet metal duct for V-24D is supported vertically with rod and thin straps adjacent to K-6B along the west side. There is minimal horizontal gap, <2", observed between tubing on K-6B and damper. The only lateral support noted was on the wall at the north end of the room where the duct enters. Due to the heavier mass at the end of the duct (i.e. damper) and flexible supports, deflections of duct expected to hit into diesel. Document EA-PO0007899-K6A-B-1, Rev. 1, was reviewed and the frequency of the system and load given in this document would provide deflections > 2", thus impacting the generator. Further evaluation is required to determine potential for damage due to impact. Licensing basis evaluation, LB-18, has been initiated.*

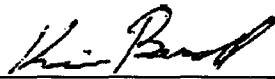
**Other Adverse Conditions**

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 anchored to ceiling, which supports lines for E-22B, have 2 bolts missing. Upon further inspection, there are welds along the plate to embed steel in the ceiling of the room, therefore judged to be okay.*

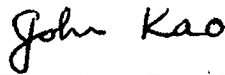
**Comments** (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/15/2012

John Kao



10/15/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 061

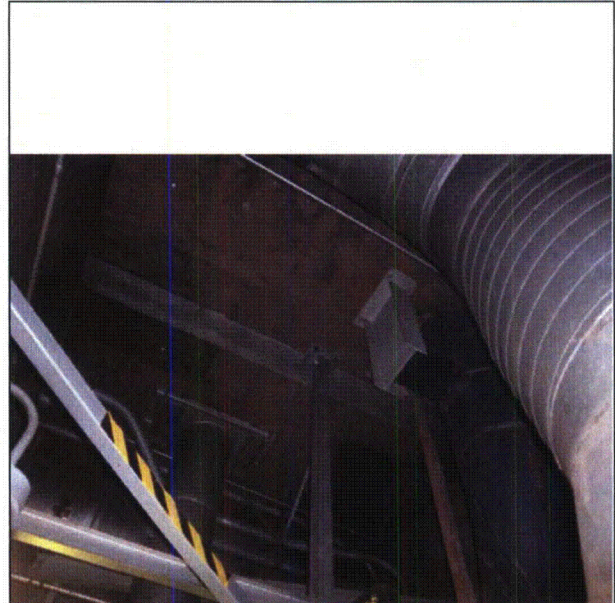
Equipment ID No. K-6B Equip. Class<sup>1</sup> 17, ENGINE GENERATORS

Equipment Description EMERGENCY DIESEL GENERATOR 1-2

Photographs

This photo contains security-sensitive information. It is available for review at the Palisades Nuclear Plant.

**Note:** *Equipment.*



**Note:** *Missing bolts in overhead support, however, welding is evident to embed in lieu of bolts. Photo is from stairwell to Room 147 in northwest corner of room looking up.*

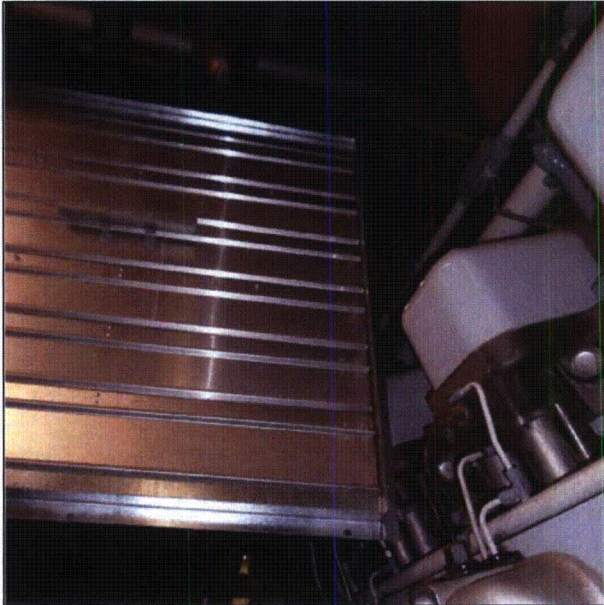


Status: Y  N  U

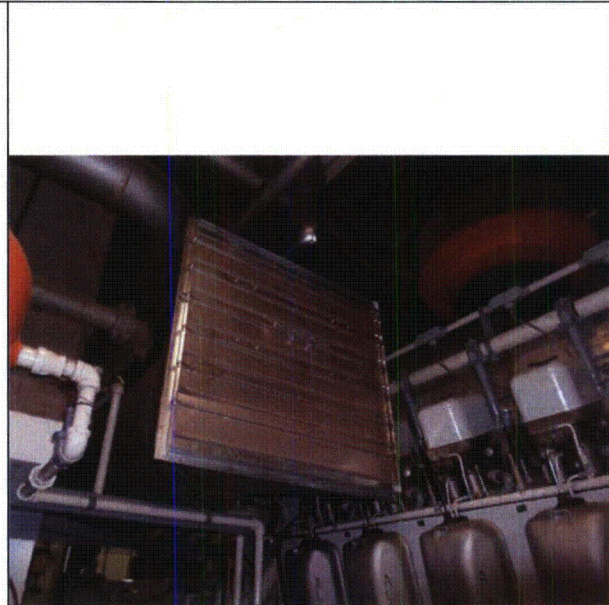
Seismic Walkdown Checklist (SWC) SWEL1- 061

Equipment ID No. K-6B Equip. Class<sup>1</sup> 17, ENGINE GENERATORS

Equipment Description EMERGENCY DIESEL GENERATOR 1-2



**Note:** Credible interaction between V24D ventilation duct, D-29 damper and K-6B. Photo is looking north, west side of K-6B.



**Note:** Credible interaction between V24D ventilation duct, D-29 damper and K-6B. Photo is looking northeast, west side of K-6B.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 062**

Equipment ID No. FT-0727 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER PPS P-8A & P-8B FLOW TRANS

Location: Bldg. AUX Floor El. 590 Room, Area 123

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 equipment is attached to a shelf angle with 4 bottom bolts. This shelf angle is welded to a piece of HSS which is bolted to the concrete wall with 4 bolts.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is some slight mild surface oxidation.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The HSS is anchored to the concrete wall with no cracks noted.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 062

Equipment ID No. FT-0727 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER PPS P-8A & P-8B FLOW TRANS

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 check for FT-0727 was verified with the SEWS Report, EA-POC0007899-SEWS-FT0727 and Bechtel Drawing: JG-135(Q) Sheet 2 of 3 Rev. 001.*
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   
 *tubing coming off of the equipment has multiple bends.*
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- 062

Equipment ID No. FT-0727 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

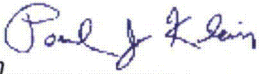
Equipment Description AUX FEEDWATER PPS P-8A & P-8B FLOW TRANS

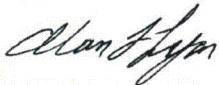
**Other Adverse Conditions**

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: Alex Smerch  Date: 10-12-2012

Paul Klein  Date: 10-12-2012

Al Lyon  Date: 10-16-2012

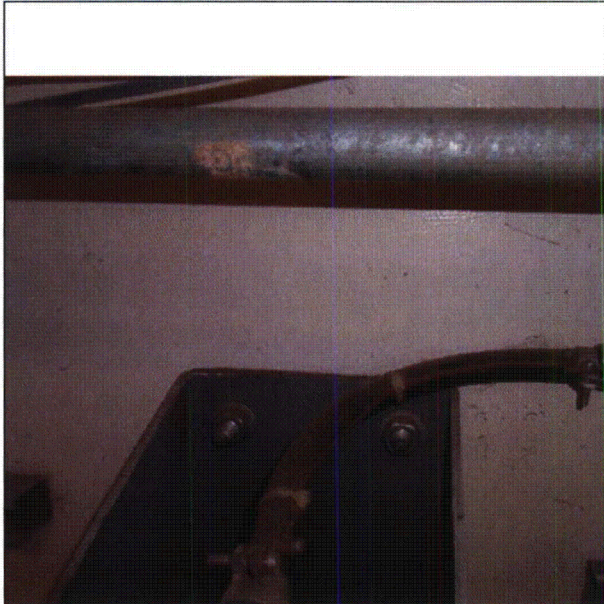
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 062

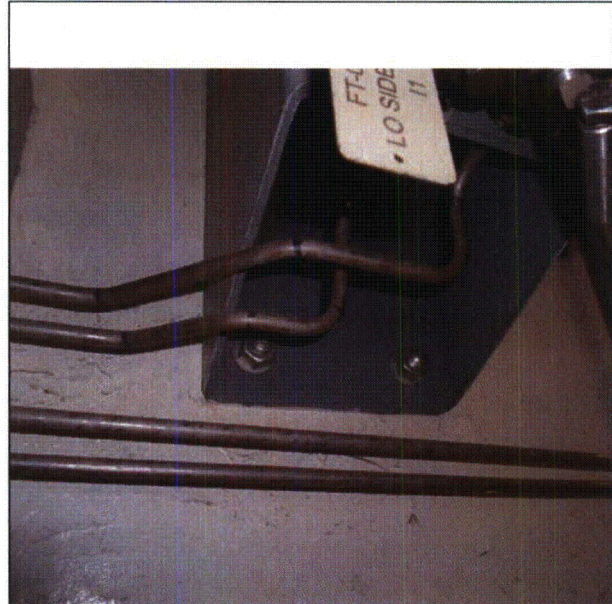
Equipment ID No. FT-0727 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER PPS P-8A & P-8B FLOW TRANS

Photographs



**Note:** Anchorage of HSS to wall at the top of the component.



**Note:** Anchorage of HSS to wall at the bottom of the component.

Status: Y  N  U

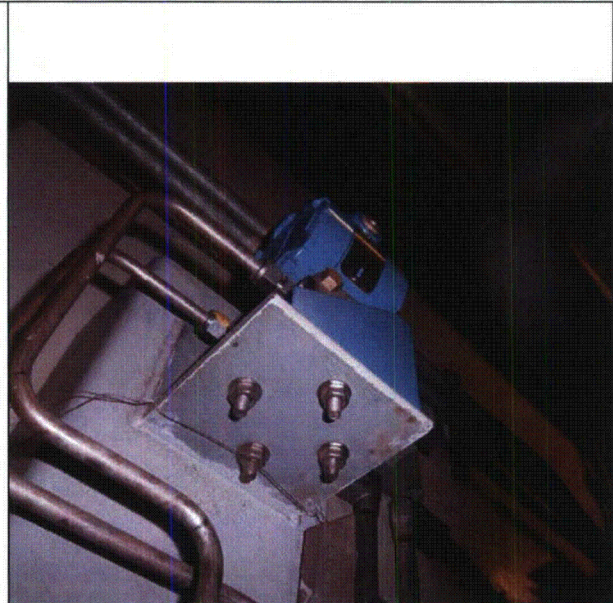
Seismic Walkdown Checklist (SWC) SWEL1- 062

Equipment ID No. FT-0727 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER PPS P-8A & P-8B FLOW TRANS



**Note:** FT-0749



**Note:** Anchorage of equipment to shelf angle and weld of angle to HSS section.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 063**

Equipment ID No. FT-0736A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C TO STM GEN E-50B FLOW IND

Location: Bldg. AUX Floor El. 57 Room, Area 005

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   
*It was anchored to a vertical steel channel which is welded to a baseplate.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*The bolts had mild surface oxidation which was judged not be to be a concern.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The baseplate was anchored to the concrete floor slab.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 063**

Equipment ID No. FT-0736A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C TO STM GEN E-50B FLOW IND

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?  
*Metal box door directly above equipment was judged to swing  
completely clear of FT-0736A and not pose a spatial interaction  
concern.* 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- 063

Equipment ID No. FT-0736A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

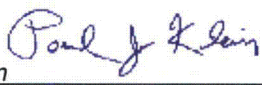
Equipment Description AUX FW PUMP P-8C TO STM GEN E-50B FLOW IND

**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: Alex Smerch  Date: 10/09/2012

Paul Klein  10/09/2012

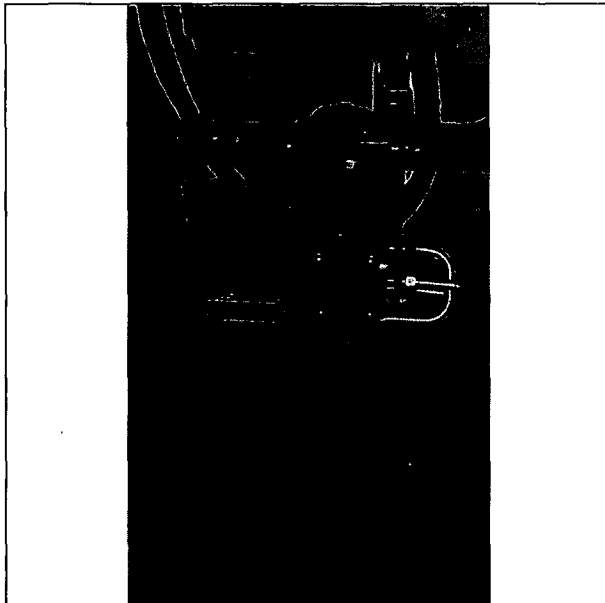
Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 063**

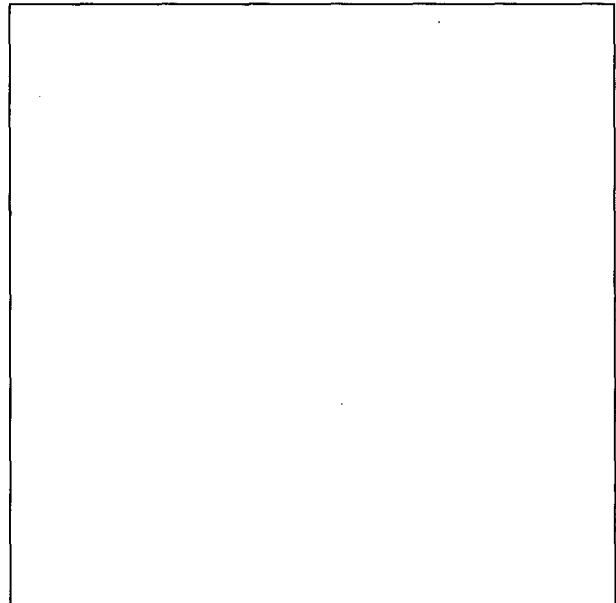
Equipment ID No. FT-0736A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C TO STM GEN E-50B FLOW IND

**Photographs**



**Note:** FT-0736A



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 064**

Equipment ID No. FT-0737A Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C TO STM GEN E-50A FLOW

Location: Bldg. AUX Floor El. 570 Room, Area 005

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   
*It is anchored to a vertical steel channel which is welded to a steel baseplate.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is no corrosion.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The baseplate is anchored to the concrete floor slab.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 064**

Equipment ID No. FT-0737A Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C TO STM GEN E-50A FLOW

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?  
*A nearby pipe was noted to be supported in very close proximity to FT-0737A. Since this support point is in close proximity to FT-0737A it is judged that there would not be enough deflection during a seismic event to contact and damage FT-0737A.* 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 over equipment does not have bulb guards but light bulbs were judged to have negligible effect on FT-0737A if they would fall.* 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- 064

Equipment ID No. FT-0737A Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C TO STM GEN E-50A FLOW

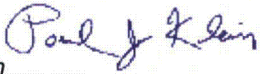
**Other Adverse Conditions**

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)

*Item is inaccessible and will be deferred.*

Evaluated by: Alex Smerch  Date: 10/09/2012

Paul Klein  10/09/2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

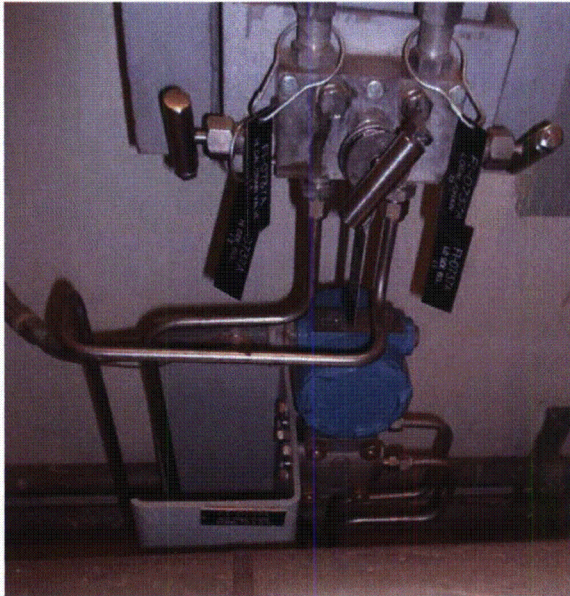
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 064

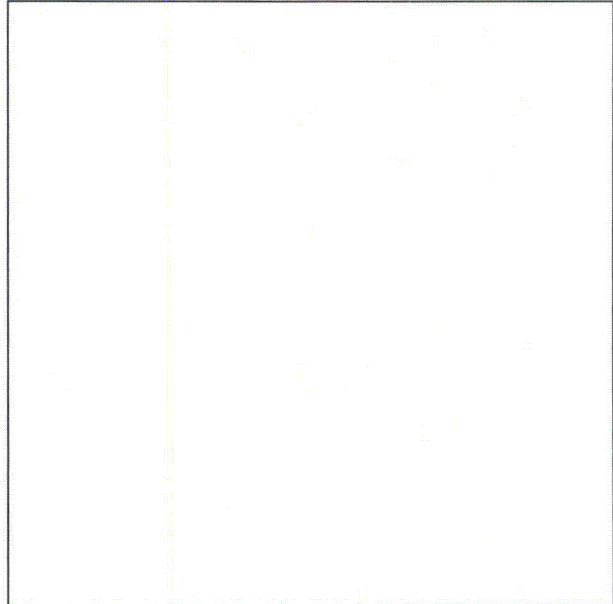
Equipment ID No. FT-0737A Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C TO STM GEN E-50A FLOW

**Photographs**



**Note:** FT-0737A



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC):** SWEL1- 065

Equipment ID No. FT-0749 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER PPS P-8A & P-8B FLOW TRANS

Location: Bldg. AUX Floor El. 590 Room, Area 123

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 equipment is attached to a shelf angle with 4 bottom bolts. This shelf angle is welded to a piece of HSS which is bolted to the concrete wall with 4 bolts.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is some mild surface oxidation.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The HSS is anchored to the concrete wall with four bolts. There was a crack in the vicinity of the anchorage that is not large enough to be considered a significant structural crack and has no effect on the structural adequacy of the anchorage of FT-0749.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 065

Equipment ID No. FT-0749 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER PPS P-8A & P-8B FLOW TRANS

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 anchorage was inspected using the SEWS Report EA-POC0007899-SEWS-FT0749 and Bechtel Drawing: JG-135(Q) Sheet 2 of 3 Rev. 001* 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?  
*There is tubing coming off of the equipment with multiple bends.* 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- 065

Equipment ID No. FT-0749 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER PPS P-8A & P-8B FLOW TRANS

**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: Alex Smerch  Date: 10-12-2012

Paul Klein  Date: 10-12-2012

Al Lyon  Date: 10-16-2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 065

Equipment ID No. FT-0749 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER PPS P-8A & P-8B FLOW TRANS

Photographs



**Note:** FT-0749



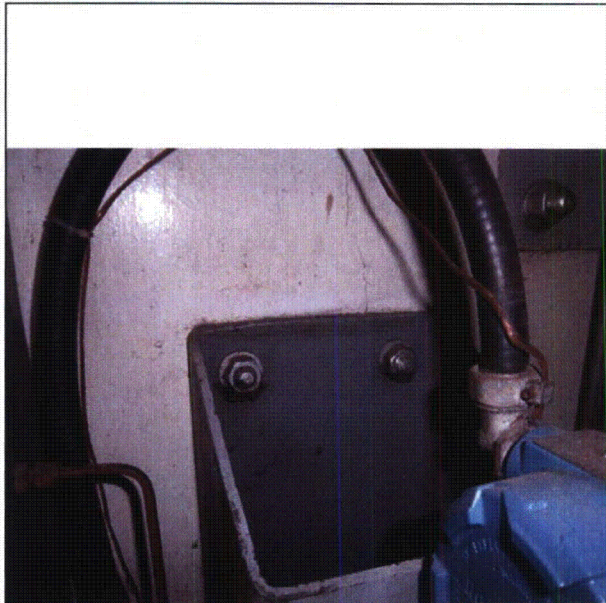
**Note:** Anchorage of equipment to shelf angle.

Status: Y  N  U

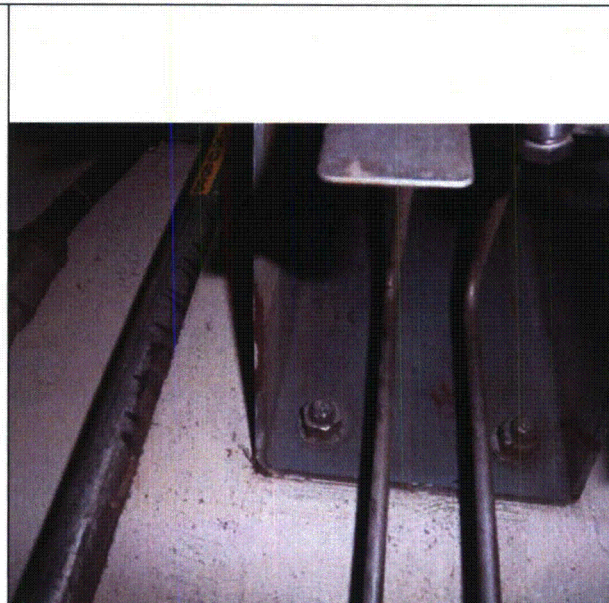
Seismic Walkdown Checklist (SWC) SWEL1- 065

Equipment ID No. FT-0749 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER PPS P-8A & P-8B FLOW TRANS



**Note:** Anchorage of HSS to wall at the top of the component.



**Note:** Anchorage of HSS to the wall at the bottom of the component.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC):** SWEL1- 066

Equipment ID No. I/P-0727 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER FLOW CONTROL TO S/G E-50B

Location: Bldg. AUX Floor El. 590 Room, Area 123

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 equipment is mounted to 2 Unistrut with 4 bolts. The Unistruts are then in turn mounted to the wall with 2 bolts through each Unistrut.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is no corrosion.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The item is mounted to a concrete wall with 4 anchors.*

<sup>1</sup> Enter the equipment class name from EPR1 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) - SWEL1- 066**

Equipment ID No. I/P-0727 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER FLOW CONTROL TO S/G E-50B

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 anchorage is verified with EA-POC0007899-SEWS-IP0727 and  
Bechtel Dwg. JG-138(Q) Sheet 3 of 3.* 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 item also has a protective box covering it.* 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 item also has a protective box covering it.* 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- 066

Equipment ID No. I/P-0727 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

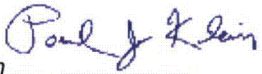
Equipment Description AUX FEEDWATER FLOW CONTROL TO S/G E-50B

**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: Alex Smerch  Date: 10-12-2012

Paul Klein  10-12-2012

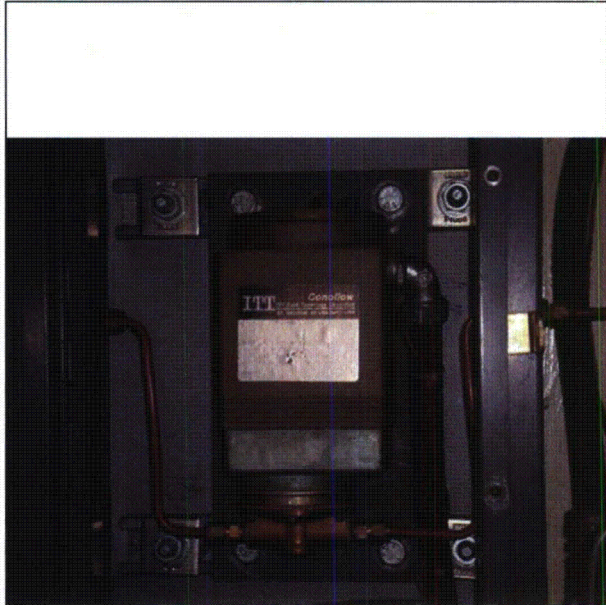
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 066

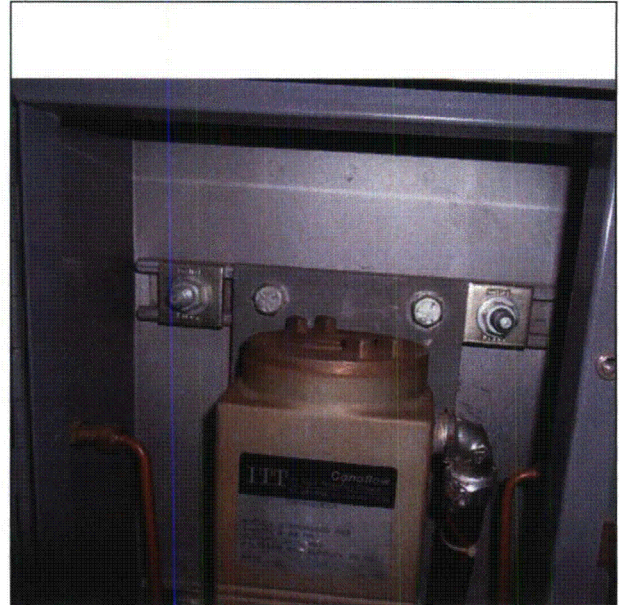
Equipment ID No. I/P-0727 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER FLOW CONTROL TO S/G E-50B

Photographs



Note: I/P-0727



Note: Top Anchorage

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

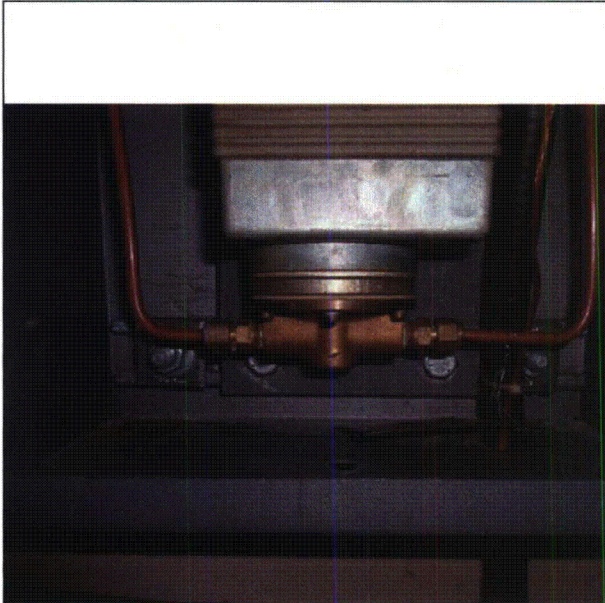
Sheet 5 of 5

Status: Y  N  U

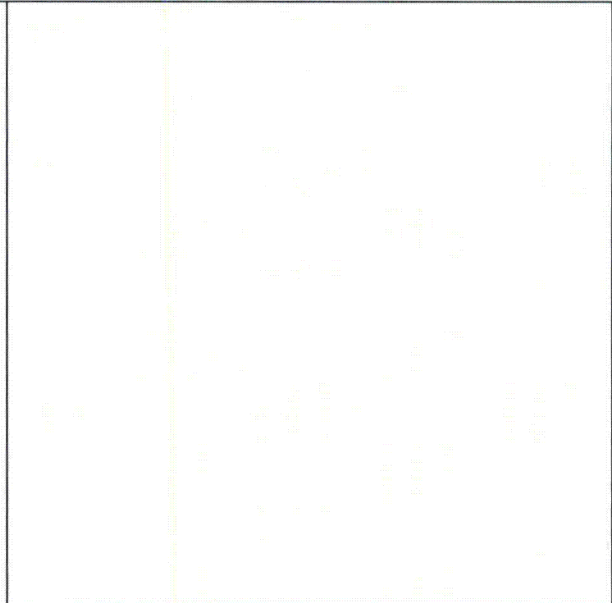
**Seismic Walkdown Checklist (SWC) SWEL1- 066**

Equipment ID No. I/P-0727 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER FLOW CONTROL TO S/G E-50B



**Note:** *Bottom Anchorage*



**Note:**



Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 067**

Equipment ID No. I/P-0736A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AFW FLOW CONTROL TO S/G E-50B

Location: Bldg. AUX Floor El. 570 Room, Area 005

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 equipment is anchored to a plate which is attached to two Unistruts each of which is bolted to the wall with two anchor bolts.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*Even though other anchorage in area has degradation from corrosion there is no visible corrosion on the anchorage for I/P-0736A which appears to be stainless steel.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The equipment is attached to the concrete wall with 4 anchor bolts.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

ATTACHMENT 9.6  
Sheet 2 of 4

SEISMIC WALKDOWN CHECKLIST FORM

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) - SWEL1- 067**

Equipment ID No. I/P-0736A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AFW FLOW CONTROL TO S/G E-50B

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 credible threats were noted and additionally equipment has  
protective metal box to help shield it from impact.* 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- 067

Equipment ID No. I/P-0736A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS


Equipment Description AFW FLOW CONTROL TO S/G E-50B

**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: Alex Smerch  Date: 10/10/2012

Paul Klein  10/10/2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

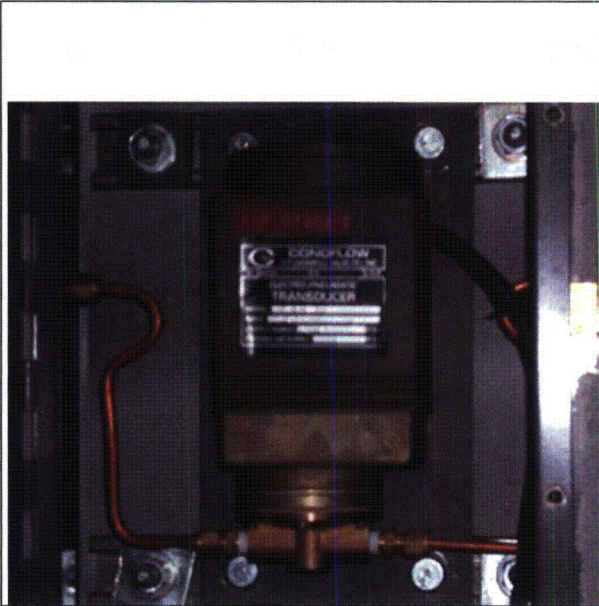
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Seismic Walkdown Checklist (SWC) SWEL1- 067

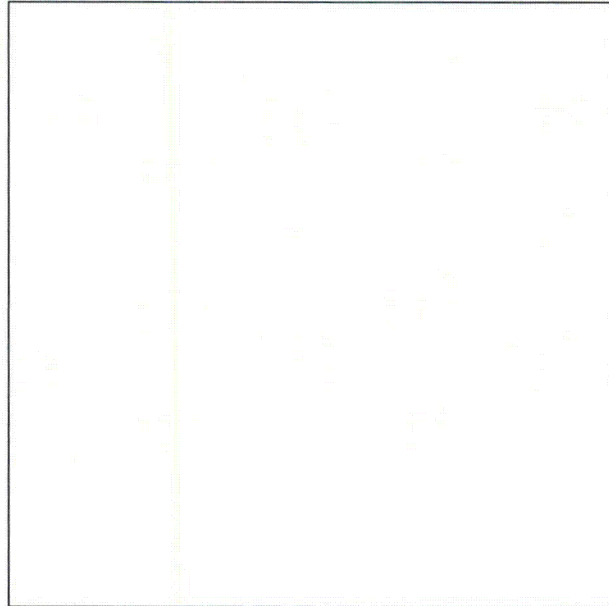
Equipment ID No. I/P-0736A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AFW FLOW CONTROL TO S/G E-50B

**Photographs**



**Note:** I/P0736A



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 068**

Equipment ID No. I/P-0737A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AFW FLOW CONTROL TO S/G E-50A

Location: Bldg. AUX Floor El. 570 Room, Area 005

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 equipment is anchored to a plate which is attached to two Unistruts each of which is bolted to the wall with two anchor bolts.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is no corrosion on the anchorage.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The equipment is attached to the concrete wall with 4 anchor bolts.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 068

Equipment ID No. I/P-0737A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AFW FLOW CONTROL TO S/G E-50A

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 credible threats were noted and additionally equipment has  
protective metal box to help shield it from impact.* 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 bulbs were observed not to have bulb covers but due to  
equipment being protected by an outer metal box this was judged not to  
be a concern.* 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- 068

Equipment ID No. I/P-0737A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS


Equipment Description AFW FLOW CONTROL TO S/G E-50A

**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: Alex Smerch  Date: 10/10/2012

Paul Klein  10/10/2012

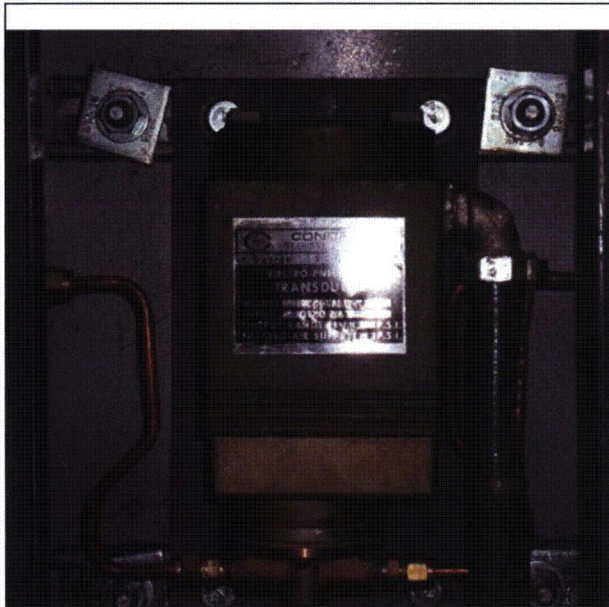
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 068

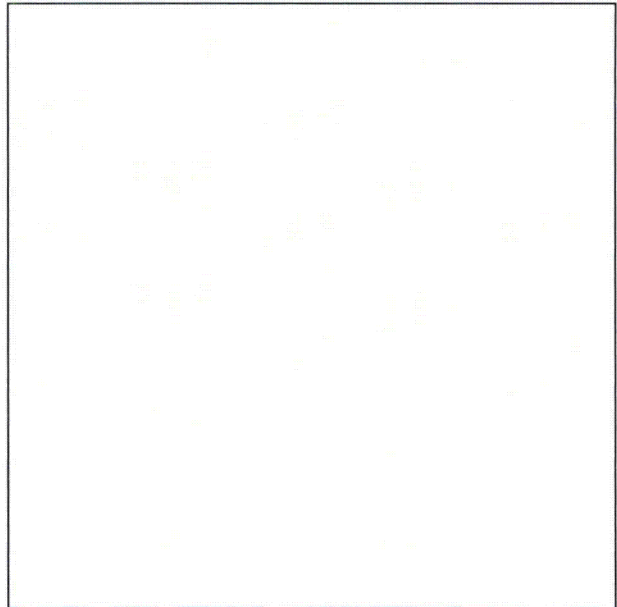
Equipment ID No. I/P-0737A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AFW FLOW CONTROL TO S/G E-50A

Photographs



Note: I/P-0737A



Note:



Status: Y  N  U

**Seismic Walkdown Checklist (SWC) : SWEL1- 069**

Equipment ID No. I/P-0749 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER FLOW CONTROL TO S/G E-50A

Location: Bldg. AUX Floor El. 590 Room, Area 123

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 equipment is mounted to 2 Unistrut with 4 bolts. The Unistruts are then in turn mounted to the wall with 2 bolts through each Unistrut.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is no corrosion.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The item is mounted to a concrete wall with 4 anchors.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 069

Equipment ID No. I/P-0749 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER FLOW CONTROL TO S/G E-50A

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 anchorage for the item was confirmed with EA-POC007899-  
SEWS-IP0749 and Bechtel Dwg. JG-138(Q) Sheet 3 of 3.* 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 item also has a protective box covering it.* 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?  
*There is a nearby qualified block wall.* 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- 069

Equipment ID No. I/P-0749 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER FLOW CONTROL TO S/G E-50A

**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: Alex Smerch  Date: 10-12-2012

Paul Klein  10-12-2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

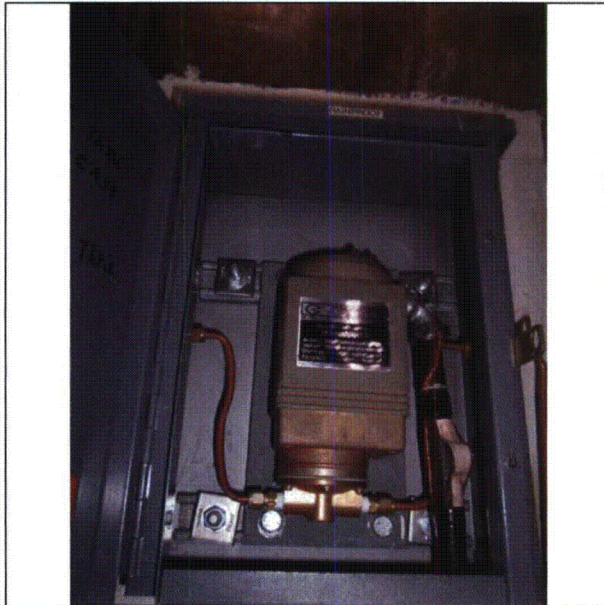
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 069

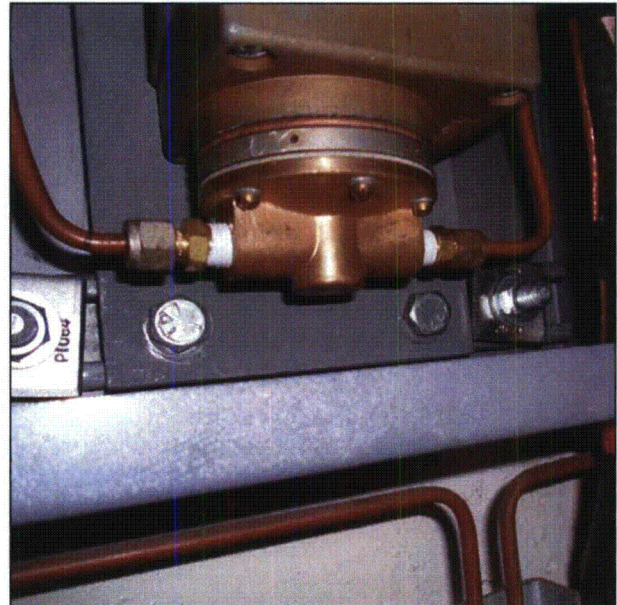
Equipment ID No. I/P-0749 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER FLOW CONTROL TO S/G E-50A

Photographs



Note: I/P-0749



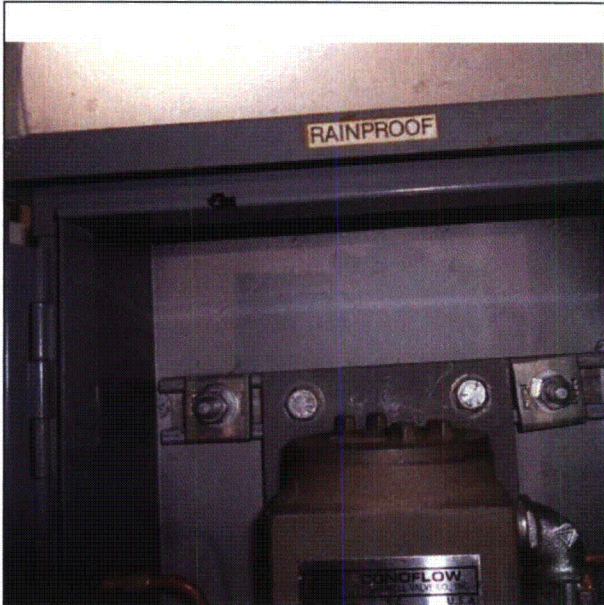
Note: Bottom Anchorage

Status: Y  N  U

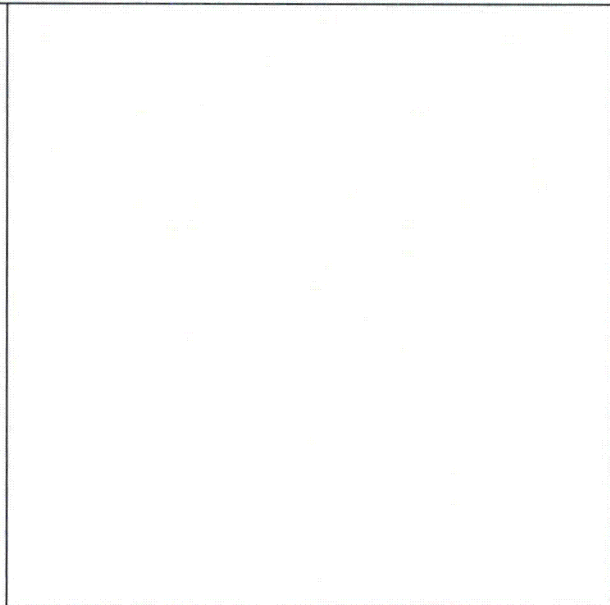
Seismic Walkdown Checklist (SWC) SWEL1- 069

Equipment ID No. I/P-0749 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FEEDWATER FLOW CONTROL TO S/G E-50A



**Note:** Top Anchorage



**Note:**

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 070**

Equipment ID No. LT-0331 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description SIRW TANK CKT 2 LEVEL TRANSMITTER

Location: Bldg. AUX Floor El. 644 Room, Area 808

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   
*LT-0331 is mounted to a manifold with 4 - 7/16 in. alloy bolts. The manifold is mounted to a 3/8 in. S.S. plate with 2 - 5/16 in. alloy bolts and the plate is mounted to a flange on the tank.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There was no corrosion in excess of mild surface corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*LT-0331 is mounted to a tank flange.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 070**

Equipment ID No. LT-0331 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description SIRW TANK CKT 2 LEVEL TRANSMITTER

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 of LT-0331 was compared with Palisades Dwgs. 950Y345 E-119A Shts. 10A and 11A.*
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   
*LT-0331 is located outside in a metal weather enclosure on the southeast side of tank T-58.*
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   
*As noted above LT-0331 is located outside in a metal weather enclosure. The only overhead system noted was what appears to be ductwork mounted on the Aux. Bldg. on the east side of tank T-58. The ductwork appeared to be well supported and is judged not to be a problem.*
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- 070

Equipment ID No. LT-0331 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description SIRW TANK CKT 2 LEVEL TRANSMITTER

**Other Adverse Conditions**

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

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

Evaluated by: Alex Smerch  Date: 10-10-12

Paul Klein  10-10-12



ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 070

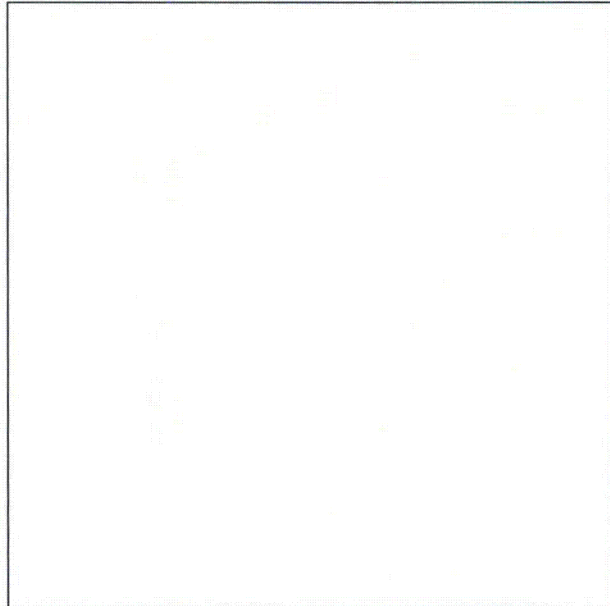
Equipment ID No. LT-0331 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description SIRW TANK CKT 2 LEVEL TRANSMITTER

**Photographs**



**Note:** LT-0331



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 071**

Equipment ID No. LT-0332A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description SIRW LEVEL TRANSMITTER

Location: Bldg. AUX Floor El. 644 Room, Area 808

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   
*LT-0332A is mounted to a manifold with 4 - 7/16 in. alloy bolts. The manifold is mounted to a 3/8 in. S.S. plate with 2 - 5/16 in. alloy bolts and the plate is mounted to a flange on the tank.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*Inspection of the anchorage of LT-0332A revealed a minimal amount of mild surface corrosion.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*LT-0332A is mounted to a tank flange.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 071

Equipment ID No. LT-0332A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description SIRW LEVEL TRANSMITTER

5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.) Y  N  U  N/A
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?  
*LT-0332A is located in a metal weather enclosure on the southwest  
side of tank T-58.* 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?  
*As described in the above response, LT-0332A is located outside in a  
metal weather enclosure and no items are likely to collapse on LT-  
0332A.* 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- 071

Equipment ID No. LT-0332A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description SIRW LEVEL TRANSMITTER

**Other Adverse Conditions**

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

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

Evaluated by: Alex Smerch  Date: 10-10-12

Paul Klein  10-10-12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 071

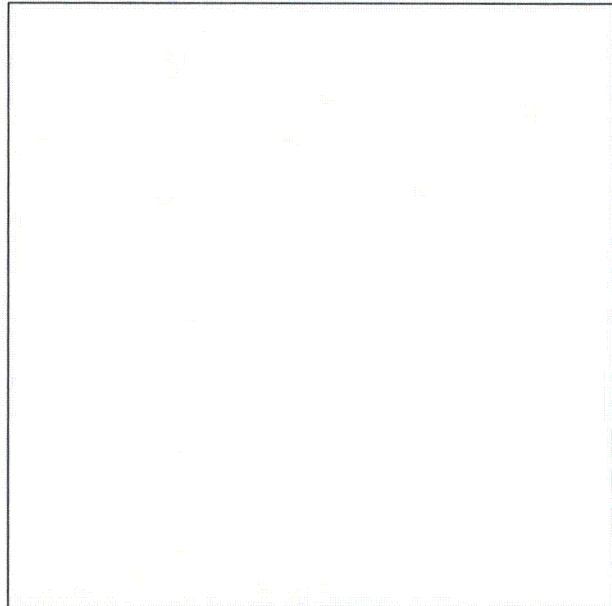
Equipment ID No. LT-0332A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description SIRW LEVEL TRANSMITTER

**Photographs**



**Note:** LT-0332A



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 072**

Equipment ID No. LT-2021 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description CONDENSATE STORAGE TANK T-2 HIGH-LOW LEVEL

Location: Bldg. TURB Floor El. 590 Room, Area OUTSIDE

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   
*Equipment is mounted inside a sheet metal enclosure. Equipment is anchored to a support bracket with 4 bolts. The support bracket is then anchored to a pipe with a u-bolt.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*No corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*Equipment is mounted to a support bracket and pipe.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 072

Equipment ID No. LT-2021 Equip. Class 18, INSTRUMENT RACKS

Equipment Description CONDENSATE STORAGE TANK T-2 HIGH-LOW LEVEL

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 equipment anchorage configuration is not consistent with the installation procedures provided in vendor manual J0445-SH-0007. The manual calls for 2 u-bolts when anchored to the pipe. The anchorage is judged to be adequate, however, requires further verification for configuration control. Licensing basis evaluation, LB-13, has been initiated. CR-PLP-2012-07149 has been generated for this condition*

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

*The equipment anchorage configuration is not consistent with the installation procedures provided in vendor manual J0445-SH-0007. The manual calls for 2 u-bolts when anchored to the pipe. The anchorage is judged to be adequate, however, requires further verification for configuration control. Licensing basis evaluation, LB-13, has been initiated. CR-PLP-2012-07149 has been generated for this condition.*

**Interaction Effects**

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

*A light and speaker system is noted on the top of the turbine building. Mounting of these fixtures is unknown and is considered a credible and significant interaction. Further evaluation is required. Licensing basis evaluation, LB-14, has been initiated. Adjacent tanks T-81 and T-7 pose interaction concerns. T-81 is documented in SEWS Sht. 1 of 4 as posing no interaction threat. Tank T-7 is smaller and sufficiently anchored and judged not to be credible interaction.*

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

*Block walls observed to the east of the equipment. Block wall is only about 3'-0" and judge to be okay due to exterior wall based on wind loading being larger compared to seismic loading and small cantilever height.*

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y  N  U

Seismic Walkdown Checklist (SWC): SWEL1- 072

Equipment ID No. LT-2021 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description CONDENSATE STORAGE TANK T-2 HIGH-LOW LEVEL

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

*A light and speaker system is noted on the top of the turbine building. Mounting of these fixtures is unknown and is considered a credible and significant interaction. Further evaluation is required. Licensing basis evaluation, LB-14, has been initiated.*

**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

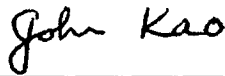
**Comments** (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/10/2012

John Kao



10/10/2012



Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 072

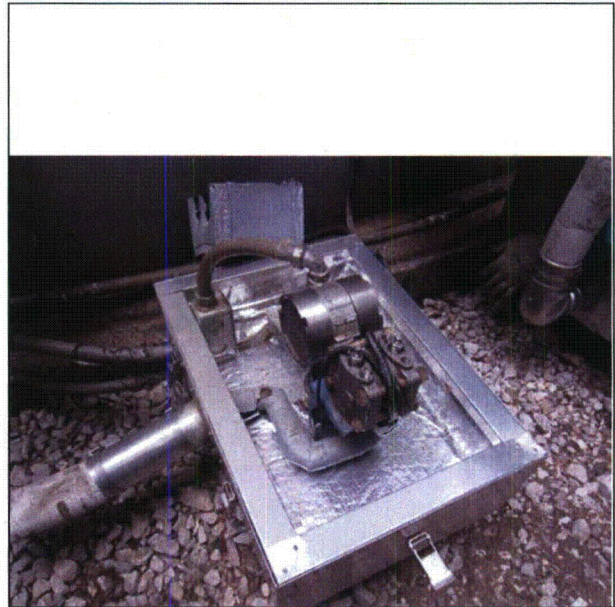
Equipment ID No. LT-2021 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description CONDENSATE STORAGE TANK T-2 HIGH-LOW LEVEL

Photographs



Note: Equipment.



Note: Equipment.

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 072

Equipment ID No. LT-2021 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description CONDENSATE STORAGE TANK T-2 HIGH-LOW LEVEL



**Note:** View of u-bolt anchorage. Vendor installation manual calls for two u-bolts. Only one u-bolt is installed.

**This photo contains security-sensitive information. It is available for review at the Palisades Nuclear Plant.**

**Note:** Overhead light and speaker system on top of Turbine building east of component. View is looking east from the road.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) - SWEL1- 073**

Equipment ID No. LT-2022 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description CONDENSATE STORAGE TANK HI-LO TRANS

Location: Bldg. TURB Floor El. 590 Room, Area OUTSIDE

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   
*Equipment is mounted inside a sheet metal enclosure. Equipment is anchored to a support bracket with 4 bolts. The support bracket is then anchored to a pipe with a u-bolt.  
One of the nuts on the u-bolt support is not fully engaged, however, the u-bolt has double nuts on both ends and the support is judged to be okay.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*Some mild corrosion noted.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*Mounted to a support bracket and pipe.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 073**

Equipment ID No. LT-2022 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description CONDENSATE STORAGE TANK HI-LO TRANS

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?  
*A light and speaker system is noted on the top of the turbine building.  
Mounting of these fixtures is unknown and is considered a credible and  
significant interaction. Further evaluation is required. Licensing basis  
evaluation, LB-15, has been initiated.*  
*Adjacent tanks T-81 and T-7 pose interaction concerns. T-81 is  
documented in SEWS Sht. 1 of 4 as posing no interaction threat. Tank  
T-7 is smaller and sufficiently anchored and judged not to be credible  
interaction.* 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?  
*Block walls observed to the east of the equipment. Block wall is only  
about 3'-0" and judge to be okay due to exterior wall based on wind  
loading being larger compared to seismic loading and small cantilever  
height.* 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?  
*A light and speaker system is noted on the top of the turbine building.  
Mounting of these fixtures is unknown and is considered a credible and  
significant interaction. Further evaluation is required. Licensing basis  
evaluation, LB-15, has been initiated.* Y  N  U

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) - SWEL1- 073**

Equipment ID No. LT-2022 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description CONDENSATE STORAGE TANK HI-LO TRANS

**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

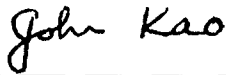
**Comments** (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/10/2012

John Kao



10/10/2012

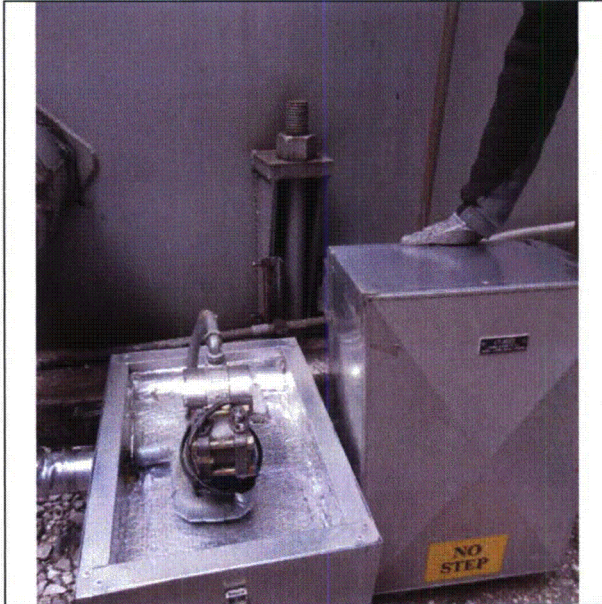
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 073

Equipment ID No. LT-2022 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description CONDENSATE STORAGE TANK HI-LO TRANS

Photographs



**Note:** Equipment.



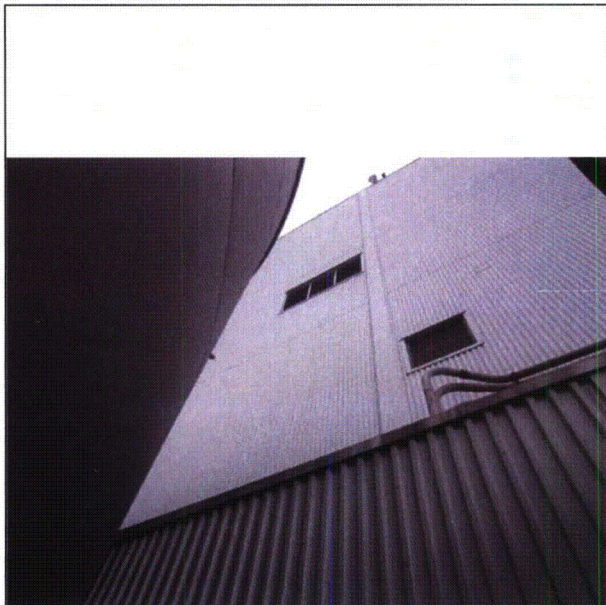
**Note:** Equipment.

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 073

Equipment ID No. LT-2022 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description CONDENSATE STORAGE TANK HI-LO TRANS



**Note:** Overhead light and speaker system on top of Turbine building east of component. View is looking up from component.

**This photo contains security-sensitive information. It is available for review at the Palisades Nuclear Plant.**

**Note:** Overhead light and speaker system on top of Turbine building east of component. View is looking east from the road.

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 074

Equipment ID No. PT-0741A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A AND P-8B LOW SUCTION

Location: Bldg. TURB Floor El. 570 Room, Area 007

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

**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   
*PT-0741A is bolted to the 6x6 sq. steel tube with 4 bolts and the steel sq. tube is bolted to the concrete wall with 4 - 1/2 in. concrete anchors.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*Minimal mild surface oxidation was observed on the concrete anchors.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The 6x6 steel sq. tube supporting PT-0741A is attached to the north concrete wall with 4 - 1/2in. concrete bolts.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 074

Equipment ID No. PT-0741A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A AND P-8B LOW SUCTION

5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
*Anchorage of the 6x6 sq. tube to the concrete wall and connection of  
LT-0741 to the steel sq. tube was compared with Palisades Dwg JG88  
Shts. 3 and 4.* 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- 074**

Equipment ID No. PT-0741A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A AND P-8B LOW SUCTION

**Other Adverse Conditions**

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

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

Evaluated by: Alex Smerch  Date: 10-12-12

Paul Klein  10-12-12

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 074**

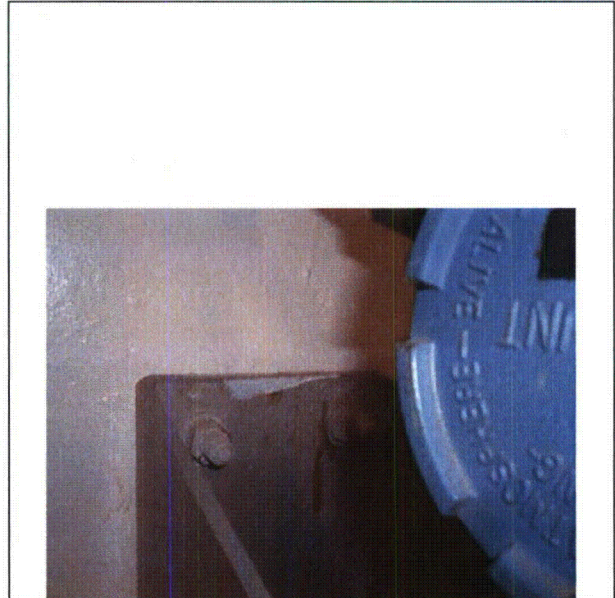
Equipment ID No. PT-0741A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A AND P-8B LOW SUCTION

**Photographs**



**Note:** PT-0741A



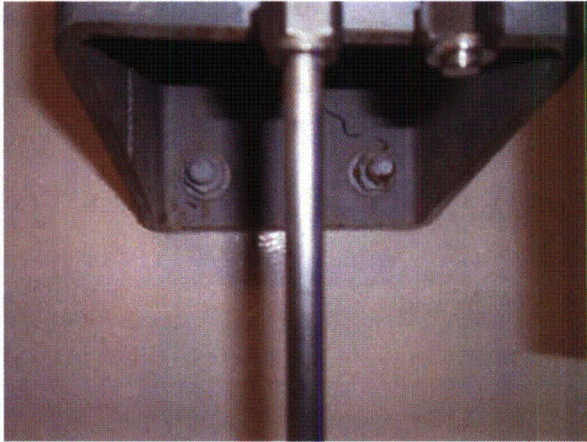
**Note:** PT-0741A Upper Sq. Tube Conc. Anchors

Status: Y  N  U

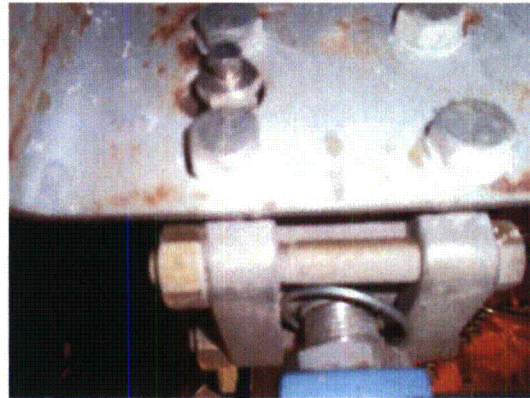
**Seismic Walkdown Checklist (SWC) SWEL1- 074**

Equipment ID No. PT-0741A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A AND P-8B LOW SUCTION



**Note:** *Pt-0741A Lower Sq. Tube Conc. Anchors*



**Note:** *PT-0741A Instrument Bolts (Quantity -4)*

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 075

Equipment ID No. PT-0741B Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A & P-8B LOW SUCTION

Location: Bldg. TURB Floor El. 570 Room, Area 007

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

**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   
*PT-0741B is bolted to the 6x6 sq. steel tube with 4 bolts and the steel sq. tube is bolted to the concrete wall with 4 - 1/2 in. conc. anchors.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*Minimal mild surface oxidation was observed on the concrete anchors.*

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The 6x6 steel sq. tube supporting PT-0741B is attached to the north conc. wall with 4 - 1/2 in. concrete bolts.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 075

Equipment ID No. PT-0741B Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A & P-8B LOW SUCTION

5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
*Anchorage of the 6x6 sq. tube to the concrete wall and connection of  
PT-0741B was compared with Palisades Dwgs. JG88 Shts. 3 and 4.* 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?  
*Chain above is locked.* 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- 075**

Equipment ID No. PT-0741B Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A & P-8B LOW SUCTION

**Other Adverse Conditions**

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

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

Evaluated by: Alex Smerch  Date: 10-12-12

Paul Klein  10-12-12

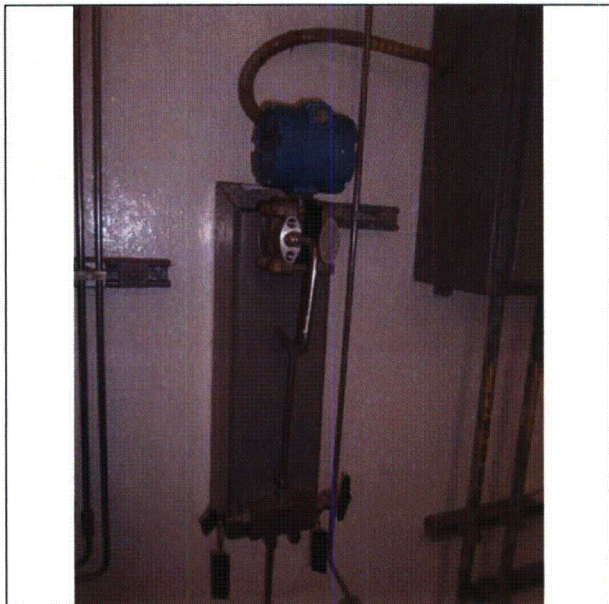
Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 075**

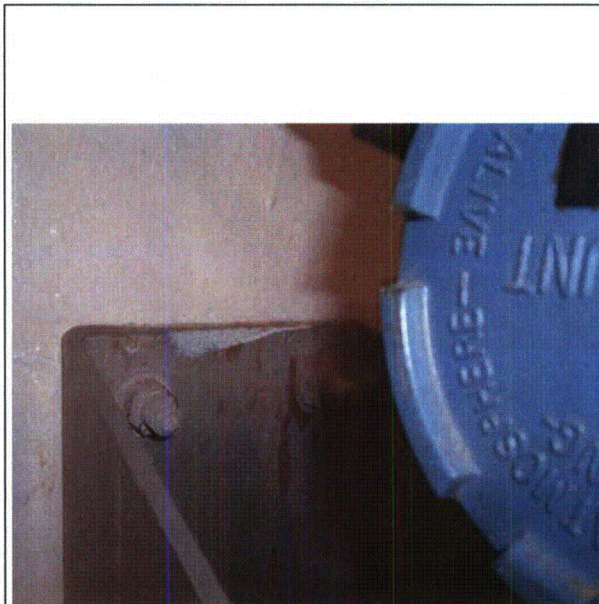
Equipment ID No. PT-0741B Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A & P-8B LOW SUCTION

**Photographs**



**Note:** PT-0741B



**Note:** PT-0741B Upper Sq. Tube Conc. Anchors

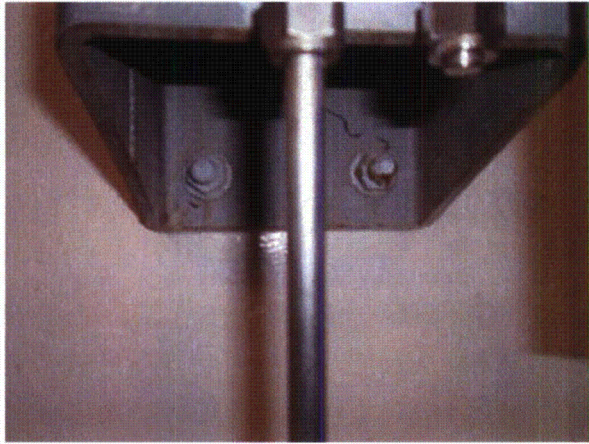


Status: Y  N  U

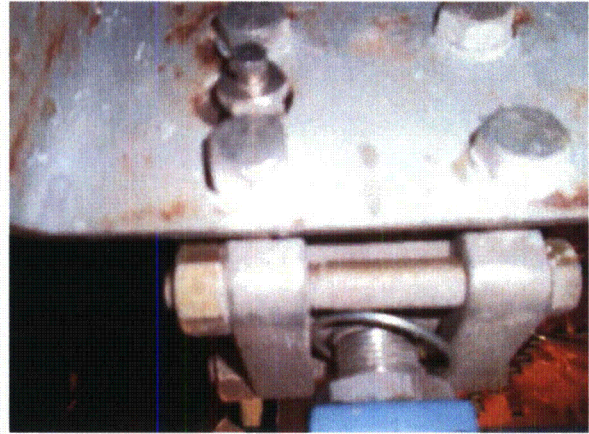
Seismic Walkdown Checklist (SWC) SWEL1- 075

Equipment ID No. PT-0741B Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A & P-8B LOW SUCTION



**Note:** PT-0741B Lower Sq. Tube Conc. Anchors



**Note:** PT-0741B Instrument Bolts (Quantity – 4)

Status: Y  N  U

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

Equipment ID No. PT-0741DD Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A & P-8B LOW SUCTION

Location: Bldg. TURB Floor El. 570 Room, Area 007

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

**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   
*PT-0741DD is bolted to the 6x6 sq. steel tube with 4 bolts and the steel sq. tube is bolted to the concrete wall with 4 - 1/2 in. concrete anchors.*

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*Minimal mild surface oxidation was observed on the concrete anchors and on the inside of the sq. tube.*

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The sq. steel tube supporting PT-0741DD is bolted to the north concrete wall of the room.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 076

Equipment ID No. PT-0741DD Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A & P-8B LOW SUCTION

5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
*Anchorage of the 6x6 steel sq. tube to the concrete wall and connection  
of PT-0741DD to the steel sq. tube was compared with Palisades Dwg.  
JG88 Shts. 3 and 4.* 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?  
*The chain on the manual valve above is tied back and is not a  
problem.* 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- 076**

Equipment ID No. PT-0741DD Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A & P-8B LOW SUCTION

**Other Adverse Conditions**

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

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

Evaluated by: Alex Smerch  Date: 10-12-12

Paul Klein  10-12-12

Status: Y  N  U

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

Equipment ID No. PT-0741DD Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A & P-8B LOW SUCTION

**Photographs**



**Note:** PT-0741DD



**Note:** PT-0741DD Upper Conc. Anchors

Status: Y  N  U

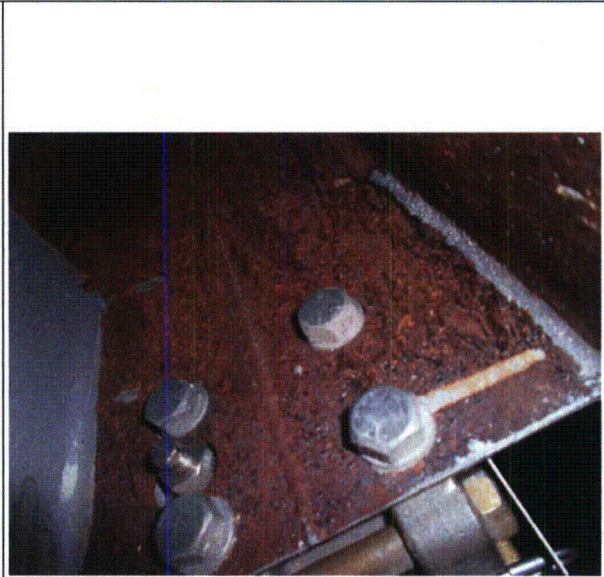
Seismic Walkdown Checklist (SWC) SWEL1- 076

Equipment ID No. PT-0741DD Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMPS P-8A & P-8B LOW SUCTION



**Note:** *PT-0741DD Lower Conc. Anchors*



**Note:** *PT-0741DD Instrument Bolts  
(Quantity - 4)*

Status: Y  N  U

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

Equipment ID No. PT-0762A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

Location: Bldg. AUX Floor El. 570 Room, Area 005

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 equipment is anchored to a steel shelf angle which is welded to a ~2 foot tall vertical piece of tube steel which is welded to a baseplate.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is no visible corrosion that is more than mild surface oxidation on anchors.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The baseplate is anchored to the concrete floor slab.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 077

Equipment ID No. PT-0762A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description: AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

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- 077

Equipment ID No. PT-0762A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

**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: Alex Smerch  Date: 10/09/2012

Paul Klein  10/09/2012

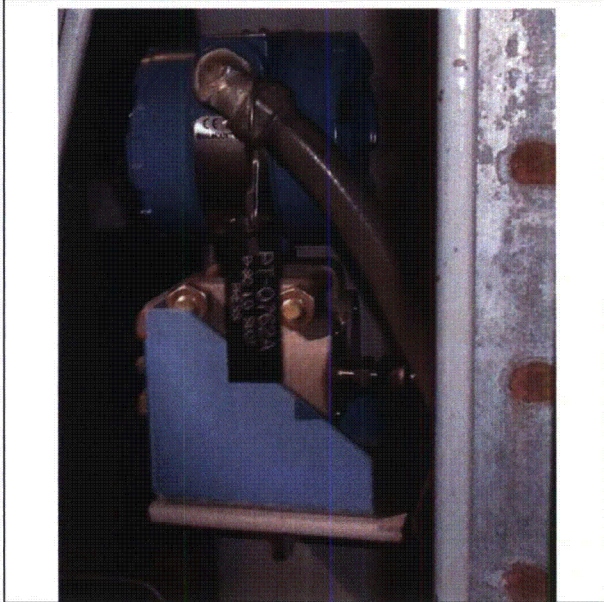
Status: Y  N  U

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

Equipment ID No. PT-0762A Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

**Photographs**



**Note:** PT-0762A



**Note:**

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 078**

Equipment ID No. PT-0762B Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

Location: Bldg. AUX Floor El. 570 Room, Area 005

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 equipment is anchored to a steel shelf angle which is welded to vertical tube steel which is welded to a baseplate.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is no visible corrosion that is more than mild surface oxidation on anchors.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The baseplate is anchored to the concrete floor slab.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

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ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

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Sheet 2 of 4

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 078**

Equipment ID No. PT-0762B Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

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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

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**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) SWEL1-078**

Equipment ID No. PT-0762B Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

**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: Alex Smerch  Date: 10/09/12

Paul Klein  10/09/12

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 078**

Equipment ID No. PT-0762B Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

**Photographs**



**Note:** PT-0762B



**Note:**

Status: Y  N  U

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

Equipment ID No.: PT-0762C Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

Location: Bldg. AUX Floor El. 570 Room, Area 005

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 equipment is anchored to a steel shelf angle which is welded to a ~2 foot tall vertical piece of tube steel which is welded to a baseplate.*

*A nut on the anchorage of the equipment to the shelf angle appears to be missing. Further evaluation is required and licensing basis evaluation, LB-17, has been initiated. CR-PLP-2012-06644 has been created.*

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

*There is no visible corrosion that is more than mild surface oxidation on anchors.*

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

*The baseplate is anchored to the concrete floor slab.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

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

Equipment ID No. PT-0762C Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

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   
*A nut on the anchorage of the equipment to the shelf angle appears  
to be missing. Further evaluation is required and licensing basis  
evaluation, LB-17, has been initiated. CR-PLP-2012-06644 has  
been created.*

**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- 079**

Equipment ID No. PT-0762C Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

**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: Alex Smerch  Date: 10/09/12

Paul Klein  10/09/12

Status: Y  N  U

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

Equipment ID No. PT-0762C Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description AUX FW PUMP P-8C LOW SUCTION PRESSURE TRIP

**Photographs**



**Note:** PT-0762C



**Note:** Missing Nut from Anchorage to Steel Shelf Angle

Status: Y N U

**Seismic Walkdown Checklist (SWC) SWEL1- 080**

Equipment ID No. TS-1820 Equip. Class<sup>1</sup> 18; INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24D AUTOMATIC TEMP SW

Location: Bldg. AUX Floor El. 590 Room, Area 116B

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 equipment is attached to conduit which is attached to unistrut. The unistrut is anchored with expansion anchors to the wall.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A  
*Anchors are coated in dirt and dust. No visible corrosion observed.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A  
*Wall is painted, no visible cracks identified.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 080**

Equipment ID No. TS-1820 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24D AUTOMATIC TEMP SW

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?  
*Temperature switch is attached to a conduit which is attached to the  
wall.* 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- 080

Equipment ID No. TS-1820 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS


Equipment Description EDG RM VENT FAN V-24D AUTOMATIC TEMP SW

**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: Kevin Bessell  Date: 10/15/2012

John Kao  10/15/2012

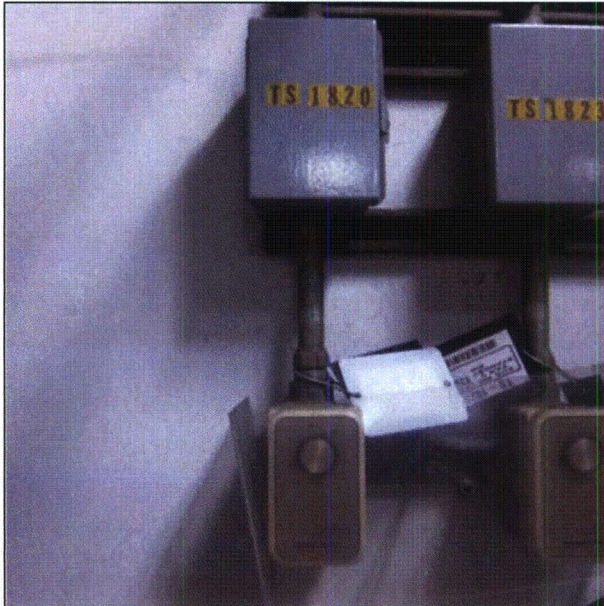
Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 080**

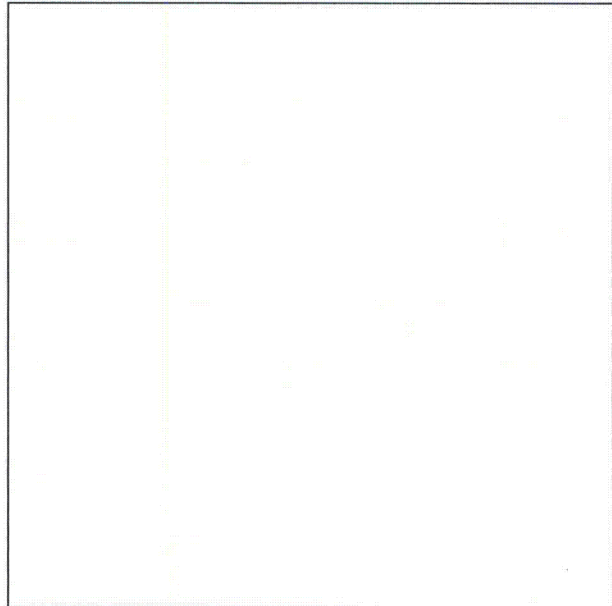
Equipment ID No. TS-1820 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24D AUTOMATIC TEMP SW

**Photographs**



**Note:** *Equipment.*



**Note:**

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 081**

Equipment ID No. TS-1822 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24C AUTOMATIC TEMP SW

Location: Bldg. AUX Floor El. 590 Room, Area 116B

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   
*Equipment is attached to conduit and is mounted to unistrut. Unistrut is anchored to concrete wall with 2 expansion anchors.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*No oxidation noted. Expansion anchors are stainless steel.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*Concrete wall is painted and there are no cracks observed.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 081

Equipment ID No. TS-1822 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24C AUTOMATIC TEMP SW

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?  
*Temperature switch is attached to a conduit which is attached to the  
wall.* 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- 081

Equipment ID No. TS-1822 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24C AUTOMATIC TEMP SW

**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

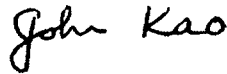
**Comments** (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/15/2012

John Kao



10/15/2012

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 081

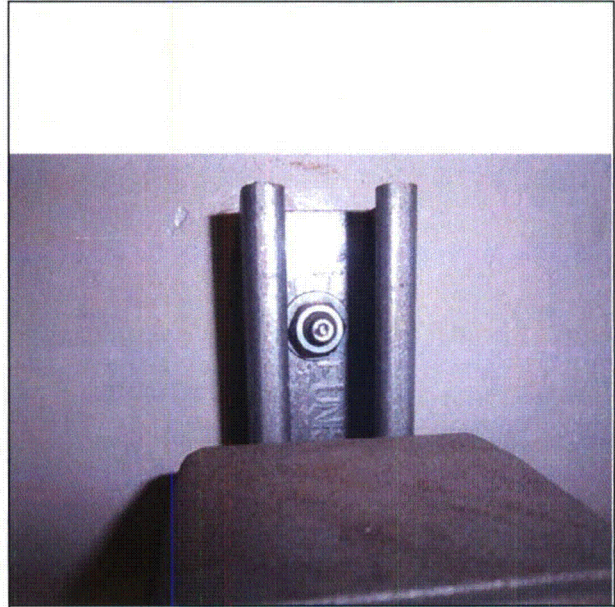
Equipment ID No. TS-1822 Equip. Class<sup>1</sup> 18, INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24C AUTOMATIC TEMP SW

Photographs



**Note:** Equipment.



**Note:** Unistrut anchorage to concrete wall (1 of 2 anchors shown).

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 082**

Equipment ID No. TS-1828 Equip. Class<sup>1</sup> 18-INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24A AUTOMATIC TEMP SW

Location: Bldg. AUX Floor El. 590 Room, Area 116

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   
*Instrument anchored to wall using Unistrut.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is no corrosion.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The device is anchored to the concrete wall.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 082

Equipment ID No. TS-1828 - Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24A AUTOMATIC TEMP SW

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?  
*Nearby extension chord is a credible source but could not cause  
significant damage.* 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- 082

Equipment ID No. TS-1828 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS


Equipment Description EDG RM VENT FAN V-24A AUTOMATIC TEMP SW

**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: Alex Smerch  Date: 10/03/2012

Paul Klein  10/03/2012

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 082**

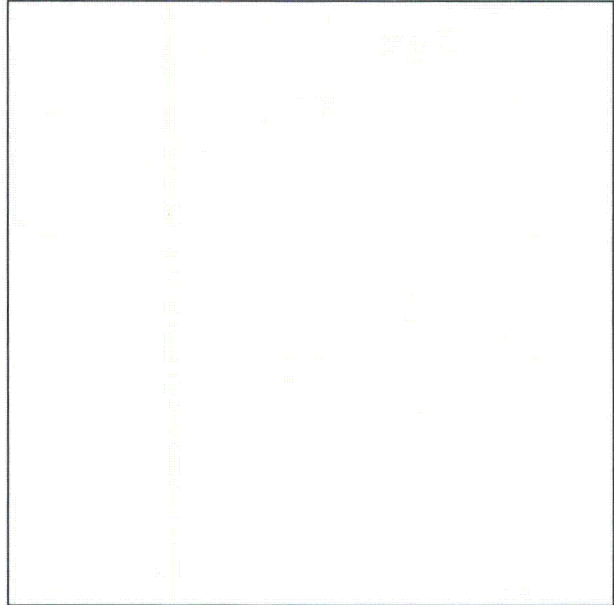
Equipment ID No. TS-1828 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24A AUTOMATIC TEMP SW

**Photographs**



**Note:** TS-1828



**Note:**

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 083

Equipment ID No. TS-1844 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24B AUTOMATIC TEMP SW

Location: Bldg. AUX Floor El. 590 Room, Area 116

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   
*Instrument is anchored by piece of unistrut bolted to wall.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There was no visible corrosion.*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*The item is anchored to the concrete wall.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 083

Equipment ID No. TS-1844 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24B AUTOMATIC TEMP SW

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?  
*Overhead emergency lighting fixture is secured to wall without an  
exposed bulb.* 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- 083

Equipment ID No. TS-1844 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

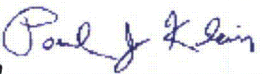
Equipment Description EDG RM VENT FAN V-24B AUTOMATIC TEMP SW

**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: Alex Smerch  Date: 10/30/2012

Paul Klein  10/30/2012

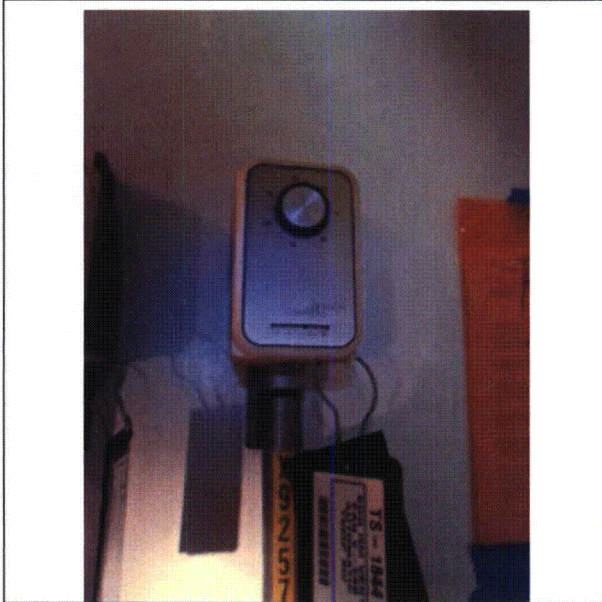
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 083

Equipment ID No. TS-1844 Equip. Class<sup>1</sup> 18 - INSTRUMENT RACKS

Equipment Description EDG RM VENT FAN V-24B AUTOMATIC TEMP SW

Photographs



Note: TS-1844



Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 086**

Equipment ID No. EC-187 Equip. Class<sup>1</sup> 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER CONTROL

Location: Bldg. AUX Floor El. 607 Room, Area 223

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 equipment consists of cabinets mounted to an inverted channel skid that sits atop a concrete pedestal on the concrete floor. The anchors in the channel which anchor into the concrete are not visible. There are 12 hexagon socket head cap screws that anchor the cabinets to the channel.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is no corrosion visible*
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Y  N  U  N/A   
*There are shrinkage cracks identified along the pedestal at approximate 6" intervals. These cracks are judged to be superficial, therefore concrete is okay.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, Appendix B: Classes of Equipment.

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 086

Equipment ID No. EC-187 Equip. Class<sup>1</sup> 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER CONTROL

5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*The anchorage configuration is consistent with drawing J-447, Sh. 2, Rev. 75 for the anchors connecting the cabinet base to the channel skid. The configuration of the anchors of the inverted channel skid to the pedestal, which were not visible, is judged to be okay per SEWS, Shts. 3 through 12 of 12. See comments below for additional information.* 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- 086

Equipment ID No. EC-187 Equip. Class<sup>1</sup> 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER CONTROL

**Other Adverse Conditions**

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

*The cable cover plates in the back interior of the cabinet are missing nuts. The plates are protecting cable and are not considered as intercabinet bolting. The only load on these plates is the dead load, which is being resisted by the screws and are not dependent on the nut. Any out-of-plane loading due to seismic, which would cause the panel to come off the screws is judged to be minimal based on small mass of the component and is kept restrained by the remaining nuts. CR-PLP-2012-06877 has been initiated.*

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

*Although the anchorage to the floor through the inverted channel skid was not visible, anchorage configuration is confirmed per SEWS package. The anchors are inaccessible, therefore modification is not possible. Corrosion is not possible due to the item being in an interior room in a non-humid or hostile environment.*

Evaluated by: Kevin Bessell  Date: 10/15/2012

John Kao  10/15/2012

Status: Y  N  U

**Seismic Walkdown Checklist (SWC) SWEL1- 086**

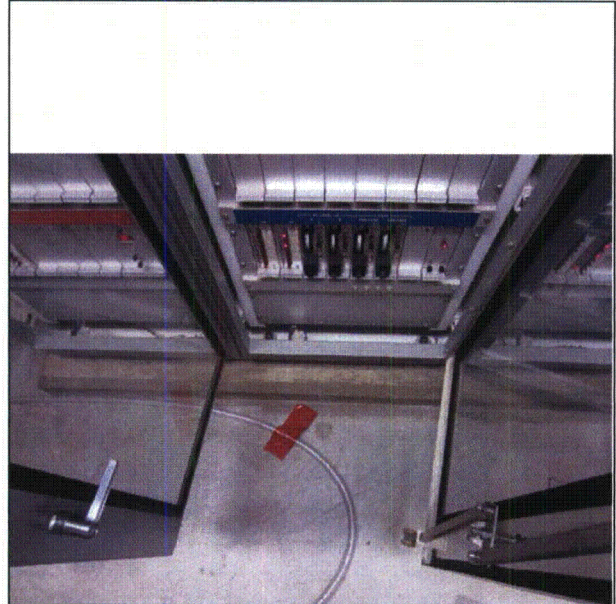
Equipment ID No. EC-187 Equip. Class<sup>1</sup> 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER CONTROL

**Photographs**



**Note:** *Equipment*



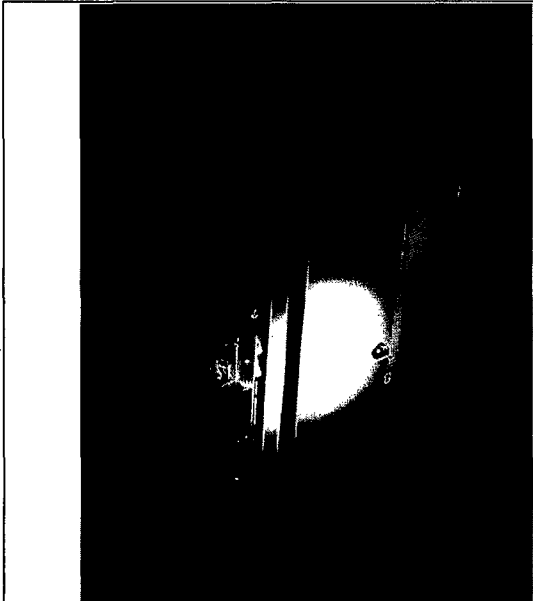
**Note:** *Anchorage of equipment base to inverted channel skid.*

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 086

Equipment ID No. EC-187 Equip. Class<sup>1</sup> 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER CONTROL



**Note:** *Missing nuts for cable cover plate in back interior of cabinet.*

**Note:**

Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 087

Equipment ID No. EJ-1005 Equip. Class<sup>1</sup> 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER RELAY CONTROL

Location: Bldg. AUX Floor El. 607 Room, Area 223

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   
*It is anchored through the metal base of the cabinet to the pedestal with 6 bolts.*
  
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   
*There is a 5" pedestal supporting the cabinet from the concrete floor slab.*  
*There are some surface micro cracks that are judged not to be a structural concern.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 087

Equipment ID No. EJ-1005 Equip. Class<sup>1</sup> 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER RELAY CONTROL

5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)  
*The anchorage for this drawing was verified with Dwg.# C-534(Q)* 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- 087

Equipment ID No. EJ-1005 Equip. Class<sup>1</sup> 20 - INSTRUMENTATION AND CONTROL  
PANELS

Equipment Description AUX FEEDWATER RELAY CONTROL

**Other Adverse Conditions**

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

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

Evaluated by: Alex Smerch



Date: 10/15/2012

Paul Klein



10/15/2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 5

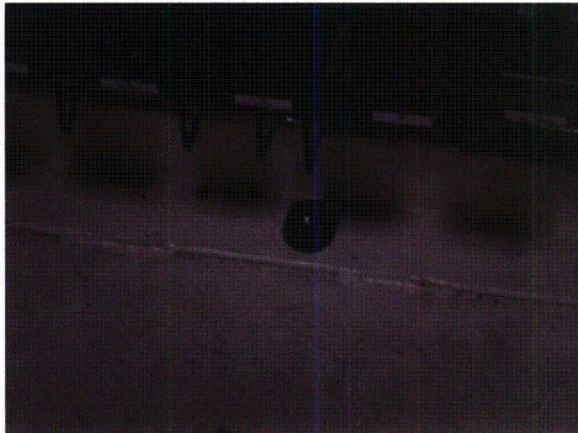
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 087

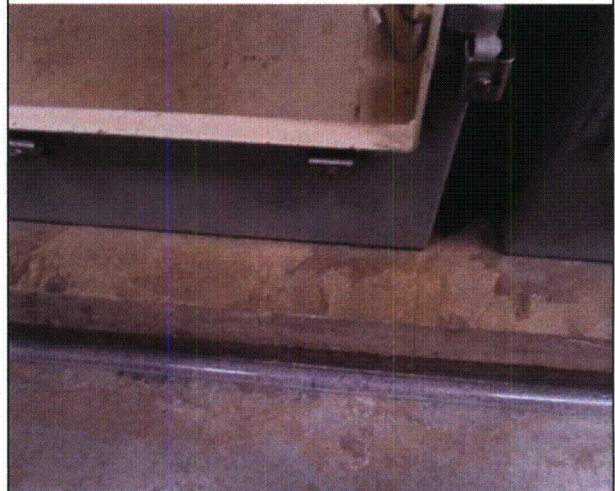
Equipment ID No. EJ-1005 Equip. Class<sup>1</sup> 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER RELAY CONTROL

Photographs



**Note:** Up Close of Anchorage



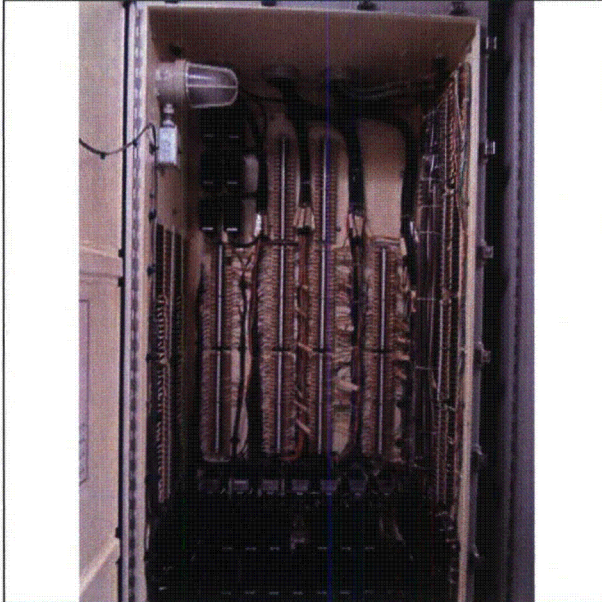
**Note:** Micro Cracks in Concrete

Status: Y  N  U

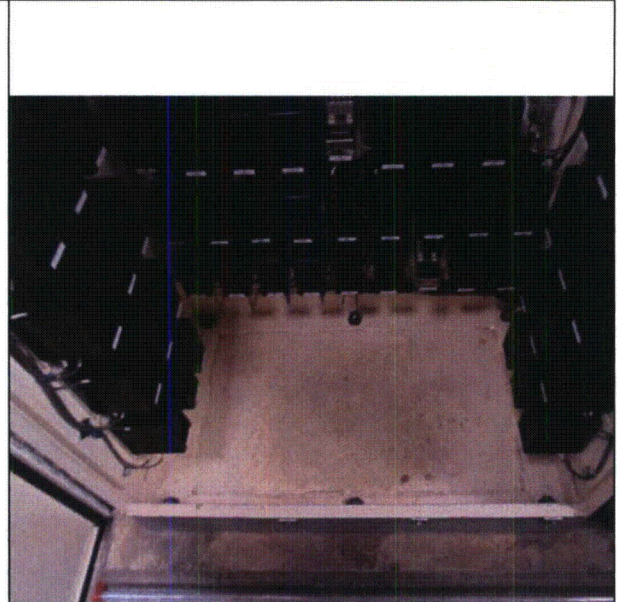
Seismic Walkdown Checklist (SWC) SWEL1- 087

Equipment ID No. EJ-1005 Equip. Class<sup>1</sup> 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER RELAY CONTROL



Note: EJ-1005



Note: Anchorage

Status: Y  N  U

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

Equipment ID No. EJ-1006 Equip. Class<sup>1</sup> 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER RELAY CONTROL

Location: Bldg. AUX Floor El. 607 Room, Area 223

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   
*It is anchored through the metal base of the cabinet to the pedestal with 6 bolts.*
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y  N  U  N/A   
*There is no 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 is a 5" pedestal supporting the cabinet from the concrete floor slab.*  
*There are some surface micro cracks that are judged not to be a structural concern.*

<sup>1</sup> Enter the equipment class name from EPRI 1025286, 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- 088

Equipment ID No. EJ-1006 Equip. Class<sup>1</sup> 20 - INSTRUMENTATION AND CONTROL  
PANELS

Equipment Description AUX FEEDWATER RELAY CONTROL

5. Is the anchorage configuration consistent with plant documentation?  
(Note: This question only applies if the item is one of the 50% for which  
an anchorage configuration verification is required.)  
*The anchorage for this drawing was verified with Dwg.# C-534(Q)* 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- 088**

Equipment ID No. EJ-1006 Equip. Class<sup>1</sup> 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER RELAY CONTROL

**Other Adverse Conditions**

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

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

Evaluated by: Alex Smerch

Date: 10/15/2012

Paul Klein

10/15/2012

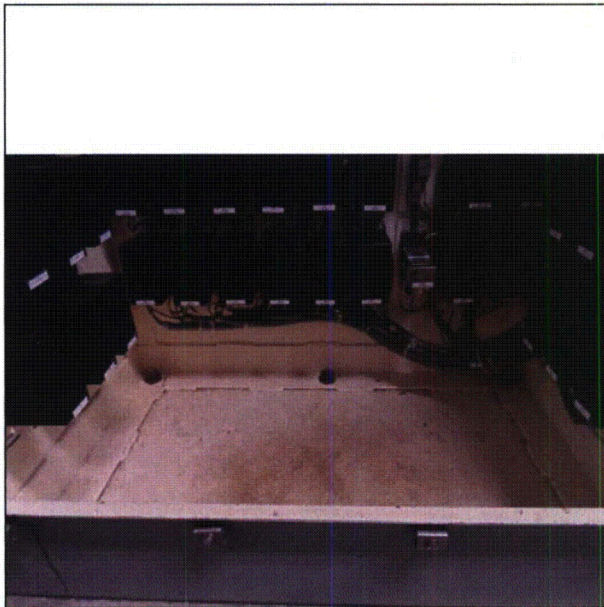
Status: Y  N  U

Seismic Walkdown Checklist (SWC) SWEL1- 088

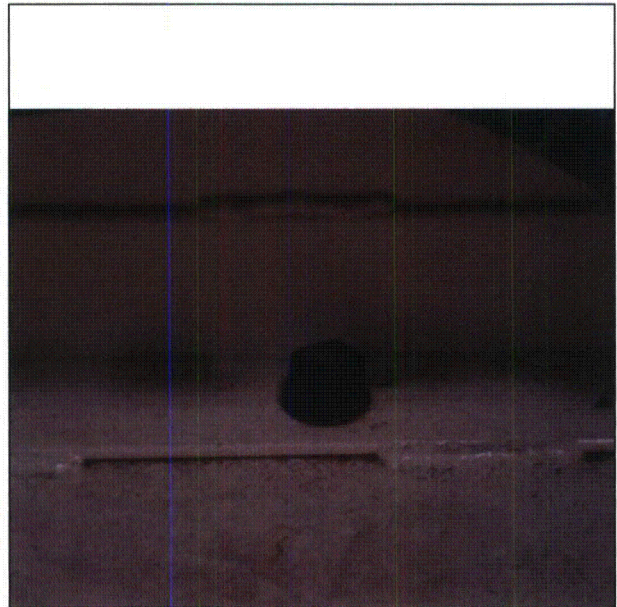
Equipment ID No. EJ-1006 Equip. Class<sup>1</sup> 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER RELAY CONTROL

Photographs



**Note:** Anchorage for EJ-1006



**Note:** Close Up of Anchorage



Status: Y  N  U

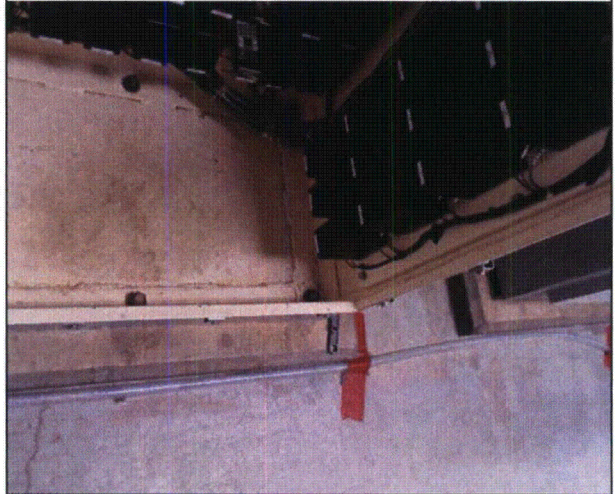
Seismic Walkdown Checklist (SWC) SWEL1- 088

Equipment ID No. EJ-1006 Equip. Class<sup>1</sup> 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER RELAY CONTROL



**Note:** EJ-1006



**Note:** Anchorage for EJ-1006