Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1Q-DC

Equipment Class: (14) Distribution Panels

Equipment Description: 125/250VDC DIST PANEL FOR EDG 1B

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): DG, 305.00 ft, 36

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?	No
2.	Is the anchorage free of bent, broken, missing or loose hardware? *Kick plates were removed and welds were inspected.*	Yes
3.	Is the anchorage free of corrosion that is more than mild surface oxidation?	Yes
4.	Is the anchorage free of visible cracks in the concrete near the anchors?	Yes
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.)	Not Applicable
6.	Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Yes

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1Q-DC

Equipment Class: (14) Distribution Panels

Equipment Description: 125/250VDC DIST PANEL FOR EDG 1B

Interaction Effects

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

Other Adverse Conditions

11.	Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? *Doors and kick plates were opened and no Other Adverse Conditions were found inside.*	Yes

Comments

Equipment was verified to be In accordance with Seismic Qualification No. SQ-T1-1Q-DC, Rev 000

Rigid conduits exhibit bends, which provide adequate flexibility.

Several linear indication (cracks) on floor below are addressed by Maintenance Rule Inspection R2151812. R2151812 tracks completion of the walkdown and updates the topical report with its results.

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1Q-DC

Equipment Class: (14) Distribution Panels

Equipment Description: 125/250VDC DIST PANEL FOR EDG 1B

Evaluated by: Mark Etre Date: 11/13/2012

Seth Baker 11/13/2012

Photos

100_3013

100_3014

Status: [Y] N U

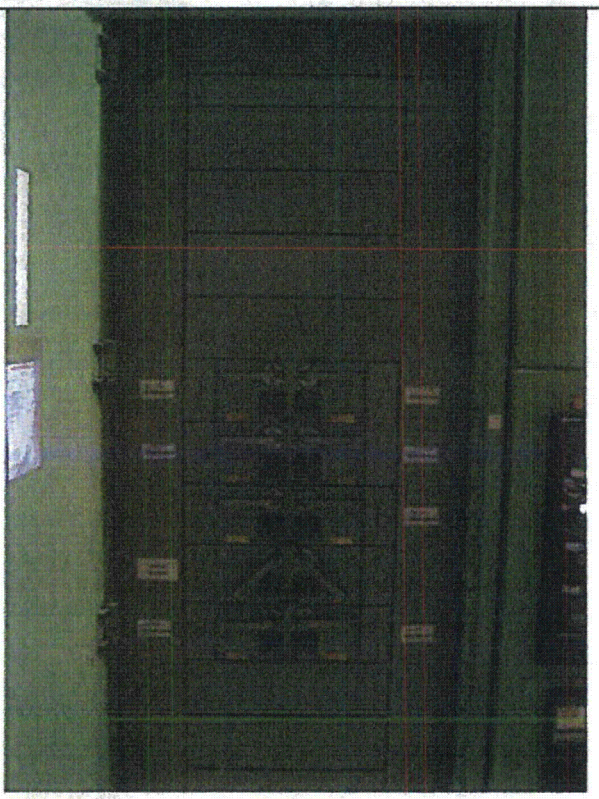
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1Q-DC

Equipment Class: (14) Distribution Panels

Equipment Description: 125/250VDC DIST PANEL FOR EDG 1B

100_3020



IMG_4658

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

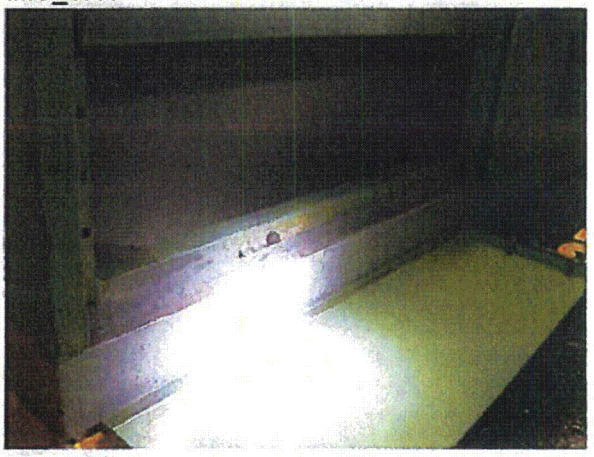
Equipment ID No.: 1Q-DC

Equipment Class: (14) Distribution Panels

Equipment Description: 125/250VDC DIST PANEL FOR EDG 1B

IMG_4659

IMG_4685



IMG_4686

Seismic Walkdown Checklist (SWC)

Equipment ID No. 1S-480V-ES-SWGR (EE-SWG-480V-1S) Equip. Class[12] (2) Low Voltage Switchgear

Equipment Description 480V Engineered Safeguards Bus 1S

Location: Bldg. CB Floor El. 322 Room, Area 18

Manufacturer, Model, Etc. (optional but recommended) Westing House Corp.

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

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☐

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. 1S-480V-ES-SWGR Equip. Class[12] (2) Low Voltage Switchgear

Equipment Description 480V Engineered Safeguards Bus 1S

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☐

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)

① Seismic Qualifakion and interaction evaluation performed per SQ-TI-1S-480V-ES Rev. 1 for SQUG.

Evaluated by: Juan A. Lopez / Juan A. Lopez Date: 11/12/13

David Yerkes / David Yerkes 11/12/13

Status: [Y] N U

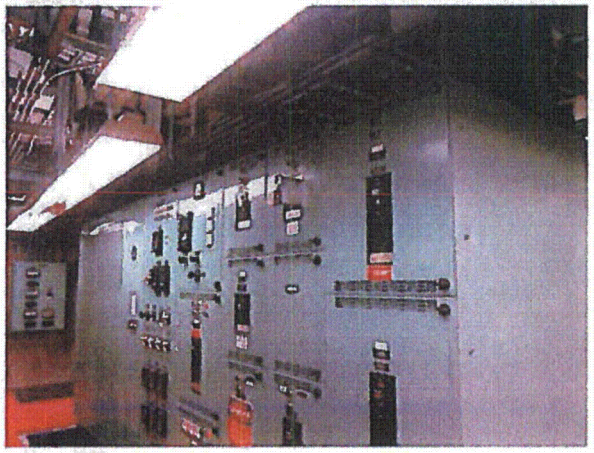
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1S-480V-ES-SWGR

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V ENGINEERED SAFEGUARDS BUS 1S

Photos



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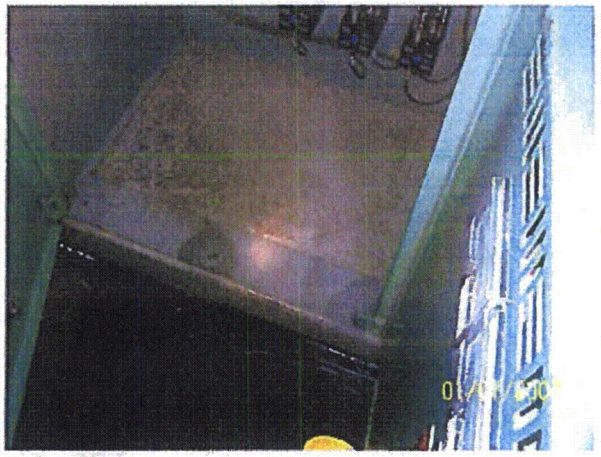
100_3666



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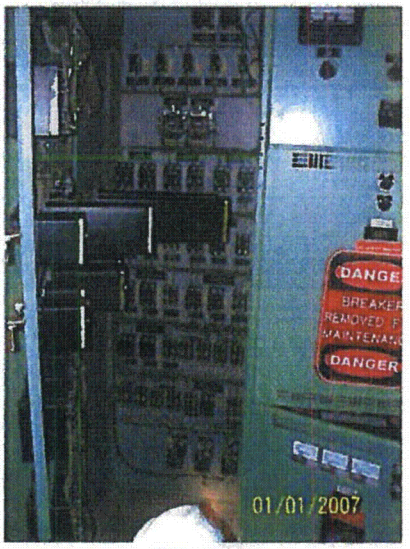


100_3874

Status: [Y] N U

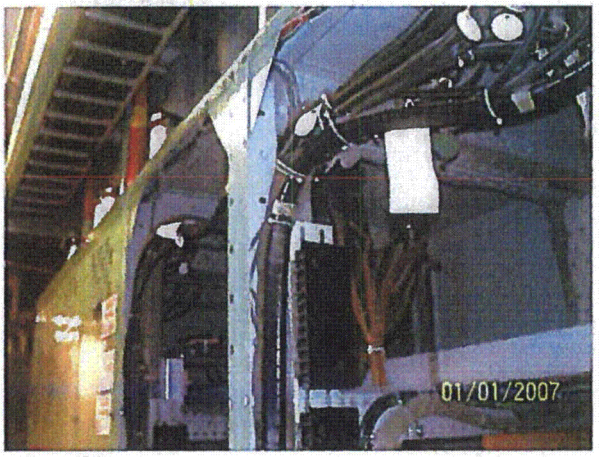
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1S-480V-ES-SWGR

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V ENGINEERED SAFEGUARDS BUS 1S

Photos (continue)



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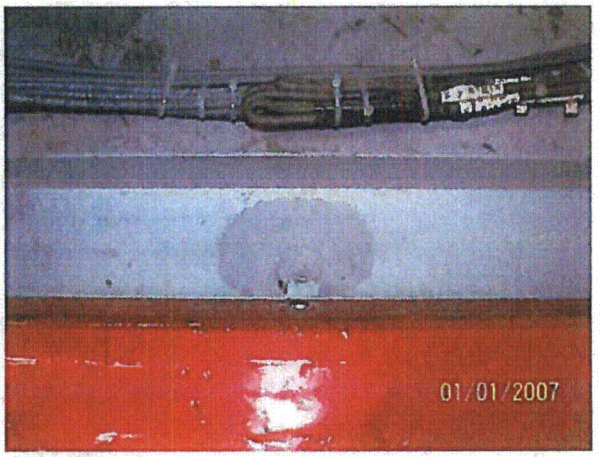

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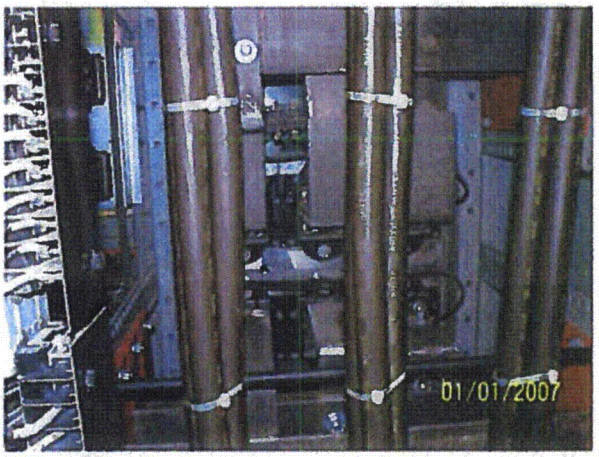


100_3903

100_3904

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 1S-480V-ES-XFMR Equip. Class[12] (4) Transformer

Equipment Description 1S 480V ES SWGR 4160/480V XFMR

Location: Bldg. CB Floor El. 322 Room, Area 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☐

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

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

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☐

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. 1S-480V-ES-XFMR Equip. Class[12] (4) Transformer

Equipment Description 1S 480V ES SWGR 4160/480V XFMR

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☐

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)

① Seismic Qualification performed under SQ-T1-1S-480V-ES Rev.1 for SQUG.
② Transformer anchored under FCR-C-100727
③ Missing/Loose Bolt at base of cabinet. Not an operability issue. This is tracked under IR 1401212

Evaluated by: Juan A. Lopez / Juan A. Lopez Date: 11/12/13

David Yerkes / David Yerkes 11/12/13

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

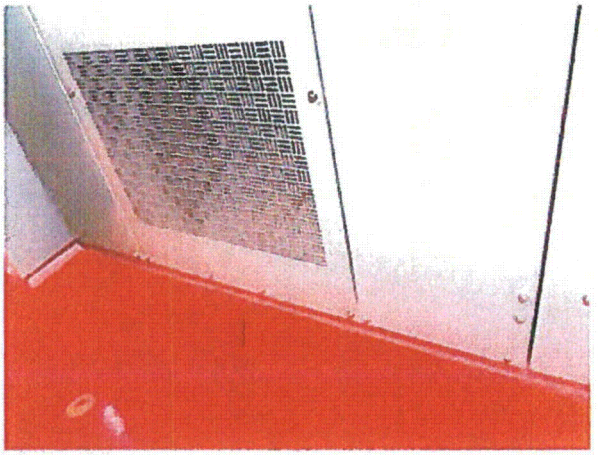
Equipment ID No.: 1S-480V-ES-XFMR

Equipment Class: (4) Transformers

Equipment Description: 1S 480V ES SWGR 4160/480V XFMR

Photos

100_3386



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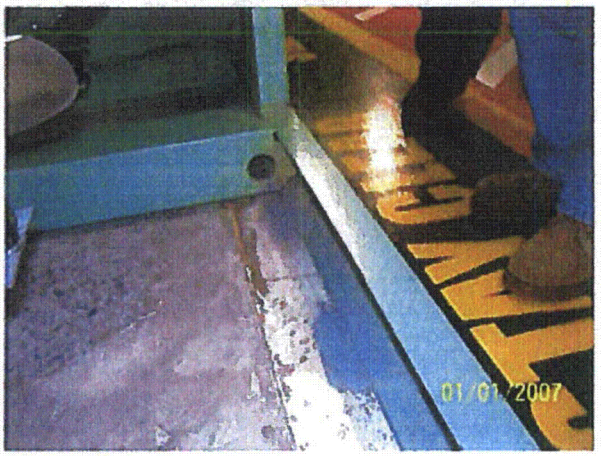

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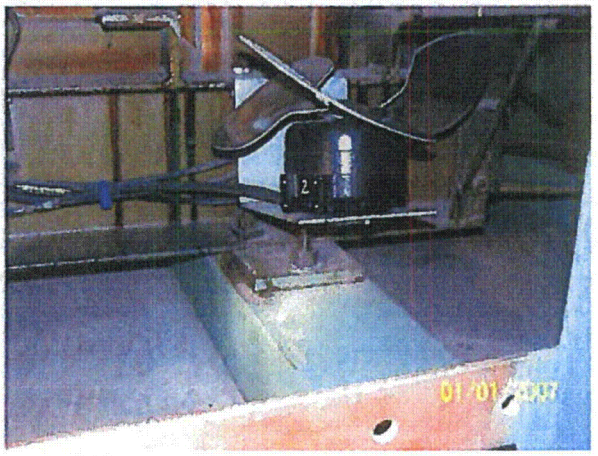


100_3887

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1S-480V-ES-XFMR

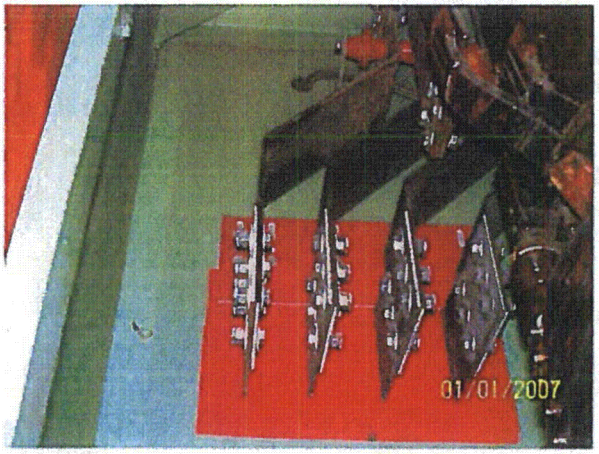
Equipment Class: (4) Transformers

Equipment Description: 1S 480V ES SWGR 4160/480V XFMR

Photos (continue)

100_3889

100_3891



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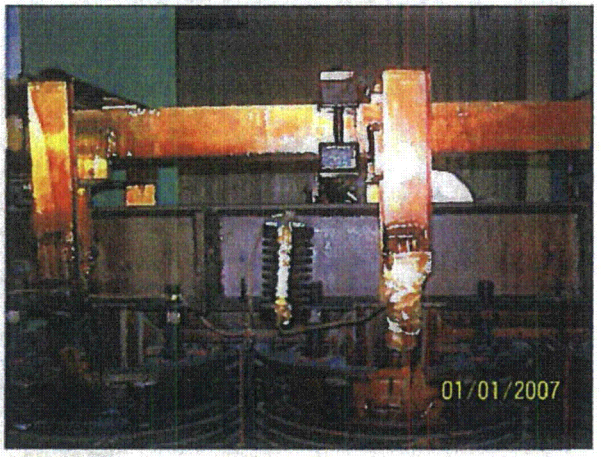


100_3894

Seismic Walkdown Checklist (SWC)

Equipment ID No. 1T-480V-SHES Equip. Class[12] (2) Low Voltage Switchgear

Equipment Description 480V Engineered Safeguard Screen House Bus 1T

Location: Bldg. IPH Floor El. 308' Room, Area 29

Manufacturer, Model, Etc. (optional but recommended) Westinghouse Elec. Corp.

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☑ N☐ U☐ N/A☐
   9 plug welds on back are acceptable
   Fillet welds on front are acceptable

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☑ N☐ U☐ N/A☑
   welded to embeded angles

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☐

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. 1T-480V-SHES Equip. Class[12] (2) Low Voltage Switchgear

Equipment Description 480V Engineered Safeguard Screen House Bus 1T

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☐

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☐

S-2 U.V. aux relay on door panel had 2 (one top/one bottom) out of four (4) screws. Still equipment was secured at panel w/ no immediate concern. IR 1583783

Comments (Additional pages may be added as necessary)

① Seismic qualification and interaction evaluation performed under SQ-T1-1T-480V-SHES for SQUG. (Rev.1)

② Anchorage evaluation performed under SQ-T1-1R-480V-SHES (SWES)

Evaluated by: Juan A. Lopez / Juan A. Lopez Date: 11/11/13

David Yerkes / David Yerkes 11/11/13

Status: [Y] N U

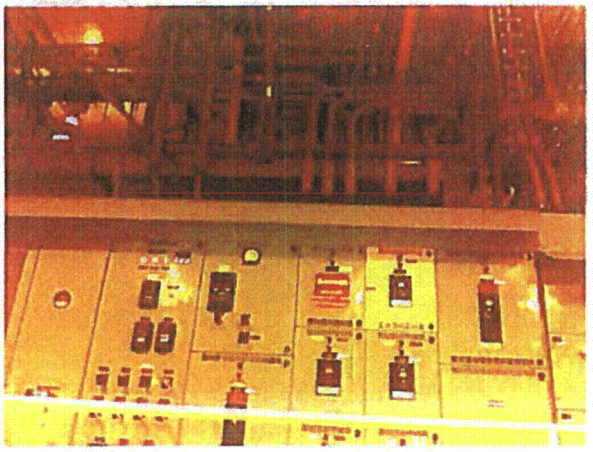
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1T-480V-SHES-SWGR

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V ENGINEERED SAFEGUARDS SCREEN HOUSE BUS 1T

Photos



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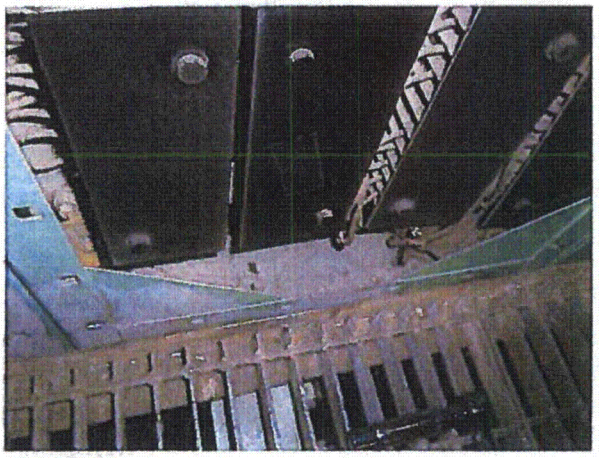
100_0506



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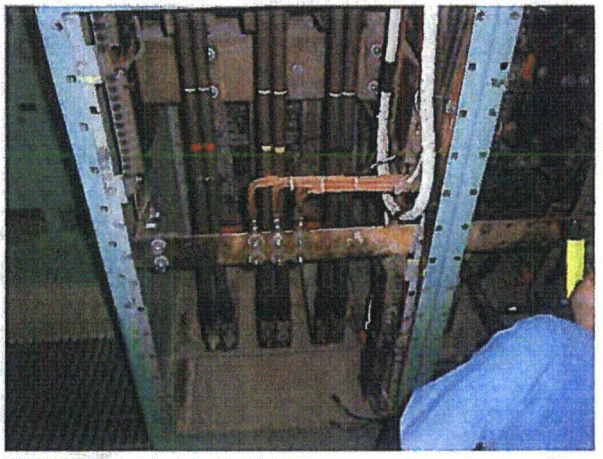


100_0520

Status: [Y] N U

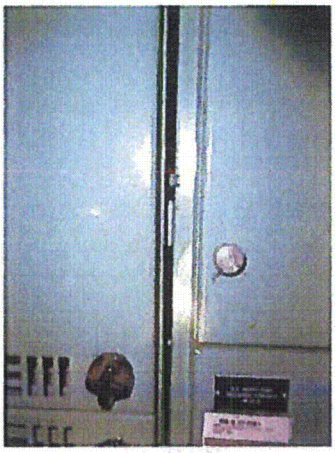
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1T-480V-SHES-SWGR

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V ENGINEERED SAFEGUARDS SCREEN HOUSE BUS 1T

Photos (Continue)



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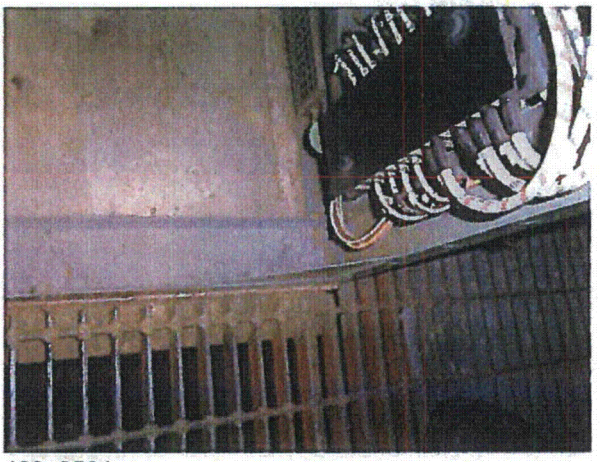

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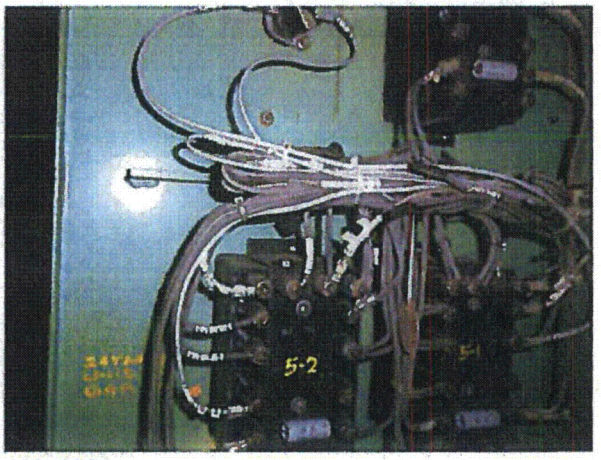
100_0547



100_0558

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 1T-480V-SWES-XFMR Equip. Class[12] (4) Transformer

Equipment Description 1T 480V Screen House ES SWGR 4160/480V XFMR

Location: Bldg. IPH Floor El. 309' Room, Area 29

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☐
   Fillet weld at each corner, transformer bolted to frame

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☑ N☐ U☐ N/A☑
   Frame welded to embeded angles

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☐

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. 1T-480V-SHES-XFMR Equip. Class[12] (4) Transformer

Equipment Description 1T 480V Screen House ES SWGR 4160/480V XFMR

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☑
   Transformer encase by enclosure (panel) is acceptable

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☐
    Front/right panel to panel connection nut not fully engage (1 of 3) is judge acceptable based on expected loads

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)

① Transformer Seismic Qualification performed under SQ-T1-1T-480V-SHES (SQUG) Rev. 1

Evaluated by: Juan A. Lopez / Juan A. Lopez Date: 11/11/13

David Yerkes / David Yerkes 11/11/13

Status: [Y] N U

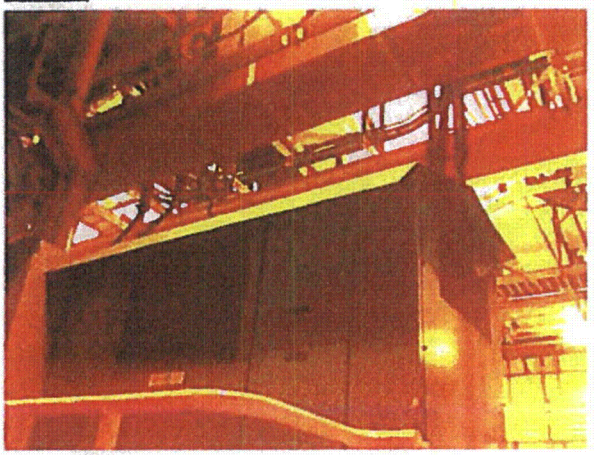
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1T-480V-SHES-XFMR

Equipment Class: (4) Transformers

Equipment Description: 1T 480V SCREEN HOUSE ES SWGR 4160/480V XFMR

Photos



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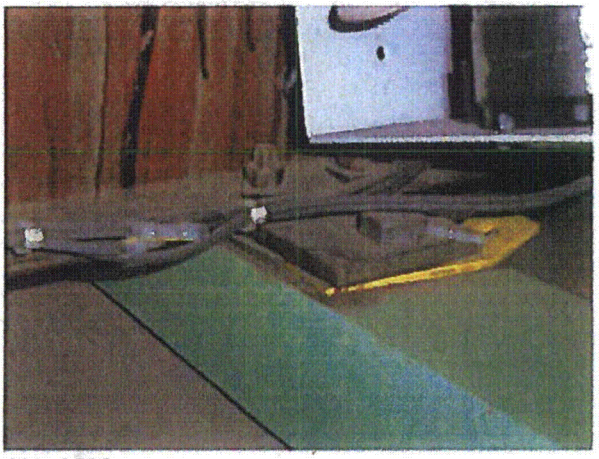
100_0487



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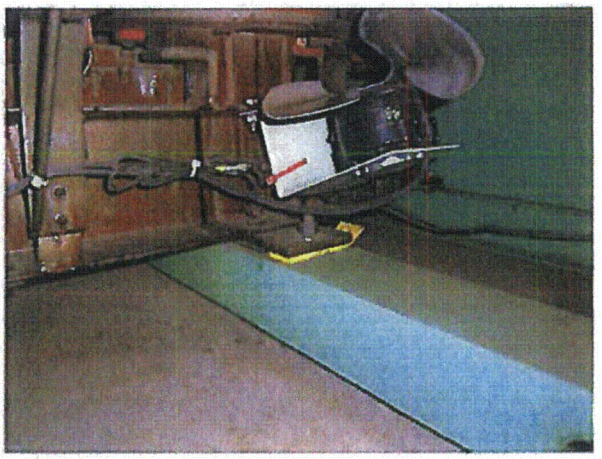


100_0493

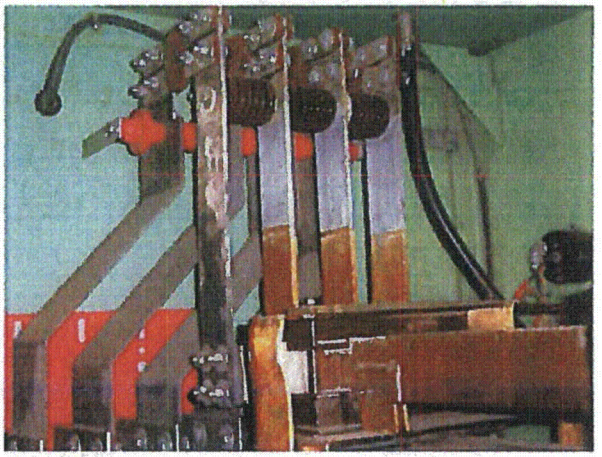
Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.:	1T-480V-SHES-XFMR
Equipment Class:	(4) Transformers
Equipment Description:	1T 480V SCREEN HOUSE ES SWGR 4160/480V XFMR

Photos (Continue)

100_0496



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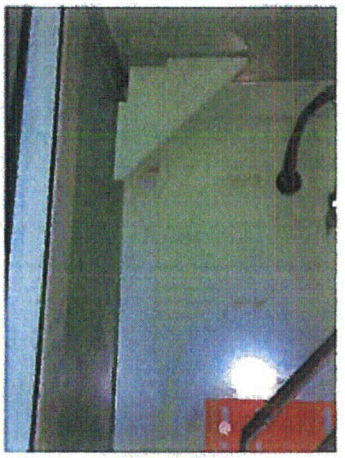
100_0500



100_0498

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: CC

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CONTROL RM CONSOLE CENTER CONTROL PANEL

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 355.00 ft, 19

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? — No

2. Is the anchorage free of bent, broken, missing or loose hardware? — Yes

   All doors/panels were opened and internal welds-to-floor were inspected. Some welds could not be seen due to cables and fire/water seals obstructing view, but the majority of welds were visible and in good condition. It is reasonable to conclude that the obstructed welds are also in good condition.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? — Yes

4. Is the anchorage free of visible cracks in the concrete near the anchors? — Yes

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.) — Not Applicable

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

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: CC

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CONTROL RM CONSOLE CENTER CONTROL PANEL

Interaction Effects

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

Other Adverse Conditions

11.	Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? *Performed internal inspection and did not find any Other Adverse Conditions.*	Yes

Comments

Equipment was verified to be in accordance with Seismic Qualification No. SQ-T1-CC, Rev 001

Instrument Calibration device was stored on top of CC panel. Removed by operations.

Cracked ceiling tile above CC. Not a Seismic interaction issue.

Evaluated by: Mark Etre Date: 11/12/2012

Seth Baker 11/12/2012

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: CC

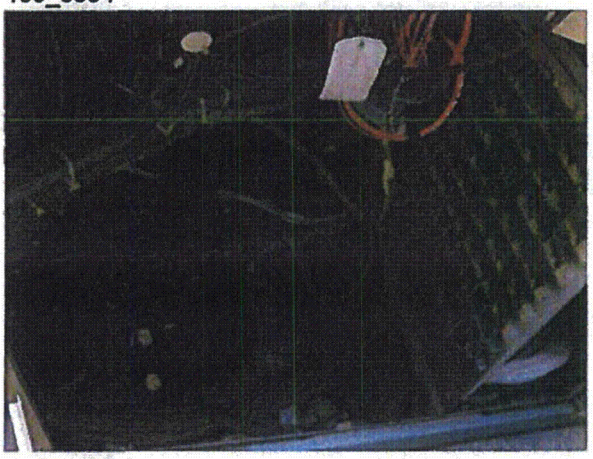
Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CONTROL RM CONSOLE CENTER CONTROL PANEL

Photos

100_3654

100_3655



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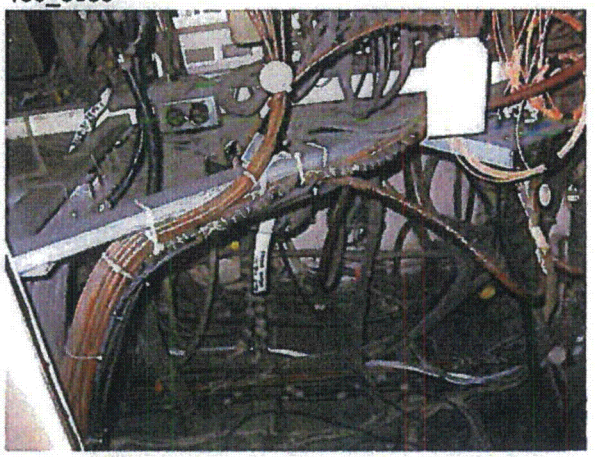


IMG_4558

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

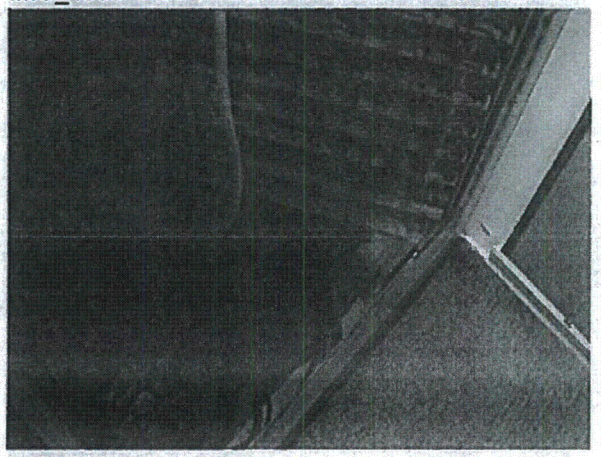
Equipment ID No.: CC

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CONTROL RM CONSOLE CENTER CONTROL PANEL

IMG_4559

IMG_4560



IMG_4561

IMG_4562

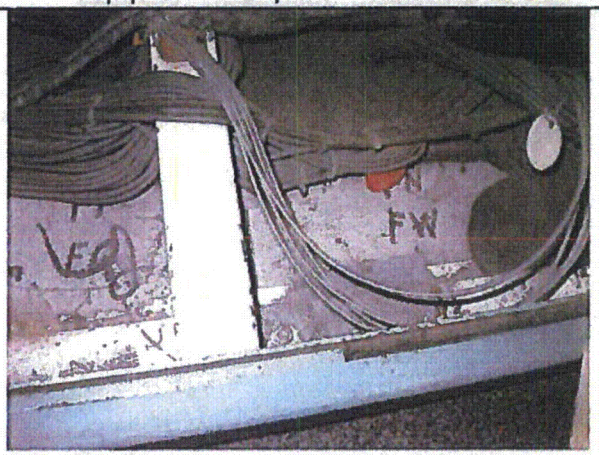
Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: CC

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CONTROL RM CONSOLE CENTER CONTROL PANEL



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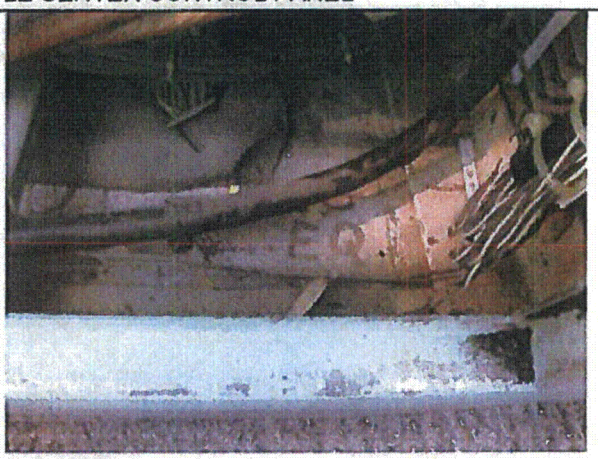

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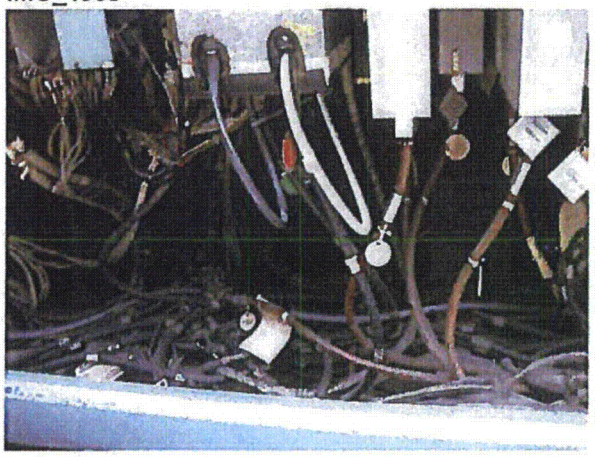

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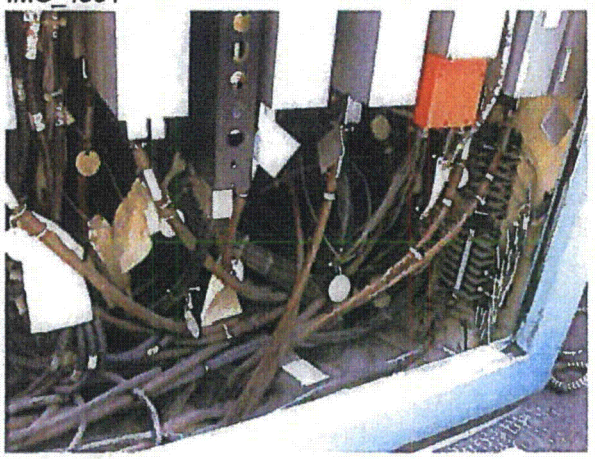


IMG_4566

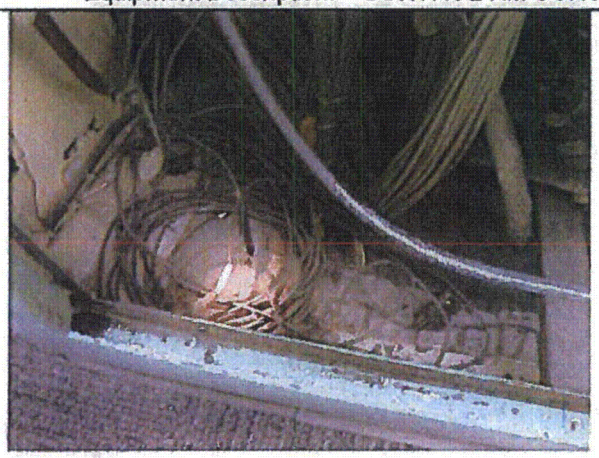
Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: CC

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CONTROL RM CONSOLE CENTER CONTROL PANEL



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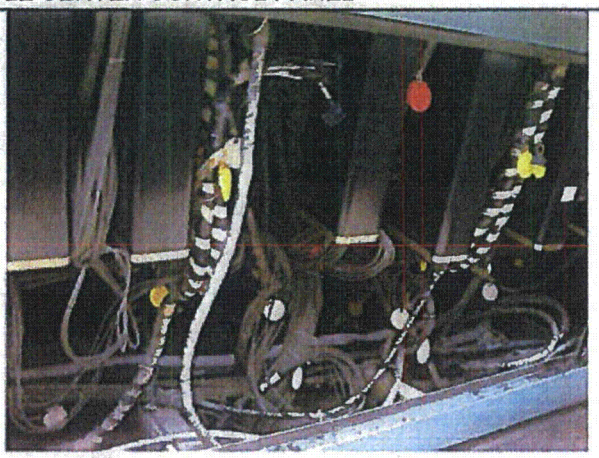


IMG_4568

Seismic Walkdown Checklist (SWC)

Equipment ID No. DH-T-0001 Equip. Class[12] (21) Tank & Heat Exchangers

Equipment Description Borated Water Storage Tank (BWST)

Location: Bldg. YD Floor El. 305' Room, Area B

Manufacturer, Model, Etc. (optional but recommended) Pittsburg, DES MOINES STEEL CO.

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☑ N☐ U☐ N/A☐
   cracks observed at grout area not at concret foundation

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☐

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

Seismic Walkdown Checklist (SWC)

Equipment ID No. DH-T-0001 Equip. Class[12] (21) Tanks and Heat Exchangers

Equipment Description BWST

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☑ N☐ U☐ N/A☐
   - Two nearby tank were evaluated as seismically adequate and does not pose an seismic interaction concern [ref. SQ-T1-DH-T-0001]
   - Two independently supported platforms around each nearby tank will have seismic interaction but it was accounted for and evaluated as acceptable per Filic Code 504.14.
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☑
   Tank is located outside
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☐

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)

- SQ-T1-DH-T-0001 Rev. 2 provides seismic verification of tank and its anchorage.
- DWG. 6-435-201 provides tanker design drawing

Evaluated by: Juan A. López / [signature] Date: 10/18/13

Dave Yerkes / [signature] 10/18/13

Status: [Y] N U

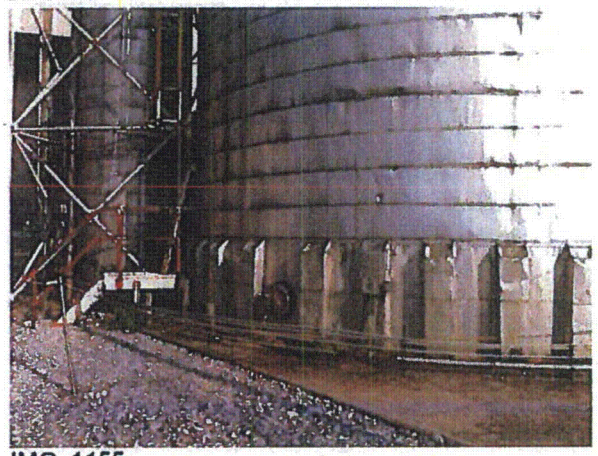
Seismic Walkdown Checklist (SWC)

Equipment ID No.: DH-T-0001

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: BWST

Photos



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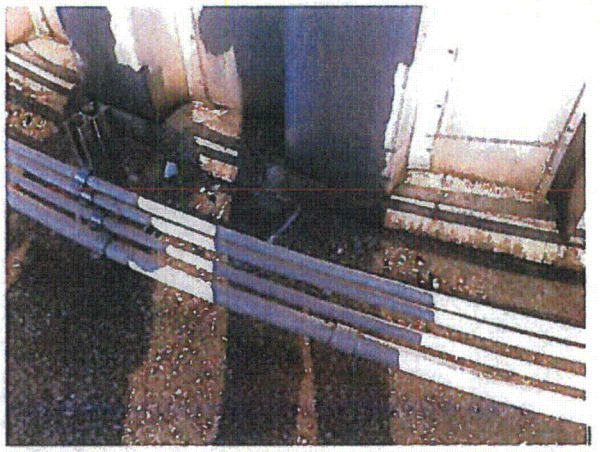

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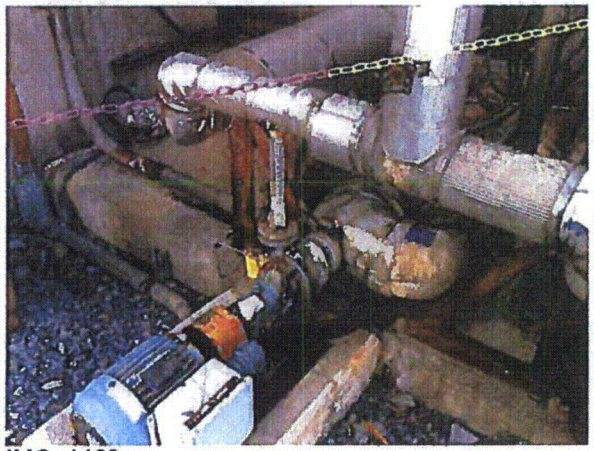


IMG_1163

DSCN1735

Status: [Y] N U

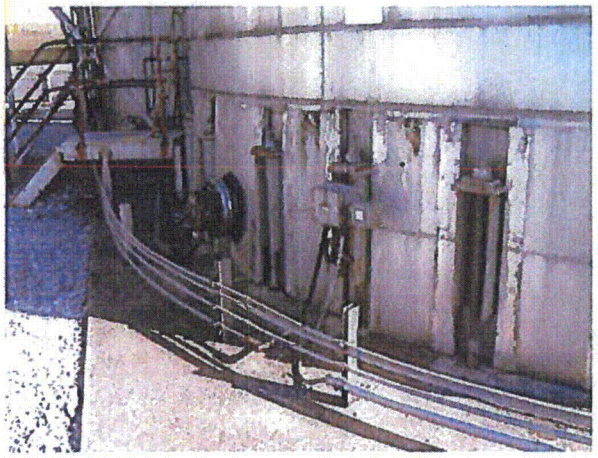
Seismic Walkdown Checklist (SWC)

Equipment ID No.: DH-T-0001

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: BWST

Photos (continue)



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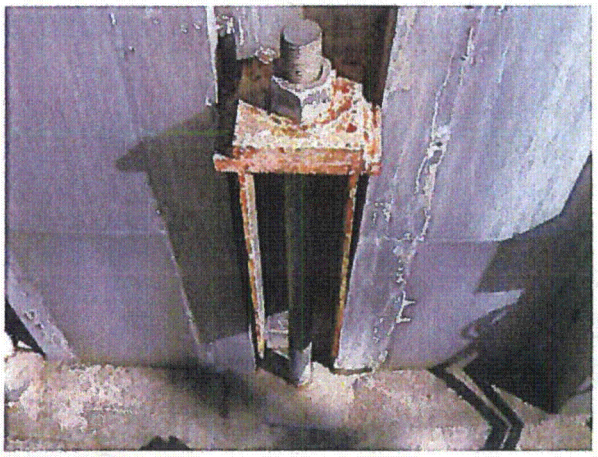
DSCN1734



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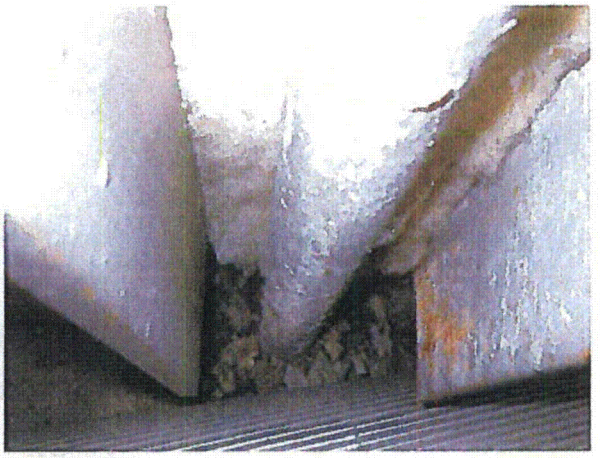


DSCN1751

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

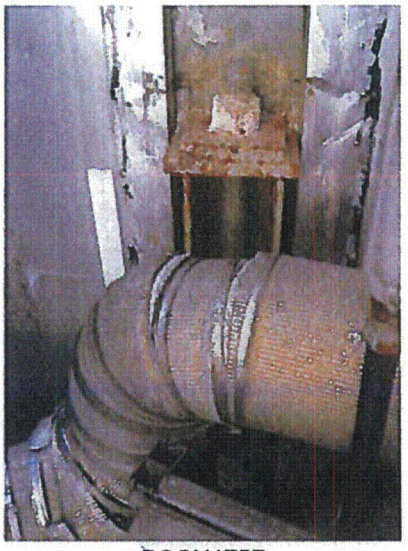
Equipment ID No.: DH-T-0001

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: BWST

Photos (continue)

DSCN1756



DSCN1757

DSCN1737

IMG_0250

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EED-PNL-1B

Equipment Class: (14) Distribution Panels

Equipment Description: 125/250V DC DIST PANEL 1B

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 322.00 ft, 18

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?	No
2.	Is the anchorage free of bent, broken, missing or loose hardware? *Kick plates were removed and welds were inspected.*	Yes
3.	Is the anchorage free of corrosion that is more than mild surface oxidation?	Yes
4.	Is the anchorage free of visible cracks in the concrete near the anchors?	Yes
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.)	Not Applicable
6.	Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Yes

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EED-PNL-1B

Equipment Class: (14) Distribution Panels

Equipment Description: 125/250V DC DIST PANEL 1B

Interaction Effects

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

Other Adverse Conditions

11.	Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? *Doors and kick plates were opened and no other Other Adverse Conditions were found inside.*	Yes

Comments

Equipment was verified to be in accordance with Seismic Qualification No. SQ-T1-1B-DC, Rev 000

Evaluated by: Mark Etre Date: 11/13/2012

Seth Baker 11/13/2012

Photos

Status: [Y] N U

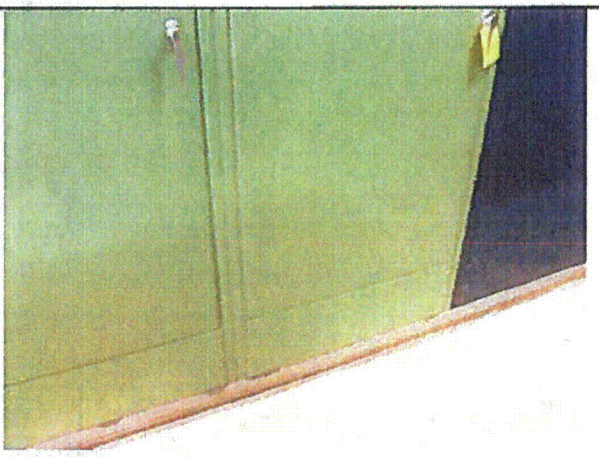
Seismic Walkdown Checklist (SWC)

Equipment ID No.: EED-PNL-1B

Equipment Class: (14) Distribution Panels

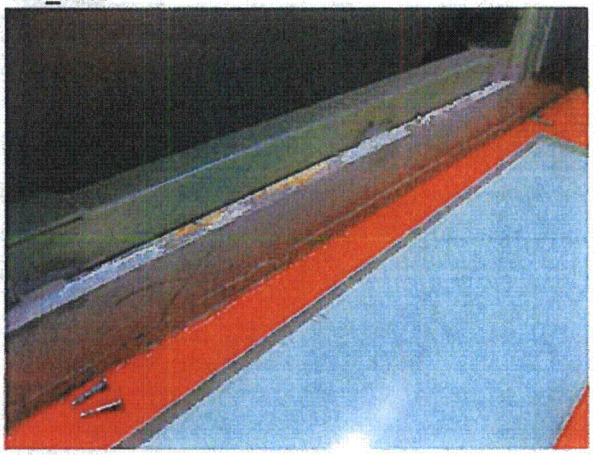
Equipment Description: 125/250V DC DIST PANEL 1B

100_3496



100_3497

100_3500



IMG_4675

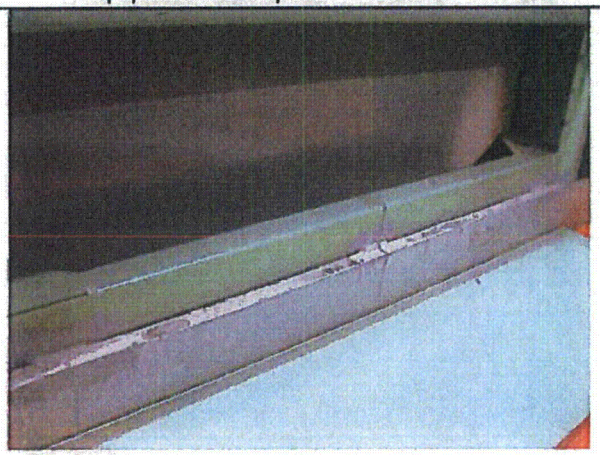
Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EED-PNL-1B

Equipment Class: (14) Distribution Panels

Equipment Description: 125/250V DC DIST PANEL 1B



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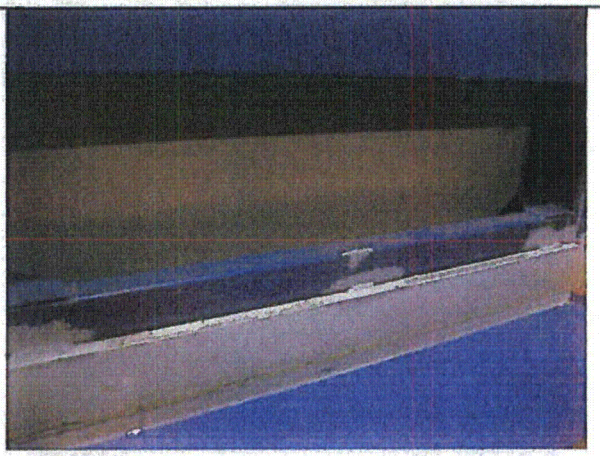

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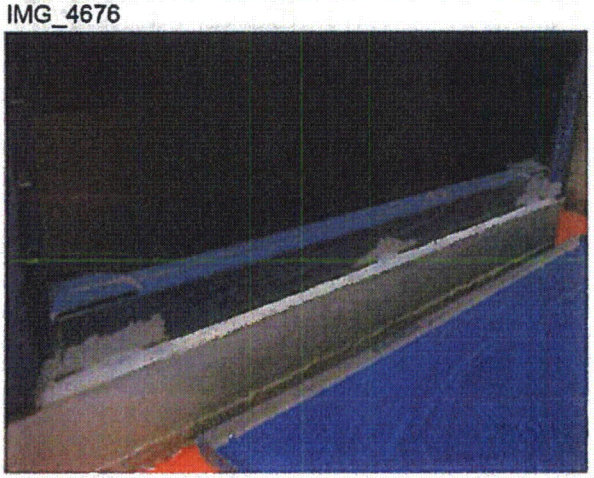

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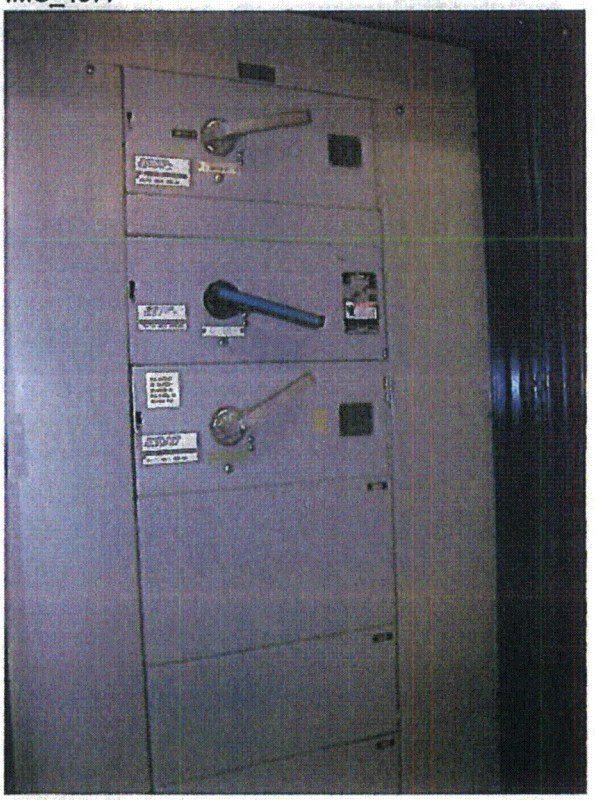


IMG_4679

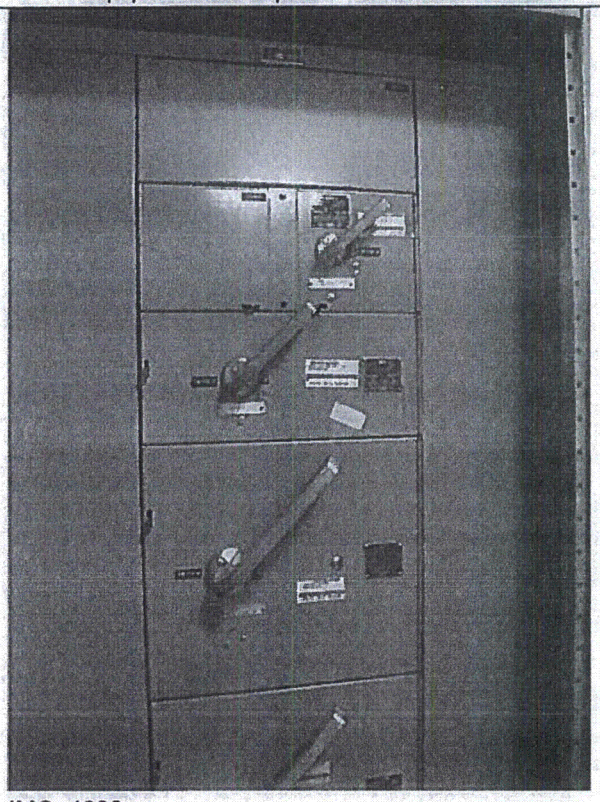
Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: EED-PNL-1B

Equipment Class: (14) Distribution Panels

Equipment Description: 125/250V DC DIST PANEL 1B



IMG_4680

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SF-P-1B-BK

Equipment Class: (1) Motor Control Centers

Equipment Description: 1B ES MCC UNIT 6A

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 322.00 ft, 18

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?	No
2.	Is the anchorage free of bent, broken, missing or loose hardware?	Not Applicable
3.	Is the anchorage free of corrosion that is more than mild surface oxidation?	Not Applicable
4.	Is the anchorage free of visible cracks in the concrete near the anchors?	Not Applicable
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.)	Not Applicable
6.	Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Yes

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: SF-P-1B-BK

Equipment Class: (1) Motor Control Centers

Equipment Description: 1B ES MCC UNIT 6A

Interaction Effects

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

Other Adverse Conditions

11.	Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? *Performed internal inspection and did not find any Other Adverse Conditions.*	Yes

Comments

See SQ-T1-1B-480V-ES, Revision 000, This component is a subcomponent of 1B-480V-ES and has no anchorage to a civil structure.

Evaluated by: Mark Etre Date: 11/13/2012

Seth Baker 11/13/2012

Status: [Y] N U

Seismic Walkdown Checklist (SWC)

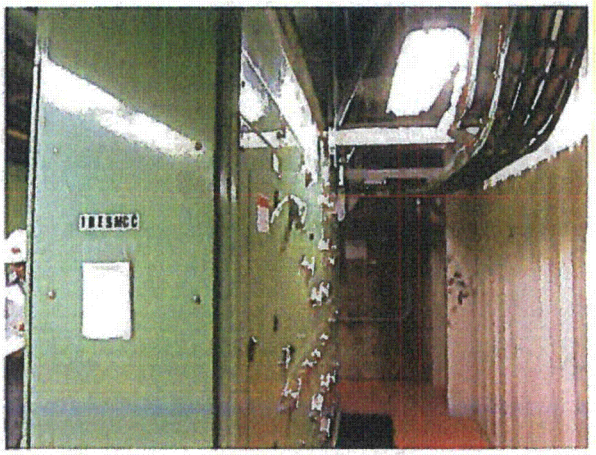
Equipment ID No.: SF-P-1B-BK

Equipment Class: (1) Motor Control Centers

Equipment Description: 1B ES MCC UNIT 6A

Photos

100_3726



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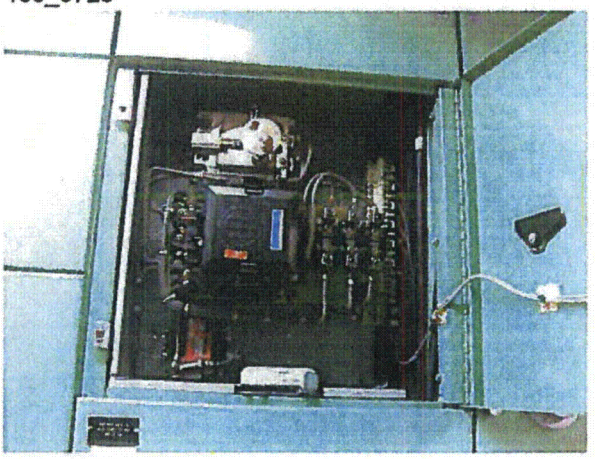


IMG_4682

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: TRB (SEE APPENDIX C PAGE C-276)

Equipment Class: (14) Distribution Panels

Equipment Description: 120V REG AC INSTR. POWER TRB

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 322.00 ft, 24 : INVERTER RM 1B

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?	-
2.	Is the anchorage free of bent, broken, missing or loose hardware?	-
3.	Is the anchorage free of corrosion that is more than mild surface oxidation?	-
4.	Is the anchorage free of visible cracks in the concrete near the anchors?	-
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.)	-
6.	Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	-

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: TRB (SEE APPENDIX C PAGE C-276)

Equipment Class: (14) Distribution Panels

Equipment Description: 120V REG AC INSTR. POWER TRB

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    - *a. Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    - *b. Are adjacent cabinets secured together?* [Y] N U
    - *c. No other adverse seismic conditions?* [Y] N U

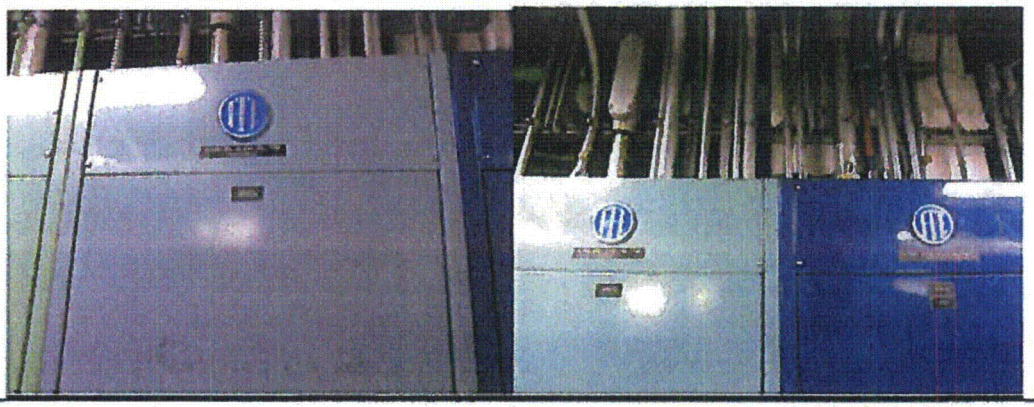
Comments

Equipment has external anchorage.

Evaluated by: Mark Etre Date: 11/12/2012

Seth Baker 11/12/2012

Photos



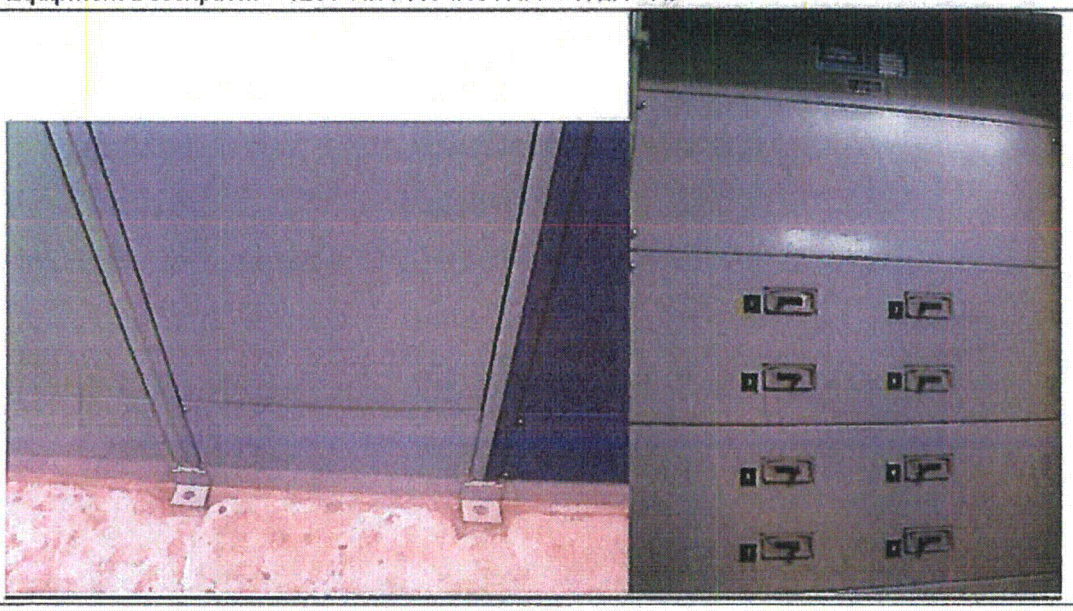
Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: TRB (SEE APPENDIX C PAGE C-276)

Equipment Class: (14) Distribution Panels

Equipment Description: 120V REG AC INSTR. POWER TRB



Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: VBD (SEE APPENDIX C PAGE C- 279)

Equipment Class: (14) Distribution Panels

Equipment Description: 120V VITAL INST DIST PANEL 1D

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 322.00 ft, 24 : INVERTER ROOM 1B

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? -
2. Is the anchorage free of bent, broken, missing or loose hardware? -
3. Is the anchorage free of corrosion that is more than mild surface oxidation? -
4. Is the anchorage free of visible cracks in the concrete near the anchors? -
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.*) -
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? -

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: VBD (SEE APPENDIX C PAGE C- 279)

Equipment Class: (14) Distribution Panels

Equipment Description: 120V VITAL INST DIST PANEL 1D

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* [Y] N U
    c. *No other adverse seismic conditions?* [Y] N U

Comments

Equipment has external anchorage.

Evaluated by: Mark Etre Date: 11/12/2012

Seth Baker 11/12/2012

Photos

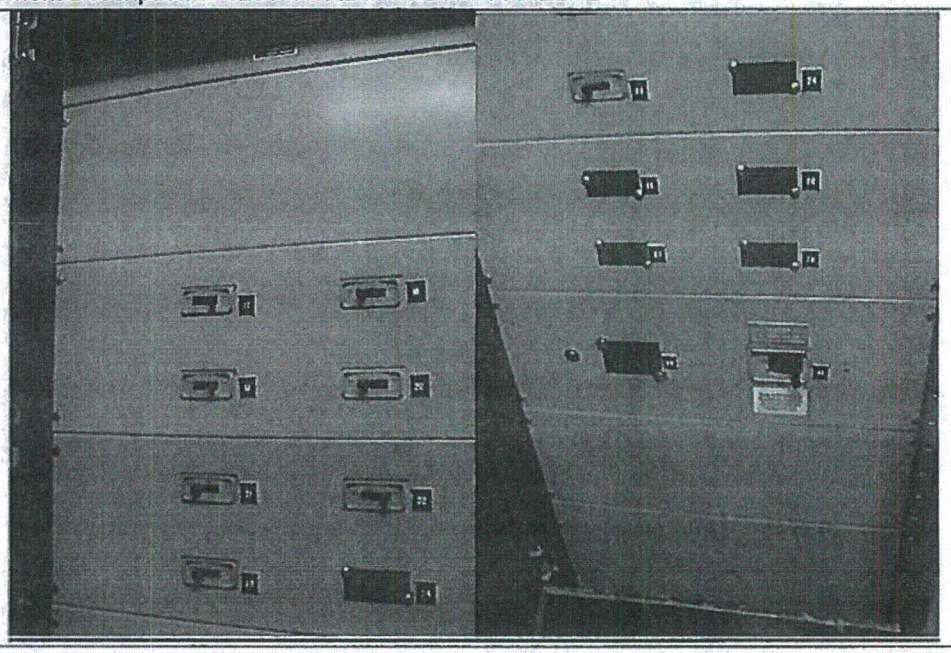
Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: VBD (SEE APPENDIX C PAGE C- 279)

Equipment Class: (14) Distribution Panels

Equipment Description: 120V VITAL INST DIST PANEL 1D



Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: EE-INV-1B (SEE APPENDIX C PAGE C-103)

Equipment Class: (16) Inverters

Equipment Description: INVERTER 1B ELEL6

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 322.00 ft, 24 : INVERTER ROOM B

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? -
2. Is the anchorage free of bent, broken, missing or loose hardware? -
3. Is the anchorage free of corrosion that is more than mild surface oxidation? -
4. Is the anchorage free of visible cracks in the concrete near the anchors? -
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.) -
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? -

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: EE-INV-1B (SEE APPENDIX C PAGE C-103)

Equipment Class: (16) Inverters

Equipment Description: INVERTER 1B ELEL6

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* Not Applicable
    c. *No other adverse seismic conditions?* [Y] N U

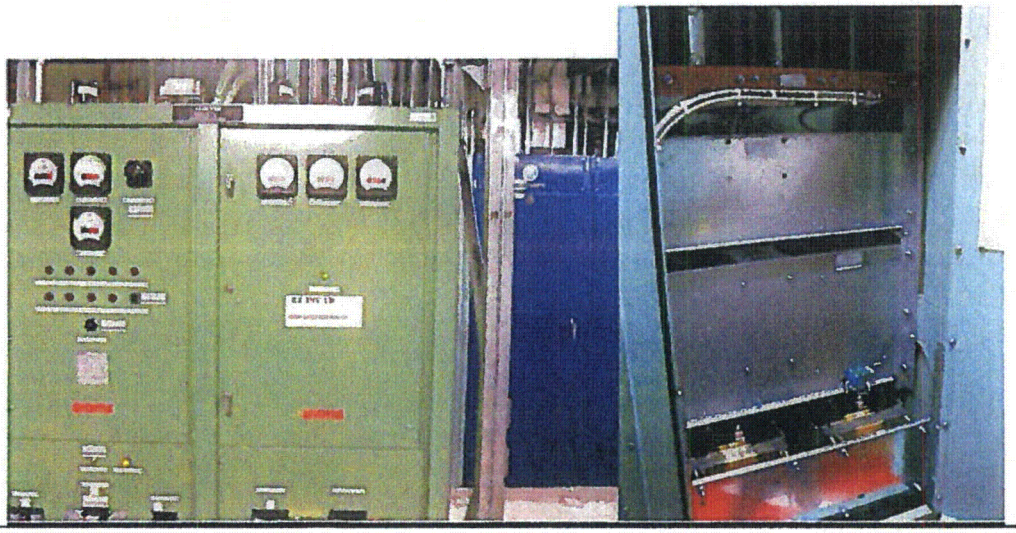
Comments

Equipment has external anchorage.

Evaluated by: Mark S Etre Mark Etre Date: 11/14/2012

Seth Baker Seth Baker 11/14/2012

Photos



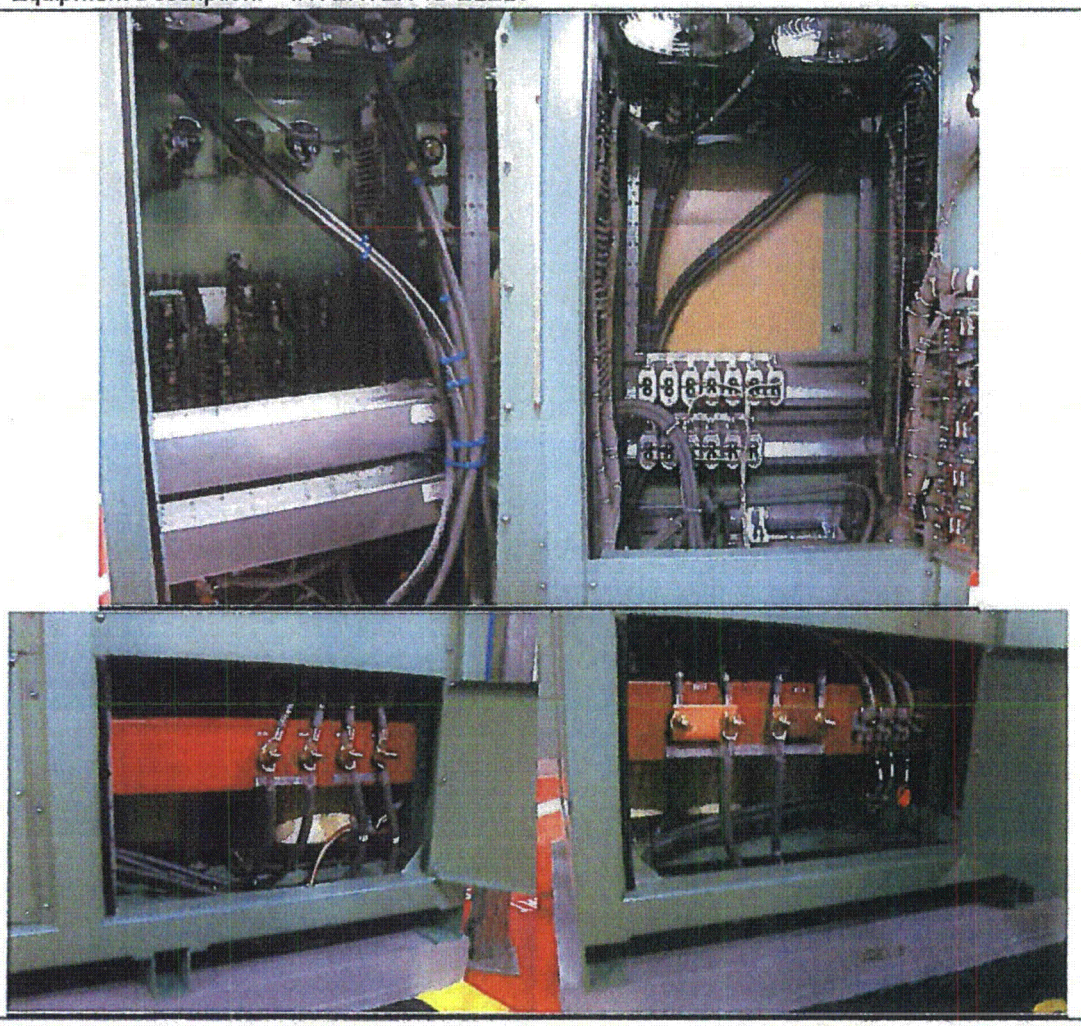
Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: EE-INV-1B (SEE APPENDIX C PAGE C-103)

Equipment Class: (16) Inverters

Equipment Description: INVERTER 1B ELEL6



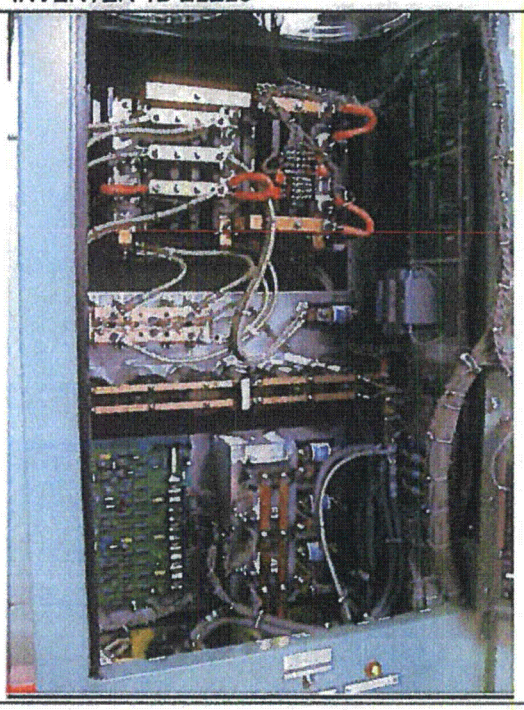
Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: EE-INV-1B (SEE APPENDIX C PAGE C-103)

Equipment Class: (16) Inverters

Equipment Description: INVERTER 1B ELEL6



Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: EE-INV-1F (SEE APPENDIX C PAGE C-106)
Equipment Class: (16) Inverters
Equipment Description: 1F INVERTER
Project: TMI SWEL
Location (Bldg, Elev, Room/Area): CB, 322.00 ft, 24 : CONTROL TWR 322: A INVERTER ROOM
Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? -
2. Is the anchorage free of bent, broken, missing or loose hardware? -
3. Is the anchorage free of corrosion that is more than mild surface oxidation? -
4. Is the anchorage free of visible cracks in the concrete near the anchors? -
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.) -
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? -

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: EE-INV-1F (SEE APPENDIX C PAGE C-106)

Equipment Class: (16) Inverters

Equipment Description: 1F INVERTER

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* Not Applicable
    c. *No other adverse seismic conditions?* [Y] N U

Comments

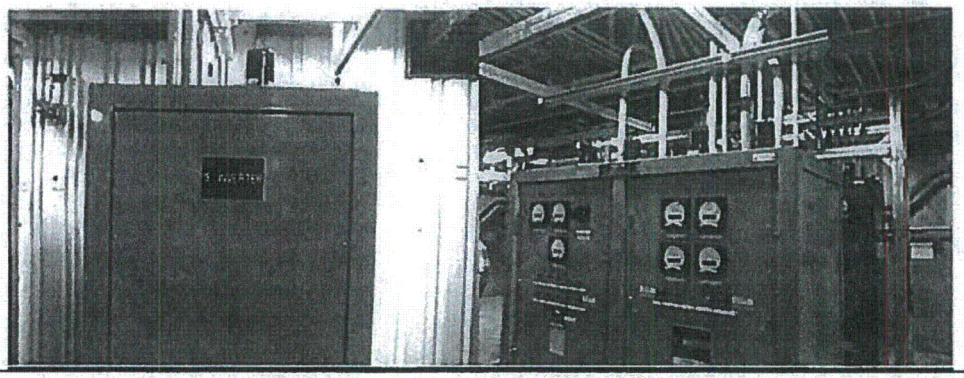
Equipment has external anchorage.

The upper right nut for the power terminal board restraint (rear panel) on the 1F Inverter is not fully engaged. This is one (1) nut out of four (4) nuts total that supports the board. Based on the engineering inspection there is reasonable assurance that the remaining three (3) nuts provides adequate restraint of the board to preclude any seismic interaction concern. The remaining three nuts were observed to be adequately tight and engaged. This is being tracked under IR 01439548.

Evaluated by: Mark S Etre Mark Etre Date: 11/13/2012

Seth Baker Seth Baker 11/13/2012

Photos



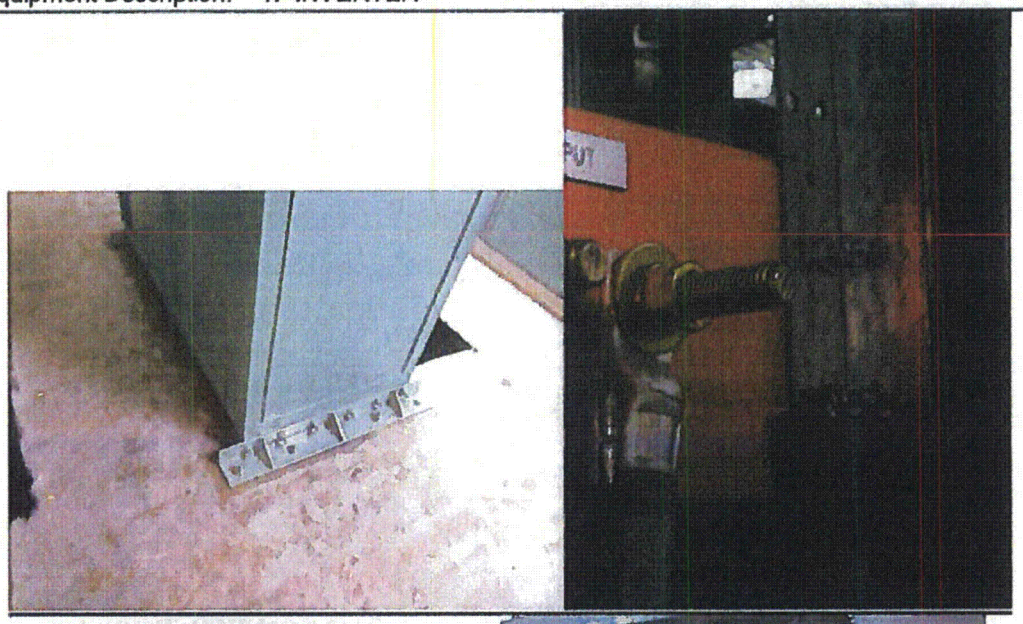
Status: [Y] N U

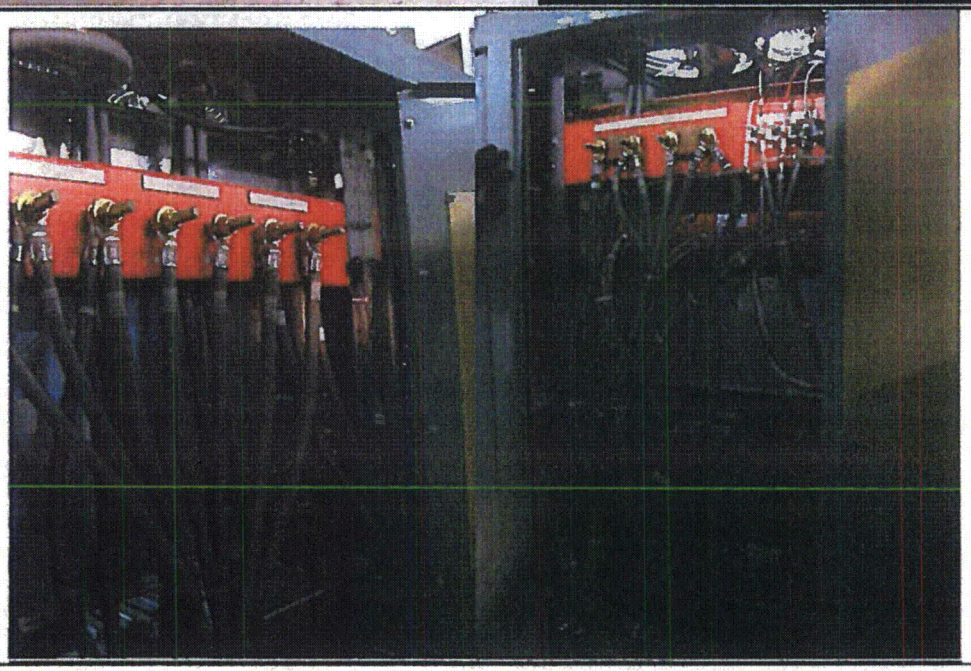
Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: EE-INV-1F (SEE APPENDIX C PAGE C-106)

Equipment Class: (16) Inverters

Equipment Description: 1F INVERTER





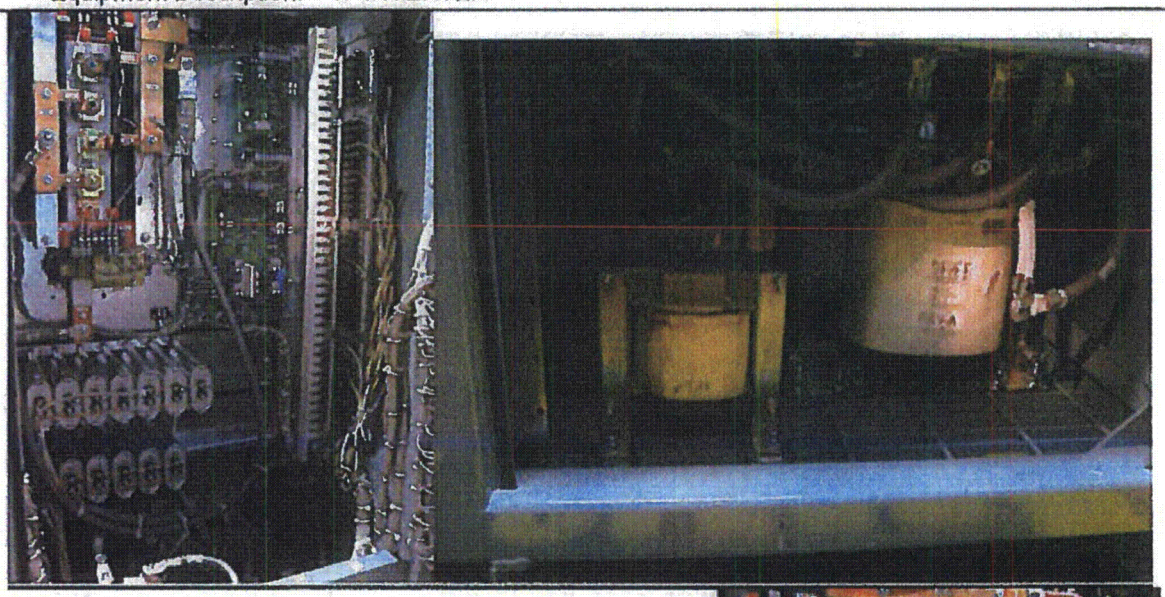
Status: [Y] N U

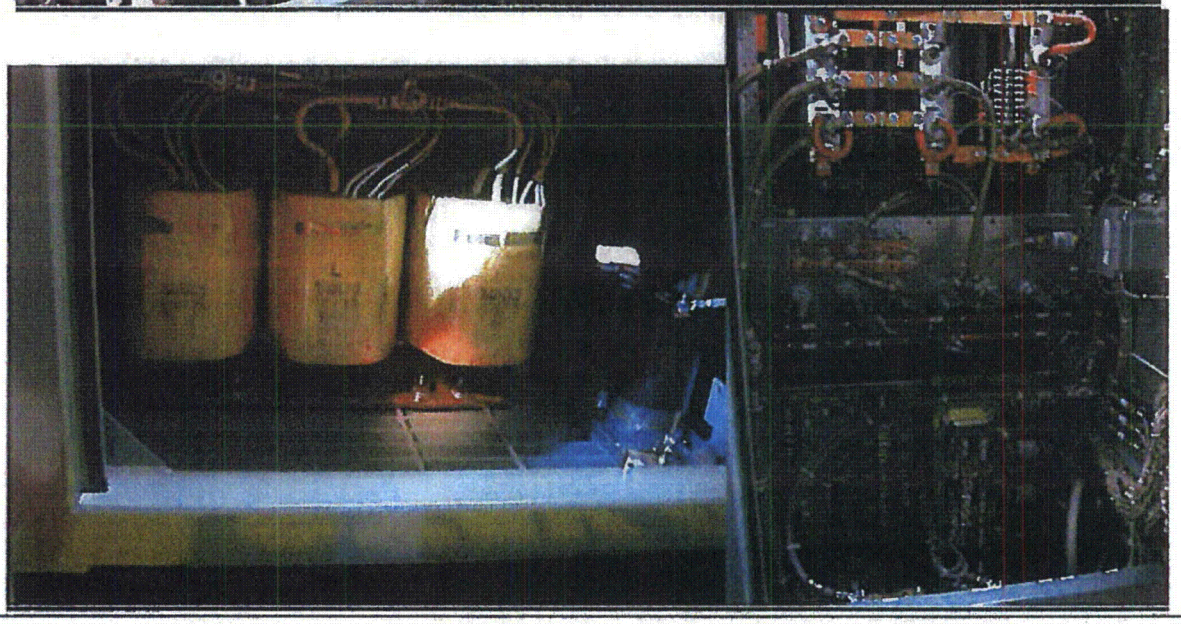
Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: EE-INV-1F (SEE APPENDIX C PAGE C-106)

Equipment Class: (16) Inverters

Equipment Description: 1F INVERTER





Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 1B (SEE APPENDIX C PAGE C-7)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ENGINEERED SAFEGUARDS CABINET 1B

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 338.50 ft, 20 : ESAS CABINET ROOM

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? -
2. Is the anchorage free of bent, broken, missing or loose hardware? -
3. Is the anchorage free of corrosion that is more than mild surface oxidation? -
4. Is the anchorage free of visible cracks in the concrete near the anchors? -
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.) -
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? -

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 1B (SEE APPENDIX C PAGE C-7)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ENGINEERED SAFEGUARDS CABINET 1B

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* [Y] N U
    c. *No other adverse seismic conditions?* [Y] N U

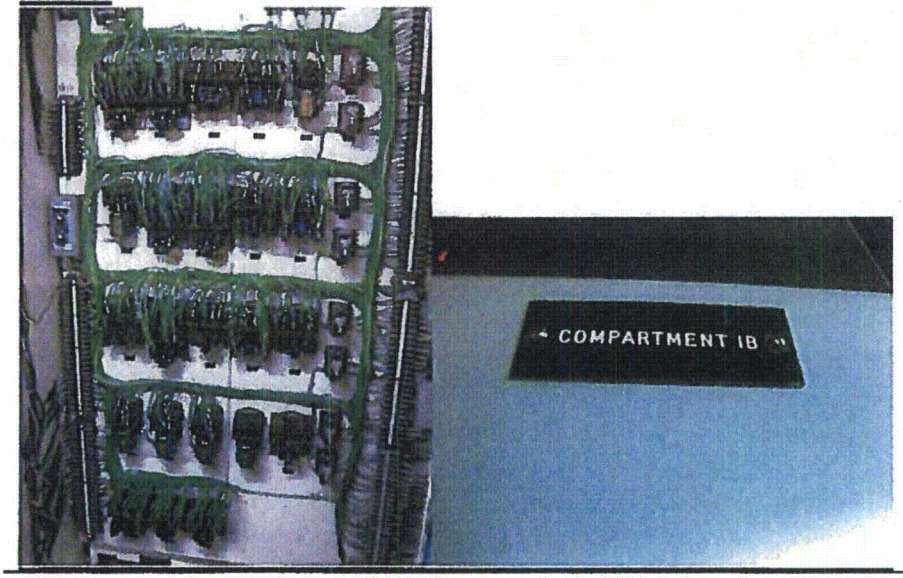
Comments

Equipment has external anchorage.

Evaluated by: Mark Etre Date: 11/12/2012

Seth Baker 11/12/2012

Photos:



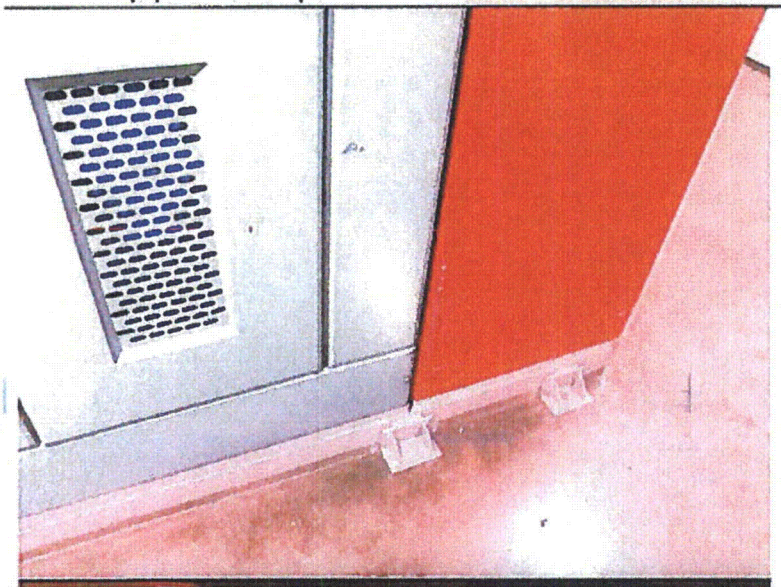
Status: [Y] N U

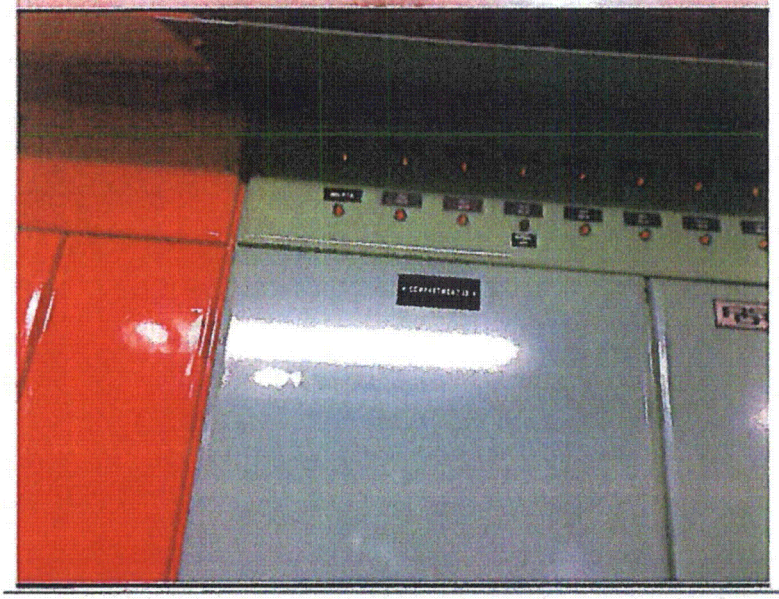
Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 1B (SEE APPENDIX C PAGE C-7)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ENGINEERED SAFEGUARDS CABINET 1B





Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 3B (SEE APPENDIX C PAGE C-13)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ESAS ACTUATION CABINET 3B

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 338.50 ft, 20 : ESAS CABINET AREA

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? -
2. Is the anchorage free of bent, broken, missing or loose hardware? -
3. Is the anchorage free of corrosion that is more than mild surface oxidation? -
4. Is the anchorage free of visible cracks in the concrete near the anchors? -
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.) -
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? -

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 3B (SEE APPENDIX C PAGE C-13)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ESAS ACTUATION CABINET 3B

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* [Y] N U
    c. *No other adverse seismic conditions?* [Y] N U

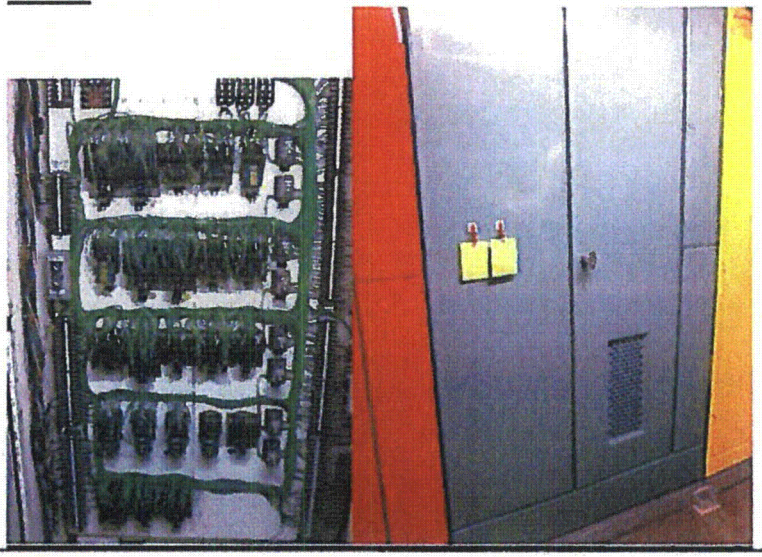
Comments

Equipment has external anchorage.

Evaluated by: Mark Etre Date: 11/12/2012

Seth Baker 11/12/2012

Photos



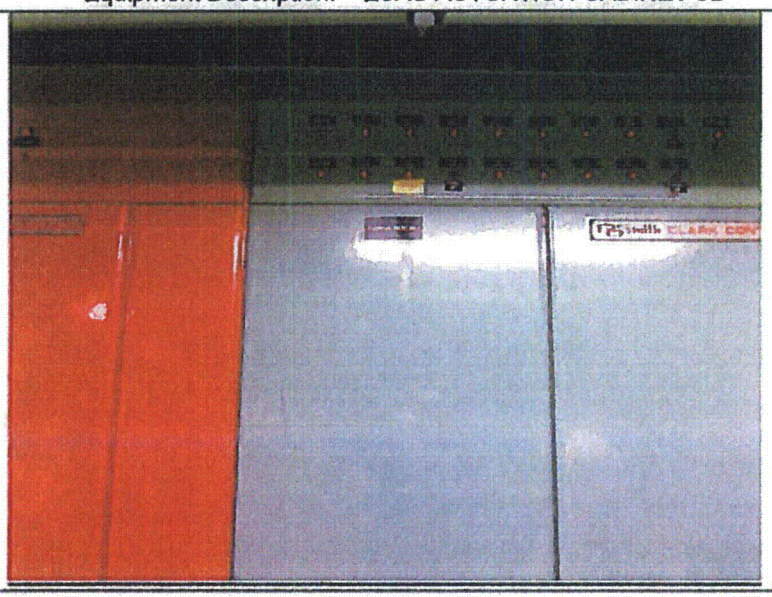
Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 3B (SEE APPENDIX C PAGE C-13)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ESAS ACTUATION CABINET 3B



Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 4B (SEE APPENDIX C PAGE C-16)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ESAS ACTUATION CABINET 4B

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 338.50 ft, 20 : ESAS CABINET AREA

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? -
2. Is the anchorage free of bent, broken, missing or loose hardware? -
3. Is the anchorage free of corrosion that is more than mild surface oxidation? -
4. Is the anchorage free of visible cracks in the concrete near the anchors? -
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.) -
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? -

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 4B (SEE APPENDIX C PAGE C-16)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ESAS ACTUATION CABINET 4B

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    - a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    - b. *Are adjacent cabinets secured together?* [Y] N U
    - c. *No other adverse seismic conditions?* [Y] N U

Comments

Equipment has external anchorage.

Evaluated by: Mark Etre Date: 11/12/2012

Seth Baker 11/12/2012

Photos

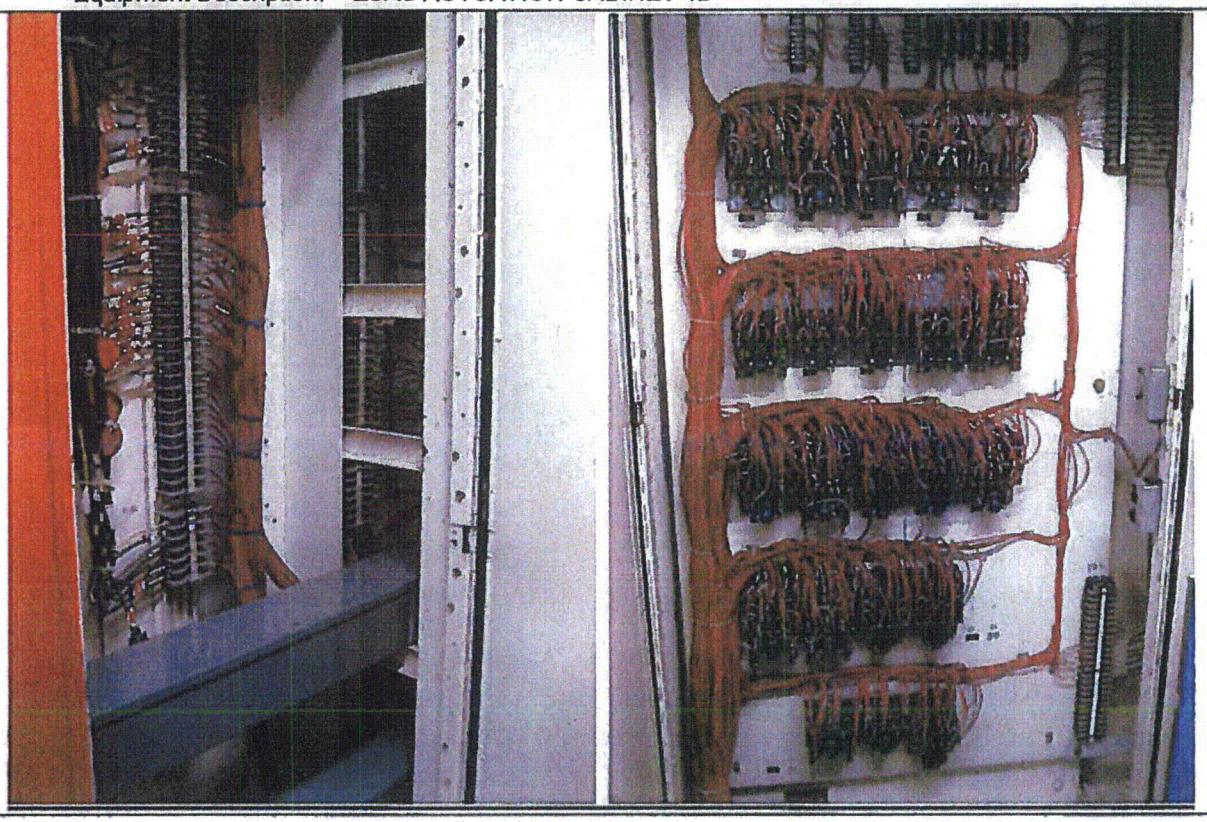
Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 4B (SEE APPENDIX C PAGE C-16)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ESAS ACTUATION CABINET 4B



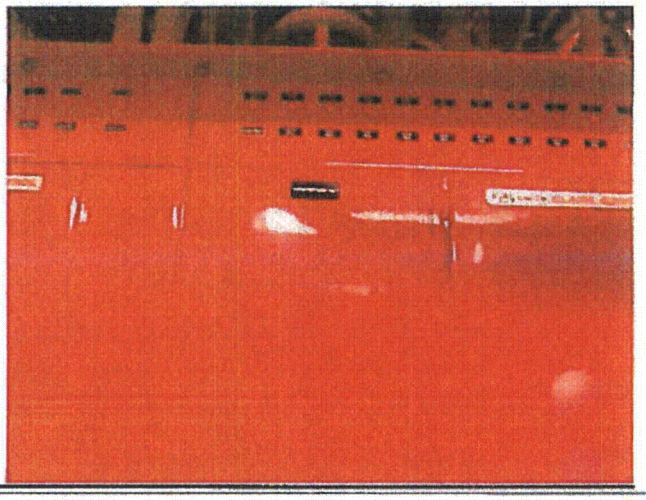
Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 4B (SEE APPENDIX C PAGE C-16)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ESAS ACTUATION CABINET 4B



Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 5B (SEE APPENDIX C PAGE C-19)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ESAS ACTUATION CABINET 5B

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 338.50 ft, 20 : ESAS CABINET AREA

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?	-
2.	Is the anchorage free of bent, broken, missing or loose hardware?	-
3.	Is the anchorage free of corrosion that is more than mild surface oxidation?	-
4.	Is the anchorage free of visible cracks in the concrete near the anchors?	-
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.)	-
6.	Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	-

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 5B (SEE APPENDIX C PAGE C-19)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ESAS ACTUATION CABINET 5B

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* [Y] N U
    c. *No other adverse seismic conditions?* [Y] N U

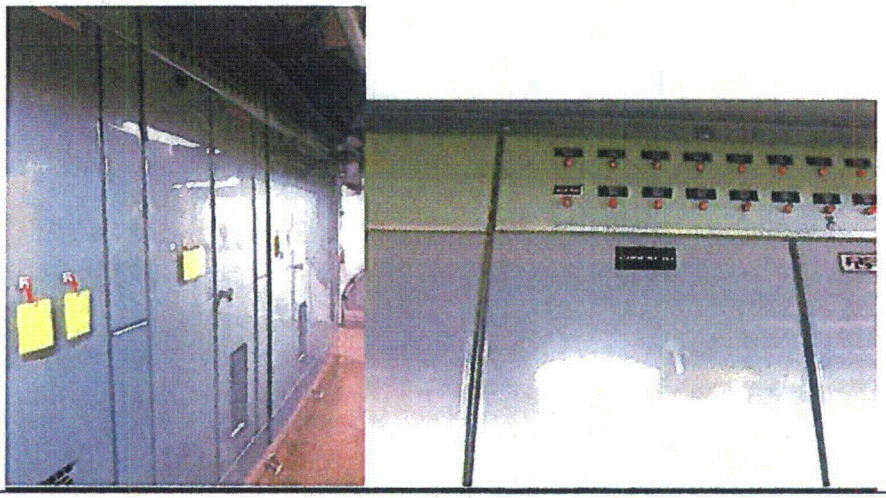
Comments

Equipment has external anchorage.

Evaluated by: Mark Etre Date: 11/12/2012

Seth Baker 11/12/2012

Photos



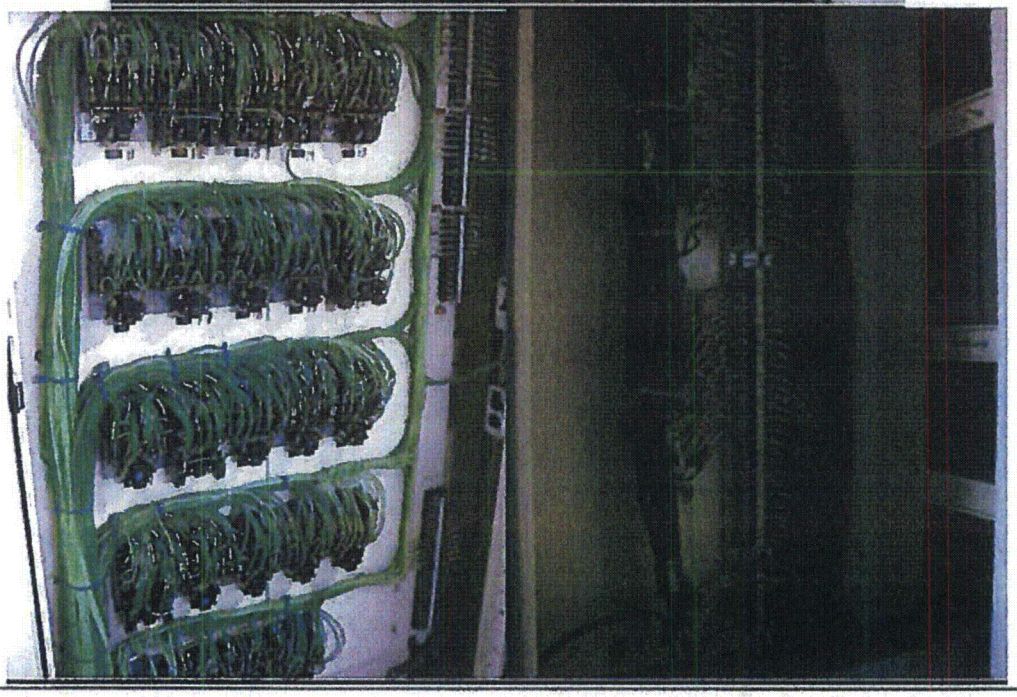
Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: 5B (SEE APPENDIX C PAGE C-19)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ESAS ACTUATION CABINET 5B



Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: BS-PS-0933 (SEE APPENDIX C PAGE C-48)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: RB PRESSURE SWITCH FOR ESAS ACTUATION

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): AB, 305.00 ft, 13 : ON RB WALL ABOVE IC-F-1A

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?	-
2.	Is the anchorage free of bent, broken, missing or loose hardware?	-
3.	Is the anchorage free of corrosion that is more than mild surface oxidation?	-
4.	Is the anchorage free of visible cracks in the concrete near the anchors?	-
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.)	-
6.	Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	-

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: BS-PS-0933 (SEE APPENDIX C PAGE C-48)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: RB PRESSURE SWITCH FOR ESAS ACTUATION

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* Not Applicable
    c. *No other adverse seismic conditions?* [Y] N U

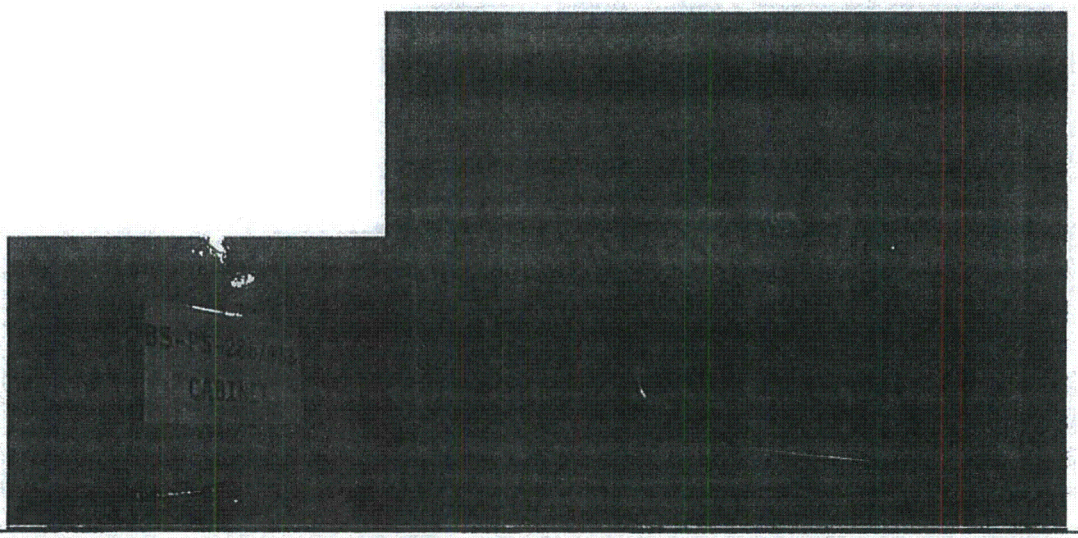
Comments

Equipment has external anchorage.

Evaluated by: Mark Etre Date: 11/13/2012

Seth Baker 11/13/2012

Photos



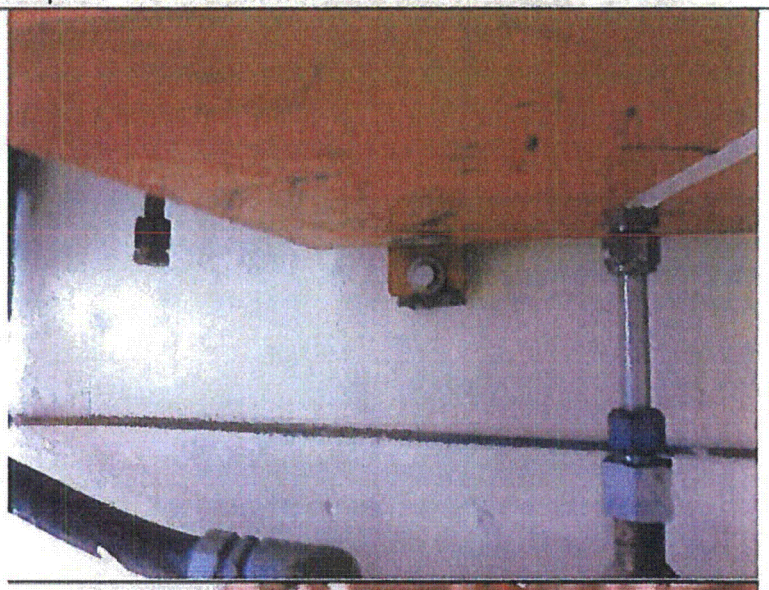
Status: [Y] N U

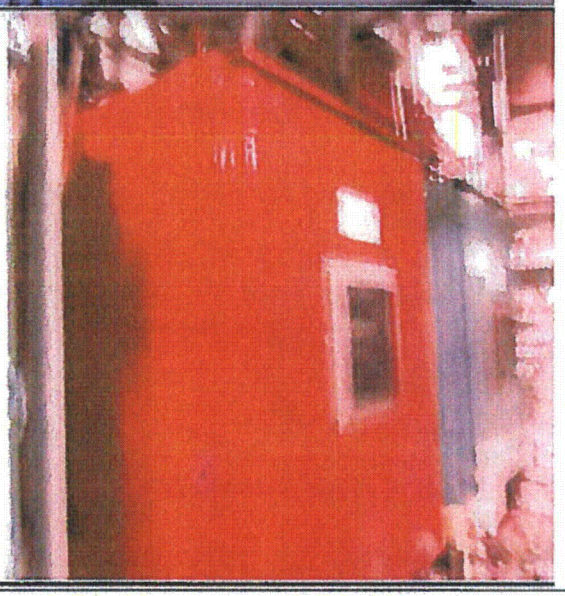
Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: BS-PS-0933 (SEE APPENDIX C PAGE C-48)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: RB PRESSURE SWITCH FOR ESAS ACTUATION





Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: CRD-CB-1D (SEE APPENDIX C PAGE C- 67)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CRD CIRCUIT BREAKER 1D

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 338.50 ft, 27 : PATIO ROOM, ELEVATION 338'

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?	-
2.	Is the anchorage free of bent, broken, missing or loose hardware?	-
3.	Is the anchorage free of corrosion that is more than mild surface oxidation?	-
4.	Is the anchorage free of visible cracks in the concrete near the anchors?	-
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.)	-
6.	Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	-

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: CRD-CB-1D (SEE APPENDIX C PAGE C- 67)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CRD CIRCUIT BREAKER 1D

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* [Y] N U
    c. *No other adverse seismic conditions?* [Y] N U

Comments

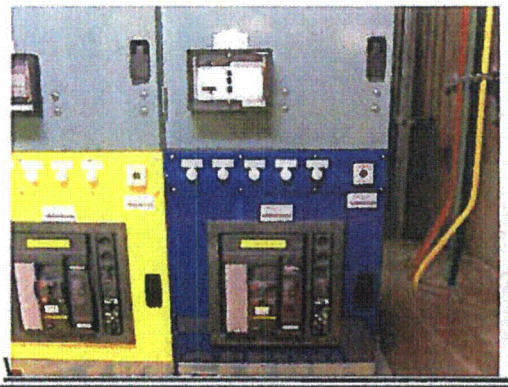
Equipment has external anchorage.

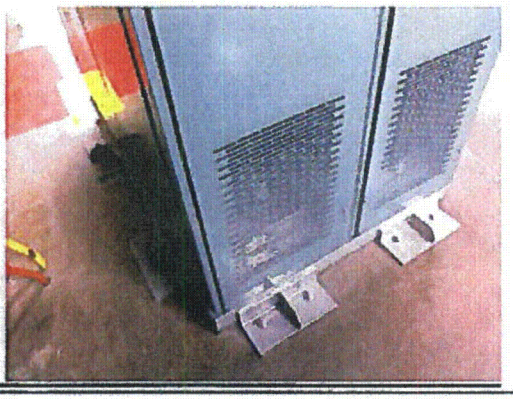
Back panel of the breaker consisted of large grating that provided suitable view of the internals.

Evaluated by: Mark Etre Date: 11/12/2012

Seth Baker 11/12/2012

Photos





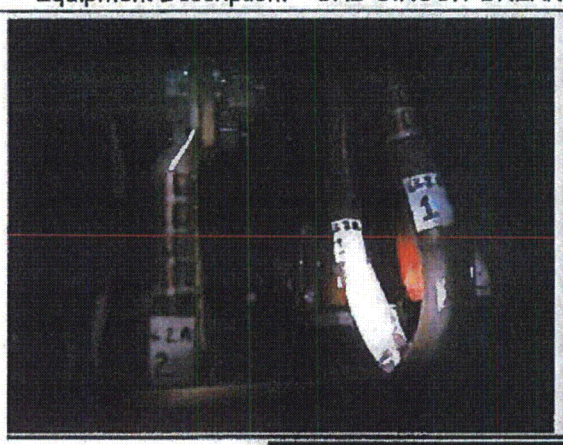
Status: [Y] N U

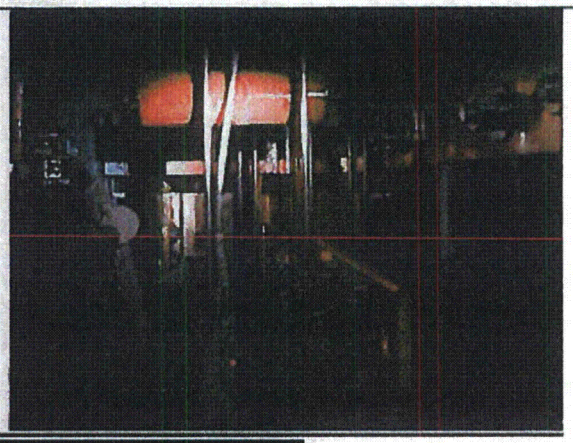
Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: CRD-CB-1D (SEE APPENDIX C PAGE C- 67)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CRD CIRCUIT BREAKER 1D





Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: EE-PNL-VBB (SEE APPENDIX C PAGE C-109)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: VBB 120 VAC PANEL

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 322.00 ft, 24 : CONTROL TWR 322: B INVERTER ROOM

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? -
2. Is the anchorage free of bent, broken, missing or loose hardware? -
3. Is the anchorage free of corrosion that is more than mild surface oxidation? -
4. Is the anchorage free of visible cracks in the concrete near the anchors? -
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.) -
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? -

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: EE-PNL-VBB (SEE APPENDIX C PAGE C-109)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: VBB 120 VAC PANEL

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* [Y] N U
    c. *No other adverse seismic conditions?* [Y] N U

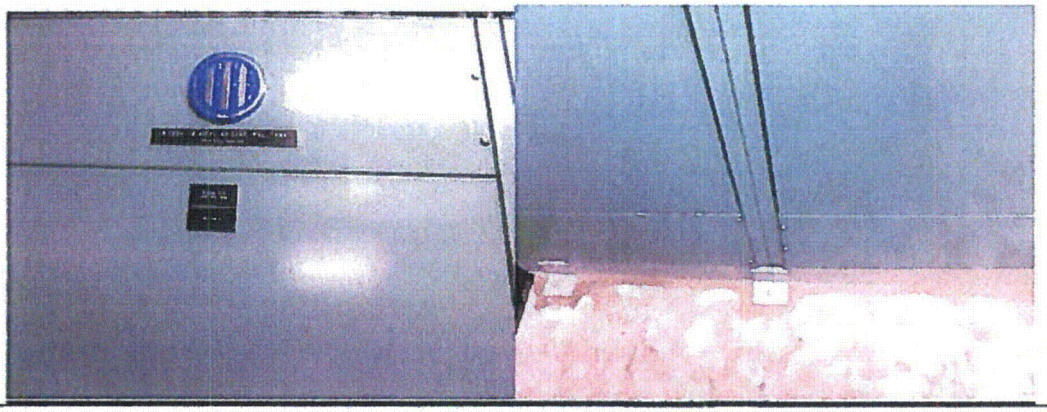
Comments

Equipment has external anchorage.

Evaluated by: Mark Etre Date: 11/12/2012

Seth Baker 11/12/2012

Photos



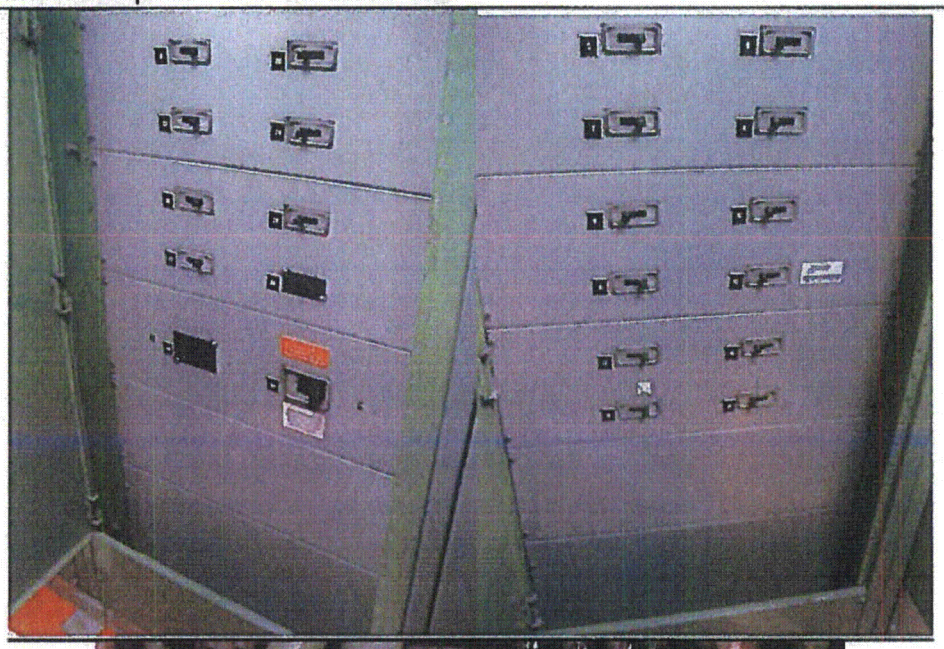
Status: [Y] N U

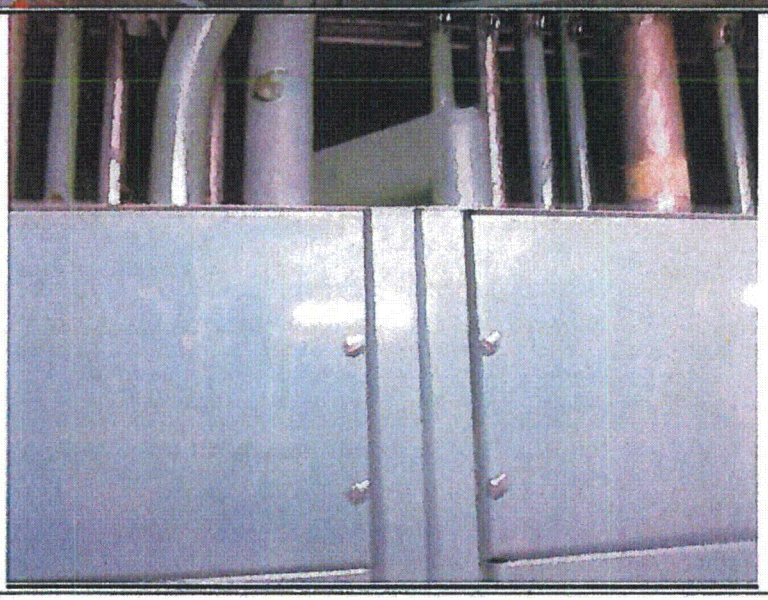
Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: EE-PNL-VBB (SEE APPENDIX C PAGE C-109)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: VBB 120 VAC PANEL





Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: HSPS-CH-2 (SEE APPENDIX C PAGE C-149)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: HSPS CHANNEL 2

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 338.50 ft, 27 : CONTROL TWR 338: PATIO

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? -
2. Is the anchorage free of bent, broken, missing or loose hardware? -
3. Is the anchorage free of corrosion that is more than mild surface oxidation? -
4. Is the anchorage free of visible cracks in the concrete near the anchors? -
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.) -
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? -

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: HSPS-CH-2 (SEE APPENDIX C PAGE C-149)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: HSPS CHANNEL 2

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* [Y] N U
    c. *No other adverse seismic conditions?* [Y] N U

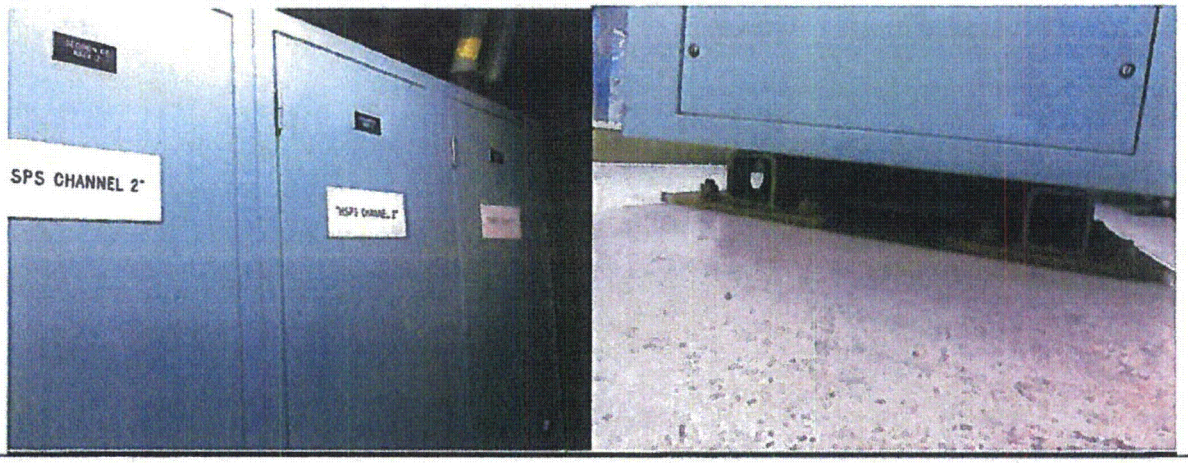
Comments

Equipment has external anchorage.

Evaluated by: Mark Etre Date: 11/12/2012

Seth Baker 11/12/2012

Photos



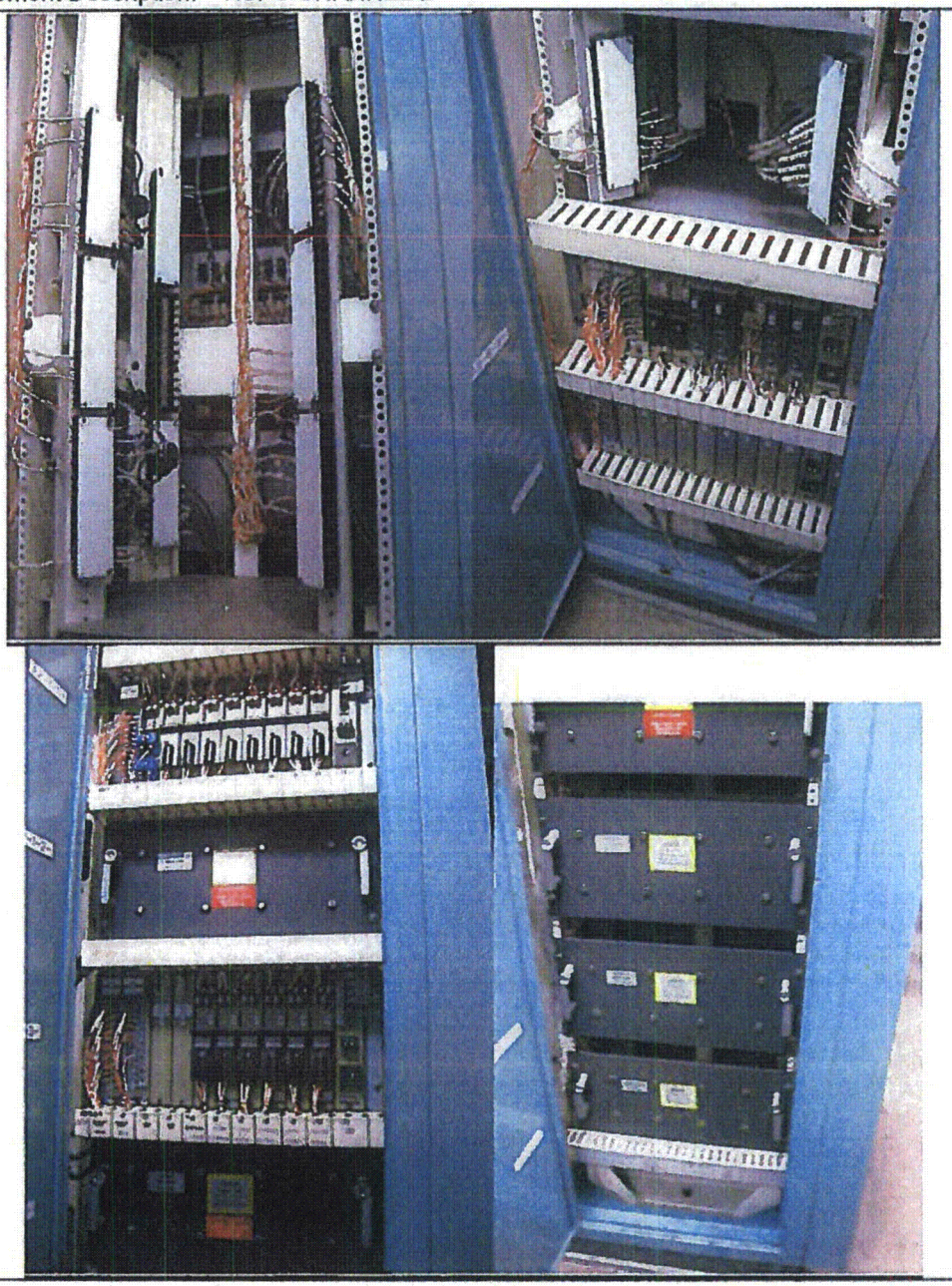
Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: HSPS-CH-2 (SEE APPENDIX C PAGE C-149)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: HSPS CHANNEL 2



Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: HSPS-CH-2 (SEE APPENDIX C PAGE C-149)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: HSPS CHANNEL 2

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: RR-S-1B (SEE APPENDIX C PAGE C-222)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: RR-S-1B CONTROL PANEL

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): IPH, 305.00 ft, 29 : RIVER WATER PUMP ROOM 'B' SOUTH CUBICLE

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? -
2. Is the anchorage free of bent, broken, missing or loose hardware? -
3. Is the anchorage free of corrosion that is more than mild surface oxidation? -
4. Is the anchorage free of visible cracks in the concrete near the anchors? -
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.) -
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? -

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: RR-S-1B (SEE APPENDIX C PAGE C-222)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: RR-S-1B CONTROL PANEL

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* Not Applicable
    c. *No other adverse seismic conditions?* [Y] N U

Comments

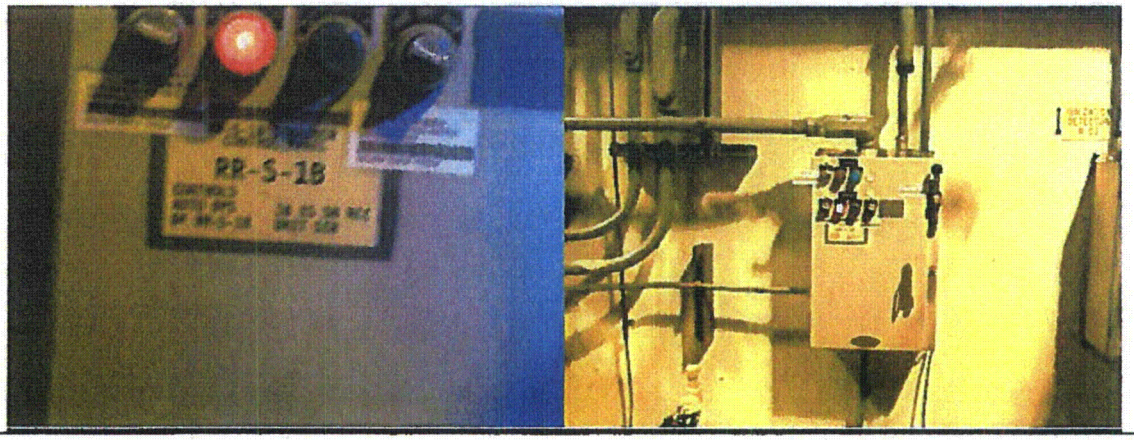
Equipment has external anchorage.

The ground connection on the RR-S-1B control panel was observed to be loose. The ground cable remains connected. Per electrical maintenance, no electrical concern was identified. Per engineering inspection the loose ground connection does not represent a seismic concern for the panel. This is being tracked under IR 01439557.

Evaluated by: Mark Etre Date: 11/13/2012

Seth Baker 11/13/2012

Photos



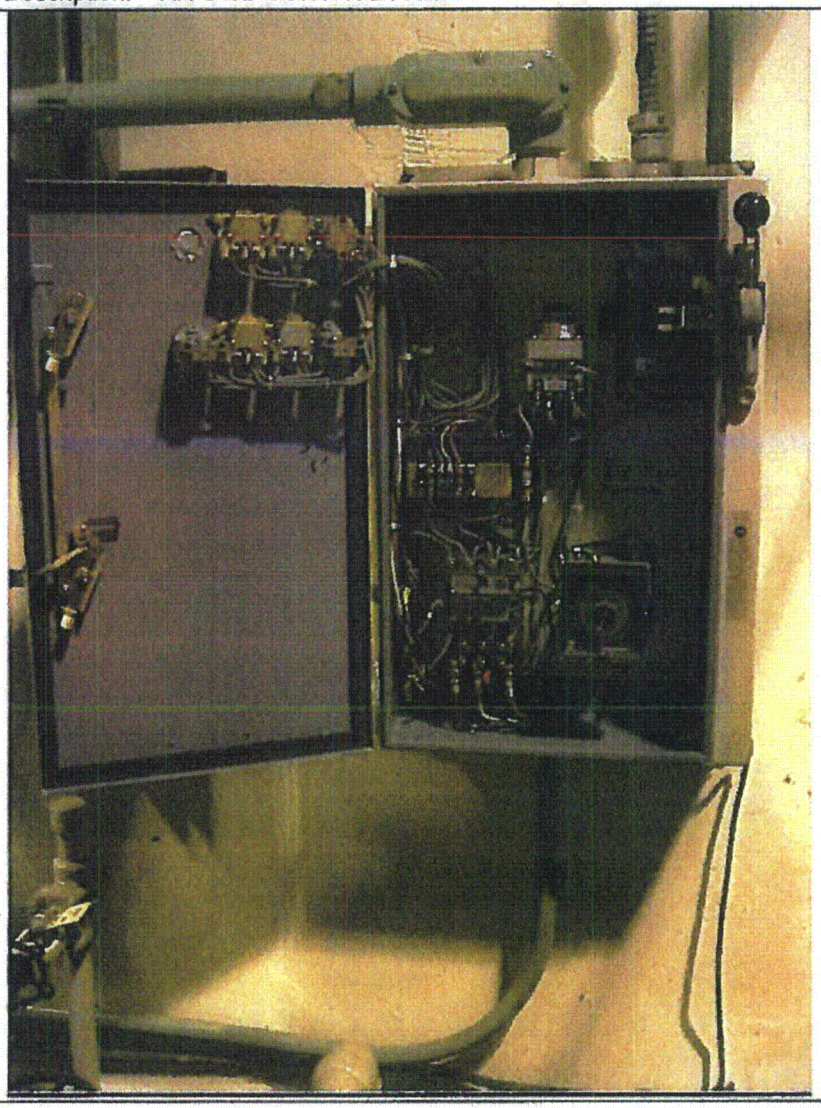
Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: RR-S-1B (SEE APPENDIX C PAGE C-222)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: RR-S-1B CONTROL PANEL



Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: XCLA (SEE APPENDIX C PAGE C-282)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: XCLA RELAY PANEL

Project: TMI SWEL

Location (Bldg, Elev, Room/Area): CB, 338.50 ft, 23 : RELAY ROOM,SOUTH OF CRD CONTROL CABINETS

Manufacturer/Model:

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 anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? -
2. Is the anchorage free of bent, broken, missing or loose hardware? -
3. Is the anchorage free of corrosion that is more than mild surface oxidation? -
4. Is the anchorage free of visible cracks in the concrete near the anchors? -
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.) -
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? -

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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

SEE SWC IN APPENDIX C FOR RESPONSES

Status: [Y] N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: XCLA (SEE APPENDIX C PAGE C-282)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: XCLA RELAY PANEL

Other Adverse Conditions (SUPPLEMENTAL CABINET INSPECTION)

11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment?
    a. *Internal components secured? (i.e. no loose or missing fasteners)* [Y] N U
    b. *Are adjacent cabinets secured together?* Not Applicable
    c. *No other adverse seismic conditions?* [Y] N U

Comments

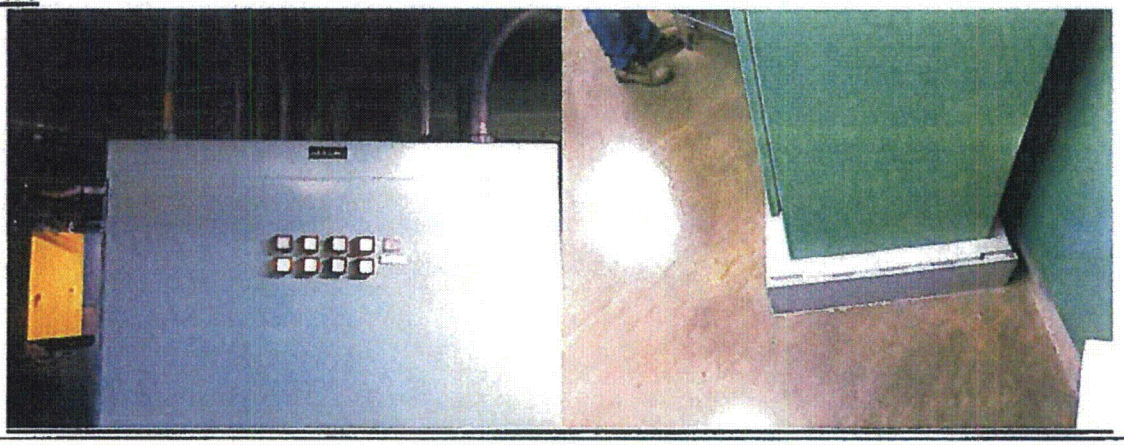
Equipment has external anchorage.

A small box of light bulbs is stored in the cabinet, secured between the cabinet wall and bundled wires. The manner in which the box is secured will prevent it from impacting any components within the cabinet during a seismic event.

Evaluated by: Mark Etre Date: 11/12/2012

Seth Baker 11/12/2012

Photos



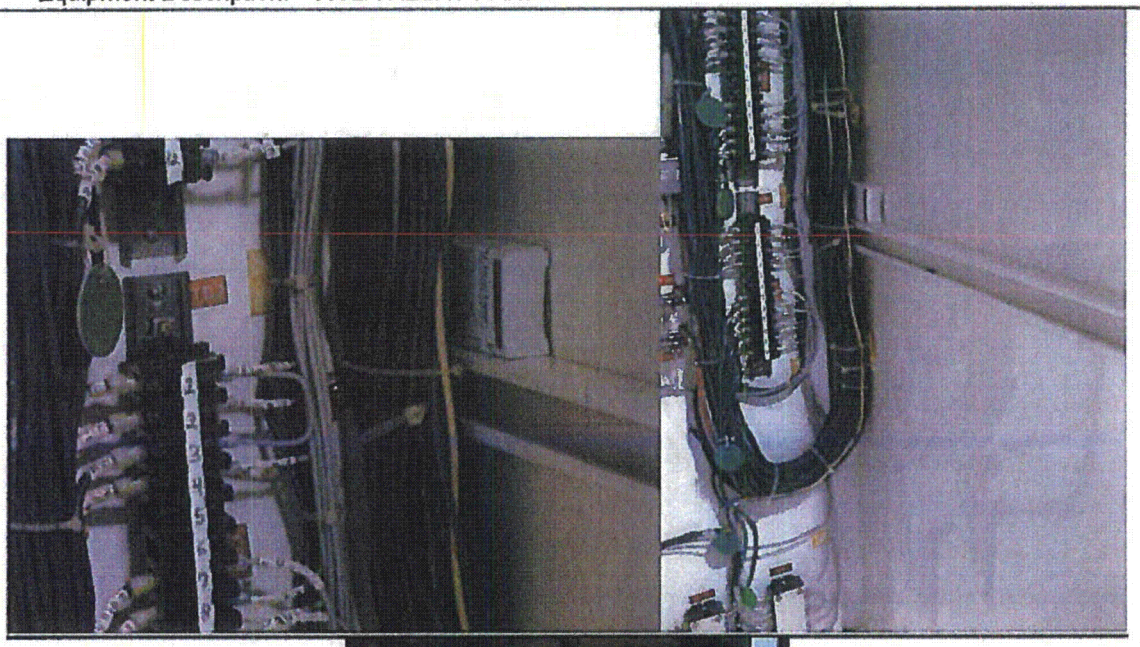
Status: [Y] N U

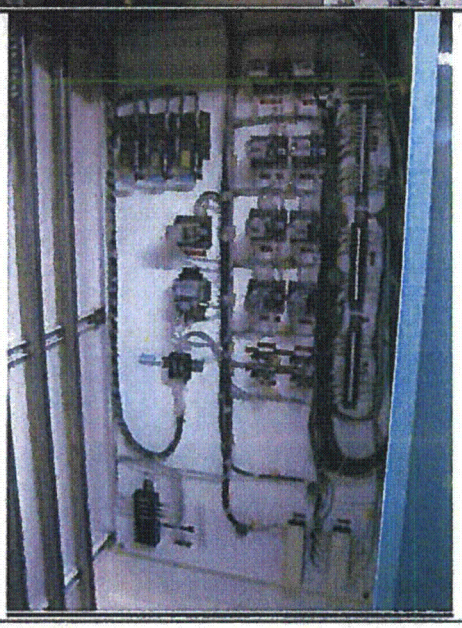
Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

Equipment ID No.: XCLA (SEE APPENDIX C PAGE C-282)

Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: XCLA RELAY PANEL





AD

Area Walk-By Checklists (AWCs)

Table AD-1 provides the building, elevation, and location of each area as well as a list of SWEL items associated with each area, and page numbers of each Area Walk-By Checklist. All items in Table D-1 were additional Area Walk-By performed during the follow-on walkdowns.

Table AD-1. Summary of Area Walk-By Checklists

AREA WALK-BY	DESCRIPTION	ID	COMMENTS	PAGE
8	DH-T-0001	DH-T-0001 CO-V-0010B CO-T-0001B		AD- 3

Status: (Y) N U

Area Walk-By Checklist (AWC)

Location: Bldg. YD Floor El. 305' Room, Area[13] 8

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☐

nearby lighting fixture does not pose a credible hazard to nearby equipment

[13] 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.

Area Walk-By Checklist (AWC)

Location: Bldg. YD Floor El. 305' Room, Area[13] 8

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☐

Comments (Additional pages may be added as necessary)

- SQ-T1-PH-T-0001 Rev.2 provides seismic verification of tanks near BWST (BW-T-1's)
- DWG. E-435-201 provides tanks foundation drawing

Evaluated by: Juan A. Lopez / [signature] Date: 10/18/13

Dave Yerkes / [signature] 10/18/13

AE

Plan for Future Seismic Walkdown of Inaccessible Equipment

Table E-1 from the initial report documents fifteen (15) components that were deferred for future Seismic Walkdown of Inaccessible Equipment. All fifteen (15) deferred components and associated Area Walk-Bys inspections have been completed and no further seismic walkdown remains deferred after this update. Reference Table AE-1 with updated status.

Table E-2 from the initial report documents the eighteen (18) components that were deferred for future Seismic walkdown of Supplemental Internal Cabinet Inspection. All eighteen (18) components with Supplemental Internal Cabinet Inspection have been completed as stated in Section A5.4 of this Annex A and no further Supplemental Internal Cabinet Inspection remains deferred after this update. Reference Table AE-2 with updated status.

Associated SWCs and AWCs are documented in Appendices AC and Appendices AD of this Annex A respectively.

Table AE-1. Inaccessible and Deferred Equipment

Component ID	Description	Reason for Inaccessibility	Action Request ID (IR)	Resolution/ Status	Milestone Completion	Actual Completion Date	Comments
DH-T-001	BWST	Risk management due to covered internal anchorage	1433899	Closed	1R20	10/18/2013	
1B-480V-ES	480V ENGINEERED SAFEGUARDS MCC 1B	Energized equipment with internal anchorage	1422453	Closed	1R20	11/12/2013	IR 1584220
1B-480V-ESV	1B ENGINEERED SAFEGUARDS VALVES & HEATING CONTROL CENTER	Energized equipment with internal anchorage	1422453	Closed	1R20	11/12/2013	
1B-480V-SHES	480V SCREEN HOUSE ENGINEERED SAFEGUARDS MCC 1B	Energized equipment with internal anchorage	1422453	Closed	1R20	11/11/2013	
SF-P-1B-BK	1B ES MCC UNIT 6A	Risk management due to covered internal anchorage	1422453	Closed	4Q2012	11/13/2012	
1S-480V-ES-SWGR	480V ENGINEERED SAFEGUARDS BUS 1S	Energized equipment with internal anchorage	1422453	Closed	1R20	11/12/2013	
1T-480V-SHES-SWGR	480V ENGINEERED SAFEGUARDS SCREEN HOUSE BUS 1T	Energized equipment with internal anchorage	1422453	Closed	1R20	11/11/2013	IR 1583783
1E-4160V-ES	4160V ENGINEERED SAFEGUARDS BUS 1E	Energized equipment with internal anchorage	1422453	Closed	1R21	11/12/2012	
1S-480V-ES-XFMR	1S 480V ES SWGR 4160/480V XFMR	Energized equipment with internal anchorage	1422453	Closed	1R20	11/12/2013	
1T-480V-SHES-XFMR	1T 480V SCREEN HOUSE ES SWGR 4160/480V XFMR	Energized equipment with internal anchorage	1422453	Closed	1R20	11/11/2013	
1F-DC	125/250V DC ES DIST PANEL 1F	Risk management due to covered internal anchorage	1422453	Closed	4Q2012	11/13/2012	
1Q-DC	125/250VDC DIST PANEL FOR EDG 1B	Risk management due to covered internal anchorage	1422453	Closed	4Q2012	11/13/2012	
1B DG CNPL	DIESEL GEN 1B - ENGINE CONTROL RELAY PANEL	Risk management due to covered internal anchorage	1422453	Closed	4Q2012	11/12/2012	
CC	CONTROL RM CONSOLE CENTER CONTROL PANEL	Risk management due to covered internal anchorage	1422453	Closed	4Q2012	11/12/2012	
EED-PNL-1B	125/250V DC DIST PANEL 1B	Risk management due to covered internal anchorage	1422453	Closed	4Q2012	11/13/2012	

Table AE-2. Supplemental Internal Cabinet Inspection List

Component ID	Description	Equipment Class	Accessible (Y/N)	If Not Accessible, Why?	Milestone Completion	Tracking Number (IR Number)	Status / Insp. Results	Actual Completion Date	Comments
1B-480V-ESF	1B-480V-ESF VENT BUILDING MCC	(01) Motor Control Centers	N	Extensive Disassembly is Required	N/A	N/A	N/A	N/A	N/A
TRB	120V REG AC INSTR. POWER TRB	(14) Distribution Panels	Y		4Q2012	1422453	Closed	11/12/2012	
VBD	120V VITAL INST DIST PANEL 1D	(14) Distribution Panels	Y		4Q2012	1422453	Closed	11/12/2012	
EED-BC-1B	BATTERY CHARGER 1B	(16) Battery Chargers and Inverters	N	Extensive Disassembly is Required	N/A	N/A	N/A	N/A	N/A
EED-BC-1D	BATTERY CHARGER 1D	(16) Battery Chargers and Inverters	N	Extensive Disassembly is Required	N/A	N/A	N/A	N/A	N/A
EED-BC-1F	BATTERY CHARGER 1F	(16) Battery Chargers and Inverters	N	Extensive Disassembly is Required	N/A	N/A	N/A	N/A	N/A
EE-INV-1B	INVERTER 1B	(16) Battery Chargers and Inverters	Y		4Q2012	1422453	Closed	11/14/2012	
EE-INV-1F	1F INVERTER	(16) Battery Chargers and Inverters	Y		4Q2012	1422453	Closed	11/13/2012	IR 1439548
1B	ENGINEERED SAFEGUARDS CABINET 1B	(20) Instrumentation and Control Panels and Cabinets	Y		4Q2012	1422453	Closed	11/12/2012	
3B	ESAS ACTUATION CABINET 3B	(20) Instrumentation and Control Panels and Cabinets	Y		4Q2012	1422453	Closed	11/12/2012	
4B	ESAS ACTUATION CABINET 4B	(20) Instrumentation and Control Panels and Cabinets	Y		4Q2012	1422453	Closed	11/12/2012	
5B	ESAS ACTUATION CABINET 5B	(20) Instrumentation and Control Panels and Cabinets	Y		4Q2012	1422453	Closed	11/12/2012	
BS-PS-0933	RB PRESSURE SWITCH FOR ESAS ACTUATION	(20) Instrumentation and Control Panels and Cabinets	Y		4Q2012	1422453	Closed	11/13/2012	
CRD-CB-1D	CRD CIRCUIT BREAKER 1D	(20) Instrumentation and Control Panels and Cabinets	Y		1R20	1422453	Closed	11/12/2012	
EE-PNL-VBB	VBB 120 VAC PANEL	(20) Instrumentation and Control Panels and Cabinets	Y		4Q2012	1422453	Closed	11/12/2012	

Component ID	Description	Equipment Class	Accessible (Y/N)	If Not Accessible, Why?	Milestone Completion	Tracking Number (IR Number)	Status / Insp. Results	Actual Completion Date	Comments
HSPS-CH-2	HSPS CHANNEL 2	(20) Instrumentation and Control Panels and Cabinets	Y		4Q2012	1422453	Closed	11/12/2012	
RR-S-1B	RR-S-1B CONTROL PANEL	(20) Instrumentation and Control Panels and Cabinets	Y		4Q2012	1422453	Closed	11/13/2012	IR 1439557
XCLA	XCLA RELAY PANEL	(20) Instrumentation and Control Panels and Cabinets	Y		4Q2012	1422453	Closed	11/12/2012	

AF

Peer Review Report

This appendix includes the Peer Review Team's report on the follow-on seismic Walkdowns and Area Walk-Bys.

Peer Review Report for Near Term Task Force (NTTF) Recommendation 2.3 Seismic Walkdown Inspection of Three Mile Island Unit 1

Annex A

January 16, 2014

Prepared by Peer Reviewers

Dennis McGettrick (Team Leader)
Patrick Mullens

D McGettrick	1/17/14
Peer Review Team Leader Certification Signature	Date

1 Introduction

1.1 OVERVIEW

This report documents the independent peer review for the Near Term Task Force (NTTF) Recommendation 2.3 Seismic Walkdowns, Annex 'A' follow-on activities performed by Exelon TMI Engineering Department for Unit 1 of the Three Mile Island Nuclear Station (TMINS). The peer review addresses the following activities:

- Review of the selection of the structures, systems, and components, (SSCs) that are included in the Seismic Walkdown Equipment List (SWEL).
- Review of the checklists prepared for the Seismic Walkdowns & Walk- Bys.
- Review of any licensing basis evaluations.
- Review of the decisions for entering the potentially adverse conditions into the plant's Corrective Action Plan (CAP).
- Review of the final submittal report

The peer reviewers for TMINS, Unit 1 are Messrs. Patrick Mullens and Dennis McGettrick, all of TMINS Engineering Department. Mr. McGettrick is designated the Peer Review Team Leader. None of the aforementioned engineers is involved in the seismic walkdown inspection process so that they can maintain their independence from the project.

Mr. McGettrick is a degree electrical engineer, has over thirty years of nuclear design experience and has been trained in the Verification of the Seismic Adequacy of Power Plant Equipment by the Seismic Experience Data Method.

Mr. Mullens is a degreed civil engineer, has nearly three years of nuclear design experience related to civil and structural engineering, and over four years of construction management experience.

The independent peer review discussions on the follow-on activities are documented herein.

No issues were identified which challenged the current licensing basis.

2 Peer Review - Selection of SSCs

2.1 PURPOSE

The purpose of this section is to describe the process to perform the peer review of the selected structures, systems, and components, (SSCs) that were included in the Seismic Walkdown Equipment List (SWEL).

However, this peer review is performed for the SSC's that were previously inaccessible and were completed during the follow-on Seismic Walkdowns and Area Walk-Bys. There are no changes to the SWEL, so the selection of new SSCs does not apply in this case.

This peer review is based on an interview with the seismic walkdown engineer (SWE) and report preparer, Mr. Juan Lopez subsequent to performance of those activities.

3

Review of Follow-on Seismic Walkdown & Area Walk-By Checklists

3.1 Overview

A peer review of the Table AC-1 SSCs Seismic Walkdown Checklist results was performed in accordance with the requirements of the EPRI Document No. 1025286 entitled "Seismic Walkdown Guidance For Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic" (SWG requirements).

3.2 Follow-on Seismic Walkdown Checklists

100% of the equipment inspected during the follow-on walkdown are included in the peer review, see follow-on Seismic Walkdown, and Area Walk-By Checklists presented below:

Table A3-1: *Table Follow-on Seismic Walkdown Checklists*

ID	Description	**Observations**
1B DG CNPL	DIESEL GEN 1B - ENGINE CONTROL RELAY PANEL	No Concerns
1B-480V-ES	480V ENGINEERED SAFEGUARDS MCC 1B	No Concerns
1B-480V-ESV	1B ENGINEERED SAFEGUARDS VALVES & HEATING CONTROL CENTR	No Concerns
1B-480V-SHES	480V SCREEN HOUSE ENGINEERED SAFEGUARDS MCC 1B	No Concerns
1E-4160V-ES	4160V ENGINEERED SAFEGUARDS BUS 1E	No Concerns
1F-DC	125/250V DC ES DIST PANEL 1F	No Concerns
1Q-DC	125/250VDC DIST PANEL FOR EDG 1B	No Concerns

1S-480V-ES SWGR	480V ENGINEERED SAFEGUARDS BUS 1S	No Concerns
1S-480V-ES XFMR	1S 480V ES SWGR 4160/480V XFMR	No Concerns
1T-480V-SHES	480V ENGINEERED SAFEGUARDS SCREEN HOUSE BUS 1T	No Concerns
1T-480V-SHES-XFMR	1T 480V SCREEN HOUSE ES SWGR 4160/480V XFMR	No Concerns
CC	CONTROL RM CONSOLE CENTER CONTROL PANEL	No Concerns
DH-T-0001	BWST	No Concerns
EED-PNL-1B	125/250V DC DIST PANEL 1B	No Concerns

3.3 EVALUATION OF FINDINGS

There were no issues that challenged the licensing bases.

The outcome of the walkdowns indicated that there were no major concerns from the inspections conducted, and the peer reviewers consider the engineering judgments made by the inspectors as appropriate and acceptable, per the EPRI Seismic Walkdown Guidance.

Further, all the outstanding uncompleted corrective action issues in Report RS-12-175 have been addressed, as shown in Tables A5-2 and A5-3 of Annex 'A'.

4

Review of Licensing Basis Assessments

There were no issues that challenged the licensing bases for the follow-on items, so there were no assessments required. The peer reviewers concur with this outcome.

5

Review Final Submittal Report & Sign-off

The final supplemental report has been reviewed by Messrs. P. Mullens and D McGettrick per the requirements of EPRI Seismic Walkdown Guidance (EPRI Report 1025286), and found to be acceptable. The review comments have been duly addressed and appropriately incorporated in the Report.

AG

IPEEE Vulnerability Status

Refer to Section G of Enclosure 1 of Exelon Letter to the NRC (RS-12-175 / TMI-12-161). No changes were made to Table G-1, IPEEE Vulnerability Status, as part of the follow-on actions and Annex A.