

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 089

Equipment ID No. EJ-1051 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER CONTROLS

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 anchorage consists of 4" intermittent fillet welds to structural steel angles which are embedded in a concrete pedestal on the concrete floor.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
There were no cracks observed in the concrete pedestal or floor.

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

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 089

Equipment ID No. EJ-1051 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER CONTROLS

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 book is hanging from the inside of the cabinet which could potentially
interact with interior wiring and components. Further evaluation is
required and licensing basis evaluation, LB-19, has been created. CR-
PLP-2012-06754 has been created to remove item.* 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. 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.* Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage?
Flexible cables are feeding 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?
*A book is hanging from the inside of the cabinet which could potentially
interact with interior wiring and components. Further evaluation is
required and licensing basis evaluation, LB-19, has been created. CR-
PLP-2012-06754 has been created to remove item.* Y N U

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 089

Equipment ID No. EJ-1051 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER CONTROLS

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
There is an adjacent funnel and drip line to drain nearby. No water or drips observed, judged to be okay for seismic induced flooding concerns.

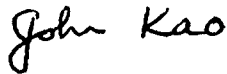
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/15/2012

John Kao



10/15/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 089

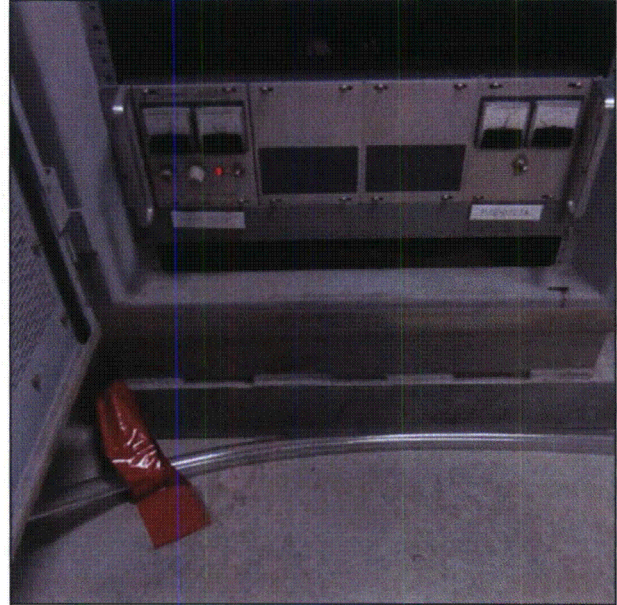
Equipment ID No. EJ-1051 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER CONTROLS

Photographs



Note: Equipment.



Note: Equipment anchorage consisting of intermittent fillet welds to embedded steel.

Status: Y N U

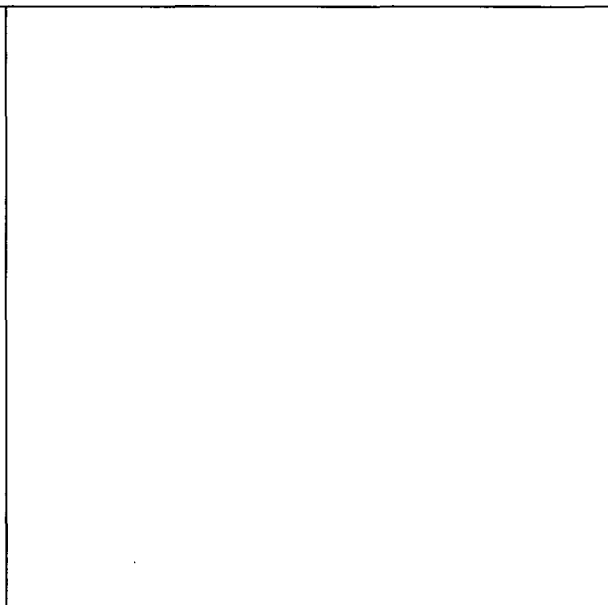
Seismic Walkdown Checklist (SWC) SWEL1- 089

Equipment ID No. EJ-1051 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER CONTROLS



Note: *Inside of equipment and book/manual noted on inside of door providing a possible seismic interaction with interior wiring and components.*



Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 090

Equipment ID No. EJ-1052 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER RELAY CONTROLS

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 anchorage consists of 4" intermittent fillet welds to structural steel angles which are embedded in a concrete pedestal on the concrete floor.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
There were no cracks observed in the concrete pedestal or floor.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 090

Equipment ID No. EJ-1052 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER RELAY CONTROLS

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 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.*
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
Flexible cables are feeding 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- 090

Equipment ID No. EJ-1052 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

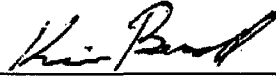
Equipment Description AUX FEEDWATER RELAY CONTROLS

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
There is an adjacent funnel and drip line to drain nearby. No water or drips observed, judged to be okay for seismic induced flooding concerns.

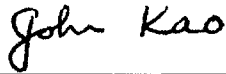
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/15/2012

John Kao



10/15/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 090

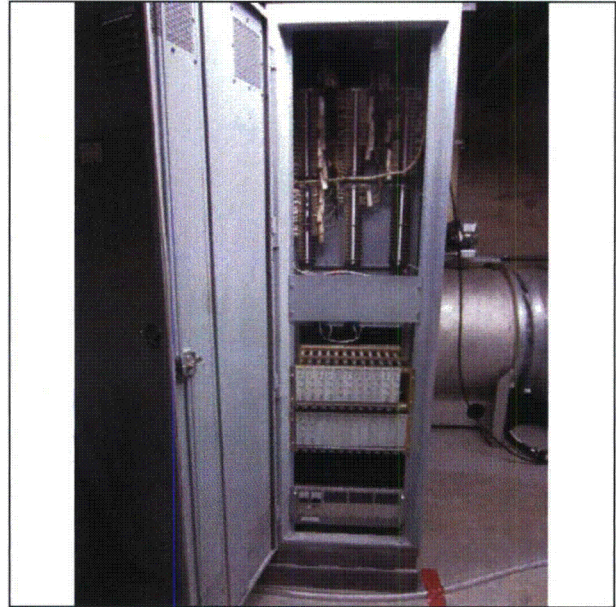
Equipment ID No. EJ-1052 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description AUX FEEDWATER RELAY CONTROLS

Photographs



Note: *Equipment.*



Note: *Inside of equipment.*

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 091

Equipment ID No. EJ-9400 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description BUS 1-C UNDER VOLTAGE RELAYS

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 with (4) expansion anchors to a concrete wall.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
There is no corrosion. Anchors are painted.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
The equipment is anchored to a concrete wall. There are no cracks observed.

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

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 091

Equipment ID No. EJ-9400 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description BUS 1-C UNDER VOLTAGE RELAYS

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 configuration is consistent with SEWS Sh. 7 of 9 and Sh. 3
of 9.* 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- 091

Equipment ID No. EJ-9400 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description BUS 1-C UNDER VOLTAGE RELAYS

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

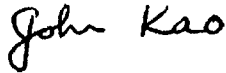
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/3/2012

John Kao



10/3/2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 091

Equipment ID No. EJ-9400 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description BUS 1-C UNDER VOLTAGE RELAYS

Photographs



Note: Equipment.



Note: Equipment.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 092

Equipment ID No. EJ-9401 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description BUS 1-D UNDERVOLTAGE RELAYS

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 is anchored to a concrete wall with 2 expansion anchors top and bottom of panel for a total of 4 anchors. The anchors are attached through tabs that extend from back of the panel.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
The equipment is anchored to a concrete wall and there are no cracks observed in the wall.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 092

Equipment ID No. EJ-9401 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description BUS 1-D UNDERVOLTAGE RELAYS

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?
*Conduit is attached to the top of the box and bends around and is
supported from 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- 092

Equipment ID No. EJ-9401 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description BUS 1-D UNDERVOLTAGE RELAYS

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

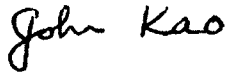
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/15/2012

John Kao



10/15/2012

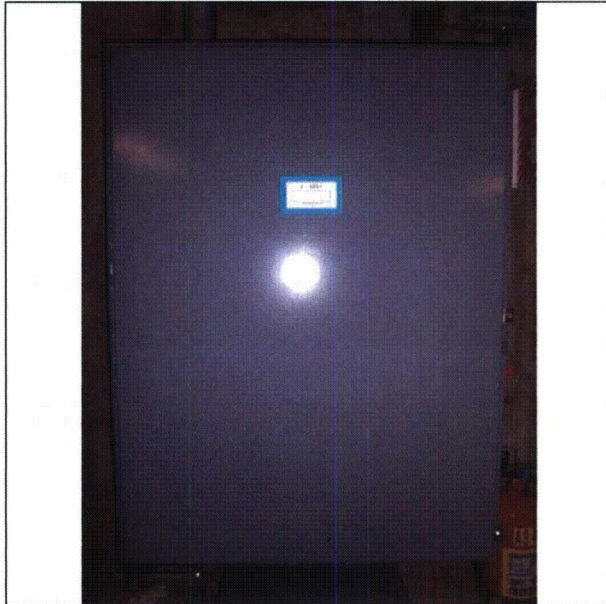
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 092

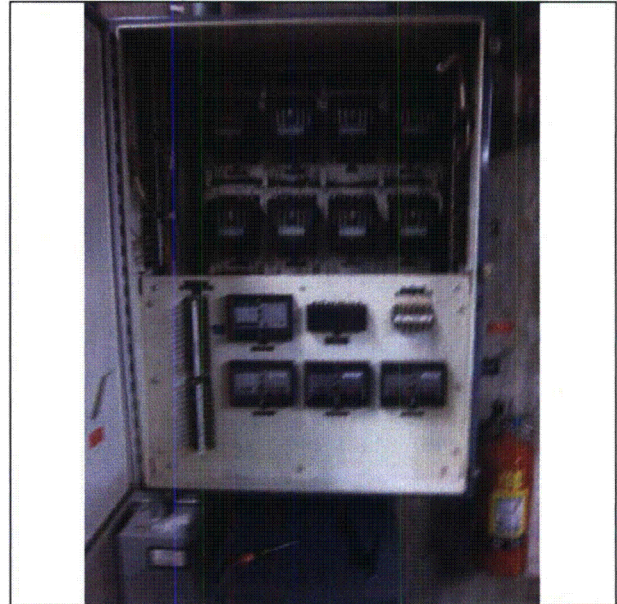
Equipment ID No. EJ-9401 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description BUS 1-D UNDERVOLTAGE RELAYS

Photographs



Note: *Equipment.*



Note: *Inside of equipment.*

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 093

Equipment ID No. EJL-422 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description 72-02 BREAKER BOX

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 anchored with 3 anchors along the top and bottom of the panel. The equipment is anchored to a block wall.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
The anchors are stainless steel and no corrosion is 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 a block wall and no cracks are observed. The block wall is seismically qualified, C107.17/Q, per drawing C-107, Sh. 1, Rev. 28.

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

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 093

Equipment ID No. EJL-422 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description 72-02 BREAKER BOX

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
*The component is mounted to a seismically qualified block wall as
noted in item #4 above. There is also a block wall to the east of the
equipment. This wall is seismically qualified, C107.16/Q, per drawing
C-107, Sh.1, Rev. 28.*
*Overhead crane has the potential to bang into supports for conduit
feeding the panel. The crane beam is judged not to have a significant
interaction with the conduits due to the interference of the support. The
crane is judged not to cause damage to the support to render the
conduit inoperable; therefore there are no interaction concerns.*
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- 093

Equipment ID No. EJL-422 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description 72-02 BREAKER BOX

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
Could not inspect inside of panel. Remainder of inspection is deferred.

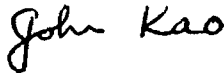
Comments (Additional pages may be added as necessary)

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- 093

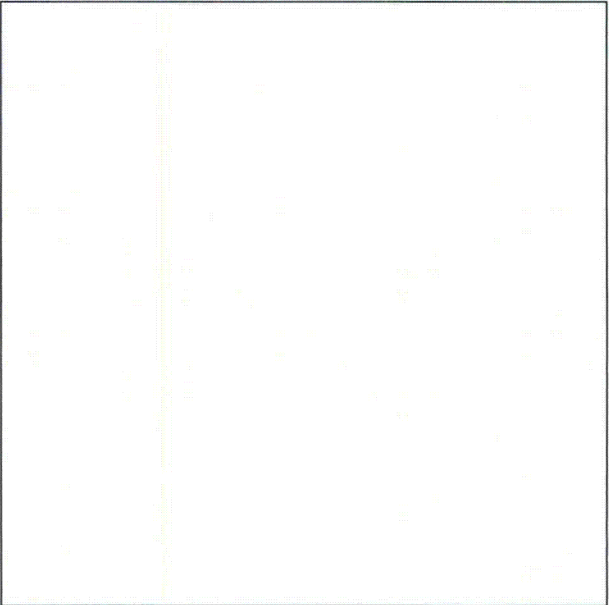
Equipment ID No. EJL-422 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description 72-02 BREAKER BOX

Photographs



Note: Equipment.



Note:

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 094

Equipment ID No. EJL-423 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description 72-01 BREAKER BOX

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
Equipment anchorage consists of 3 anchors top and bottom of panel anchored to concrete wall.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Stainless steel anchors noted with no corrosion.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Panel is anchored to a concrete wall and there are no cracks observed.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 094

Equipment ID No. EJL-423 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description 72-01 BREAKER BOX

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 SEWS shts.
5 through 7 of 10.* 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 on east side of the room. The wall is qualified, C107.16/Q,
per drawing C-107, Sh. 1, Rev. 28.* 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- 094

Equipment ID No. EJL-423 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

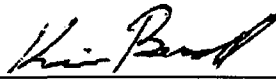
Equipment Description 72-01 BREAKER BOX

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
Internal inspection of panel has been deferred due to protected equipment component.

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- 094

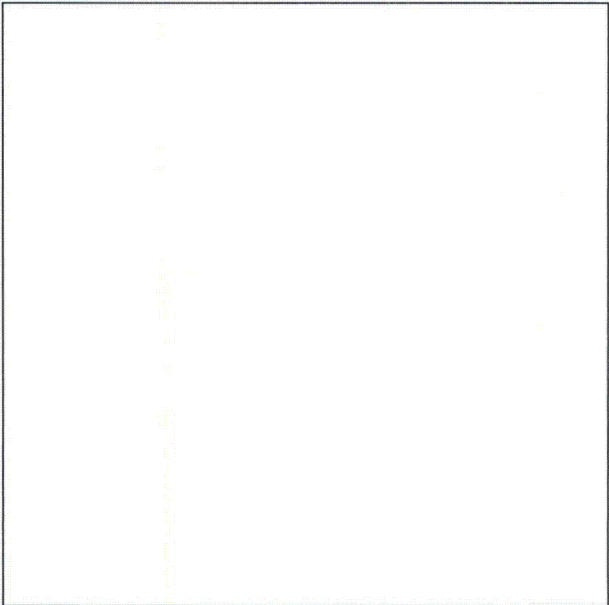
Equipment ID No. EJL-423 Equip. Class¹ 20, INSTRUMENTATION AND CONTROL PANELS

Equipment Description 72-01 BREAKER BOX

Photographs



Note: *Equipment.*



Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 095

Equipment ID No. 42-1/RPS Equip. Class¹ 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description CONTROL ROD CLUTCH BREAKER

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
Could not open equipment to inspect anchorage because it is plant sensitive.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Could not open equipment to inspect anchorage because it is plant sensitive.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Could not open equipment to inspect anchorage because it is plant sensitive.

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

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 095

Equipment ID No. 42-1/RPS Equip. Class¹ 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description CONTROL ROD CLUTCH BREAKER

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
Could not open equipment to inspect anchorage because it is plant sensitive. Y N U N/A
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?
Could not open equipment to inspect anchorage because it is plant sensitive. Y N U

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures?
There are junction boxes mounted above that are well supported. Y N U N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?
There is a nearby qualified block wall, reference Drawing C-107 Sheet 1. Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage?
Attached conduits have bends giving them flexibility. Y N U N/A
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y N U

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 095

Equipment ID No. 42-1/RPS Equip. Class¹ 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description CONTROL ROD CLUTCH BREAKER

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch

Date: October 17th, 2012

Paul Klein

October 17th, 2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 095

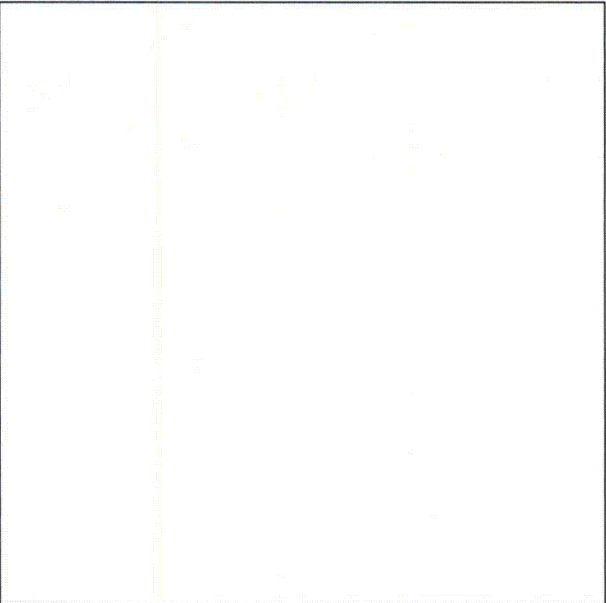
Equipment ID No. 42-1/RPS Equip. Class¹ 20 - INSTRUMENTATION AND CONTROL PANELS

Equipment Description CONTROL ROD CLUTCH BREAKER

Photographs



Note: 42-1/RPS



Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 096

Equipment ID No. E-54A Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING WATER HEAT EXCHANGER

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
There were 8 bolts connected the feet of the heat exchanger to the top of E-54B.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
There was no corrosion as all the bolts were painted.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Heat exchanger is anchored to top of E-54B.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 096

Equipment ID No. E-54A Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING WATER HEAT EXCHANGER

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.)
Anchorage was verified using M-14 Sheet 2. 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 heat exchanger 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?
Nearby block wall qualified by C-104. 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- 096

Equipment ID No. E-54A Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING WATER HEAT EXCHANGER

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch



Date: 10-12-2012

Paul Klein



10-12-2012

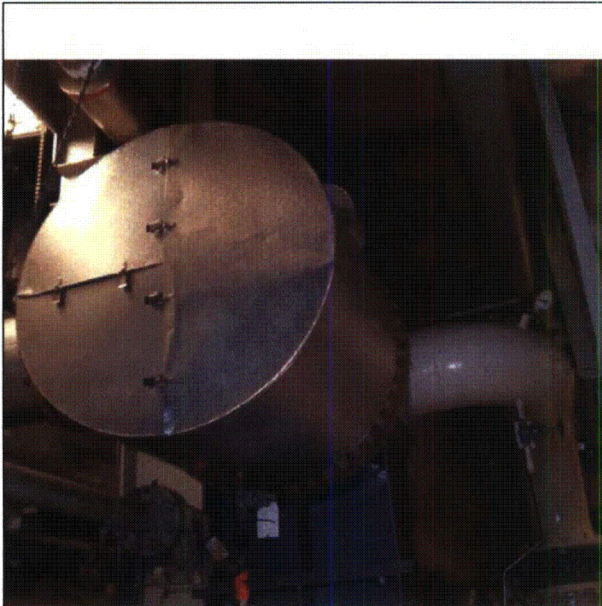
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 096

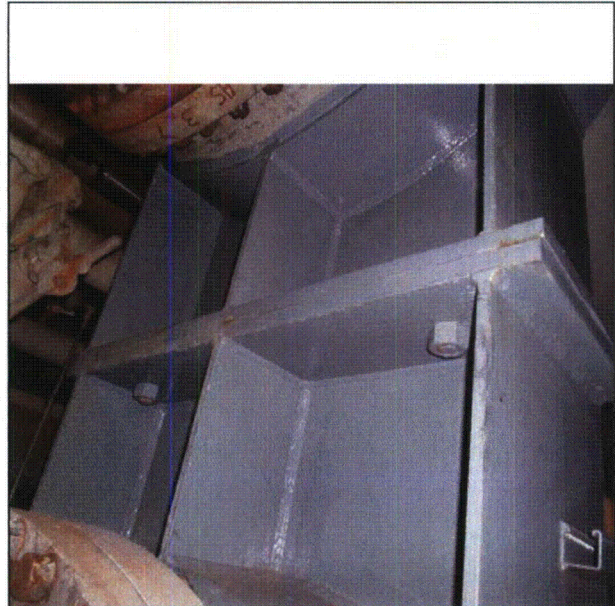
Equipment ID No. E-54A Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING WATER HEAT EXCHANGER

Photographs



Note: E-54A



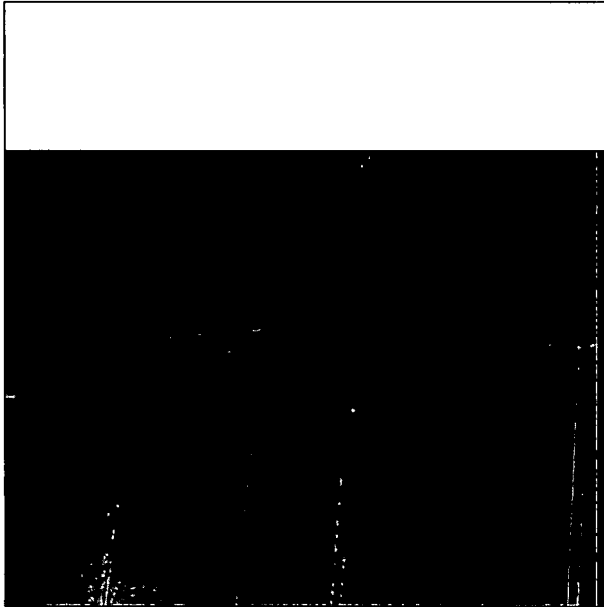
Note: Anchorage

Status: Y N U

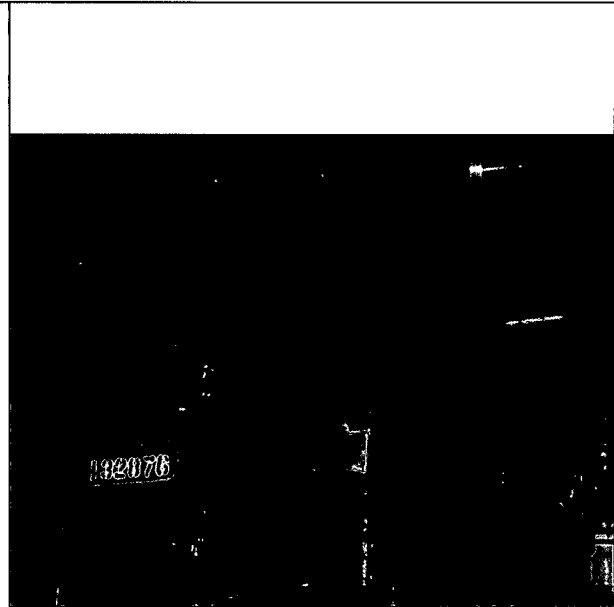
Seismic Walkdown Checklist (SWC) SWEL1- 096

Equipment ID No. E-54A Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING WATER HEAT EXCHANGER



Note: Additional Anchorage



Note: Additional Anchorage

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 097

Equipment ID No. E-54B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING HEAT EXCHANGER

Location: Bldg. AUX BLDG 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
Two bolts on the second pedestal from the north have less than full thread engagement. These bolts have not been deemed a potentially adverse seismic consideration because there was at most 1 thread not fully engaged which will not limit a 1-1/8" anchor bolt as its failure mode will still be limited by direct tensile yielding at this point (therefore not decreasing its capacity).

There are 16 bolts anchoring the feet of the heat exchanger to 4 separate pedestals extending from the floor slab.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
The majority of the bolts were painted with no signs of corrosion and a few had some slight mild surface oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
There are 4 concrete pedestals supporting the heat exchanger. They have 3 instances of slight surface chipping of the concrete that is of no structural concern.

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

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 097

Equipment ID No. E-54B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING HEAT EXCHANGER

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.)
*The anchorage configuration has been verified using Dwg. M-14 Sheet
1.* 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 heat exchanger is not considered 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?
There is a block wall nearby that is qualified by C-104 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- 097

Equipment ID No. E-54B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

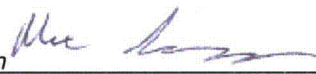
Equipment Description COMPONENT COOLING HEAT EXCHANGER

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch



Date: 10-12-2012

Paul Klein



10-12-2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 097

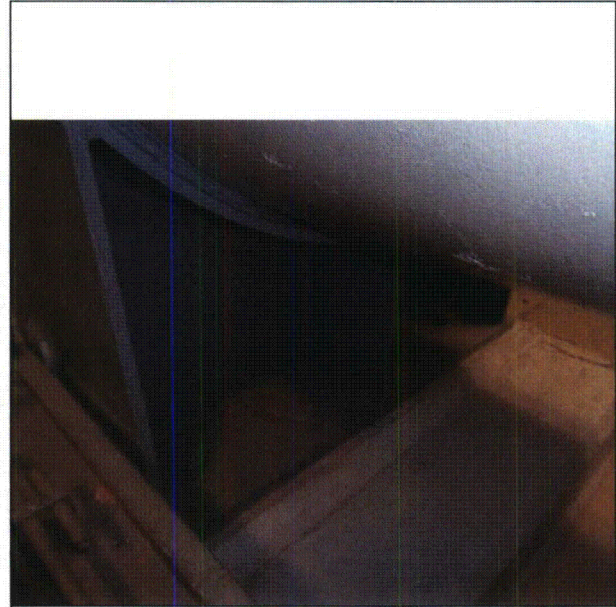
Equipment ID No. E-54B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING HEAT EXCHANGER

Photographs



Note: E-54B



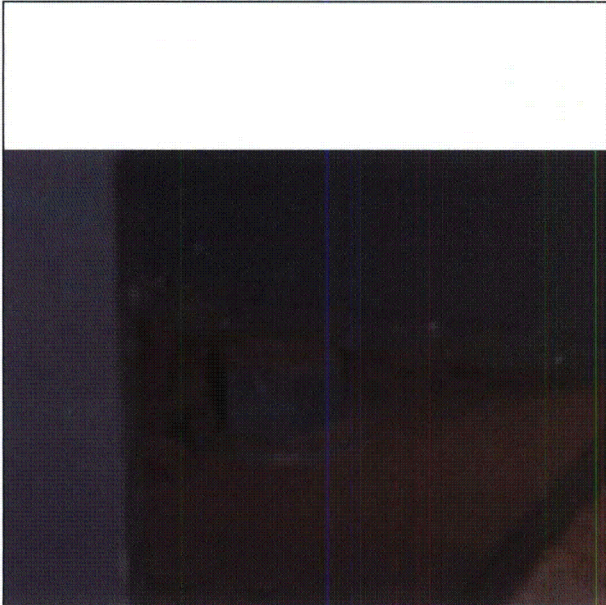
Note: Anchorage

Status: Y N U

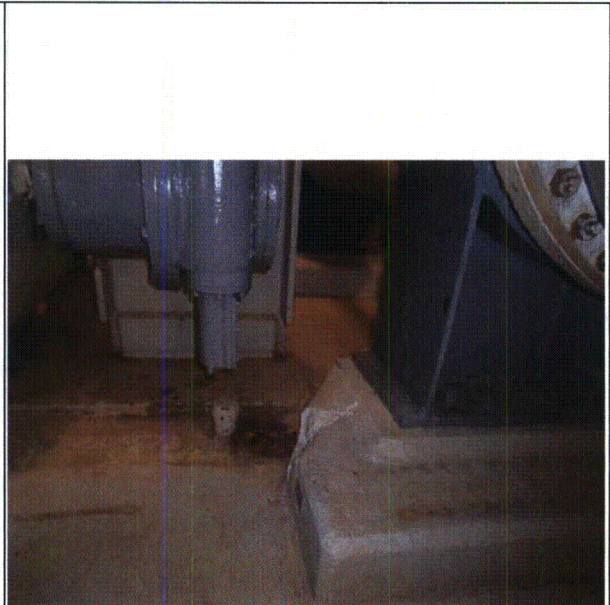
Seismic Walkdown Checklist (SWC) SWEL1- 097

Equipment ID No. E-54B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description COMPONENT COOLING HEAT EXCHANGER



Note: *Additional Anchorage*



Note: *Concrete Chip*

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 098

Equipment ID No. E-60A Equip. Class¹ 21 – TANKS AND HEAT EXCHANGERS

Equipment Description SHUTDOWN COOLING HEAT EXCHANGER

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 heat exchanger is anchored to the top of E-60B with anchor bolts through both of its legs (on the East and West ends of the heat exchanger).

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
The heat exchanger is mounted to E-60B.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 098

Equipment ID No. E-60A Equip. Class¹ 21 – TANKS AND HEAT EXCHANGERS

Equipment Description SHUTDOWN COOLING HEAT EXCHANGER

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
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 heat exchanger 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?
*The suspension system for an overhead light was not visible but does
not appear to be a credible threat or display any signs that it is
inadequately 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 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 098

Equipment ID No. E-60A Equip. Class¹ 21 – TANKS AND HEAT EXCHANGERS

Equipment Description SHUTDOWN COOLING HEAT EXCHANGER

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Anchorbolts connecting E-60A to E-60B were inspected from video taken by a portable video camera due to radiation concerns.

Evaluated by: Alex Smerch

Date: 10/9/2012

Paul Klein

10/9/2012

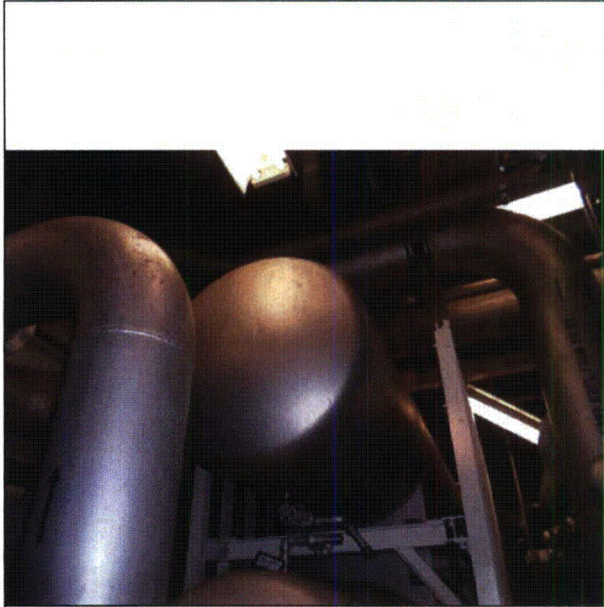
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Seismic Walkdown Checklist (SWC) SWEL1- 098

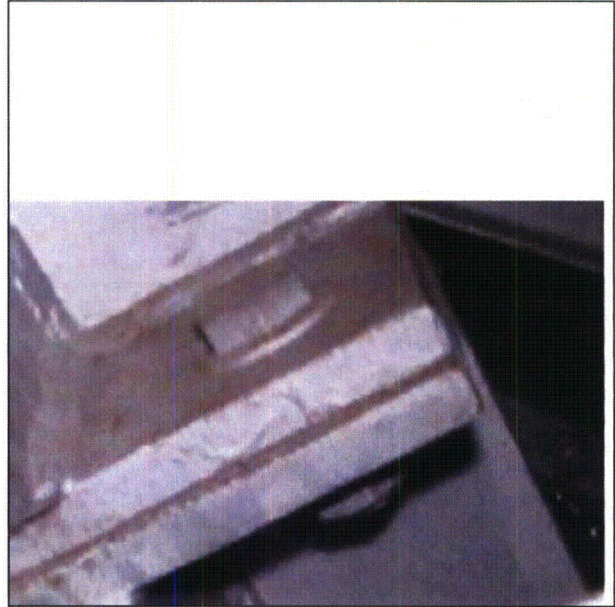
Equipment ID No. E-60A Equip. Class¹ 21 – TANKS AND HEAT EXCHANGERS

Equipment Description SHUTDOWN COOLING HEAT EXCHANGER

Photographs



Note: E-60A



Note: Anchorage for E-60A (1)

Status: Y N U

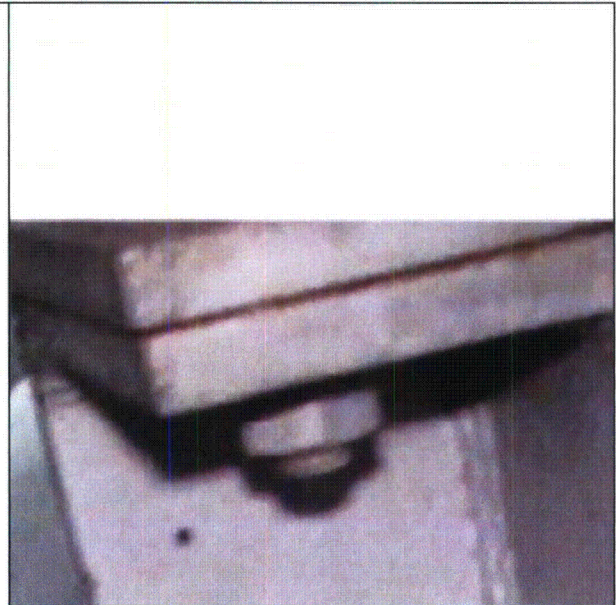
Seismic Walkdown Checklist (SWC) SWEL1- 098

Equipment ID No. E-60A Equip. Class¹ 21 – TANKS AND HEAT EXCHANGERS

Equipment Description SHUTDOWN COOLING HEAT EXCHANGER



Note: Anchorage for E-60A (2)



Note: Anchorage for E-60A (3)

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-099

Equipment ID No. E-60B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description SHUTDOWN COOLING HEAT EXCHANGER

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 heat exchanger is anchored to two concrete pedestals with two anchor bolts in each pedestal.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
There is some slight corrosion that is no more than mild surface oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Each concrete pedestal supporting E-60B extends to the top of the concrete floor slab.

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

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-099

Equipment ID No. E-60B Equip. Class 21 - TANKS AND HEAT EXCHANGERS

Equipment Description SHUTDOWN COOLING HEAT EXCHANGER

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
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 heat exchanger 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?
*The suspension system for an overhead light was not visible but does
not appear to be a credible threat or display any signs that it is
inadequately 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) SWEL1-099

Equipment ID No. E-60B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description SHUTDOWN COOLING HEAT EXCHANGER

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Back anchorage for E-60B was observed via the use of binoculars due to radiation concerns. Front anchorage was observed via hand mirrors and a camera.

Evaluated by: Alex Smerch



Date: 10/10/12

Paul Klein



10/10/12

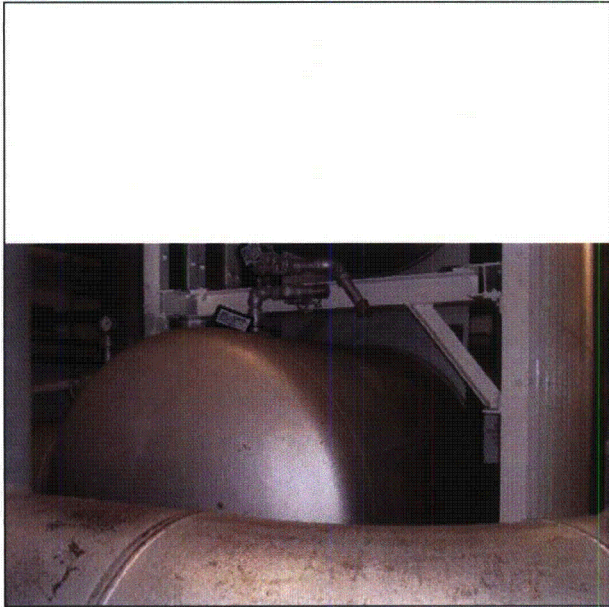
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1-099

Equipment ID No. E-60B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description SHUTDOWN COOLING HEAT EXCHANGER

Photographs



Note: E-60B



Note: One of Anchor Bolts for E-60B

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 100

Equipment ID No. T-13A Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description EDG K-6A JACKET WATER SURGE 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? Y N U N/A
Tank is anchored to north wall by brackets and held down vertically by two U straps.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
There was no visible corrosion that was more than mild surface oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
The support holding up the tank is anchored to the concrete wall.

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

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 100

Equipment ID No. T-13A Equip. Class 21 - TANKS AND HEAT EXCHANGERS

Equipment Description EDG K-6A JACKET WATER SURGE TANK

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.) Y N U N/A
*Anchorage was verified using SEWS package ID: T-13A (Rev. 1) Sheet
3 of 3 and Stevenson and Associates A46/IPEEE Outlier Resolution
Calculation # EA POC00 5276-T13A&B Job#: 9252750 Sheet 3.*
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?
Tank is not 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
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- 100

Equipment ID No. T-13A Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description EDG K-6A JACKET WATER SURGE TANK

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch



Date: 10/03/2012

Paul Klein



10/03/2012

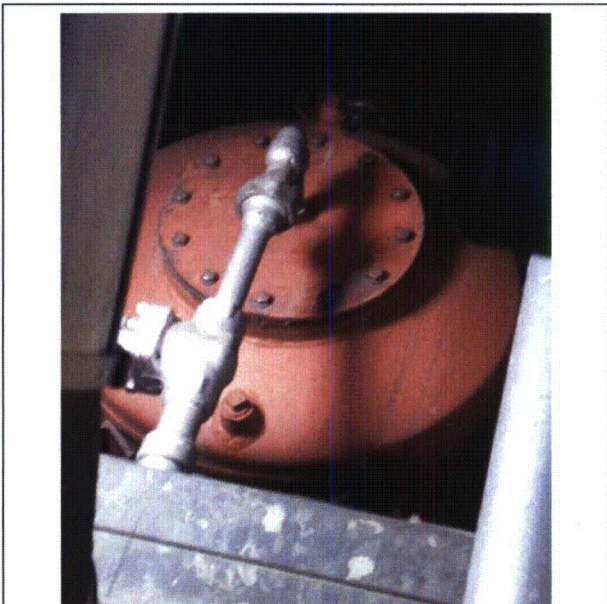
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 100

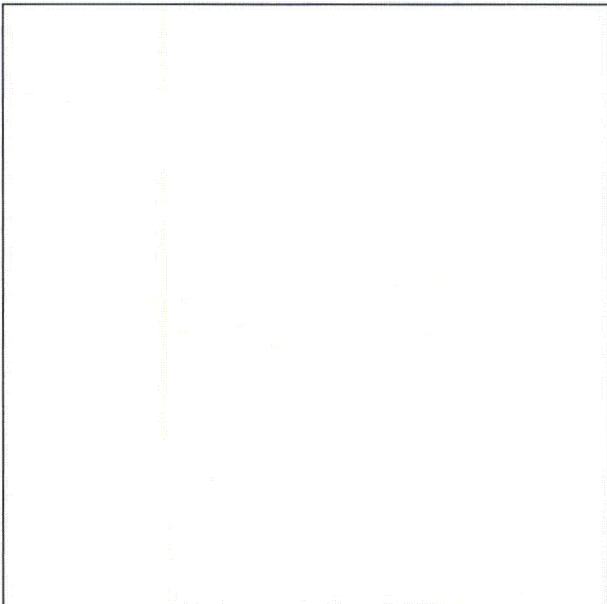
Equipment ID No. T-13A Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description EDG K-6A JACKET WATER SURGE TANK

Photographs



Note: T-13A



Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 101

Equipment ID No. T-13B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-2 K-6B JACKET WATER SURGE TK

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 two brackets with two u-bolts around the tank. The brackets are anchored to a concrete wall with 2 anchor bolts per bracket.

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

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

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 101

Equipment ID No. T-13B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-2 K-6B JACKET WATER SURGE TK

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
9. Do attached lines have adequate flexibility to avoid damage?
*Piping lines over to diesel tank and wall have multiple bends and
flexibility for deformation along piping lines.* Y N U N/A
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 101

Equipment ID No. T-13B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-2 K-6B JACKET WATER SURGE TK

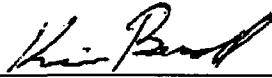
Other Adverse Conditions

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)

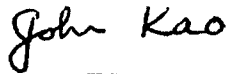
Bolt holes in bracket noted towards the top of the bracket. Item judged to be okay with 2 anchors per bracket as-installed based on size of anchors relative to size of equipment supported.

Evaluated by: Kevin Bessell



Date: 10/15/2012

John Kao



10/15/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 101

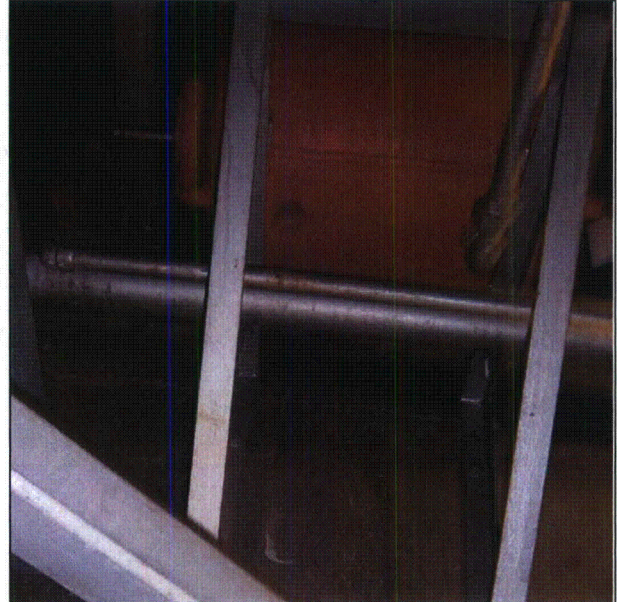
Equipment ID No. T-13B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-2 K-6B JACKET WATER SURGE TK

Photographs



Note: *Equipment.*



Note: *Holes in top of bracket.*

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 102

Equipment ID No. T-2 Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description CONDENSATE STORAGE TANK

Location: Bldg. TURB Floor El. 590 Room, Area OUTSIDE, COL Y5, LINE 19

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 12 cast in place anchors around the base of the tank.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
Mild corrosion noted on a couple of the anchors. The majority of anchors were free from corrosion.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Small surface cracks noted near a few anchors. The leveling pad beneath the tank baseplate has spalled in areas around the perimeter. This does not pose an adverse seismic risk.

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

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 102

Equipment ID No. T-2 Equip. Class 21, TANKS AND HEAT EXCHANGERS

Equipment Description CONDENSATE STORAGE TANK

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
The equipment anchorage configuration is consistent with drawing VEN-C18, Sh. 41, Rev. 7, C-18, Sh.1, Rev. 2 and SEWS Sht. 1 of 4.
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
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.
A structural steel platform is noted on the roof of the building north of tank T-2 which is supporting large HVAC units. Interaction of the HVAC units with the tank is not credible since the steel platform is well braced and is judged to maintain integrity during a seismic event preventing collapse over and onto tank.
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- 102

Equipment ID No. T-2 Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

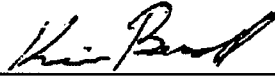
Equipment Description CONDENSATE STORAGE TANK

Other Adverse Conditions

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

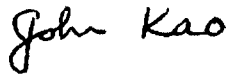
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/10/2012

John Kao



10/10/2012

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 102

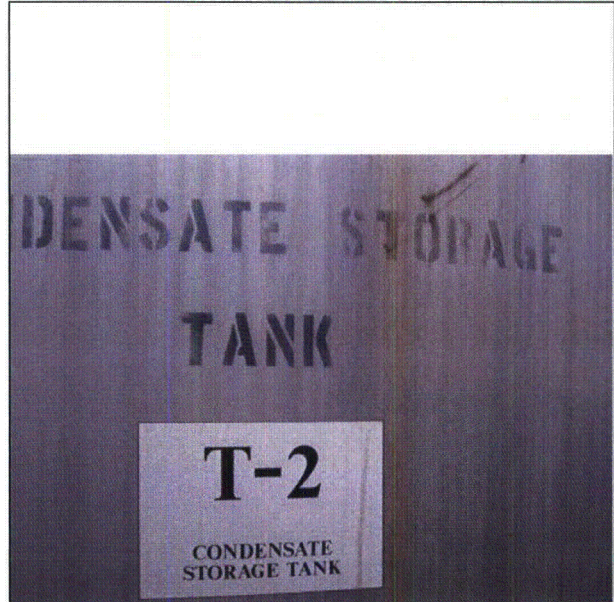
Equipment ID No. T-2 Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description CONDENSATE STORAGE TANK

Photographs

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

Note: *Equipment.*



Note: *Equipment Tag ID.*

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 103

Equipment ID No. T-25A Equip. Class¹ 21, TANKS AND EXCHANGERS

Equipment Description EMERGENCY DIESEL GEN 1-1 K-6A DAY TANK

Location: Bldg. AUX Floor El. 590 Room, Area 146

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

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
Tank legs are anchored to the floor with cast in place anchors. There are additional anchors to the wall along the top and bottom of tank. The tank is heavily braced with tube steel along the east side of the tank.

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
The equipment is anchored to the concrete walls and floor. There are no cracks observed.

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

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 103

Equipment ID No. T-25A Equip. Class¹ 21, TANKS AND EXCHANGERS

Equipment Description EMERGENCY DIESEL GEN 1-1 K-6A 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

The anchorage configuration is consistent with plant drawing C-103, Sh. 2B, Rev. 1 with the exception of the angle connecting the tube steel at the top brace. The angle is a 4x4x0'-4"x1/2" and drawing C-103 calls for a 5x3x0'-4"x1/2" angle. Licensing basis evaluation, LB-02, has been created. CR-PLP-2012-6565 has been initiated.

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

Y N U

The anchorage configuration is consistent with plant drawing C-103, Sh. 2B, Rev. 1 with the exception of the angle connecting the tube steel at the top brace. The angle is a 4x4x0'-4"x1/2" and drawing C-103 calls for a 5x3x0'-4"x1/2" angle. Licensing basis evaluation, LB-02, has been created. CR-PLP-2012-6565 has been initiated.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures?
Equipment 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 fixture noted overhead near tank. The fixture and light are judged not to be a credible or significant seismic interaction due to the relative mass and stiffness of the fixture compared to that of the tank as well as a tube steel support between the tank and the fixture zone of influence.

Y N U N/A

9. Do attached lines have adequate flexibility to avoid damage?
Bends exist in piping and tubing to provide flexibility, and piping lines enter oversized penetrations in the wall allowing for axial movement.

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- 103

Equipment ID No. T-25A Equip. Class¹ 21, TANKS AND EXCHANGERS

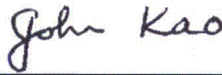
Equipment Description EMERGENCY DIESEL GEN 1-1 K-6A DAY TANK

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: Kevin Bessell  Date: 10/2/2012, 10/3/2012

John Kao  10/2/2012, 10/3/2012

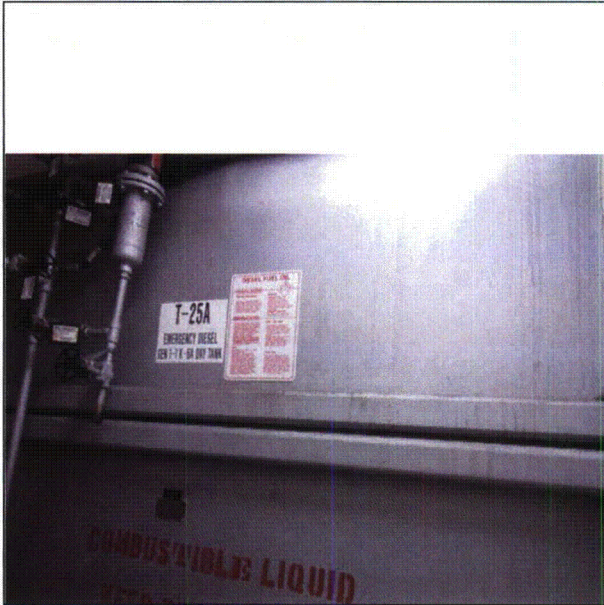
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Seismic Walkdown Checklist (SWC) SWEL1- 103

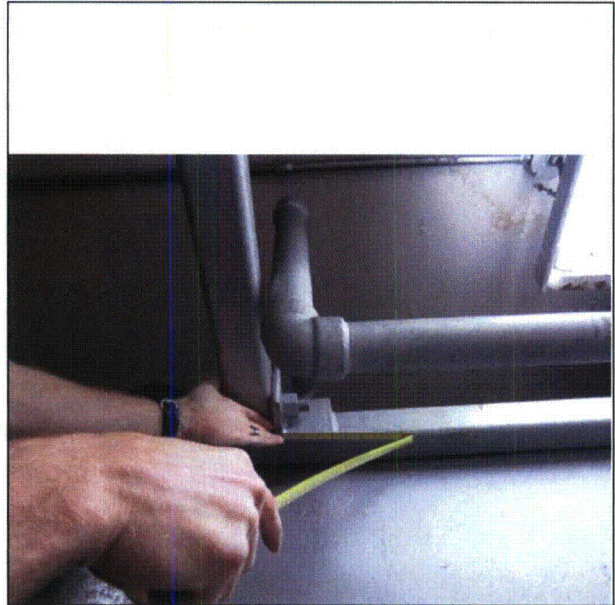
Equipment ID No. T-25A Equip. Class¹ 21, TANKS AND EXCHANGERS

Equipment Description EMERGENCY DIESEL GEN 1-1 K-6A DAY TANK

Photographs



Note: Equipment.



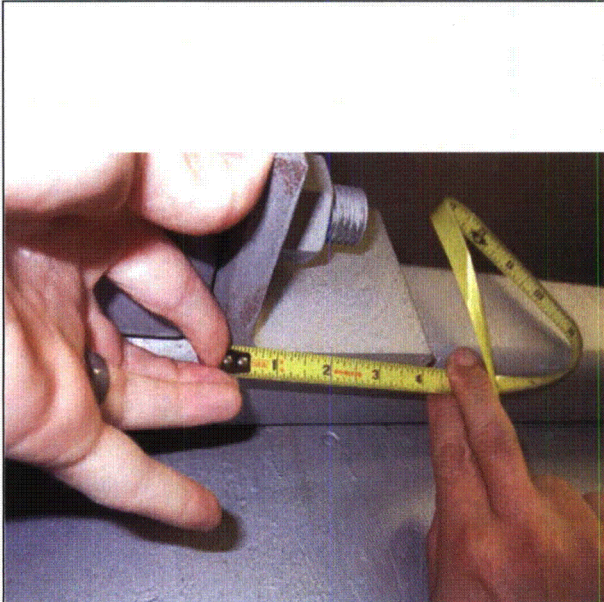
Note: Angle connection top tube steel bracing supports.

Status: Y N U

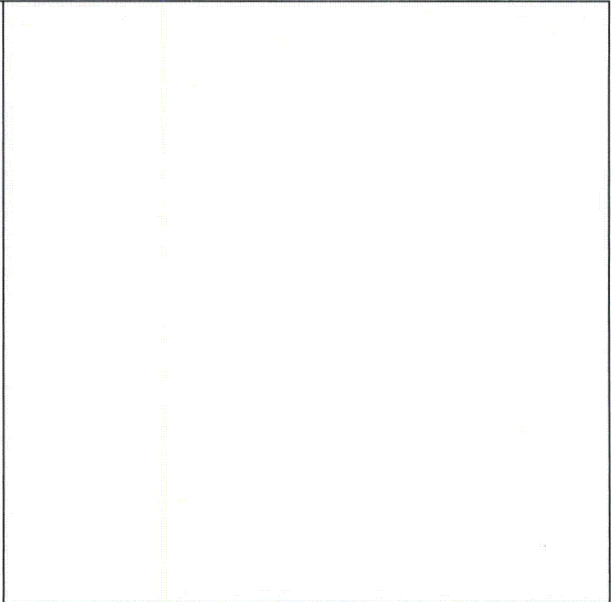
Seismic Walkdown Checklist (SWC) SWEL1- 103

Equipment ID No. T-25A Equip. Class¹ 21, TANKS AND EXCHANGERS

Equipment Description EMERGENCY DIESEL GEN 1-1 K-6A DAY TANK



Note: Angle connection top tube steel bracing supports non-conformance.



Note:

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 104

Equipment ID No. T-25B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EMERGENCY DIESEL GEN 1-2 K-6B DAY TANK

Location: Bldg. AUX Floor El. 590 Room, Area 147

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

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
Tank legs are anchored to the floor with cast in place anchors. There are additional anchors to the wall along the top and bottom of tank. The tank is heavily braced with tube steel along the west side of the tank.

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. Anchors appear galvanized.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
The equipment is anchored to the concrete walls and floor. There are no cracks observed.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 104

Equipment ID No. T-25B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EMERGENCY DIESEL GEN 1-2 K-6B 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

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 fixture noted overhead near tank. The fixture and light
are judged not to be a credible or significant seismic interaction due to
the relative mass and stiffness of the fixture compared to that of the
tank as well as a tube steel support between the tank and the fixture
zone of influence.* Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage?
*Bends exist in piping and tubing to provide flexibility, and piping lines
enter oversized penetrations in the wall allowing for axial movement.* 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- 104

Equipment ID No. T-25B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EMERGENCY DIESEL GEN 1-2 K-6B 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

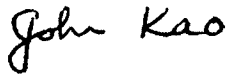
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/15/2012

John Kao



10/15/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 104

Equipment ID No. T-25B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EMERGENCY DIESEL GEN 1-2 K-6B DAY TANK

Photographs



Note: *Equipment.*



Note: *Equipment anchorage for seismic restraining brace.*

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 105

Equipment ID No. T-31B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-1 K-6A AIR STARTING 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? Y N U N/A
Anchored to floor through base with 4 bolt circular pattern.

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.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
The tank is anchored to the concrete floor slab.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 105

Equipment ID No. T-31B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-1 K-6A AIR STARTING 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.)
Used DWG M-12 Sheet 8 to verify anchorage. 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 large duct judged to be adequately 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- 105

Equipment ID No. T-31B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-1 K-6A AIR STARTING 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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

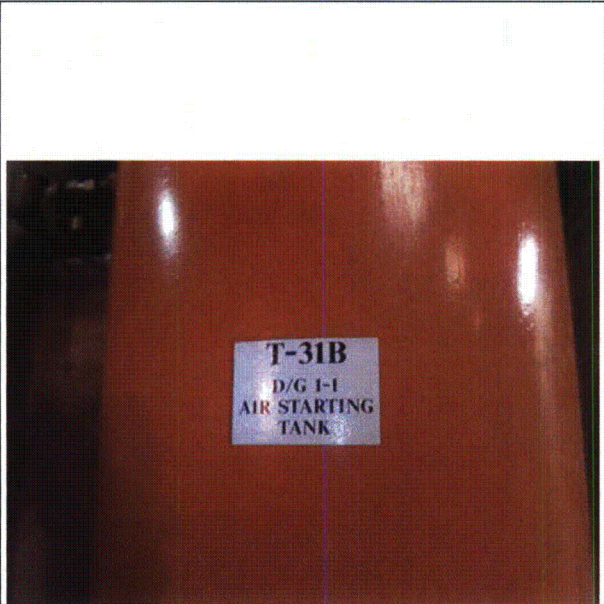
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 105

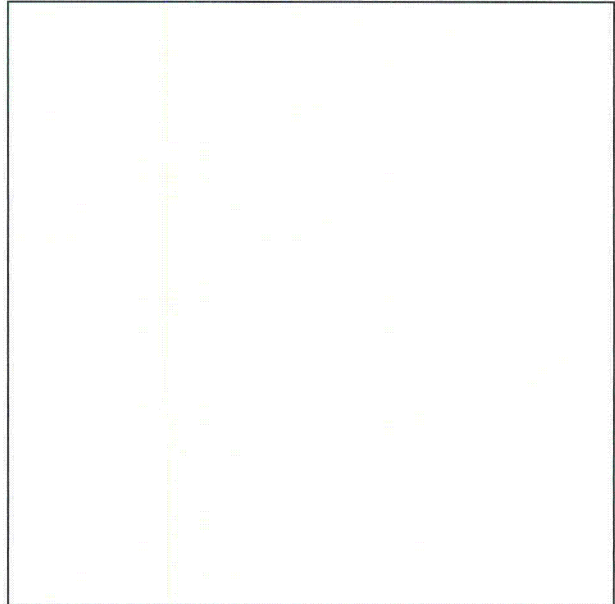
Equipment ID No. T-31B Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-1 K-6A AIR STARTING TANK

Photographs



Note: *T-31B*



Note:

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 106

Equipment ID No. T-31C Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-2 K-6B AIR STARTING 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? Y N U N/A
Equipment anchorage consists of 4 - 3/4" cast in place anchors around the perimeter of the tank baseplate. The baseplate is attached to the bottom of the tank with intermittent fillet welds, 3" long on 8" centers.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
The equipment and anchors are painted and no corrosion is observed.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
The equipment sits on top of a concrete pedestal on the concrete floor. The floor and pedestal are painted. No cracks are observed.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 106

Equipment ID No. T-31C Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-2 K-6B AIR STARTING 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.)
*The equipment anchorage is consistent with drawing M-12, Sh. 8, Rev.
3 and SEWS Sh. 1 of 5.* 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
9. Do attached lines have adequate flexibility to avoid damage?
*There are tubing and piping lines with multiple bends that span from
tank. These lines are supported with hanger rods.* 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- 106

Equipment ID No. T-31C Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-2 K-6B AIR STARTING 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

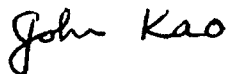
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/15/2012

John Kao



10/15/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 106

Equipment ID No. T-31C Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description EDG 1-2 K-6B AIR STARTING TANK

Photographs



Note: Equipment.



Note: Equipment anchorage.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 107

Equipment ID No. T-58 Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description SAFETY INJECTION REFUELING WATER TANK

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
T-58 is anchored to the concrete with 52 - 1-1/2 in. dia. anchor bolts. The bolts go through a stiffened flat bar welded to the tank that rings the tank approximately 15 in. above the base of the tank. The bolts are located on approximately 34 in. centers around the circumference of the tank.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
There was no visible corrosion in excess of mild surface corrosion.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
The roof coating at the base of tank T-58 prevented inspection of the concrete around the anchors.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 107

Equipment ID No. T-58 Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description SAFETY INJECTION REFUELING WATER 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.)
The anchorage configuration of tank T-58 was compared with the tank supplier drawing (Plant Dwg. No. 5935-C-18-1-2) and Dwg. C-106 Rev. 6. 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?
Tank T-58 was judged not to be 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?
T-58 is located outside and the only item that possibly may impact the tank was the ductwork along the east side of the tank. The ductwork is well supported and is judged not to represent a threat to the tank. 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- 107


Equipment ID No. T-58 Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS


Equipment Description SAFETY INJECTION REFUELING WATER 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: 10-10-12

Paul Klein  10-10-12

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 107

Equipment ID No. T-58 Equip. Class¹ 21 - TANKS AND HEAT EXCHANGERS

Equipment Description SAFETY INJECTION REFUELING WATER TANK

Photographs



Note: Tank T-58



Note: Tank T-58 Anchor Bolt. 1 of 52

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 108

Equipment ID No. VF-26A Equip. Class¹ 10, AIR HANDLERS

Equipment Description AIR HANDLING UNIT V-26A FILTER

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
The equipment is anchored with 6 cast in place anchors along each side of the component base for a total of 12 anchors.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Equipment is resting on a grout pad and concrete pedestal atop a concrete floor, no cracks observed.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 108

Equipment ID No. VF-26A Equip. Class¹ 10, AIR HANDLERS

Equipment Description AIR HANDLING UNIT V-26A FILTER

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
M57A-1, Sh. 1, Rev. 75 and C-455, 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?
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
9. Do attached lines have adequate flexibility to avoid damage?
Flex conduit noted entering unit housing. 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- 108

Equipment ID No. VF-26A Equip. Class¹ 10, AIR HANDLERS


Equipment Description AIR HANDLING UNIT V-26A FILTER

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- 108

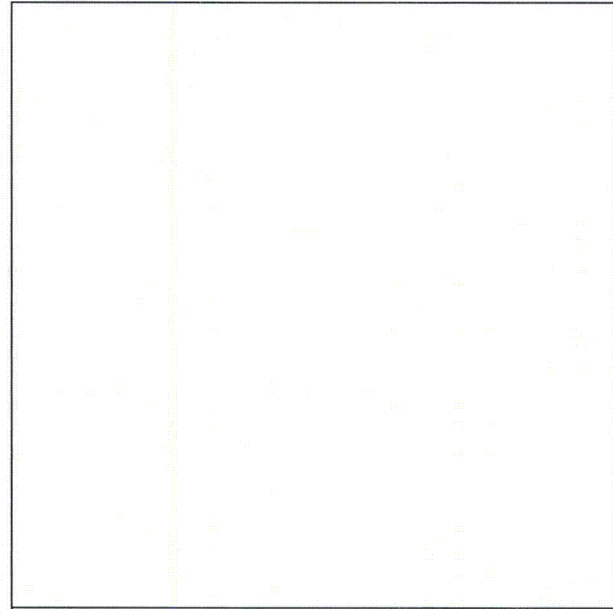
Equipment ID No. VF-26A Equip. Class¹ 10, AIR HANDLERS

Equipment Description AIR HANDLING UNIT V-26A FILTER

Photographs



Note: *Equipment.*



Note:

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 109

Equipment ID No. VF-26B Equip. Class¹ 10, AIR HANDLERS

Equipment Description AIR HANDLING UNIT V-26B FILTER

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
The equipment is anchored with 6 cast in place anchors along each side of the component base for a total of 12 anchors.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
Equipment is resting on a grout pad and concrete pedestal atop a concrete floor, hairline shrinkage cracks noted at approximate 6" intervals on west side of pedestal and grout pad. Cracks are superficial and are judged to be okay.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 109

Equipment ID No. VF-26B Equip. Class¹ 10, AIR HANDLERS

Equipment Description AIR HANDLING UNIT V-26B FILTER

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
9. Do attached lines have adequate flexibility to avoid damage?
Flex conduit noted entering unit housing. 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- 109

Equipment ID No. VF-26B Equip. Class¹ 10, AIR HANDLERS

Equipment Description AIR HANDLING UNIT V-26B FILTER

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: 10/16/2012

John Kao  10/16/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 109

Equipment ID No. VF-26B Equip. Class¹ 10, AIR HANDLERS

Equipment Description AIR HANDLING UNIT V-26B FILTER

Photographs



Note: Equipment.



Note: Equipment Anchorage.

Status: Y N U

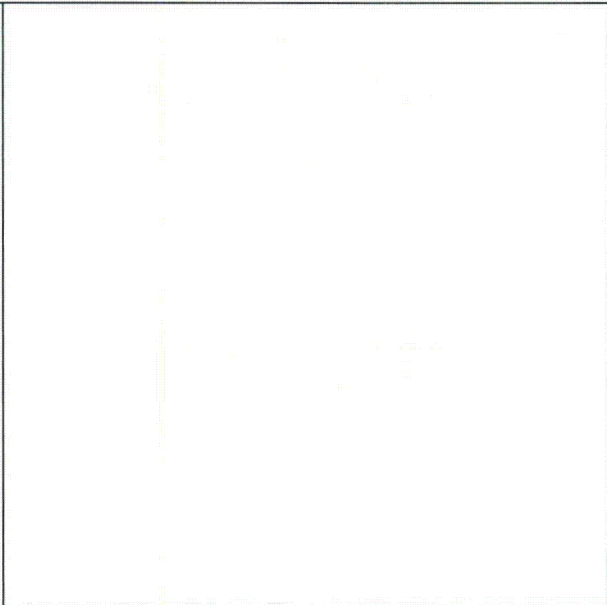
Seismic Walkdown Checklist (SWC) SWEL1- 109

Equipment ID No. VF-26B Equip. Class¹ 10, AIR HANDLERS

Equipment Description AIR HANDLING UNIT V-26B FILTER



Note: *Top view of VF-26B looking south.*



Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 110

Equipment ID No. PO-1711 Equip. Class¹ 0, OTHER

Equipment Description MODULATION DAMPER D-20 POSITIONER

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
The equipment anchorage consists of 4 bolts connecting it to a steel frame that is positioned to the damper.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
The component is anchored to a steel frame.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 110

Equipment ID No. PO-1711 Equip. Class¹ 0, OTHER

Equipment Description MODULATION DAMPER D-20 POSITIONER

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 M0244, Sh. 57, pg. 44
and 43.* 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.* Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage?
Flex conduit noted attached to positioner. 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- 110

Equipment ID No. PO-1711 Equip. Class¹ 0, OTHER

Equipment Description MODULATION DAMPER D-20 POSITIONER

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

There is a drip funnel overhead for roof leak and rust stains are noted along the HVAC duct. This corrosion is not a seismic concern; however, a work order (WR288642) has been initiated.

Comments (Additional pages may be added as necessary)

Insulation is noted on damper D-20 that has separated from the unit. A work order (WR288643) has been initiated.

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

John Kao  10/10/2012

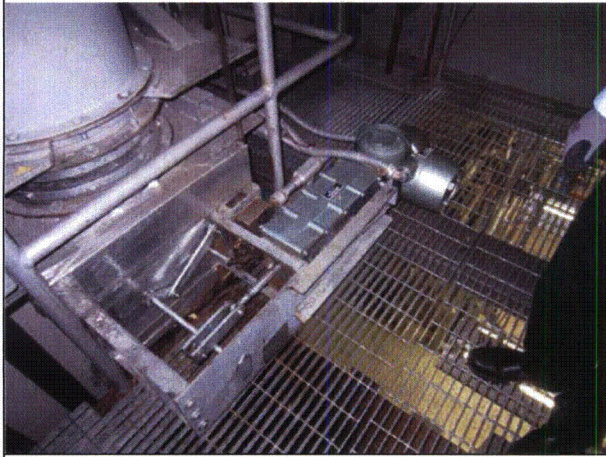
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 110

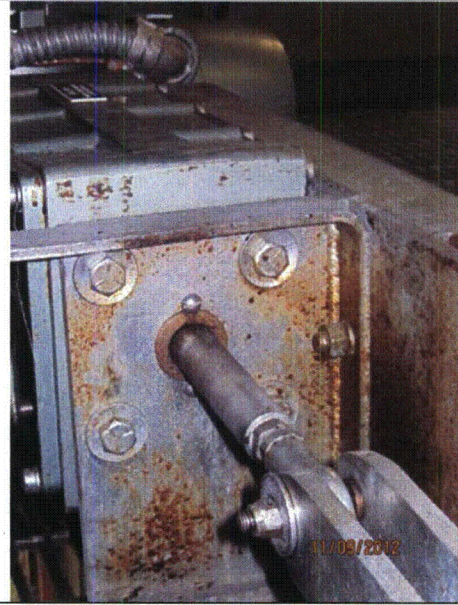
Equipment ID No. PO-1711 Equip. Class¹ 0, OTHER

Equipment Description MODULATION DAMPER D-20 POSITIONER

Photographs



Note: Equipment.



Note: Equipment anchorage to steel frame.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 110

Equipment ID No. PO-1711 Equip. Class¹ 0, OTHER

Equipment Description MODULATION DAMPER D-20 POSITIONER



Note: *Insulation separated from damper unit.*



Note: *Drip funnel overhead.*

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 111

Equipment ID No. PO-1712 Equip. Class¹ 0, OTHER

Equipment Description MODULATION DAMPER D-21 POSITIONER

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
The equipment anchorage consists of 4 bolts connecting it to a steel frame that is positioned to the damper.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
The component is anchored to a steel frame.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 111

Equipment ID No. PO-1712 Equip. Class¹ 0, OTHER

Equipment Description MODULATION DAMPER D-21 POSITIONER

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?
Flex conduit noted attached to positioner. 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- 111

Equipment ID No. PO-1712 Equip. Class¹ 0, OTHER

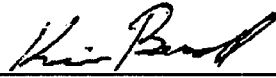
Equipment Description MODULATION DAMPER D-21 POSITIONER

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

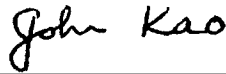
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/16/2012

John Kao



10/16/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL1- 111

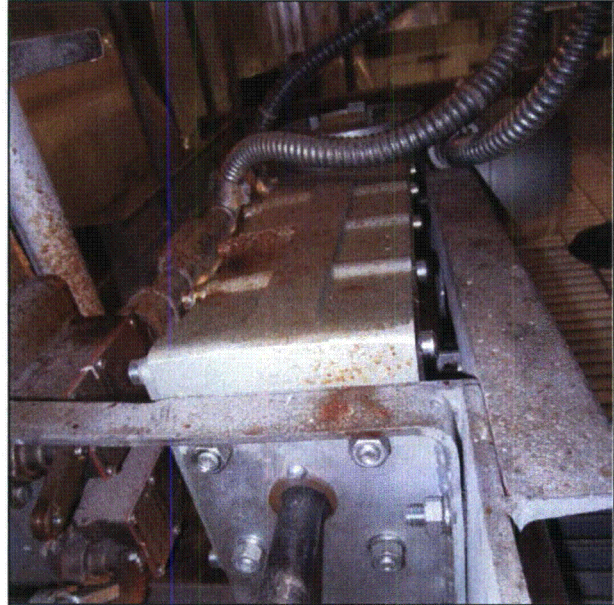
Equipment ID No. PO-1712 Equip. Class¹ 0, OTHER

Equipment Description MODULATION DAMPER D-21 POSITIONER

Photographs



Note: *Equipment.*



Note: *Equipment anchorage.*

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 001

Equipment ID No. P-51A Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SPENT FUEL POOL COOLING PUMP

Location: Bldg. AUX Floor El. 590 Room, Area 115

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

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
The anchorage consists of 4 bolts connecting pump skid with concrete pedestal.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
The anchorage is painted and shows no corrosion.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
There is a concrete pedestal supporting the pump that is approximately 1' high and is located directly on the concrete floor slab.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 001

Equipment ID No. P-51A Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SPENT FUEL POOL COOLING PUMP

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures?
Pump 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?
*Light bulbs overhead could fall but do not pose a credible threat to the
pump.* Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 001

Equipment ID No. P-51A Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SPENT FUEL POOL COOLING PUMP

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch  Date: 10/04/2012

Paul Klein  10/04/2012

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 001

Equipment ID No. P-51A Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SPENT FUEL POOL COOLING PUMP

Photographs

<p>This photo contains security-sensitive information. It is available for review at the Palisades Nuclear Plant.</p>
<p>Note: P-51A</p>

<p>Note:</p>

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 002

Equipment ID No. P-51B Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SPENT FUEL POOL COOLING PUMP

Location: Bldg. AUX Floor El. 590 Room, Area 115

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

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
The anchorage consists of 4 anchors attaching a pump skid to an approximately 1 foot high concrete pedestal.

There was one approximately 3/4" bolt on the southwest side of the pump responsible for attaching the pump pedestal to the pump skid that did not have full thread engagement with its respective nut. Due to the fact that no more than 2 threads were not engaged, the failure limit state of the bolt most likely remains unchanged and therefore its capacity remains unchanged. Therefore this is not seen as an operability concern at this time but licensing basis evaluation, LB-06 on EN-DC-168-ATT-9.8, has been initiated to follow up. CR-PLP-2012-7084 is initiated. (See Photo)

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
The anchors are fully painted and show no corrosion.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 002

Equipment ID No. P-51B Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SPENT FUEL POOL COOLING PUMP

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

The concrete foundation consisted of an approximately 1 foot high concrete pedestal located directly on the concrete floor slab.

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 validated with PLP SEWS package for P-51B Sheets 6-8.

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

There was one approximately 3/4" bolt on the southwest side of the pump responsible for attaching the pump pedestal to the pump skid that did not have full thread engagement with its respective nut. Due to the fact that no more than 2 threads were not engaged, the failure limit state of the bolt most likely remains unchanged and therefore its capacity remains unchanged. Therefore this is not seen as an operability concern at this time but licensing basis evaluation, LB-06 on EN-DC-168-ATT-9.8, has been initiated to follow up. (See Photo)

Interaction Effects

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

The pump is not a soft target.

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

Nearby light bulbs could fall but would not damage equipment. A block wall is southwest of pump and is judged not close enough to interfere with pump during seismic event.

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 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 002

Equipment ID No. P-51B Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SPENT FUEL POOL COOLING PUMP

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: Alex Smerch  Date: 10/04/12

Paul Klein  10/04/12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 002

Equipment ID No. P-51B Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SPENT FUEL POOL COOLING PUMP

Photographs

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

Note: *P-51B*



Note: *Bolt with limited engagement with nut*

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 003

Equipment ID No. P-82 Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SFP RECIRCULATION BOOSTER PUMP

Location: Bldg. AUX Floor El. 590 Room, Area 115

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

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
Anchorage consists of 4 anchors through a ~1 foot high concrete pedestal connected to the pump skid.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
The pump is located on a concrete pedestal on top of the concrete floor slab. There was concrete chipped off one of the corners of the pedestal but it did not pass through any of the anchor bolts nor did it have any exposed reinforcement and was thus deemed not a concern. (See photo)

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 003

Equipment ID No. P-82 Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SFP RECIRCULATION BOOSTER PUMP

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
An anchorage configuration check was performed using PLP SEWS for P-82 Sheets 3 and 5.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
The pump is not a soft target.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
A 12" block wall just east of pump does not have any apparent designation on the wall itself and nothing shown on drawing C-104 stating whether it is qualified or unqualified. If it is unqualified it could have detrimental effects on P-82. Licensing basis evaluation, LB-07, has been initiated for this condition on EN-DC-168-ATT-9.8. CR-PLP-2012-06854 has been initiated as well.
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
A 12" block wall just east of pump does not have any apparent designation on the wall itself and nothing shown on drawing C-104 stating whether it is qualified or unqualified. If it is unqualified it could have detrimental effects on P-82. Licensing basis evaluation, LB-07, has been initiated for this condition on EN-DC-168-ATT-9.8.1. CR-PLP-2012-06854 has been initiated as well.

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 003

Equipment ID No. P-82 Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SFP RECIRCULATION BOOSTER PUMP

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch  Date: 10/04/2012

Paul Klein  10/04/2012

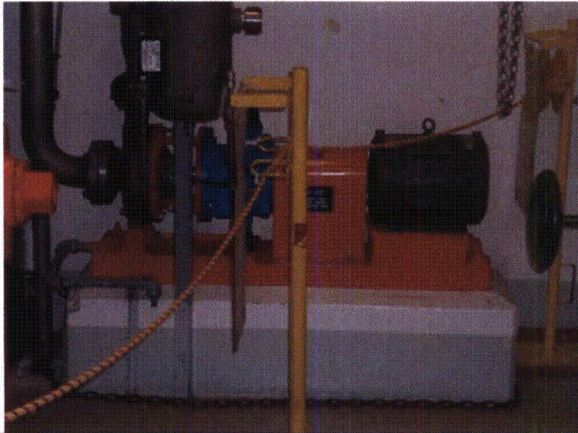
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 003

Equipment ID No. P-82 Equip. Class¹ 5, HORIZONTAL PUMPS

Equipment Description SFP RECIRCULATION BOOSTER PUMP

Photographs



Note: P-82



Note: Chipped concrete on corner of pump pedestal.

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 004

Equipment ID No. E-53A Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description SPENT FUEL POOL HEAT EXCHANGER

Location: Bldg. AUX Floor El. 590 Room, Area 115

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

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y N U N/A
The anchorage consists of two concrete pedestals with two bolts in each.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
There is not significant corrosion on the anchorage.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
The pedestals supporting the heat exchanger are located directly on top of the concrete floor slab.

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

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 2 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 004

Equipment ID No. E-53A Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description SPENT FUEL POOL HEAT EXCHANGER

5. Is the anchorage configuration consistent with plant documentation?
(Note: This question only applies if the item is one of the 50% for which
an anchorage configuration verification is required.)
*The Anchorage configuration has been checked using drawings M-9
Sheet 2(1) Rev. 9 and C-101, and was found to be in compliance with
drawings.* 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 Heat Exchanger 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?
A nearby block wall is qualified by drawing C-104. Y N U N/A
9. Do attached lines have adequate flexibility to avoid damage? Y N U N/A
10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? Y N U

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 3 of 4

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 004

Equipment ID No. E-53A Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description SPENT FUEL POOL HEAT EXCHANGER

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Drawing M-6 and M-44 incorrectly show that E-53A is on top of E-53B; CR-PLP-2012-06577 has been initiated for this.

Evaluated by: *Alex Smerch*

Date: 10-4-12

Paul Klein
Paul Klein

10-4-12

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 4 of 4

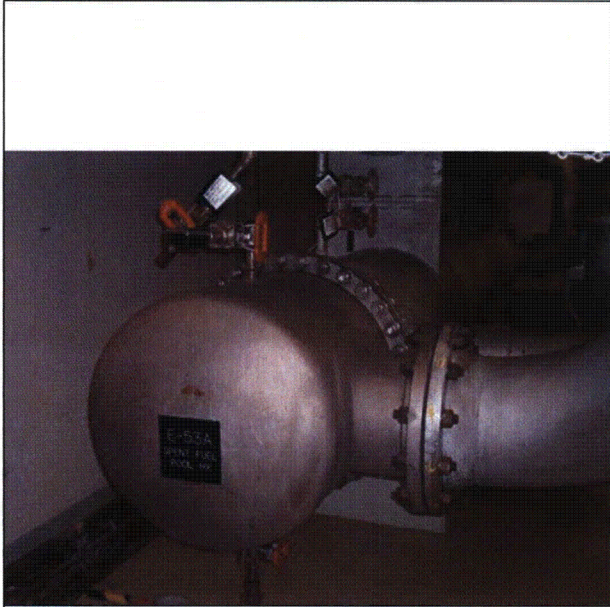
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Seismic Walkdown Checklist (SWC) SWEL2- 004

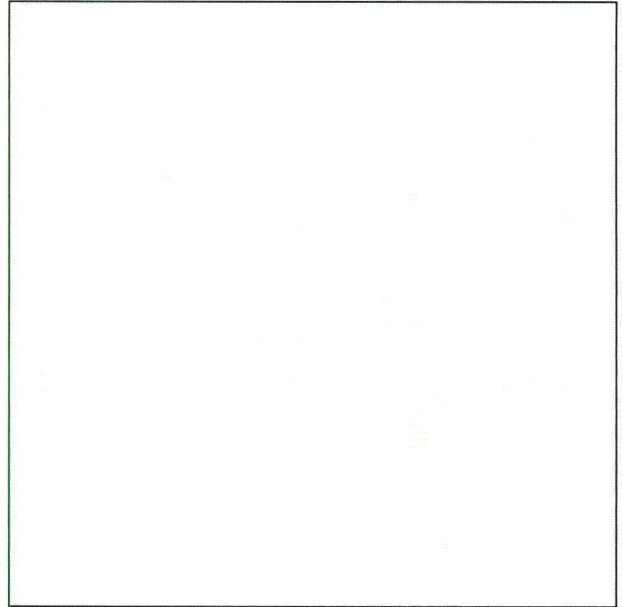
Equipment ID No. E-53A Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description SPENT FUEL POOL HEAT EXCHANGER

Photographs



Note: E-53A



Note:

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 1 of 5

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 005

Equipment ID No. E-53B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description SPENT FUEL POOL HEAT EXCHANGER

Location: Bldg. AUX Floor El. 590 Room, Area 115

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
E-53A is anchored to the top of Heat Exchanger E-53B. However, there was one approximately 3/4" bolt that did not have full thread engagement with its respective nut on the south side of the heat exchanger. Due to the fact that approximately only 2 threads were not engaged, the failure limit state of the bolt most likely remained unchanged and therefore its capacity would remain unchanged. Therefore this is not seen as an operability concern at this time but LB-03 on EN-DC-168-ATT-9.8 has been initiated to follow up. CR-PLP-2012-7083 has been initiated. (See Photos)

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y N U N/A
There is mild rust around the bolts and between the mounting plate surfaces that appears to have been due to water dripping down the side of the heat exchanger. Despite mild rust, bolt integrity appears to remain intact without capacity reduction. (See Photos)

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y N U N/A
There is no concrete anchorage as it is anchored to E-53A.

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

Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 005

Equipment ID No. E-53B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description SPENT FUEL POOL HEAT EXCHANGER

5. Is the anchorage configuration consistent with plant documentation? Y N U N/A
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
This anchorage configuration was verified using C-101 Sheet 0 and M-9 Sheet 1.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y N U

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y N U N/A
The Heat Exchanger is not a soft target.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y N U N/A
The block wall next to the heat exchanger is qualified by drawing C-104.
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) SWEL2- 005

Equipment ID No. E-53B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description SPENT FUEL POOL HEAT EXCHANGER

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch



Date: 10-4-12

Paul Klein



10-4-12

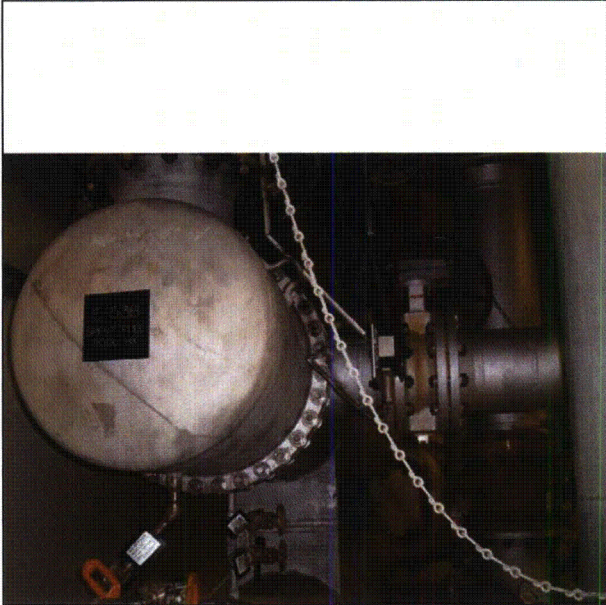
Status: Y N U

Seismic Walkdown Checklist (SWC) SWEL2- 005

Equipment ID No. E-53B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

Equipment Description SPENT FUEL POOL HEAT EXCHANGER

Photographs



Note: E-53B



Note: Rusted bolt lacking full thread engagement (bottom view).

ATTACHMENT 9.6

SEISMIC WALKDOWN CHECKLIST FORM

Sheet 5 of 5

Status: Y N U

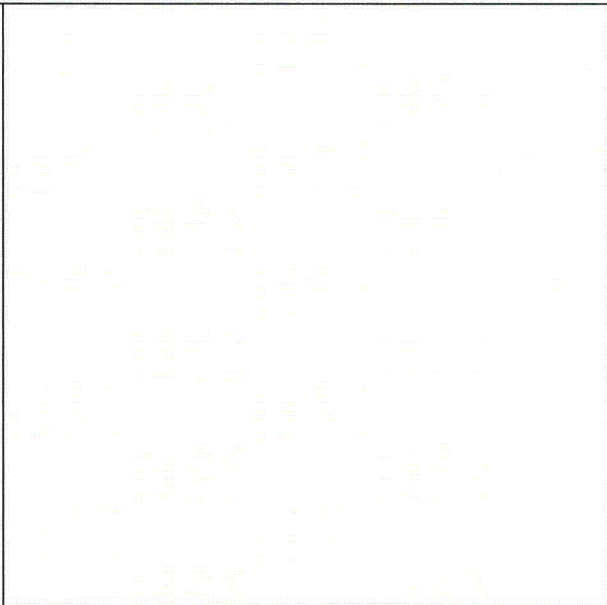
Seismic Walkdown Checklist (SWC) SWEL2- 005

Equipment ID No. E-53B Equip. Class¹ 21, TANKS AND HEAT EXCHANGERS

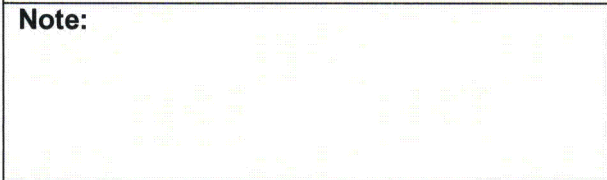
Equipment Description SPENT FUEL POOL HEAT EXCHANGER



Note: *Rusted Bolt with lack of thread engagement (side view).*



Note:



ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 01

Location: Bldg. AUX Floor El. 590 Room, Area¹ 116A, ENTIRE ROOM

SWEL Components: SWEL1- 010, 044, 091

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 01

Location: Bldg. AUX Floor El. 590 Room, Area¹ 116A, ENTIRE ROOM

SWEL Components: SWEL1- 010, 044, 091

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

Fluorescent lights noted overhead which are uncaged, however there is no significant interaction concern due to low mass and stiffness of source relative to targets in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

There is overhead critical Service Water piping overhead along the east side of the room. This piping is flexible and is supported seismically and is not an interaction concern.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

A tool rack with heavy tools is located at the northwest corner of the room. Tools on the rack are unrestrained in the lateral direction away from the wall, however, the tools are judged not to be a credible or significant interaction.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 01

Location: Bldg. AUX Floor El. 590 Room, Area¹ 116A, ENTIRE ROOM

SWEL Components: SWEL1- 010, 044, 091

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

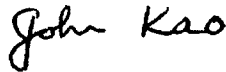
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/3/2012

John Kao



10/3/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 02

Location: Bldg. AUX Floor El. 590 Room, Area¹ 146, ENTIRE ROOM

SWEL Components: SWEL1- 103

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 02

Location: Bldg. AUX Floor El. 590 Room, Area¹ 146, ENTIRE ROOM

SWEL Components: SWEL1- 103

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

Fluorescent light fixture noted overhead which is not a credible or significant seismic interaction with other components in the room.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

There are small diesel oil spots noted on the floor. These spots are small and judged not a probable ignition source or fire hazard.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 02

Location: Bldg. AUX Floor El. 590 Room, Area¹ 146, ENTIRE ROOM

SWEL Components: SWEL1- 103

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

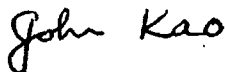
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/2/2012

John Kao



10/2/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 03

Location: Bldg. AUX Floor El. 629.17 Room, Area¹ 300, ENTIRE ROOM

SWEL Components: SWEL1- 036, 038, 043, 084, 108, 110

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 03

Location: Bldg. AUX Floor El. 629.17 Room, Area¹ 300, ENTIRE ROOM

SWEL Components: SWEL1- 036, 038, 043, 084, 108, 110

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

Fluorescent light fixture hanging from chains and connected with S hooks note overhead of flexible conduit over V-26A at northwest side of room. Falling of fixture could sever conduit, however, S hooks are crimped and chains are judged to support fixture adequately.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

There is a minor leak in the roof that is causing water to drip onto V-26A unit. Brown stains noted on ducting to V-26A and a spout catcher that leads to a bucket is noted hanging from the duct. This leak is judged to be minor due to surface cracks in the roof, therefore okay.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

Status: Y N U


Area Walk-By Checklist (AWC) AWC- 03

Location: Bldg. AUX Floor El. 629.17 Room, Area¹ 300, ENTIRE ROOM

SWEL Components: SWEL1- 036, 038, 043, 084, 108, 110

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

Comments (Additional pages may be added as necessary)

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

Tim Crocker  10/3/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 04

Location: Bldg. AUX Floor El. 590 Room, Area¹ 116

SWEL Components: SWEL1- 060, 031, 100, 105, 083, 033, 082

Instructions for Completing Checklist

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

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

Steam supply to room heater hanger slightly bowed(see photo). Supporting 15 feet of 2" steam piping weighting less than 200 pounds. Rod looked to be 3/8" inch. Hanger was not observed to have any physical signs of degradation as a result of its bowing and would not have significant impact on vertical downward (tension) capacity. Upward vertical forces can be neglected as seismic acceleration is .3G (per Tech Spec C-175(Q) App. B) and not enough to counter dead weight.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 04

Location: Bldg. AUX Floor El. 590 Room, Area¹ 116

SWEL Components: SWEL1- 060, 031, 100, 105, 083, 033, 082

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area?
Wooden box near K-1A Gasoline compressor engine does not have significant source of ignition as compressor doesn't actively carry fuel. Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 04

Location: Bldg. AUX Floor El. 590 Room, Area¹ 116

SWEL Components: SWEL1- 060, 031, 100, 105, 083, 033, 082

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch



Date: 10/03/2012

Paul Klein



10/03/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 4

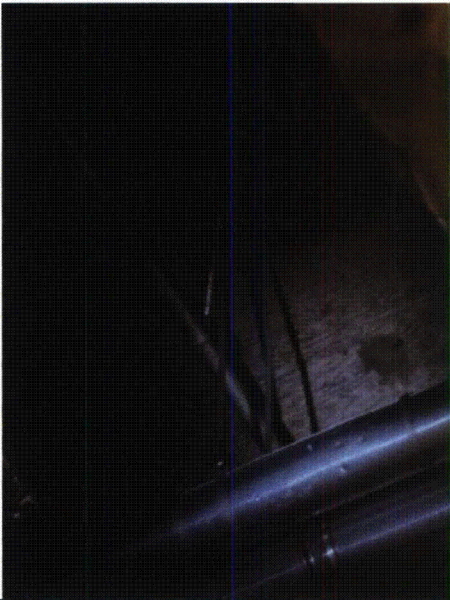
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Area Walk-By Checklist (AWC) AWC- 04

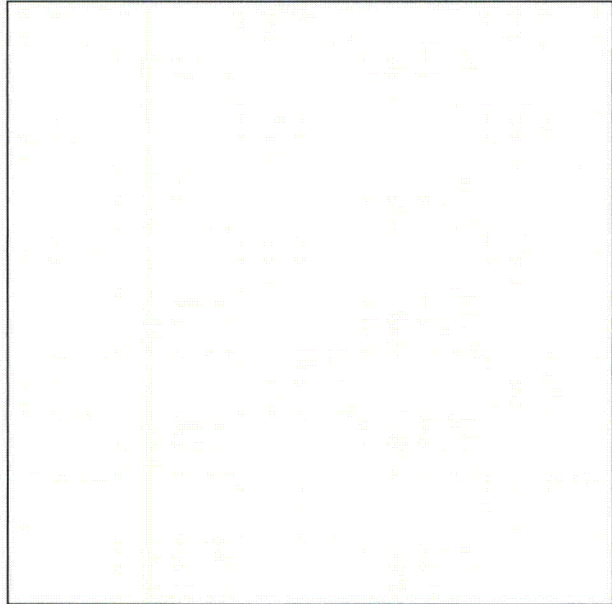
Location: Bldg. AUX Floor El. 590 Room, Area¹ 116

SWEL Components: SWEL1- 060, 031 ,100, 105, 083, 033, 082

Photographs



Note: *Bowed Hanger Rod Supporting Steam Supply to Room Heater*



Note:

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 6

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 05

Location: Bldg. AUX Floor El. 590 Room, Area¹ 115

SWEL Components: SWEL2- 001, 002, 003, 004, 005

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A
The chain from an overhead light is suspended from the overhead cable tray in north end of room 115 (see photo). Uncovered wires observed at the end of the tray were later determined to be grounding wiring for the cable tray and deemed to not be of concern.

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 6

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 05

Location: Bldg. AUX Floor El. 590 Room, Area¹ 115

SWEL Components: SWEL2- 001, 002, 003, 004, 005

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 6

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 05

Location: Bldg. AUX Floor El. 590 Room, Area¹ 115

SWEL Components: SWEL2- 001, 002, 003, 004, 005

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

There is a pipe support consisting of a steel angle extending from the west wall just west of E-53B that has a gap between the support and its associated pipe. The pipe is vertically restrained by its U-Bolt (see photo). Further evaluation is required and licensing basis evaluation, LB-10, has been created. CR-PLP-2012-06650 has been generated for this condition.

There is a 12" blockwall just west of Column Line G, between Column Lines 26 and 28 and just East of P-82 that is not designated as qualified or unqualified on either the physical wall itself nor C-104. If it is unqualified it has potential to be an adverse seismic condition for equipment in its immediate vicinity. Further evaluation is required and licensing basis evaluation, LB-11, has been created. CR-PLP-2012-06854 has been generated for this condition.

There is an overhead spring can support in room 115 hanging from the ceiling whose associated spring can body is askew and appears to be taking a load. Further evaluation is required and licensing basis evaluation, LB-09, has been created. WR288113 has been generated to further inspect the spring can.

There is a lighting fixture in the north end of the room suspended by an open S-hook in the area. According to C-175(Q) the peak acceleration in the vertical direction is 0.15G OBE at 2% damping. Because the G value is less than 1, it shows that the light fixture would never have an acceleration coupled with its dead weight resulting in a net upward force. Due to this, the light fixture is judged to not have be a potentially adverse seismic condition, but rather a maintenance best practice issue. (See Photo). A licensing basis evaluation, LB-08, has been created. See CR-PLP-2012-06670.

Comments (Additional pages may be added as necessary)

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST


Sheet 4 of 6


Status: Y N U

Area Walk-By Checklist (AWC) AWC- 05

Location: Bldg. AUX Floor El. 590 Room, Area¹ 115

SWEL Components: SWEL2- 001, 002, 003, 004, 005

Evaluated by: Alex Smerch  Date: 10/04/2012

Paul Klein  10/04/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 5 of 6

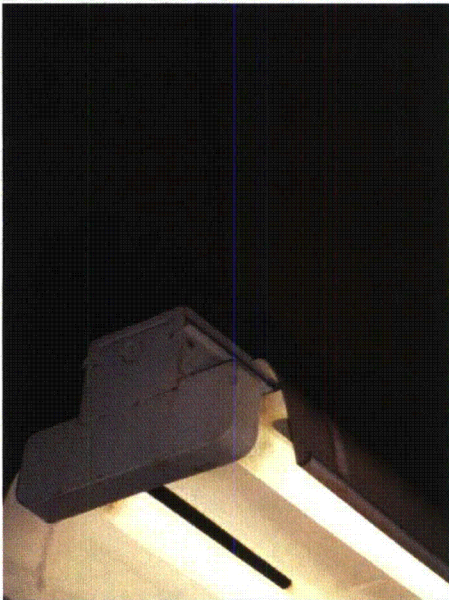
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Area Walk-By Checklist (AWC) AWC- 05

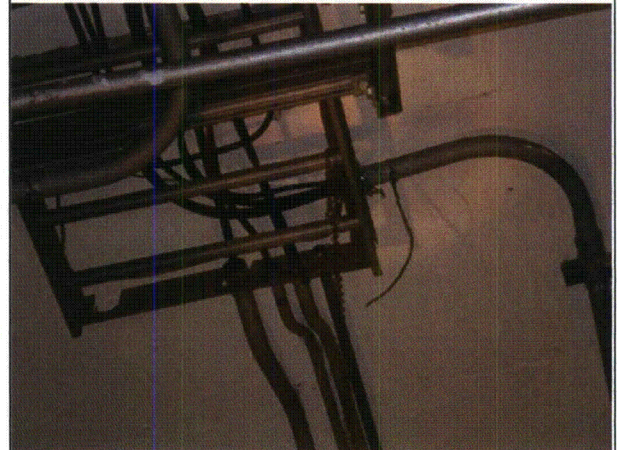
Location: Bldg. AUX Floor El. 590 Room, Area¹ 115

SWEL Components: SWEL2- 001, 002, 003, 004, 005

Photographs



Note: *Lighting Fixture Suspended by open S-Hook*



Note: *Loose Uncrimped S-Hook Hanging From Cable Tray*

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

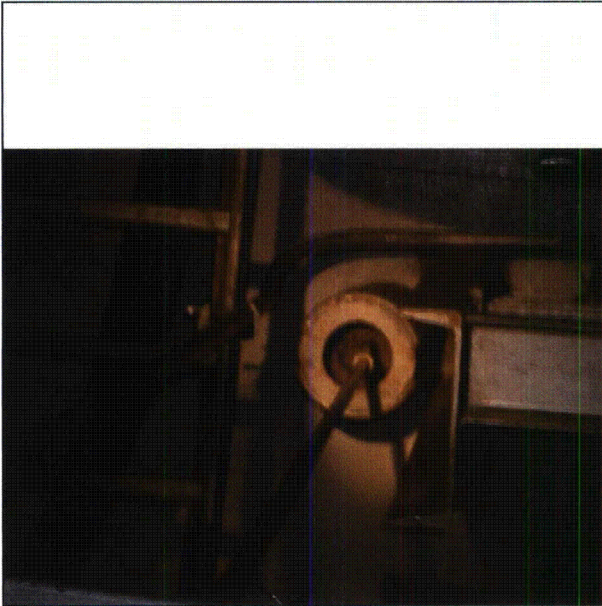
Sheet 6 of 6

Status: Y N U

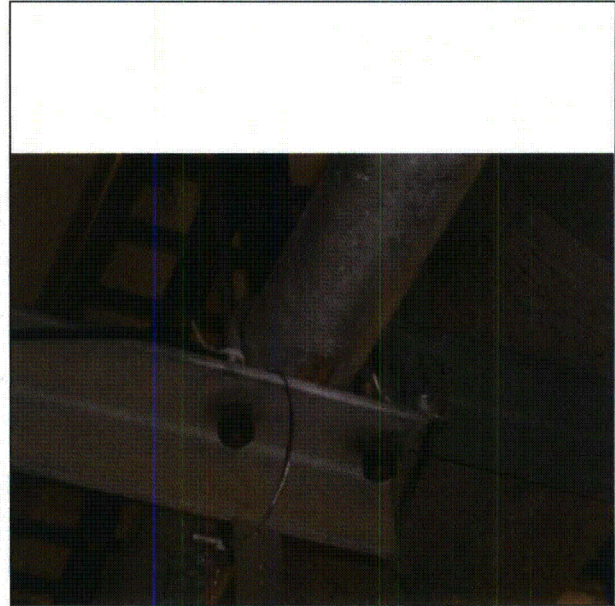
Area Walk-By Checklist (AWC) AWC- 05

Location: Bldg. AUX Floor El. 590 Room, Area¹ 115

SWEL Components: SWEL2- 001, 002, 003, 004, 005



Note: Spring Can with Bent Hanger Rod



Note: Pipe Lifted Off Support

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 5

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 06

Location: Bldg. AUX Floor El. 570 Room, Area¹ 005

SWEL Components: SWEL1- 017, 018, 021, 025, 026, 029, 041, 063, 064, 067, 068, 077, 078, 079, 098, 099

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A
Anchorage of Air Regulator for I/P-0736 along the west wall has degraded anchorage due to corrosion most likely from water damage over time. (See photo). Further evaluation is required and licensing basis evaluation, LB-12, has been created. CR-PLP-2012-06643 has been initiated.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 5

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 06

Location: Bldg. AUX Floor El. 570 Room, Area¹ 005

SWEL Components: SWEL1- 017, 018, 021, 025, 026, 029, 041, 063, 064, 067, 068, 077, 078, 079, 098, 099

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 5

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 06

Location: Bldg. AUX Floor El. 570 Room, Area¹ 005

SWEL Components: SWEL1- 017, 018, 021, 025, 026, 029, 041, 063, 064, 067, 068, 077, 078, 079, 098, 099

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

A hanger rod was observed to be slightly bent but because it utilizes a clevis type clamp, it is judged to move along the pipe and straighten out under any direct tension. This type of hanger rod is not designed to take direct compression and therefore should only be analyzed for direct tension. The bend would not result in a significant loss of section capacity and would therefore not have a significant effect on the rod in direct tension. Therefore the bend was judged not to be a seismic concern. (See photo)

There is a pipe hanger supported by a spring canister at the ceiling slab whose rod is bent due to contact with a pipe that runs above heat exchanger E-60A/B near valve MV-CC197 (See photos). Due to the fact that spring canister supports are not used in seismic analysis and due to the mass of the heat exchanger compared with the mass of the piping system the interaction was not judged to be significant nor a potentially adverse seismic condition.

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch

Date: 10/09/12

Paul Klein

10/09/12

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 5

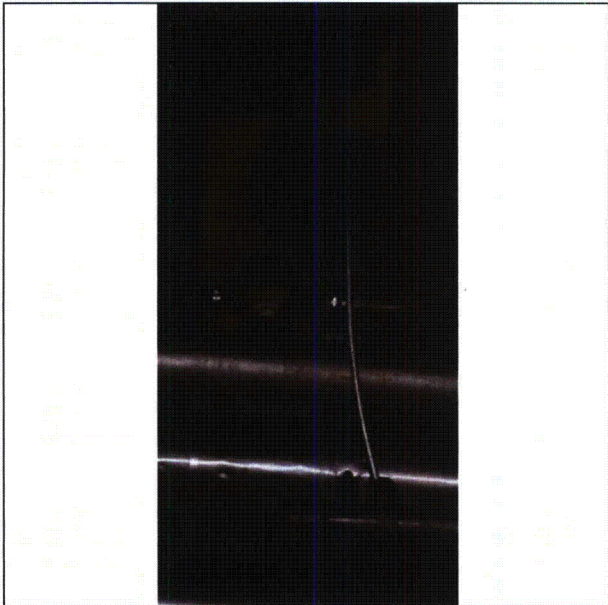
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Area Walk-By Checklist (AWC) AWC- 06

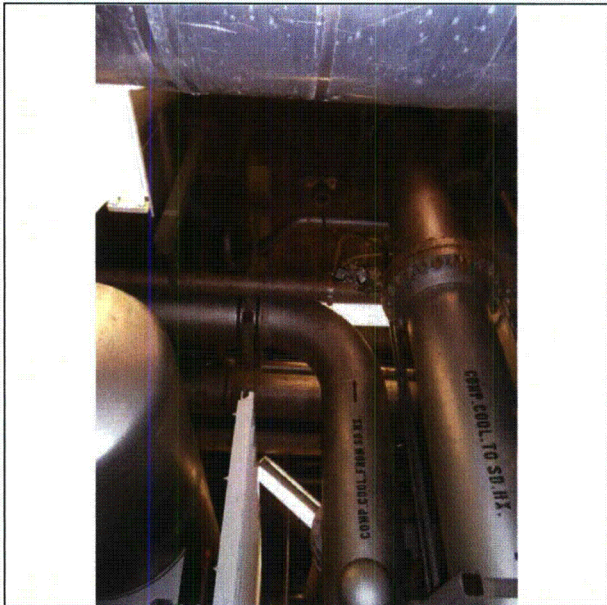
Location: Bldg. AUX Floor El. 570 Room, Area¹ 005

SWEL Components: SWEL1- 017, 018, 021, 025, 026, 029, 041, 063, 064, 067, 068, 077, 078, 079, 098, 099

Photographs



Note: Bent Hanger Rod with Sliding Clamp



Note: Pipe Hanger Supported by Spring Cannister Bent Around Pipe (Overview)

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 5 of 5

Status: Y N U

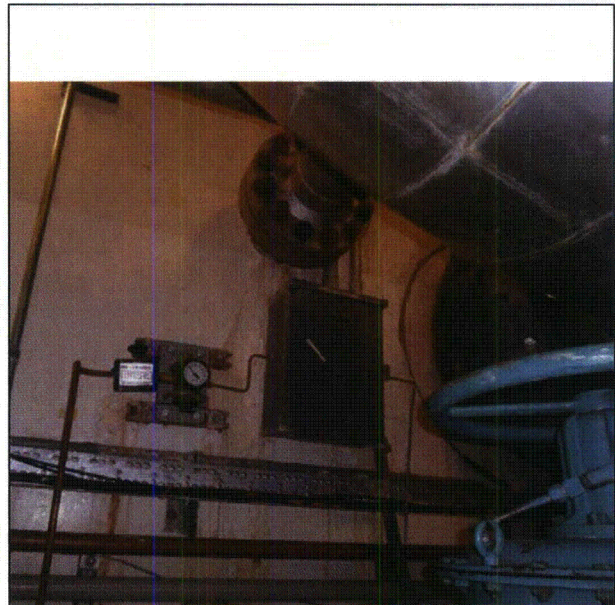
Area Walk-By Checklist (AWC) AWC- 06

Location: Bldg. AUX Floor El. 570 Room, Area¹ 005

SWEL Components: SWEL1- 017, 018, 021, 025, 026, 029, 041, 063, 064, 067, 068, 077, 078, 079, 098, 099



Note: Pipe Hanger Supported by Spring Canister Bent Around Pipe (close-up)



Note: Degraded Wall Due to Water Damage

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 07

Location: Bldg. AUX. Floor El. 644 Room, Area¹ 808

SWEL Components: SWEL1- 070, 071, 107

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 07

Location: Bldg. AUX. Floor El. 644 Room, Area¹ 808

SWEL Components: SWEL1- 070, 071, 107

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

The scaffold accessing the area had an expired tag. The SWE's were informed by the SIRW Work Supervisor, Brian Rigozzi, that the scaffold paperwork is up to date but the revised tag is not in place. He ensured correct tag will be displayed.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 07


Location: Bldg. AUX. Floor El. 644 Room, Area¹ 808

SWEL Components: SWEL1- 070, 071, 107

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch  Date: 10-10-2012

Paul Klein  10-10-2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 08

Location: Bldg. TURB Floor El. 590 Room, Area¹ OUTSIDE, AREA INSIDE FENCE AROUND T-2, T-7 AND T-81

SWEL Components: SWEL1- 072, 073, 102

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)?
No cable tray or HVAC. Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 08

Location: Bldg. TURB Floor El. 590 Room, Area¹ OUTSIDE, AREA INSIDE FENCE AROUND T-2, T-7 AND T-81

SWEL Components: SWEL1- 072, 073, 102

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A
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 to instrumentation in the area. Further evaluation is required. Licensing basis evaluation, LB-16, has been initiated. 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. 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.
5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A
6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 08

Location: Bldg. TURB Floor El. 590 Room, Area¹ OUTSIDE, AREA INSIDE FENCE AROUND T-2, T-7 AND T-81

SWEL Components: SWEL1- 072, 073, 102

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

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

Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/10/2012

John Kao



10/10/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 4

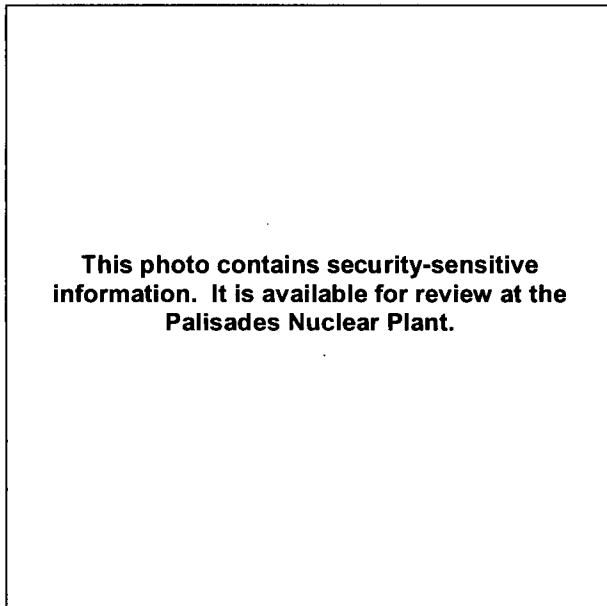
Status: Y N U

Area Walk-By Checklist (AWC) AWC- 08

Location: Bldg. TURB Floor El. 590 Room, Area¹ OUTSIDE, AREA INSIDE FENCE AROUND T-2, T-7 AND T-81

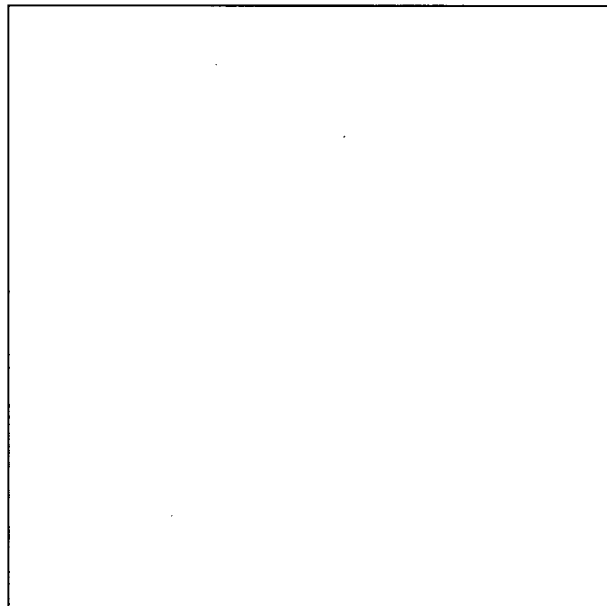
SWEL Components: SWEL1- 072, 073, 102

Photographs



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.*



Note:

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 09

Location: Bldg. TURBINE Floor El. 590 Room, Area¹ 136

SWEL Components: SWEL 1 – 022, 023, 024, 028, 030

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 09

Location: Bldg. TURBINE Floor El. 590 Room, Area¹ 136

SWEL Components: SWEL 1 – 022, 023, 024, 028, 030

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A
*Screenhouse service water booster pump valve is leaking. Nearby drain is catching the runoff.
CR-PLP-2012-6488 is already in place to address this known issue.*

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A
The ladders are adequately stored.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 09

Location: Bldg. TURBINE Floor El. 590 Room, Area¹ 136

SWEL Components: SWEL 1 – 022, 023, 024, 028, 030

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

Comments (Additional pages may be added as necessary)

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

Paul Klein  10-12-12

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 10

Location: Bldg. AUX Floor El. 590 Room, Area¹ 121, ENTIRE ROOM

SWEL Components: SWEL1- 001

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

At east end of room over EC-33 there is a conduit and support touching the HVAC exhaust shroud. Interaction is not credible with component since the conduit is in the way of the shroud and ducting. The front side switches of EC-33 are also protected with a plexiglass covering making the interaction also insignificant.

There are bulletin boards hanging along the north wall which are a credible interaction source if they should fall to the ground and then overturn onto the adjacent cabinets EC-40 possible hitting a switch. These boards were tug tested and okay.

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 10

Location: Bldg. AUX Floor El. 590 Room, Area¹ 121, ENTIRE ROOM

SWEL Components: SWEL1- 001

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

A fluorescent light fixture in the southwest corner of the room is mounted over level gauge, MV-CA10277, and light inside fixture is caged with 2 plastic tie wraps. S. Podgurski of Entergy Operations stated component is not required for safe shutdown. Possible interaction with fluorescent light fixture judged to be okay.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

Drawing rack noted in southwest corner of the room which is attached to the wall. Drawing rack has the ability to swing open and hit adjacent cabinet EB-08. EB-08 is non-safety related and does not contain essential relays therefore this interaction is not a concern and judged to be okay.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 10

Location: Bldg. AUX Floor El. 590 Room, Area¹ 121, ENTIRE ROOM

SWEL Components: SWEL1- 001

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y N U
Block wall along north side of the room. The wall is seismically qualified, C104.11/Q, per drawing C-104, Rev. 33.

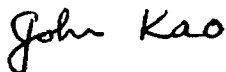
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/9/2012

John Kao



10/9/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 11

Location: Bldg. AUX Floor El. 607 Room, Area¹ 225A, ENTIRE ROOM

SWEL Components: SWEL1- 050, 094

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 11

Location: Bldg. AUX Floor El. 607 Room, Area¹ 225A, ENTIRE ROOM

SWEL Components: SWEL1- 050, 094

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 11

Location: Bldg. AUX Floor El. 607 Room, Area¹ 225A, ENTIRE ROOM

SWEL Components: SWEL1- 050, 094

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y N U
Seismically qualified block walls are noted in the room per drawing C-107, Sh. 1, Rev. 28.

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

Area Walk-By Checklist (AWC) AWC- 12

Location: Bldg. AUX Floor El. 607 Room, Area¹ 225, ENTIRE ROOM

SWEL Components: SWEL1- 051, 093

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 12

Location: Bldg. AUX Floor El. 607 Room, Area¹ 225, ENTIRE ROOM

SWEL Components: SWEL1- 051, 093

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y N U
Seismically qualified block walls are noted in the room per drawing C-107, Sh. 1, Rev. 28.

Comments (Additional pages may be added as necessary)

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

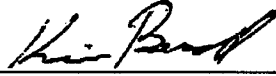
Status: Y N U

Area Walk-By Checklist (AWC) AWC- 12

Location: Bldg. AUX Floor El. 607 Room, Area¹ 225. ENTIRE ROOM

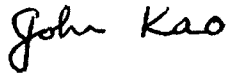
SWEL Components: SWEL1- 051, 093

Evaluated by: Kevin Bessell



Date: 10/9/2012

John Kao



10/9/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 13

Location: Bldg. TURBINE Floor El. 571 Room, Area¹ 7 - AUX. FEEDWATER PUMP RM.

SWEL Components: SWEL 1- 019, 020, 074, 075, 076

Instructions for Completing Checklist

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

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

The north support of the monorail beam above pump P-8B has a crack or gouge at the edge of the plate. The crack is minor and does not extend near the bolts connecting the monorail beam to the support and is therefore not a concern.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 13

Location: Bldg. TURBINE Floor El. 571 Room, Area¹ 7 - AUX. FEEDWATER PUMP RM.

SWEL Components: SWEL 1- 019, 020, 074, 075, 076

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A
Pump drain lines are on floor and extend to the drain.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A
The ladders are well stored.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 13

Location: Bldg. TURBINE Floor El. 571 Room, Area¹ 7 - AUX. FEEDWATER PUMP RM.

SWEL Components: SWEL 1- 019, 020, 074, 075, 076

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

Flourescent light fixtures were supported with chains. Open S-Hooks were noted at the upper end of some of the chains supporting the flourescent light fixtures. The connection of the lower end of the chain to the light fixture could not be seen.

The peak vertical acceleration for the structure is less then 1g per C-175(Q). Since the peak vertical seismic acceleration is less then 1g, the acceleration is not great enough to overcome the dead weight of the light fixture. No net uplift of the light fixture is expected, therefore the chain supporting the light fixture is not expected to come unhooked from the S-Hook.

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch

Date: 10-12-12

Paul Klein

10-12-12

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 4

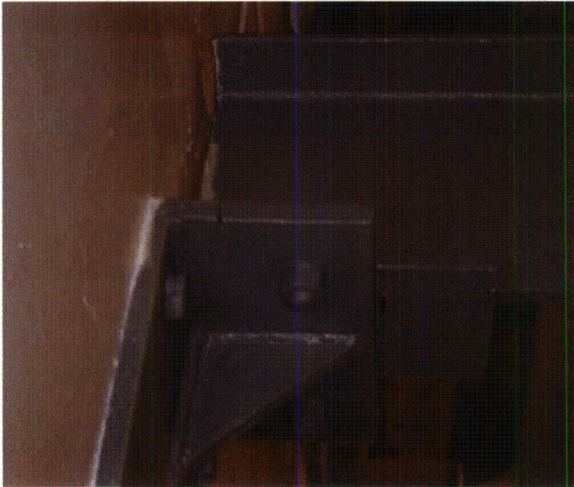
Status: Y N U

Area Walk-By Checklist (AWC) AWC- 13

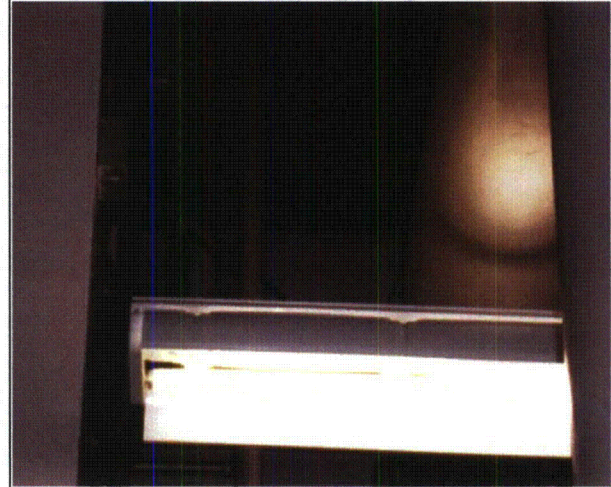
Location: Bldg. TURBINE Floor El. 571 Room, Area¹ 7 - AUX. FEEDWATER PUMP RM.

SWEL Components: SWEL 1- 019, 020, 074, 075, 076

Photographs



Note: Pump P-8B Monorail Beam North Support



Note: Fluorescent Light Fixture

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 14

Location: Bldg. AUX Floor El. 590 Room, Area¹ 123

SWEL Components: SWEL1- 16, 62, 65, 66, 69, 96, 97

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 14

Location: Bldg. AUX Floor El. 590 Room, Area¹ 123

SWEL Components: SWEL1- 16, 62, 65, 66, 69, 96, 97

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

There is a CCW floor drain equipment box located on the floor with no real targets nearby and it has a low center of gravity. This this is not a concern.

There is also a SIRWT leak collection tank unanchored to the ground. This is not in the proximity of any targets to cause any damage.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 14

Location: Bldg. AUX Floor El. 590 Room, Area¹ 123

SWEL Components: SWEL1- 16, 62, 65, 66, 69, 96, 97

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y N U
- There are two blockwalls in the area that are both qualified by C-104.*

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch



Date: 10/12/2012

Paul Klein



10/12/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 4

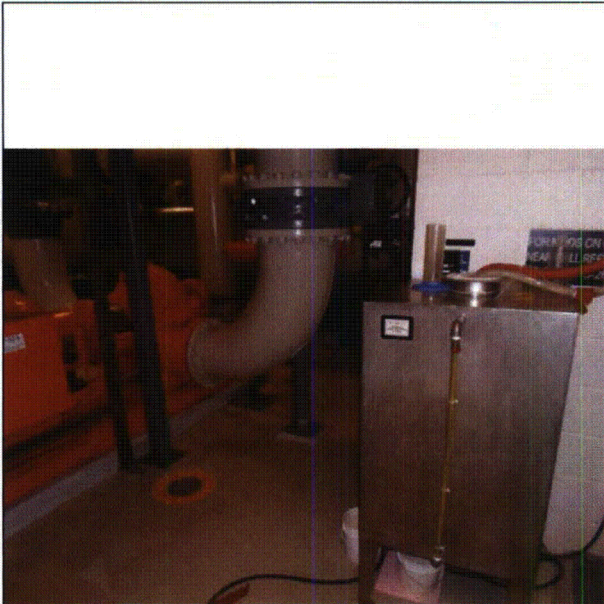
Status: Y N U

Area Walk-By Checklist (AWC) AWC- 14

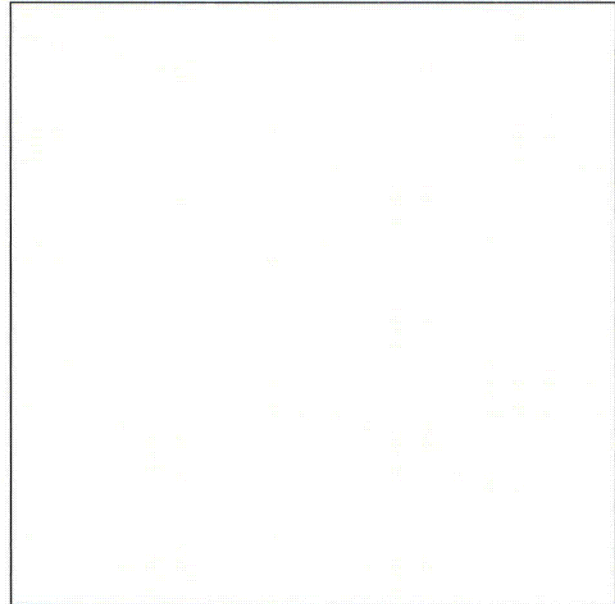
Location: Bldg. AUX Floor El. 590 Room, Area¹ 123

SWEL Components: SWEL1- 16, 62, 65, 66, 69, 96, 97

Photographs



Note: SIRWT Leak Collection Tank



Note:

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 15

Location: Bldg. AUX Floor El. 590 Room, Area¹ 147, ENTIRE ROOM

SWEL Components: SWEL1- 104

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

The north side of LS-1453 is touching bolt for seismic bracing to tank. Interaction judged not to be significant since component is rigidly mounted in the north-south direction. Component movement will be in phase with T-25B. Component interaction is not a concern.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 15

Location: Bldg. AUX Floor El. 590 Room, Area¹ 147, ENTIRE ROOM

SWEL Components: SWEL1- 104

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

Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell  Date: 10/15/2012

John Kao  10/15/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 15

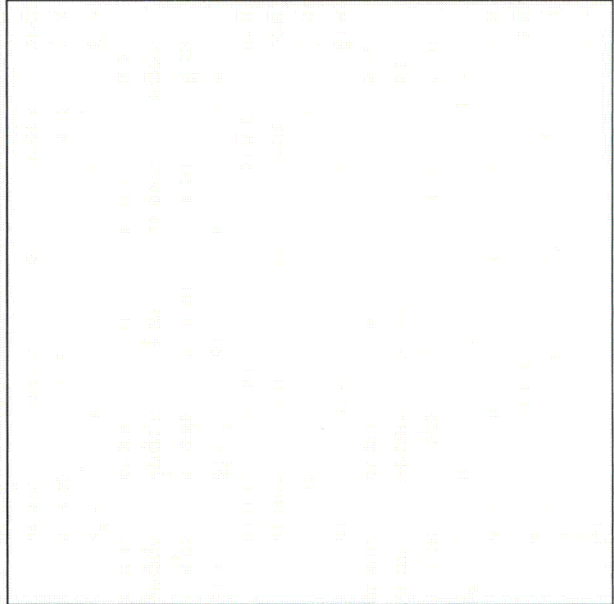
Location: Bldg. AUX Floor El. 590 Room, Area¹ 147, ENTIRE ROOM

SWEL Components: SWEL1- 104

Photographs



Note: LS-1453 touching bolt for seismic bracing of tank.



Note:

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 16

Location: Bldg. AUX Floor El. 607 Room, Area¹ 223

SWEL Components: SWEL1- 003, 011, 086, 087, 088, 089, 090, 092

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 16

Location: Bldg. AUX Floor El. 607 Room, Area¹ 223

SWEL Components: SWEL1- 003, 011, 086, 087, 088, 089, 090, 092

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A
The fire line in this area appears to be adequately supported.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A
There is a battery charger in the area with a low center of gravity without any realistic targets in its vicinity.

The scaffold in the area has a current tag.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 16

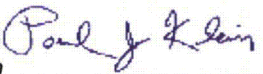
Location: Bldg. AUX Floor El. 607 Room, Area¹ 223

SWEL Components: SWEL1- 003, 011, 086, 087, 088, 089, 090, 092

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch  Date: 10/15/2012

Paul Klein  10/15/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 17

Location: Bldg. AUX Floor El. 590 Room, Area¹ 116B

SWEL Components: SWEL1- 032, 034, 045, 061, 080, 081, 101, 106

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 17

Location: Bldg. AUX Floor El. 590 Room, Area¹ 116B

SWEL Components: SWEL1- 032, 034, 045, 061, 080, 081, 101, 106

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

A blockwall near safety-related equipment is qualified by C-104.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 17

Location: Bldg. AUX Floor El. 590 Room, Area¹ 116B

SWEL Components: SWEL1- 032, 034, 045, 061, 080, 081, 101, 106

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch  Date: 10-15-2012

Paul Klein



10-15-2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 18

Location: Bldg. AUX Floor El. 629.17 Room, Area¹ 300A

SWEL Components: SWEL1- 037, 039, 042, 085, 109, 111

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A
A large heater unit, VEH-37B, is cantilevered off the wall over instruments and tubing for VC-10. Unit is supported with tube steel and anchored to concrete wall with large anchors, judged to be well supported.

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 18

Location: Bldg. AUX Floor El. 629.17 Room, Area¹ 300A

SWEL Components: SWEL1- 037, 039, 042, 085, 109, 111

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

There is a crooked light fixture overhead of air handling unit VF-26B. The light fixture is supported via chains and S-hooks and is restrained laterally by adjacent beam and HVAC damper. Interaction with damper is judged to be insignificant. Light fixtures judged not to fall off S hooks due to vertical seismic acceleration < 1.0g.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

Firewater lines noted in the area and judged to be well supported.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 3

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 18

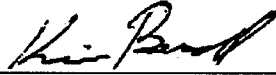
Location: Bldg. AUX Floor El. 629.17 Room, Area¹ 300A

SWEL Components: SWEL1- 037, 039, 042, 085, 109, 111

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

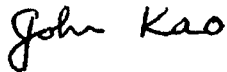
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/16/2012

John Kao



10/16/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 5

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 19

Location: Bldg. AUX Floor El. 607 Room, Area¹ 725, ENTIRE ROOM

SWEL Components: SWEL1- 008, 009, 014, 015

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 5

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 19

Location: Bldg. AUX Floor El. 607 Room, Area¹ 725, ENTIRE ROOM

SWEL Components: SWEL1- 008, 009, 014, 015

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A
There is a bucket on the west side of EB-20. Auxiliary Operator, Steve Podgurski noted that the bucket is checked every shift. No water noted in bucket.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A
There was equipment in the area that was roped off per WO#262786. All the equipment was roped off and/or wheels were chocked.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 5

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 19

Location: Bldg. AUX Floor El. 607 Room, Area¹ 725, ENTIRE ROOM


SWEL Components: SWEL1- 008, 009, 014, 015

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

An unrestrained fire extinguisher was noted resting right side up on the ground east side of room. The extinguisher was sitting on a marked off area.

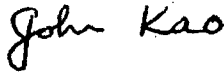
Comments (Additional pages may be added as necessary)

Evaluated by: Kevin Bessell



Date: 10/17/2012

John Kao



10/17/2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 5

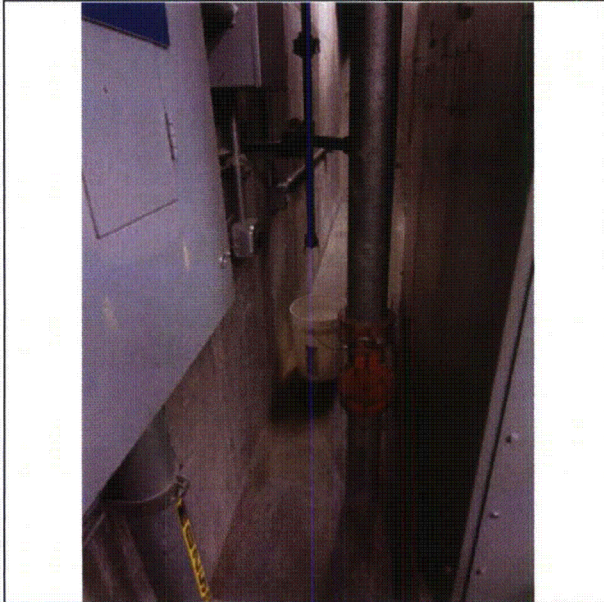
Status: Y N U

Area Walk-By Checklist (AWC) AWC- 19

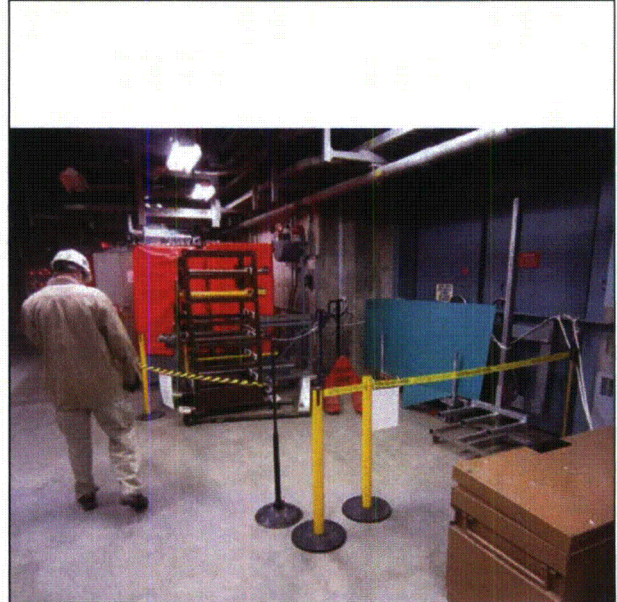
Location: Bldg. AUX Floor El. 607 Room, Area¹ 725, ENTIRE ROOM

SWEL Components: SWEL1- 008, 009, 014, 015

Photographs



Note: Bucket adjacent to EB-20.



Note: Staged equipment.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 5 of 5

Status: Y N U

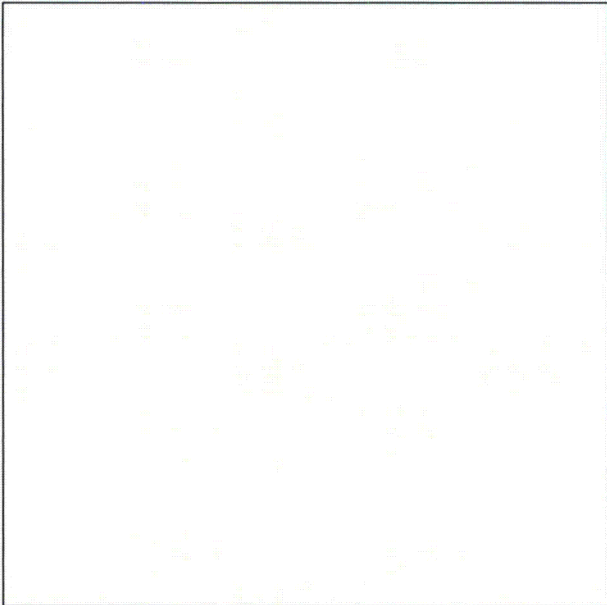
Area Walk-By Checklist (AWC) AWC- 19

Location: Bldg. AUX Floor El. 607 Room, Area¹ 725, ENTIRE ROOM

SWEL Components: SWEL1- 008, 009, 014, 015



Note: Fire extinguisher near wall, unrestrained.



Note:

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 1 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 20

Location: Bldg. AUX Floor El. 607 Room, Area¹ 224

SWEL Components: SWEL1- 002, 004, 005, 006, 007, 012, 013, 046, 047, 048, 049, 052, 053, 054, 055, 056, 057, 058, 059, 095

Instructions for Completing Checklist

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

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

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y N U N/A

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y N U N/A
The cable trays appear to be full but not outside their acceptable limits.

¹ If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 2 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 20

Location: Bldg. AUX Floor El. 607 Room, Area¹ 224

SWEL Components: SWEL1- 002, 004, 005, 006, 007, 012, 013, 046, 047, 048, 049, 052, 053, 054, 055, 056, 057, 058, 059, 095

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y N U N/A

It was noted that there was as small as a 2" gap between many of the cabinets and other large items. This gap is seen as sufficient allowance to account for the relative motion between the stiff cabinets without having a seismic interaction.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y N U N/A

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y N U N/A

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y N U N/A

The only housekeeping items noted in this Area-Walk-By were ladders and a small binder, all of which were secured.

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 3 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 20


Location: Bldg. AUX Floor El. 607 Room, Area¹ 224

SWEL Components: SWEL1- 002, 004, 005, 006, 007, 012, 013, 046, 047, 048, 049, 052, 053, 054, 055, 056, 057, 058, 059, 095

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

Comments (Additional pages may be added as necessary)

Evaluated by: Alex Smerch  Date: 10-17-2012

Paul Klein  10-17-2012

ATTACHMENT 9.7

AREA WALK-BY CHECKLIST

Sheet 4 of 4

Status: Y N U

Area Walk-By Checklist (AWC) AWC- 20

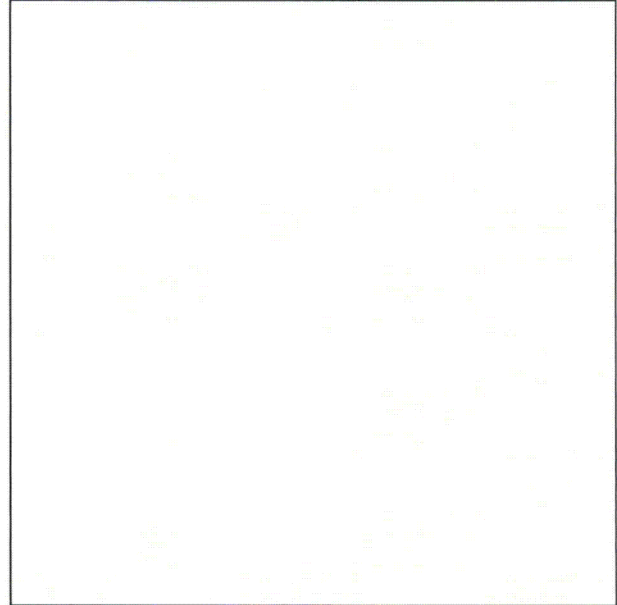
Location: Bldg. AUX Floor El. 607 Room, Area¹ 224

SWEL Components: SWEL1- 002, 004, 005, 006, 007, 012, 013, 046, 047, 048, 049, 052, 053, 054, 055, 056, 057, 058, 059, 095

Photographs



Note: Example of 2 inch gap between Cabinet and other Items



Note:

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
LB-01	SWEL1-010	Missing bolt connecting cabinets at 152-111/112 and 152-106/107.	Condition entered directly into CAP. Missing bolts should be replaced.	CR-PLP-2012-06559	Closed to Work Orders 331376 and 331377
LB-02	SWEL1-103	Angle connecting tube steel braces different than what is shown in drawing.	Condition entered directly into CAP. Calculation is to be reviewed and configuration documents are required to be modified accordingly.	CR-PLP-2012-06565	Closed to CR-PLP-2012-06555 CA-15 for Configuration Change
LB-03	SWEL2-004	Anchorage of E53B (heat exchanger) to E-53A has limited engagement of nuts with bolt on west side of heat exchanger.	The condition of one bolt not fully engaged is acceptable. The bolting in question does not need a strength reduction because more than three threads are engaged. Per Mechanical Engineering Design, Shigley 3rd Edition, section 6-8, only three threads are required to develop the full strength of the bolting.	CR-PLP-2012-7083	Close to CR-PLP-2012-7083
LB-04	SWEL1-001	Brace for top of cabinets calls for a WT2X6.5 in C-103, Sh. 1. As-built consists of 2L.	Condition entered directly into CAP. Calculation is to be reviewed and configuration documents are required to be modified accordingly.	CR-PLP-2012-06707	Closed to CR-PLP-2012-06555 CA-13 for Configuration Change
LB-05	SWEL1-001	MCC bucket 52-721 has exposed wire and appears to be missing components.	Condition entered directly into CAP. Identify missing components and tie up loose wiring.	CR-PLP-2012-06639	Closed to Work Order 329289
LB-06	SWEL2-002	Southwest bolt anchoring pump skid of P-51B has limited thread engagement.	The condition of one bolt not fully engaged is acceptable. The bolting in question does not need a strength reduction because more than three threads are engaged. Per Mechanical Engineering Design, Shigley 3rd Edition, section 6-8, only three threads are required to develop the full strength of the bolting.	CR-PLP-2012-7084	Close to CR-PLP-2012-7084
LB-07	SWEL2-003	12" block wall just east of pump does not have any apparent designation on the wall itself and nothing shown on drawing C-104 stating whether it is qualified or unqualified. If it is unqualified it could have detrimental effects on P-82.	Upon further review it was discovered Drawing C-104 sheet 0 shows both walls as qualified. WR288197 was generated to label wall C-104.20Q and wall Q-104.23Q in accordance with Specification C-265. CR-PLP-2012-06854 was also generated to document that the walls were not labeled.	CR-PLP-2012-06854	Closed to Label Request for Block Wall
LB-08	AWC-05	There is a lighting fixture suspended by an open S-hook in the area. If lighting fell during seismic event it could damage equipment below.	Condition entered directly into CAP. Determine the vertical seismic acceleration in the area and consider whether the hook coming off the support is credible.	CR-PLP-2012-06670	Closed Work Order 326722

ATTACHMENT 9.8
 Sheet 2 of 4

POTENTIALLY ADVERSE SEISMIC CONDITIONS FORM

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
LB-09	AWC-05	There is an overhead spring can support in room 115 hanging from the ceiling whose associated hanger rod is askew and appears to be bent within the spring can support.	WR288113 was generated to further inspect the hanger. At this time the spring can appears to be taking the load. At the time of the VT-3 if an adverse condition is identified a CR will be generated	N/A	N/A
LB-10	AWC-05	There is a pipe support consisting of a steel angle extending from the west wall just west of E-53B that has a gap between the support and its associated pipe. The pipe is vertically restrained by its u-bolt.	Condition entered directly into CAP. The design load for the U-bolt in SP-03325 for Pipe Restraint HC4-H245.1 is +/- 62 lbs. Per previous evaluations under the Safety Related Piping Reverification Program, the system can be considered operable with one deficient hanger.	CR-PLP-2012-06650	Closed to Work Order 330791
LB-11	AWC-05	There is a 12" blockwall just west of Column Line G, between Column Lines 26 and 28 and just East of P-82 that is not designated as qualified or unqualified on either the physical wall itself nor C-104. If it is unqualified it has potential to be an adverse seismic condition for equipment in its immediate vicinity.	Upon further review it was discovered Drawing C-104 sheet 0 shows both walls as qualified. WR288197 was generated to label wall C-104.20Q and wall Q-104.23Q in accordance with Specification C-265. CR-PLP-2012-06854 was also generated to document that the walls were not labeled.	CR-PLP-2012-06854	Closed to Label Request for Block Wall
LB-12	AWC-06	Anchorage of air regulator for I/P 0736 has corroded anchorage due to water damage over time.	Condition entered directly into CAP. Review the calculation of the support bracket to determine the margin within the expansion anchors.	CR-PLP-2012-06643	Closed to Work Order 327102
LB-13	SWEL1-072	Support bracket has one u-bolt and vendor configuration mounting shows two u-bolts.	LT-2021 is operable based on the low seismic demand compared to the relatively high capacity of the bolting in question. LT-2021 was also found acceptable previously per the SQUG methodology. CR-PLP-2012-07149 was initiated which includes an Operation Evalutaion that declaired LT-2021/LT-2022 Operable Non-conforming	CR-PLP-2012-07149	Close to WO 333244 and 333245
LB-14	SWEL1-072	Possible interaction with light fixture and speaker system on top of turbine building	This is not an operability concern. The siren and light are properly restrained to resist design wind loads. The wind loading bounds the seismic loading. In a seismic event the light and siren will remain safely attached and will not negatively impact surrounding plant equipment.	N/A	N/A
LB-15	SWEL1-073	Possible interaction with light fixture and speaker system on top of turbine building	This is not an operability concern. The siren and light are properly restrained to resist design wind loads. The wind loading bounds the seismic loading. In a seismic event the light and siren will remain safely attached and will not negatively impact surrounding plant equipment.	N/A	N/A

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS/EVALUATION CONCLUSION	RESOLUTION	STATUS
LB-16	AWC-08	Possible interaction with light fixture and speaker system on top of turbine building	This is not an operability concern. The siren and light are properly restrained to resist design wind loads. The wind loading bounds the seismic loading. In a seismic event the light and siren will remain safely attached and will not negatively impact surrounding plant equipment.	N/A	N/A
LB-17	SWEL1-079	There is a nut missing on the anchorage connecting PT-0762C to its steel angle support.	Condition entered directly into CAP. Review the calculation and determine the capacity of the as-installed condition. Replace nut.	CR-PLP-2012-06644	Closed to Work Order 326722
LB-18	SWEL1-061	Possible interaction of damper D-29 and duct for V-24D with K-6B.	This issue was dispositioned in CR-PLP-2009-03639. The as-found condition identified in LB-18 is acceptable.	N/A	N/A
LB-19	SWEL1-089	A book is hanging from the inside of the cabinet which could potentially interact with interior wiring and components.	Condition entered directly into CAP. Remove the notebook.	CR-PLP-2012-06754	Closed to Action Taken (removed notebook)
LB-20	SWEL1-003	There is a 2" line that runs above EB-22 approximately 12 feet above the slab that is unsupported for approximately 16.5'. This was judged to be an excessive span for that small of a pipe diameter. For identification purposes it was noted that conduit x3316 is attached to the span.	Condition entered directly into CAP. Review the pipe stress analysis for the pipe and determine the adequacy of the long span.	CR-PLP-2012-06742	CR-PLP-2012-06742 CA-03 initiated to develop EC to address identified issue
LB-21	SWEL1-086	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.	Condition entered directly into CAP. Replace nuts.	CR-PLP-2012-06877	Close to WO330961
LB-22	SWEL-018	Two of the six nuts that hold the pump skid to its concrete pedestal lack full thread engagement.	The bolting in question does not need a strength reduction because more than three threads are engaged. Per Mechanical Engineering Design, Shigley 3rd Edition, section 6-8, only three threads are required to develop the full strength of the bolting.	CR-PLP-2012-7271	Close to CR-PLP-2012-7271

Prepared by: Kevin Bessell (ENERCON) *Kevin Bessell* Date: 11/15/2012

Reviewed by: P. D. MacMaster *P. D. MacMaster* Date: 11/15/2012
Peer Review Team Member

Licensing Basis (LB) Evaluation Form

LB Evaluation No.: LB-01

Originating SWC/AWC: SWEL1-010

Equipment ID No.: EA-11

Equip. Class: 3, MEDIUM VOLTAGE, METAL-CLAD
SWITCHGEAR

Equipment Description: BUS 1C (2400 VOLT)

Location: Bldg. AUX

Floor El. 590

Room, Area 116A

Condition

Missing bolt interconnecting cabinets at 152-111/112 and 152-106/107.

Documents Reviewed

N/A - Condition entered directly into Corrective Action Program.

Licensing Basis

N/A - Condition entered directly into Corrective Action Program.

Evaluation

N/A - Condition entered directly into Corrective Action Program.

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (if applicable): CR-PLP-2012-06559

Prepared by: Kevin Bessell 
Licensing Basis Reviewer

Date 10/10/2012

Reviewed by: P.D. MacMaster 
Peer Reviewer

Date 10/23/2012

Licensing Basis (LB) Evaluation FormLB Evaluation No.: LB-03Originating SWC/AWC: SWEL2-005Equipment ID No.: E-53BEquip. Class: 21, TANKS AND HEAT EXCHANGERSEquipment Description: SPENT FUEL POOL HEAT EXCHANGERLocation: Bldg. AUXFloor El. 590Room, Area 115**Condition**

One of the bolts that connects E-53A to E-53B does not have full thread engagement. All the other bolting connecting the two heat exchangers is fully engaged.

Documents Reviewed

Mechanical Engineering Design, Shigley 3rd Edition

Licensing Basis

It is generally understood that equipment fastened by bolts is expected to have full thread engagement. Of the four anchors inspected for E-53A/E-53B three had full thread engagement and one did not. The bolt that did not was less than two threads below the top of the nut. Per Mechanical Engineering Design section 6-8, only three threads are required to develop the full strength of the bolting. CR-PLP-2012-7083 was initiated to document the lack of thread engagement.

Evaluation

The condition of one bolt not fully engaged is acceptable. The bolting in question does not need a strength reduction because more than three threads are engaged.

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (If applicable): CR-PLP-2012-7083Prepared by: Tim Crocker

Date 11/06/2012

Licensing Basis Reviewer

Reviewed by: P.D. MacMaster

Date 11/06/2012

Peer Reviewer

Licensing Basis (LB) Evaluation Form

LB Evaluation No.: LB-04

Originating SWC/AWC: SWEL1-001

Equipment ID No.: EB-07

Equip. Class: 1, MOTOR CONTROL CENTERS AND WALL MOUNTED CONTACTORS

Equipment Description: 480 VOLT MCC NO.7

Location: Bldg. AUX

Floor El. 590

Room, Area 121

Condition

The seismic bracing from EB-07 to the adjacent concrete wall is identified as WT 2 X 6.5 in drawing C-103 Sh.1. The actual bracing is double angle 2 X 1-1/4 X 3/16. CR-PLP-2012-06707 was initiated.

Documents Reviewed

Drawing C-103 Sh.1. Records search was also performed to try to locate a field change that authorized the member change.

Licensing Basis


The as-built bracing is equivalent to that shown in drawing C-103 Sh.1. CR-PLP2012-06707 provides further justification.

Evaluation

The noted discrepancies between the bracing configuration and drawing C-103 Sh.1 are acceptable. The change does adversely effect EB-07 from a seismic loading standpoint, see CR-PLP-2012-06707 for further justification.

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (If applicable): CR-PLP-2012-06707

Prepared by: Tim Crocker 
Licensing Basis Reviewer

Date 10/15/2012

Reviewed by: P.D. MacMaster 
Peer Reviewer

Date 10/23/2012

Licensing Basis (LB) Evaluation Form

LB Evaluation No.: LB-05

Originating SWC/AWC: SWEL1-001

Equipment ID No.: EB-07

Equip. Class: 1, MOTOR CONTROL CENTERS AND WALL MOUNTED CONTACTORS

Equipment Description: 480 VOLT MCC NO.7

Location: Bldg. AUX

Floor El. 590

Room, Area 121

Condition

MCC bucket 52-721 has exposed wire and appears to be missing components. This condition does not have an adverse effect on the seismic adequacy of EB-07. CR-PLP-2012-06639 was initiated to document this condition.

Documents Reviewed

Licensing Basis

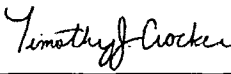
See CR-PLP-2012-06639. Identified issue is dispositioned directly in CR. Breaker 52-721 is a spare and is in the off position.

Evaluation

See CR-PLP-2012-06639. Identified issue is dispositioned directly in CR. Breaker 52-721 is a spare and is in the off position.

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (If applicable): CR-PLP-2012-06639

Prepared by: Tim Crocker 
Licensing Basis Reviewer

Date 10/15/2012

Reviewed by: P.D. MacMaster 
Peer Reviewer

Date 10/23/2012

Licensing Basis (LB) Evaluation Form

LB Evaluation No.: LB-06

Originating SWC/AWC: SWEL2-002

Equipment ID No.: P-51B

Equip. Class: 5. HORIZONTAL PUMPS

Equipment Description: SPENT FUEL POOL COOLING PUMP

Location: Bldg. AUX

Floor El. 590

Room, Area 115

Condition

One of the anchor bolts that holds the pump skid to the pump pedestal does not have full thread engagement. There are four approximate 3/4" diameter anchor bolts. The bolts could not be measured at the time of the walk down due to loose contamination located on the pump.

Documents Reviewed

Mechanical Engineering Design, Shigley 3rd Edition

Licensing Basis


It is generally understood that equipment fastened by bolts is expected to have full thread engagement. Of the four anchors inspected for P-51B three had full thread engagement and one did not. The bolt that did not was less than two threads below the top of the nut. Per Mechanical Engineering Design section 6-8, only three threads are required to develop the full strength of the bolting. CR-PLP-2012-7084 was initiated to document the lack of thread engagement.

Evaluation

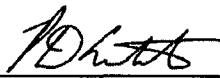
The condition of one bolt not fully engaged is acceptable. The bolting in question does not need a strength reduction because more than three threads are engaged.

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (If applicable): CR-PLP-2012-7084

Prepared by: Tim Crocker 
Licensing Basis Reviewer

Date 11/06/2012

Reviewed by: P.D. MacMaster 
Peer Reviewer

Date 11/06/2012

Licensing Basis (LB) Evaluation Form

LB Evaluation No.: LB-09

Originating SWC/AWC: AWC-05

Equipment ID No.: N/A

Equip. Class: N/A

Equipment Description: SPRING CAN BENT ROD

Location: Bldg. AUX

Floor El. 590

Room, Area 115

Condition

Spring can HC4-H93 is cocked to one side. It appears one side of the spring is compressed more than the other causing the spring to be cocked. The spring can still appears to be taking the load.

Documents Reviewed

Plant Drawing M-107 sheet 110

Licensing Basis


It appears HC4-H93 is still carrying the load, however, the hanger rod is not centered in the spring can as well as one would normally expect. Work Request 288113 was generated to do a VT-3 on the spring can. Since the hanger appears to be taking the load there is no adverse condition with respect to it carrying load. If an adverse condition is identified during the VT-3 of the hanger a CR will be generated.

Evaluation

WR288113 was generated to further inspect the hanger. At this time the spring can appears to be taking the load. At the time of the VT-3 if an adverse condition is identified a CR will be generated.

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (If applicable): N/A

Prepared by: Tim Crocker 
Licensing Basis Reviewer

Date 10/23/2012

Reviewed by: P.D. MacMaster 
Peer Reviewer

Date 10/23/2012

Licensing Basis (LB) Evaluation Form

LB Evaluation No.: LB-13 Originating SWC/AWC: SWEL1-072
Equipment ID No.: LT-2021 Equip. Class: 18, INSTRUMENT RACKS
Equipment Description: CONDENSATE STORAGE TANK T-2 HIGH-LOW LEVEL
Location: Bldg. TURB Floor El. 590 Room, Area OUTSIDE

Condition

Vendor manual J-445 sheet 0007 shows two U-bolts that hold the mounting bracket for LT-0221. The as found condition only had one U-bolt holding the bracket.

Documents Reviewed

- Vendor Manual J-445
- Vendor Drawings J-445

Licensing Basis

The Vendor Manual for LT-2021 (J-445 sheet 7) shows several options for mounting the transmitters. The configuration for mounting to pipes includes two U-bolts. The bolt pattern for pipe mounted transmitter brackets is square shaped while the bolt pattern for panel mounted transmitter brackets is diamond shaped. The vendor manual on file is dated 1999. It appears a panel mounting bracket was used to mount LT-2021, which should use a pipe mounted bracket. Since a panel mounting bracket was used only one U-bolt is holding the transmitter bracket to the pipe. LT-2021 was previously walked down using the SQUG methodology and found to be acceptable. The current mounting configuration cannot be found in records.

Per Vendor Manual J-445 Sheet 7 the U-bolt diameter is 5/16". Conservatively only looking at one half of the U-bolt, the tensile area is 0.0524 in². Using a yield strength of 30ksi the yield capacity is 1572 pounds. Given the transmitter is only 21 pounds per the EQ files, the seismic capacity is much higher than the seismic demand. The bolting configuration as noted is acceptable, and LT-2021 remains operable.

Evaluation

LT-2021 is operable based on the low seismic demand compared to the relatively high capacity of the bolting in question. LT-2021 was also found acceptable previously per the SQUG methodology. CR-PLP-2012-07149 was initiated to identify this issue. An Operability Evaluation determined that the installed condition of the mounting bracket for LT-2021 is Operable nonconforming since it does not fully meet the Regulatory Guide 1.97 requirements for Category 1 equipment. WO333244 was created to installed a seismically qualified mounting bracket, however the installed condition is operable, see CR-PLP-2012-07149 CA-01.

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (if applicable): CR-PLP-2012-07149

Licensing Basis (LB) Evaluation Form


LB Evaluation No.: LB-13

Originating SWC/AWC: SWEL1-072

Equipment ID No.: LT-2021

Equip. Class: 18, INSTRUMENT RACKS

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

Prepared by: Tim Crocker 

Date 11/15/2012

Licensing Basis Reviewer

Reviewed by: P.D. MacMaster 

Date 11/15/2012

Peer Reviewer

Licensing Basis (LB) Evaluation Form

LB Evaluation No.: LB-14

Originating SWC/AWC: SWEL1-072

Equipment ID No.: LT-2021

Equip. Class: 18, INSTRUMENT RACKS

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

Location: Bldg. TURB

Floor El. 590

Room, Area OUTSIDE

Condition

A light and speaker located on top of the Turbine Building along the west side of the building have the potential to come loose from their anchorage in a seismic event and impact LT-2021.

Documents Reviewed

None, searched Merlin using keywords; "lighting", "siren", and "PA".

Licensing Basis

Drawing details cannot be located for the mounting of the siren and lighting to the Turbine Building roof. The siren is bolted to a unistrut channel that is bolted to another unistrut member that is fastened to the Turbine Building roof. The light is bolted to a pole that is fastened to the turbine building roof. All hardware used is judged to be adequate based on the low mass and in turn low seismic demand of the objects being secured. In addition both the siren and the light are being secured to the building by their power supply cords. The power supply cords if needed could also restrain the items in a seismic event.


The design wind load loads for the site bound the seismic design loads that the siren and light would see.

Evaluation

This is not an operability concern. The siren and light are properly restrained to resist design wind loads. The wind loading bounds the seismic loading. In a seismic event the light and siren will remain safely attached and will not negatively impact surrounding plant equipment.

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (If applicable): N/A

Prepared by: Tim Crocker 
Licensing Basis Reviewer

Date 10/22/2012

Reviewed by: P.D. MacMaster 
Peer Reviewer

Date 10/23/2012



Sound and Lighting Located Above T-2, Taken From the Turbine Building.

Licensing Basis (LB) Evaluation Form

LB Evaluation No.: LB-15

Originating SWC/AWC: SWEL1-073

Equipment ID No.: LT-2022

Equip. Class: 18, INSTRUMENT RACKS

Equipment Description: CONDENSATE STORAGE TANK HI-LO TRANS

Location: Bldg. TURB

Floor El. 590

Room, Area OUTSIDE

Condition

A light and speaker located on top of the Turbine Building along the west side of the building have the potential to come loose from their anchorage in a seismic event and impact LT-2022.

Documents Reviewed

None, searched Merlin using keywords; "lighting", "siren", and "PA".

Licensing Basis

Drawing details cannot be located for the mounting of the siren and lighting to the Turbine Building roof. The siren is bolted to a unistrut channel that is bolted to another unistrut member that is fastened to the Turbine Building roof. The light is bolted to a pole that is fastened to the turbine building roof. All hardware used is judged to be adequate based on the low mass and in turn low seismic demand of the objects being secured. In addition both the siren and the light are being secured to the building by their power supply cords. The power supply cords if needed could also restrain the items in a seismic event.

The design wind load loads for the site bound the seismic design loads that the siren and light would see.

Evaluation

This is not an operability concern. The siren and light are properly restrained to resist design wind loads. The wind loading bounds the seismic loading. In a seismic event the light and siren will remain safely attached and will not negatively impact surrounding plant equipment.

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (If applicable): N/A

Prepared by: Tim Crocker



Licensing Basis Reviewer

Date 10/22/2012

Reviewed by: P.D. MacMaster

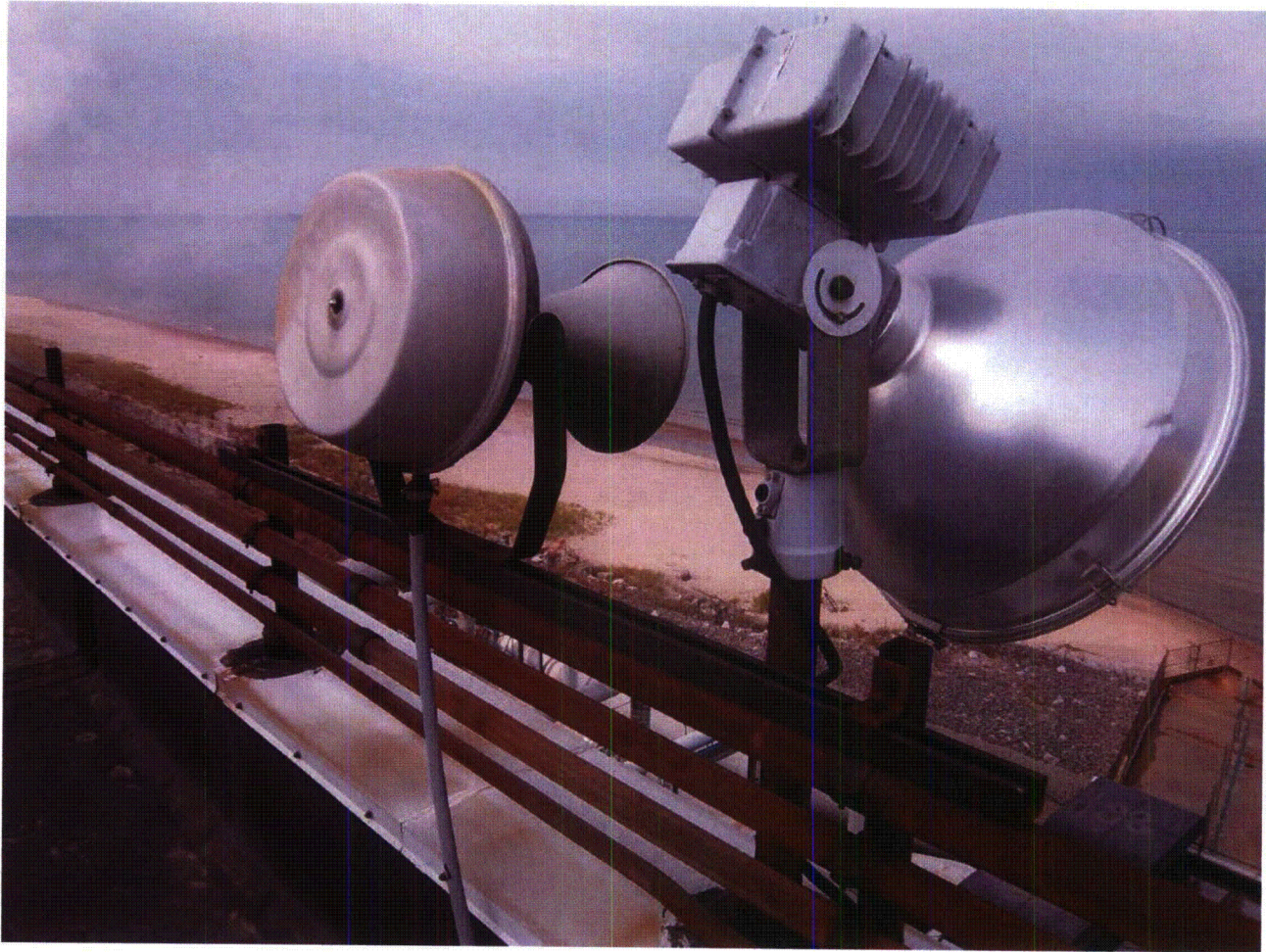


Peer Reviewer

Date 10/23/2012



Sound and Lighting Located Above T-2, Taken From the Turbine Building.



Sound and Lighting Located Above T-2, Taken From the Turbine Building.

Licensing Basis (LB) Evaluation Form

LB Evaluation No.: LB-19

Originating SWC/AWC: SWEL1-089

Equipment ID No.: EJ-1051

Equip. Class: 20, INSTRUMENTATION AND CONTROL
PANELS

Equipment Description: AUX FEEDWATER CONTROLS

Location: Bldg. AUX

Floor El. 607

Room, Area 223

Condition

A notebook was discovered hanging inside the panel door for EJ-1051. The notebook was attached by a chain that was screwed into the panel door.

Documents Reviewed

N/A

Licensing Basis


CR-PLP-2012--06754 was written to document this issue. Per the CR the plastic notebook was captured between the door panel and an internal metal panel that would limit movement of the notebook during a seismic event. Once the issue was identified Operations subsequently removed the notebook.


Evaluation

See CR-PLP-2012-06754. The notebook was removed by Operations at time of discovery. In addition the found condition of the notebook was deemed not a seismic operability concern due to the fact that the movement was limited by an internal panel and the panel door.

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (If applicable): CR-PLP-2012-06754

Prepared by: Tim Crocker  Date 10/18/2012
Licensing Basis Reviewer

Reviewed by: P.D. MacMaster  Date 10/23/2012
Peer Reviewer

Licensing Basis (LB) Evaluation Form

LB Evaluation No.: LB-20

Originating SWC/AWC: SWEL1-003

Equipment ID No.: EB-22

Equip. Class: 1-MOTOR CONTROL CENTERS AND WALL-MOUNTED CONTACTORS

Equipment Description: 480 VOLT MOTOR CONTROL CENTER #22

Location: Bldg. AUX Floor El. 607 Room, Area 223

Condition

An unidentified 2" pipe in the overhead of the 1-D Switchgear room has an approximate unsupported span of 18'. The piping is located along the north end of EB-22. A 1/2" conduit for the fire protection system is also supported of this 2" line.

Documents Reviewed

Plant Drawing E-296 sheet1

Licensing Basis


CR-PLP-2012-06742 was initiated to identify this issue. This piping ties into the plant storm drainage system. Both the 2" pipe and 1/2" conduit are not safety related and are not required to be seismically designed. The length of the 2" pipe exceeds typical spans for 2" piping. However, there are large margins for the capacity of these spans compared to the allowable stress for those spans. In a seismic event this piping would maintain its structural adequacy based on the flexibility of the piping and low loads on the system.


Evaluation

See CR-PLP-2012-06742

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (if applicable): CR-PLP-2012-06742

Prepared by: Tim Crocker  Date 10/18/2012
Licensing Basis Reviewer

Reviewed by: P.D. MacMaster  Date 10/23/2012
Peer Reviewer

Licensing Basis (LB) Evaluation Form

LB Evaluation No.: LB-21

Originating SWC/AWC: SWEL1-086

Equipment ID No.: EC-187

Equip. Class: 20. INSTRUMENTATION AND CONTROL
PANELS

Equipment Description: AUX FEEDWATER CONTROLS

Location: Bldg. AUX

Floor El. 607

Room, Area 223

Condition

The cable cover plates in the back interior of the cabinet are missing nuts. The plates are protecting cable internal to the cabinet. Each cover plate is fastened to the panel by 16 1/4" diameter studs that are backed by a nut. All six sub panels within EC-187 are missing nuts, the sub panel with the least amount of nuts has 7 of 16 nuts installed.

Documents Reviewed

None

Licensing Basis


The as found condition does not meet the licensing basis, which is to have all the nuts installed. CR-PLP-2012-6877 was initiated to document this condition.

Evaluation

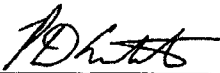
EC40621, Engineering Change Reply was written to support operability of EC-187 with the missing nuts. CR-PLP-2012-7084 and EC40621 describe how the as found condition of missing nuts is acceptable as the cover panel is still performing its design function. The missing nuts are planned to be installed by WO330961.

Conclusion Condition Meets the Licensing Basis: Yes No

CR# (If applicable): CR-PLP-2012-6877

Prepared by: Tim Crocker 
Licensing Basis Reviewer

Date 11/06/12

Reviewed by: P.D. MacMaster 
Peer Reviewer

Date 11/06/2012

Peer Review Checklist for SWEL

Instructions for Completing Checklist

This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (SWEL) in accordance with EPRI 1025286, Section 6: Peer Review. The space below each question in this checklist should be used to describe any findings identified during the peer review process and how the SWEL may have changed to address those findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Were the five safety functions adequately represented in the SWEL 1 selection? Y N
The systems chosen adequately represented the five safety functions including reactivity control, pressure control, inventory control, decay heat removal, and maintain containment function/integrity. A review of the FSAR Chapter 14 events was performed to identify the required systems used to mitigate plant transients.

2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:
 - a. Various types of systems? Y N
EPRI 1025286 Appendix E identifies systems typically used to support PWR frontline safety functions and the associated support functions. The major components and systems identified in EPRI 1025286 Appendix E were represented in SWEL 1.

 - b. Major new and replacement equipment? Y N
Attempts were made to identify new, replacement, and modified equipment by searching the Work Order database, ModTrack Database, and Engineering Changes. Some of the replacement equipment in SWEL 1 included service water pumps, battery chargers and inverters, critical service water isolation valve CV-1359, station batteries, 2400V Bus undervoltage relays, and the shut trip breakers in panels EJL-422 and EJL-423. These have all been replaced since the original IPEEE/A-46 walkdowns. In addition, many other items of equipment on SWEL 1 have been modified since the IPEEE was completed.

 - c. Various types of equipment? Y N
19 out of 21 classes of mechanical and electrical equipment listed in EPRI 1025286 appendix B: Classes of Equipment were originally represented in SWEL 1. There are no Seismic Category 1 components in the other two classes. However, during the walkdowns it was identified that the equipment from two other classes was not accessible for inspection (only two items in each class). As a result, 17 of the 21 classes are represented by the walkdowns. As a result, two items from Class 0 were subsequently included on SWEL 1 and were walked down.

 - d. Various environments? Y N
The peer reviewer suggested adding more equipment located outside of the plant. However, the Plant responded that there weren't many Seismic Category 1 items located "Outside," and the one suggested, the Diesel Fuel Oil Storage Tank, was inaccessible in a sand-filled concrete vault.

Peer Review Checklist for SWEL

Instructions for Completing Checklist

This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (SWEL) in accordance with EPRI 1025286, Section 6: Peer Review. The space below each question in this checklist should be used to describe any findings identified during the peer review process and how the SWEL may have changed to address those findings. Additional space is provided at the end of this checklist for documenting other comments.

- e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program? Y N

The IPEEE equipment list was used as a starting point for the development of BL 1 and SWEL 1. This list was checked against/compared with the A-46 (SQUG) equipment list (which included non-IPEEE equipment). The peer reviewer made recommendations of adding some equipment based on the A-46 equipment list as they serve important safety functions as indicated by EPRI 1025286 Appendix E. However, the equipment selection team deemed that all equipment classes and safety functions were adequately represented.

- f. Were risk insights considered in the development of SWEL 1? Y N

Attachment 5 of EA-PSA-SEIS-SWEL-1-12-06 included the Full Power Internal Events (FPIE) importance ranking results. Systems were chosen based on the four-quadrant plot. The "upper right quadrant" identified systems or components that contribute significantly to current risk and would have a large additional contribution to the change in risk if they were allowed to degrade. Equipment selection for BL 1 initially used this ranking, combined with the IPEEE equipment list to populate the list.

3. For SWEL 2:

- a. Were spent fuel pool related items considered, and if applicable included in SWEL 2? Y N

The spent fuel pool related items selected for SWEL 2 were consistent with the guidance given in Section 3 of EPRI 1025286. The peer reviewer agreed with the equipment selection for SWEL 2.

- b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2? Y N

Palisades does not have SFP penetrations below 10 feet above the top of the fuel assemblies. Since there are no such penetration, no rapid drain-down items were included in SWEL 2.

Peer Review Checklist for SWEL

4. Provide any other comments (Attachment 9.11) related to the peer review of the SWELs.

The Peer Reviewer suggested that various other items of equipment be selected from the A-46 list to supplement, or as replacements for, the equipment selected. However, the Plant responded that many of these suggested items were not Seismic Category 1 equipment, or had been at one time but were no longer required to be maintained as seismic, and were excluded. The equipment selection personnel also responded that some of the multiple items of equipment within a particular class were included since they were replaced subsequent to the IPEEE completion. Overall, the selected equipment satisfies the EPRI Guidance for equipment selection.

5. Have all peer review comments been adequately addressed in the final SWEL?

Y N

Peer Reviewer #1: Candice Chou (ENERCON)



Date: 11/6/2012

Certificate of Completion

Timothy Crocker

**Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns**

June 27, 2012

Date

R.P. Kassawara

Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity

Certificate of Completion

Alex Smerch

**Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns**

June 13, 2012

Date

R.P. Kassawara

Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity

Certificate of Completion

Kevin Bessell

**Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns**

June 13, 2012

Date

R.P. Kassawara

Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity



ENERCON

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Certificate of Completion

is hereby granted to

Paul Klein

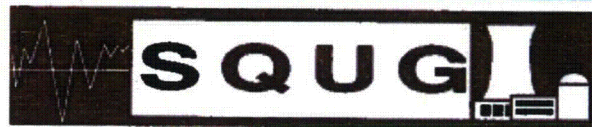
for successful completion of

**TRAINING ON NEAR TERM TASK FORCE
RECOMMENDATION 2.3
*PLANT SEISMIC WALKDOWNS***

Awarded: 9/13/2012 in Mt. Arlington, NJ

Kevin Bessell
Certified Seismic Walkdown Engineer
Palo Alto, CA – 6/13/2012

Alex Smerch
Certified Seismic Walkdown Engineer
Palo Alto, CA – 6/13/2012



Certificate of Achievement

This is to Certify that

John H. Kao

has Completed the SQUG Walkdown Screening
and Seismic Evaluation Training Course
Held May 3-7, 1993



David A. Freed, MPR Associates
SQUG Training Coordinator

Neil P. Smith, Commonwealth Edison
SQUG Chairman

Robert P. Kassawara, EPRI
SQUG Program Manager



Certificate of Achievement

This is to Certify that

John W. Kao

has Completed the
Seismic IPE Add-On Training Course
Held June 8-10, 1993

David A. Freed, MPR Associates
SQUG Training Coordinator

Robert P. Kassawara, EPRI
SQUG Program Manager



Certificate of Achievement

This is to Certify that

Alan H. Lyon

has Completed the SQUG Walkdown Screening
and Seismic Evaluation Training Course
Held November 9-13, 1992



Handwritten signature of David A. Freed.


David A. Freed, MPR Associates
SQUG Training Coordinator


Handwritten signature of Neil P. Smith.


Neil P. Smith, Commonwealth Edison
SQUG Chairman


Handwritten signature of Robert P. Kassawara.


Robert P. Kassawara, EPRI
SQUG Program Manager


		Seismic Walkdown Submittal Report Review Comments and Resolutions Form		
Engineering Report Number	PLP-RPT-2012-00141	Rev. 0	Title SEISMIC WALKDOWN EQUIPMENT LIST (SWEL-1 and SWEL-2)	
Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Special Notes or Instructions: Peer Reviewer's Comments and Responses		
Comment Number	Section/ Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
1	Table 9.4.2	What you have listed in the "system type" column does not match the procedure. Please refer to EN-DC-168, Rev. 0, page 46 of 80.	System Type was changed to reflect whether the System is a "Support" or "Front Line" System. No further breakdown is deemed necessary since the supported Safety Function is noted in Table 9.4.1.	CC
2	Table 9.4.2	The "class" designation should be in numerical format per EN-DC-168, Rev. 0, page 47 of 80.	The Class Designation has been changed to reflect the 21 Classes of Equipment.	CC
3	Table 9.4.2	The class designation for SWEL-16 does not match the equipment description.	Errors in importing data into the SWEL Tables 9.4.1 and 9.4.2 have been corrected.	CC
4	Table 9.4.2	There are some redundancies in the table that could be eliminated to make room for other equipment that is currently not on the list. For example, SWEL items 22, 23, and 24 are all service water pumps located on the same elevation. Suggest you replace with one of the charging pumps (P-55B or P-55C) to the SWEL.	Charging Pumps are no longer Seismic Category 1 Equipment. The three Service Water Pumps were included since they are the only Seismic Category 1 vertical pumps.	CC

		Seismic Walkdown Submittal Report Review Comments and Resolutions Form		
Engineering Report Number	PLP-RPT-2012-00141	Rev.	Title	
Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		0	SEISMIC WALKDOWN EQUIPMENT LIST (SWEL-1 and SWEL-2)	
		Special Notes or Instructions: Peer Reviewer's Comments and Responses		
5	Table 9.4.2	At first glance there weren't too many equipment listed as "O" for outside. Suggest that you add T-10 (diesel oil storage tank) in addition to T-2 (SWEL-101). In EA-PSA-SEIS-SWEL-1-12-06, Section 7.2.3 you stated that T-10 should be considered in the SWEL but it wasn't listed in Table 9.4.2.	There aren't too many Seismic Category 1 items that are outside. With respect to the Diesel Oil Storage Tank, it is located in a sand-filled concrete vault, so there is nothing visible to inspect, with respect to seismic anchorage.	CC
6	Table 9.4.2	Suggest that you replace SWEL-13 (EX-12) with EX-13 since there was a recent modification on the transformer.	EX-13 is not Seismic Category 1.	CC
7	Table 9.4.2	You already have P-67B (LPSI pump) in SWEL-16. Consider also adding P-66A (HPSI pump) since it performs the RCS inventory control safety function and there was also a recent modification on the pump.	The modification to P-66A was non-consequential with respect to seismic anchorage of the pump. Since we had multiple horizontal pumps on the list, and we were trying to limit, where possible, the equipment to a specific non-protected train, it was determined that the HPSI Pump, P-66A (on the opposite train from P-67B) was not needed on the list. Additionally, the mounting configuration for the Containment Spray Pump P-54C, which is included, is similar to the mounting of the HPSI Pumps, thus there is no benefit to having more horizontal pumps. Further, P-66A would be the only piece of equipment in that room, and would then require an Area Walk-by of the entire room, which is not in keeping with the ALARA principles. A complete area walk-by of one train of Safeguards	CC

		Seismic Walkdown Submittal Report Review Comments and Resolutions Form		
Engineering Report Number	PLP-RPT-2012-00141	Rev. 0	Title SEISMIC WALKDOWN EQUIPMENT LIST (SWEL-1 and SWEL-2)	
Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Special Notes or Instructions: Peer Reviewer's Comments and Responses		
			Equipment should be representative of both trains.	
8	Table 9.4.2	Suggest that you replace SWEL-27 (CV-0861) with CV-0821 since there was a recent modification on the valve.	CV-0861 was selected since it was support equipment for VHX-1, Containment Air Cooler, and supports the Containment Function, whereas CV-0821 does not. CV-0821 is associated with the CCW Heat Exchanger. Since they are both line-mounted components, I'm not sure there is any benefit, from a SWEL standpoint, for selecting the one that has been replaced.	CC
9	Table 9.4.2	For SWEL-30, please check the elevation for SV-1359. Should it be 590 instead of 598?	The valve is actually at elevation 598. The floor elevation is 590. However, this change was incorporated for consistency.	CC

		Seismic Walkdown Submittal Report Review Comments and Resolutions Form			
Engineering Report Number	PLP-RPT-2012-00141	Rev.	0	Title	SEISMIC WALKDOWN EQUIPMENT LIST (SWEL-1 and SWEL-2)
Quality Related:		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Special Notes or Instructions: Peer Reviewer's Comments and Responses	
10	Table 9.4.2	SWEL items 46 through 49 (EY-10, EY-20, EY-30, EY-40) are redundant. Consider using two to make room for other equipment.	I'm not sure what you had in mind for "other equipment". We have a fairly balanced representation of most all of the Classes. These 4 items were selected since they are part of only 10 items from the Class 14 Equipment on the A-46 list, and they are larger panels than the other equipment in that Class.		CC
11	Table 9.4.2	SWEL items 52 through 55 (ED-06, ED-07, ED-08, ED-09) are redundant. Consider using only two.	All four Station Inverters were included since they had been modified since the IPEEE walkdowns.		CC
12	Table 9.4.2	SWEL items 56 through 59 (ED-15, ED-16, ED-17, ED-18) are redundant. Consider using only two.	All four Station Battery Chargers were included since they had been modified since the IPEEE walkdowns.		CC
13	Table 9.4.2	SWEL items 80 through 83 (TS-1820, TS-1822, TS-1828, and TS-1844) are redundant. Consider using two.	Agreed they are redundant, but so are many items. The idea is to have representative samples of different types of equipment anchorage. These are smaller components directly mounted to the structure, so they are different from most other Class 18 items.		CC


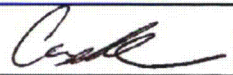
		Seismic Walkdown Submittal Report Review Comments and Resolutions Form		
Engineering Report Number	PLP-RPT-2012-00141	Rev.	Title	
		0	SEISMIC WALKDOWN EQUIPMENT LIST (SWEL-1 and SWEL-2)	
Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Special Notes or Instructions: Peer Reviewer's Comments and Responses		
14	Table 9.4.2	I didn't find anything in the SWEL that is related to the Reactor Trip System. Suggest that you add EC-06 (RPS control), EC-11A (post-accident control), and maybe EC-168 (post-accident sample monitoring).	Control Panels EC-06 and EC-11A are in the Control Room. No equipment was selected in this room specifically for that reason. Multiple other components were selected that satisfy the equipment class without a disruption to the Operators-at-the-Controls, especially for conducting the Area Walk-By. The Control Panels were all re-anchored in accordance with IEB 80-13 in the early 1980's, as were most of the other electrical cabinets, many of which are on the list. Since the Control Room is a well-controlled environment, it is less likely that the Control Panel anchorage is degraded there than it is for many of the other electrical panels in less controlled environs. Control Rod Clutch Breaker 42-1/RPS was added to the list. EC-168 is not Seismic Category 1 equipment.	CC
15	Table 9.4.2	SWEL items 87 through 90 are redundant. Consider using only two. Suggest that you add EJ-43 or EJ-44 (diesel fuel transfer) and EJ-245 or EJ-246 (diesel oil transfer pumps).	The selected items are actually upright cabinets associated with Decay Heat Removal (Auxiliary Feedwater). Since many other components selected are also associated with the Aux. Feed. System, these were selected for that equipment class. The Junction Boxes suggested are relatively small compared to the cabinets selected, thus more relevant.	CC

		Seismic Walkdown Submittal Report Review Comments and Resolutions Form		
Engineering Report Number	PLP-RPT-2012-00141	Rev. 0	Title SEISMIC WALKDOWN EQUIPMENT LIST (SWEL-1 and SWEL-2)	
Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Special Notes or Instructions: Peer Reviewer's Comments and Responses		
16	Table 9.4.2	I didn't see anything for containment pressure indication/control. Suggest that you add LT-0102 or LT-0103, PT-0105A or PT-0105B, and RV-0401.	Containment Air Cooler VHX-1, CV-0861, and Ventilation Fan V-3A are all associated with Containment Pressure Control, as is the Containment Spray Pump P-54C. Adding more Instruments on Racks or Line-Mounted Valves was thought to be unnecessary.	CC
17	Table 9.4.2	While you have listed several tanks in SWEL-99 through SWEL-106, suggest that you also add either T-53A or T-53B (boric acid tank) to the SWEL.	The Boric Acid Storage Tanks are no longer part of a Seismic Category 1 System. When the Boric Acid System was removed from Tech. Specs., a decision was made to not go into the Equipment Database and change all of the Classifications for all of the Components (thousands of changes). As such, these items still show up as Seismic 1, but are not necessarily being maintained as such. This should be reflected as such in the FSAR.	CC
18	Table 9.4.2	In the SWEL you only have one MOV listed (SWEL-29). Suggest that you add a few of the HPSI and LPSI MOVs to the list (MO-3007, MO-3009, MO-3010, MO-3011, MO-3012, MO-3013, or MO-3014).	Since MOV's are line-mounted components, I don't see the benefit of having more of them and less equipment that is actually anchored to the structure.	CC

ATTACHMENT 9.11

PEER REVIEW COMMENT FORM


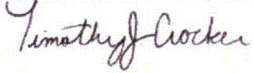
Sheet 1 of 7

		Seismic Walkdown Submittal Report Review Comments and Resolutions Form			
Engineering Report Number	PLP-RPT-2012-00141	Rev. 0	Title SEISMIC WALKDOWN EQUIPMENT LIST (SWEL-1 and SWEL-2)		
Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Special Notes or Instructions: Peer Reviewer's Comments and Responses			
19	Table 9.4.2	I didn't see any items related to Containment Spray. Suggest that you add SV-3001 or SV-3002 (CS flow control valve) and CV-3001 or CV-3002 (CS header isolation). These mods were performed as part of the GSI-191 resolution.	Containment Spray Pump P-54C is on the list. I don't see the benefit of having more line-mounted components.	CC	
20	Table 9.4.2	Suggest that you add P-41 (diesel driven fire pump) to the SWEL. A mod was performed to re-anchor the pump in 2011.	P-41 is not a Seismic Category 1 Component.	CC	
21	Table 9.4.5	No comment on SWEL 2	N/A	N/A	
Reviewed By:		Candice Chou 	Date 9/27/12	Resolved By:	Alan Lyon
Site/Department:		PAL/Enercon Peer Ph.	Date: 10/25/12		

ATTACHMENT 9.11

PEER REVIEW COMMENT FORM


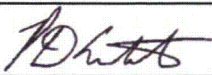
Sheet 1 of 1


		Seismic Walkdown Submittal Report Review Comments and Resolutions Form			
Engineering Report Number	PLP-RPT-12-00141	Rev. 1	Title: Palisades Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic		
Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Special Notes or Instructions: Peer Review for SWCs and AWCs			
Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials	
		<p>As the walkdown packages were being assembled Palisades Civil/Structural Design Engineering ensured proper documents were being used as references.</p> <p>As the walkdowns were being performed each team was provided infield oversight by at least one Civil/Structural or Mechanical Design Engineer. The majority of the time the oversight was done by a qualified SWE. This was to aid the SWEs with any question they might have on items being inspected or items included in the Area Walk-bys. Having a site engineer in the field also helped ensure the level of detail in the walkdowns was adequate.</p> <p>Approximately one third of the SWCs and AWCs had a detailed peer review while the remaining got spot checked by the peer reviewers. All the peer reviewers comments were incorporated into the submittal report.</p>	None required	N/A	
Reviewed By:	Timothy Crocker 	Date	11/1/12	Resolved By:	N/A
Site/Department:	PLP / Design Eng.	Ph.	2856	Date:	N/A

ATTACHMENT 9.11

PEER REVIEW COMMENT FORM

Sheet 1 of 1


		Seismic Walkdown Submittal Report Review Comments and Resolutions Form				
Engineering Report Number	PLP-RPT-12-00141	Rev. 1	Title: Palisades Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic			
Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Special Notes or Instructions: Peer Review for Licensing Basis Evaluations (LBE's)				
Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials		
		<p>At the conclusion of the walkdowns Palisades Design Engineering Supervisor reviewed the Licensing Basis Evaluation Forms that were generated. All LBE forms were reviewed. When Palisades Condition Report numbers were recorded on the sheets, the Condition Reports were also reviewed for appropriateness of their dispositions.</p> <p>Two comments were provided to the author of the on two of the walkdown forms to provide better clarity for the evaluation. The peer reviewer's comments were incorporated.</p>	None required	PDM		
Reviewed By:		Dave MacMaster 	Date	11/1/12	Resolved By:	N/A
Site/Department:		PLP / Design Eng.	Ph.	2657	Date:	N/A

		Seismic Walkdown Submittal Report Review Comments and Resolutions Form		
Engineering Report Number	PLP-RPT-12-00141	Rev. A	Title Palisades Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic	
Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Special Notes or Instructions: Peer Review Report		
Comment Number	Section/ Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
1	23	I think we need to revise PEER table. Lead PEER reviewer need to review everything?	The table notes state whom the Peer Review Team Leader is. The Peer Review Team Leader is defined in the Guidance as responsible for all aspects of the Peer Review. I don't think all slots need to be marked explicitly in Table 4-1 of the report.	CEN
2	23	Revise Charles Netzel BIO as follows: Mr. Charles Netzel is a project manager in ENERCON's Naperville, IL office. Mr. Netzel has over 28 years experience in the nuclear industry managing multi-discipline projects . Charles designed, built and provide plant modifications for most of the nuclear power plants in the Midwest . Charles has had more recent experience at Point Beach Nuclear Plant on the 1X-04 Cable Bridge Project, Grass Fouling for RE-216 Project, Force on Force Project, and has been involved with the 10CFR73.55 security modifications and the Spent Fuel Pool Rerack Projects at Palisades Nuclear Station. Mr. Netzel is a licensed structural engineer in the state of Illinois.	None Required	N/A

ATTACHMENT 9.11

PEER REVIEW COMMENT FORM


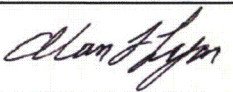
Sheet 1 of 2


		Seismic Walkdown Submittal Report Review Comments and Resolutions Form			
Engineering Report Number	PLP-RPT-12-00141	Rev. A	Title Palisades Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic		
Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Special Notes or Instructions: Peer Review Report			
Comment Number	Section/ Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials	
3	Atch C	Provide photos for SWEL1- 027, 035, 040	Those items are in containment and are deferred. Status is marked "N" and this is described in the submittal report.	CEN	
Reviewed By:		Chuck Netzel <i>Charles E. Netzel</i>	Date	11/2/12	Resolved By: Kevin Bessell <i>Kevin Bessell</i>
Site/ Department:				Date: 11/6/12	

ATTACHMENT 9.11

PEER REVIEW COMMENT FORM

Sheet 1 of 1


		Seismic Walkdown Submittal Report Review Comments and Resolutions Form			
Engineering Report Number	PLP-RPT-12-00141	Rev. A	Title Palisades Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic		
Quality Related: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Special Notes or Instructions: Peer Review of Seismic Walkdowns and Area Walk-bys			
Comment Number	Section/ Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials	
1	N/A	<p>This Comment Form is completed per EN-DC-168 to document the Peer Review Process of the Seismic Walkdowns and the Area Walk-bys as delineated by the EPRI Guidance document. An overall Project Pre-Job Brief was conducted with the Walkdown Team prior to the start of the walkdowns and provided the expectations for their conduct. Additionally, daily pre-job briefs were conducted. The Peer Reviewer accompanied the Walkdown Teams on the some of the walkdowns and conducted Post-Job Debriefs, as necessary, on the results/ observations. The Teams exhibited an appropriate questioning attitude with respect to completing the checklists, and interacted with the Peer Reviewer in the field. Anchorage verification checks were thorough and discrepancies were noted for later resolution. Additionally, many of the initially completed walkdown and walk-by checklists were reviewed, and feedback was provided to the Teams with respect to the details being provided in the checklists. Overall, the Walkdown Teams provided the appropriate level of inspection detail as delineated within the Procedure and the Guidance.</p>	None Required	N/A	
Reviewed By:		 Alan Lyon	Date	11/1/12	Resolved By: N/A
Site/ Department:		PAL/ Design Eng.	Ph. 2921	Date: N/A	


		Seismic Walkdown Submittal Report Review Comments and Resolutions Form		
Engineering Report Number	PLP-RPT-12-00141	Rev. 0	Title Palisades Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic	
Quality Related: <input type="checkbox"/> Yes <input type="checkbox"/> No		Special Notes or Instructions: View electronic mark-up of report for comment clarification.		
Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
1	3/18	Possibly comment that specific procedure was generated and implemented across the fleet to insure guidance is correctly implemented.	The following was added to Section 3.0: "A procedure was developed to help implement the Guidance requirements and to ensure consistency across the Entergy nuclear fleet."	AWS
2	4.2/19	Include Al Lyon as a SWE and include his SQUG sheet.	Al Lyon has been added and his SQUG certificate added to Attachment H.	AWS

ATTACHMENT 9.11

PEER REVIEW COMMENT FORM

Sheet 1 of 5


		Seismic Walkdown Submittal Report Review Comments and Resolutions Form		
Engineering Report Number	PLP-RPT-12-00141	Rev. 0	Title Palisades Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic	
Quality Related: <input type="checkbox"/> Yes <input type="checkbox"/> No		Special Notes or Instructions: View electronic mark-up of report for comment clarification.		
3	4.2/20-22	Keep referral of personal consistent.	This section has changed. Consistency of personnel referral has tried to be maintained.	AWS
4	5/25	Ensure Reference is Attached.	Reference to section has been fixed.	AWS
5	7/28	Section discussing shuffling of team members needs supporting details.	This statement was removed since it was invalid per our walkdowns.	AWS
6	7/28	Possibly insert section discussing post job debriefing where PASC's requiring or not requiring LBE's were relayed, and discussed.	The following was inserted in Section 7.0: "The walkdowns and area walk-bys concluded each day with a post-job brief which discussed the observations and conditions identified in the field."	AWS

		Seismic Walkdown Submittal Report Review Comments and Resolutions Form		
		Engineering Report Number PLP-RPT-12-00141	Rev. 0	Title Palisades Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: <input type="checkbox"/> Yes <input type="checkbox"/> No		Special Notes or Instructions: View electronic mark-up of report for comment clarification.		
7	7/28	Block Wall Maps inserted	Inserted block wall maps in the discussion pertaining to walkdown documentation.	AWS
8	7/29	Phrasing of anchorage comment needs editing.	Statement has been edited to state the following: "Anchorage, in all cases, was specifically meant to be the attachment of the component to the structure."	AWS
9	7/29	Add scope describing anchorage inspection.	Comment noted.	AWS
10	7/29	Changed "breaking the plane" to "violating site electrical safety standards".	Rephrased the sentence to the following: "as well as inspection for "other adverse seismic conditions" related to internal components (if it could be observed without violating site electrical safety procedures)."	AWS

ATTACHMENT 9.11

PEER REVIEW COMMENT FORM


Sheet 1 of 5

		Seismic Walkdown Submittal Report Review Comments and Resolutions Form		
		Engineering Report Number PLP-RPT-12-00141	Rev. 0	Title Palisades Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: <input type="checkbox"/> Yes <input type="checkbox"/> No		Special Notes or Instructions: View electronic mark-up of report for comment clarification.		
11	7/29	Update anchorage total to reflect most recent SWEL.	Anchorage total has been updated.	AWS
12	7.2/30	Clarify 1 st sentence of 2 nd paragraph describing area walk bys.	Changed the phrase to the following: "A single area walk-by was conducted for plant areas containing more than one SWEL item."	AWS
13	9.2/36	Delete 10%	10% is deleted.	AWS

ATTACHMENT 9.11

PEER REVIEW COMMENT FORM

Sheet 1 of 5

		Seismic Walkdown Submittal Report Review Comments and Resolutions Form			
		Engineering Report Number PLP-RPT-12-00141	Rev. 0	Title Palisades Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic	
Quality Related: <input type="checkbox"/> Yes <input type="checkbox"/> No		Special Notes or Instructions: View electronic mark-up of report for comment clarification.			
Reviewed By: Alex Smerch <i>Alex Smerch</i>	Contractor /ENERCON	Ph. 630-864-3626	Date 11-5-2012	Resolved By: Kevin Bessell <i>Kevin Bessell</i>	Date: 11/6/2012