| Seismic Walkdown Checklist (SWC) | Status: Y N U |
|--|---|
| | |
| Equipment ID No.: <u>1Q-DC</u> | |
| Equipment Class: (14) Distribution Panels | · |
| Equipment Description: 125/250VDC DIST PANEL FOR ED | G 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 W SWEL. The space below each of the following questions may be use findings. Additional space is provided at the end of this checklist for o | ed to record the results of judgments and |
| Anchorage | |
| Is anchorage configuration verification required (i.e., is the ite of SWEL items requiring such verification)? | em one of the 50% No |
| | |
| | |
| 2. Is the anchorage free of bent, broken, missing or loose hardw | vare? Yes |
| Kick plates were removed and welds were inspected. | |
| 3. Is the anchorage free of corrosion that is more than mild surfa | ace oxidation? Yes |
| 4. Is the anchorage free of visible cracks in the concrete near th | ne anchors? Yes |
| Is the anchorage configuration consistent with plant documer This question only applies if the item is one of the 50% for wh configuration verification is required.) | |
| 6. Based on the above anchorage evaluations, is the anchorage potentially adverse seismic conditions? | e free of Yes |
| | |

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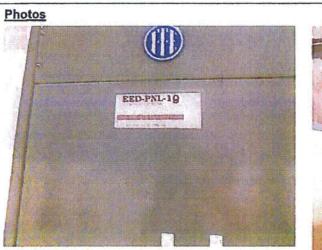
r

| Seismic Walkdown Checklist (SWC) | Status: Y N U |
|--|---------------|
| 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 selsmic 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-I | DC, Rev 000 |
| Rigid conduits exhibit bends, which provide adequate flexibility. | |
| Several linear indication (cracks) on floor below are addressed by Maintenance Rule L R2151812 tracks completion of the walkdown and updates the topical report with its re | • |
| ······································ | |

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والجارية جميها مروا المرتبين والمنكل مكرو يتشقين تقرب المارية بحاف وماريتهم فالرابية المروا بين المارتين المارتين والمتقدين

| Seismic Walkdo | wn Checklist | (SWC) | | Status: Y N U |
|----------------|--------------|----------------------------------|-------|---------------|
| Equip | ment ID No.: | 1Q-DC | | |
| Equi | pment Class: | (14) Distribution Panels | | |
| Equipment | Description: | 125/250VDC DIST PANEL FOR EDG 1B | | |
| Evaluated by: | Man | S Etter Mark Etre | Date: | 11/13/2012 |
| | -J. | a Bahar Seth Baker | | 11/13/2012 |



100_3013



| Status: | Y | N | U |
|---------|---|---|---|
| | | | |

Seismic Walkdown Checklist (SWC)

| Equipment ID No.: | 1Q-DC | 16 18 - 16 | |
|------------------------|----------------------------------|----------------|--|
| Equipment Class: | (14) Distribution Panels | | |
| Equipment Description: | 125/250VDC DIST PANEL FOR EDG 1B | | |



100_3020

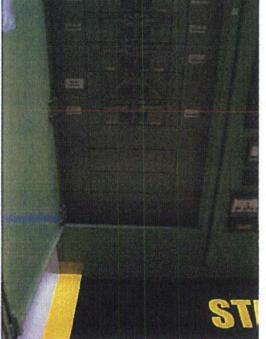


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Status: Y N U

Seismic Walkdown Checklist (SWC)

| | Equipment ID No.: | 1Q-DC | |
|-------------|------------------------|----------------------------------|--|
| | Equipment Class: | (14) Distribution Panels | |
| | Equipment Description: | 125/250VDC DIST PANEL FOR EDG 1B | |
| C. Constant | | | |



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IMG_4659



IMG_4686

Three Mile Island Generating Station Unit 1 Correspondence Nରଧନତେ14/022

Status: YN U

| Selsmic Walkdown Checklist (SWC) | |
|--|------------------------------|
| Equipment ID No. $19-4804-55-544R$ Equip. Class ¹² (2) Low Va (EE -546-4804-15) | Itage Switchgear |
| Equipment Description 480V Engineered Safequards Bas | <u>15</u> |
| (EE -509-480V-15) Equipment Description <u>480V Engineered Safeguards Bas</u> Location: Bldg. <u>CB</u> Floor El. <u>322</u> Room, Area <u>18</u> | |
| Manufacturer, Model, Etc. (optional but recommended) Westing House | e Corp |
| Instructions for Completing Checklist | / |
| This checklist may be used to document the results of the Seismic Walkdown of SWEL. The space below each of the following questions may be used to record t findings. Additional space is provided at the end of this checklist for documenting the space of | the results of judgments and |
| Anchorage | |
| 1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Y NIZ |
| | - |
| 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? | |
| 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.) | Yon uon/age |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? | |
| | |

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

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| Seismic Walkdown Checklist (SWC) |
|---|
| Equipment ID No. <u>15-4807-65-suck</u> Equip. Class ¹² (2) Low Voltage Switchgear |
| Equipment Description 4800 Engineered Safeguards Bas 15 |
| Interaction Effects |
| 7. Are soft targets free from impact by nearby equipment or structures? YE NE UE N/AE |
| 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, YM ND UD N/AD and masonry block walls not likely to collapse onto the equipment? |
| 9. Do attached lines have adequate flexibility to avoid damage? YEND UD N/AD |
| 10. Based on the above seismic interaction evaluations, is equipment free Y Y N U |
| Other Adverse Conditions |
| 11. Have you looked for and found no other seismic conditions that could Y N U |
| Comments (Additional pages may be added as necessary) |
| © Saomic Qualifation and interaction evaluation performer per sa-71-1s-480v-Es Rev. 1 for saug. |
| Evaluated by: Jugo A. Lopez / fuser Age Date: 11/12/13 |
| David Yorker 1 Dr. 11 1 |

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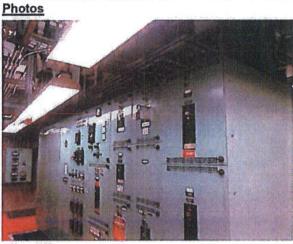
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Status: Y N U

Seismic Walkdown Checklist (SWC)

| Equipment ID No.: | 1S-480V-ES-SWGR | |
|------------------------|-----------------------------------|---|
| Equipment Class: | (2) Low Voltage Switchgear | - |
| Equipment Description: | 480V ENGINEERED SAFEGUARDS BUS 1S | |





100_3401

100_3868

100_3666



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)



100_3896

100_3898







100_3904

Status YN U

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| Seismic Walkdow | n Checklist (SV | VC) |
|-----------------|-----------------|-----|
|-----------------|-----------------|-----|

| Equipment ID No. 15-4804-ES-XFMR Equip. Class ¹² (4) Transform | mer |
|---|-----------------------------|
| Equipment Description 15 480 V ES SWGR 4160/480 V YFM | |
| 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 a SWEL. The space below each of the following questions may be used to record the findings. Additional space is provided at the end of this checklist for documenting | ne results of judgments and |
| Anchorage | |
| 1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Y DINE |
| ł | |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? | YE NO UO NAO |
| 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? | |
| 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? | YEND UD |

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

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| Seismic Walkdown Checklist (SWC) | |
|---|----------------|
| Equipment ID No. 15-480V-ES-XFAR Equip. Class ¹² (4) Transf | ormer |
| Equipment Description 15 480 V ES SWGR 4160/480 V | XEMR |
| Seismic Walkdown Checklist (SWC) Equipment ID No. 15-480V-EX-VIAR Equip. Class ¹¹ _(4) Transformer Equipment Description 15 480 V ES StuGR 4160/480 V X EAR Interaction Effects 7. Are soft targets free from impact by nearby equipment or structures? YEN: U: N/A: 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, YEN: U: N/A: and masonry block walls not likely to collapse onto the equipment? 9. Do attached lines have adequate flexibility to avoid damage? YEN: U: N/A: 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? YEN: U: N/A: Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could view seismic interaction effects? Comments (Additional pages may be added as necessary) 9 Scurric Qualification performed under SQ-T1- IS- 480V-ES Rev.! For SQOQ 9 Trave former anchored under FCR - C- 100 TCF (a) Mussing / Looke (R) Hat back of cab nct. Net an operability usure. This is tracked under IR 1907/12 Evaluated by: Juca n. A. Lopce Mustandian page. II 12/13 David Verkes / David Werkes / Davi | |
| Equipment ID No. 13-480V-EX-VEASE Equip. Class ¹² (4) Transformer Equipment Description 15 480 V ES 540 R 4163/480 V XEAR Interaction Effects 7. Are soft targets free from impact by nearby equipment or structures? VENUL NAL 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, VENUL NAL 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, VENUL NAL 9. Do attached lines have adequate flexibility to avoid damage? YENUL NAL 10. Based on the above seismic interaction evaluations, is equipment free YENUL NAL 11. Have you looked for and found no other seismic conditions that could aversely affect the safety functions of the equipment? 11. Have you looked for and found no other seismic conditions that could aversely affect the safety functions of the equipment? 12. Comments (Additional pages may be added as necessary) 0. Substruct Qualification previounced under Sa-T1 - IS - 480V-ES Rev.I for Sa000 0. Trave former anchored under FCA - C - 100 7127 (a) Mussing Laze Boilt at bace of cab.nct. Not an operability 13300. This 13 tracked under IR 1401272 Evaluated by: Juan A. Lopce Human Mark Javid Yerkes J. David Yerkes J. San Table | |
| 9. Do attached lines have adequate flexibility to avoid damage? | YEYND UD N/AD |
| | |
| 11. Have you looked for and found no other seismic conditions that could | |
| O Seconic Qualification performed under SQ-T1-15-4 Transformer anchored under FCR-C-100727 Missing / Losse Bolt at base of cabinet. Not an operative tracked under IR 1401212 Evaluated by: Juan A. Lopce & Marshoppet | Date: 11/12/13 |
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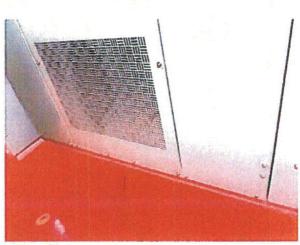
Status: Y N U

| Equipment Description: | 1S 480V ES SWGR 4160/4 | 80V XFMR | |
|----------------------------|------------------------|----------|--|
| Equipment Class: | (4) Transformers | | |
| Equipment ID No.: | 1S-480V-ES-XFMR | | |
| Seismic Walkdown Checklist | (SWC) | | |

Photos



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100_3390







100_3887

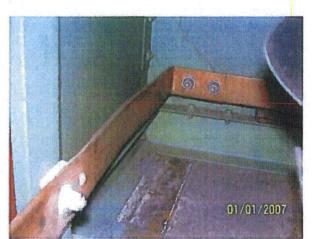
Status: Y N U

Seismic Walkdown Checklist (SWC)

| | | 1S-480V-ES-XFMR | 1969 M 1970 | | |
|---|-----------------------|--------------------------------|----------------|--|--|
| | Equipment Class: | (4) Transformers | | | |
| E | quipment Description: | 1S 480V ES SWGR 4160/480V XFMR | | | |

Photos (continue)





100_3889

100_3891



100_3893



100_3894

Three Mile Island Generating Station Unit 1 Correspondence Non Bhc 801 bf-032

Status YN U

Seismic Walkdown Checklist (SWC)

| Equipment ID No. <u>1T-480V-SHES</u> Equip. Class ¹² (2) Low Vo (+ | |
|---|-----------------------------|
| Equipment Description 480 V Engineered Safeguard Screen | n House Bus 17 |
| Location: Bldg. <u>IPH</u> Floor El. <u>308</u> Room, Area <u>29</u> | - |
| Manufacturer, Model, Etc. (optional but recommended) Westunghouse | Elec. Corp. |
| Instructions for Completing Checklist | |
| This checklist may be used to document the results of the Seismic Walkdown of a SWEL. The space below each of the following questions may be used to record t findings. Additional space is provided at the end of this checklist for documenting the space of the space is provided at the end of the space space. | he results of judgments and |
| Anchorage | |
| 1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? | Y DI NO |
| 1 | 1 |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? 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? | |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? welched to embedded any les | |
| 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? | |

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

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| Selsmic Walkdown Checklist (SWC) |
|--|
| Equipment ID No. <u>17-480y-SHES</u> Equip. Class ¹² (2) Low Voltage Switchgear |
| Equipment Description 480 V Engineered Safeguard Screen Howe Bus 17 |
| Interaction Effects |
| 7. Are soft targets free from impact by nearby equipment or structures? YE N UNA |
| |
| 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, YUNUNAD and masonry block walls not likely to collapse onto the equipment? |
| 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 YENUU of potentially adverse seismic interaction effects? |
| Other Adverse Conditions |
| 11. Have you looked for and found no other seismic conditions that could YIZ N U U adversely affect the safety functions of the equipment? |
| 5-2 U.V. Que relay on door panel had 2 (one toplone bottom) But of four (4) screws. still equipment was secured at panel w/ no immediate concern. IR 1583783 |
| Comments (Additional pages may be added as necessary) |
| O seismic Qualification und interaction evaluation performed under |
| |
| |
| Evaluated by: Juan A. Lopce / acon Agy Date: 11/11/13 |
| 7. Are soft targets free from impact by nearby equipment or structures? YEN_U_N/A 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, YEN_U_N/A 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, YEN_U_N/A 9. Do attached lines have adequate flexibility to avoid damage? YEN_U_N/A 10. Based on the above seismic interaction evaluations, is equipment free YEN_U_N/A 10. Based on the above seismic interaction evaluations, is equipment free YEN_U_N/A 11. Have you looked for and found no other seismic conditions that could YEN_U_N_U_ 12. At a view relay on clear panel had a (one tarlow bottow) but of four (u) strews. Still equipment was geauted at panel will move immediate concern. IR 1583 Comments (Additional pages may be added as necessary) O Spiomic Qualification und interaction evaluation evaluation performed under sa-T1 -1T - 480Y-SHES for SQUG. (Rev.1) Anchange evaluation performed under SQ -T1 -1R - 480V-SHES (swes) |
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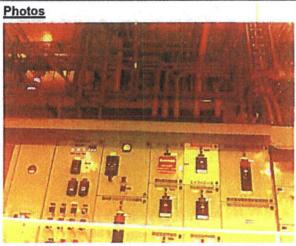
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Status: Y N U

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 |





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100_0506



100_0515



100_0520

Status: Y N U

Seismic Walkdown Checklist (SWC)

| | 1T-480V-SHES-SWGR | |
|------------------|---|----|
| Equipment Class: | (2) Low Voltage Switchgear | |
| | 480V ENGINEERED SAFEGUARDS SCREEN HOUSE BUS | 1T |

Photos (Continue)



100_0528



100_0534



100_0547

100_0558



Three Mile Island Generating Station Unit 1 Correspondence Noshes-14032

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 11-490V-SUES-XFAR Equip. Class¹² (4) Transformer Equipment Description 17 480V Screen House ES SWGR 4160/480V XFMR Location: Bldg. IPH Floor El. 308' 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 Y N of the 50% of SWEL items requiring such verification)? YNN UN N/AN 2. Is the anchorage free of bent, broken, missing or loose hardware? Filet weld at each comer transformer bothed to firmer 3. Is the anchorage free of corrosion that is more than mild surface oxidation? YN NU UU NAD 4. Is the anchorage free of visible cracks in the concrete near the anchors? Frame welded to embedded 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.) 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? 12 Enter the equipment class name from Appendix B: Classes of Equipment.

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AC-47

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| Seismic Walkdown Checklist (SWC) | |
|--|------|
| Equipment ID No. <u>17-4801-5HE5-</u> Equip. Class ¹² (4) Transfermer | |
| Equipment Description 17 480V Schen Hause ES SWGR 4160/400 V XFMR | |
| Interaction Effects 7. Are soft targets free from impact by nearby equipment or structures? YEN U VINA | |
| 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, Y N UN N/A | |
| Transformer encase by enclosure (ponel) is acceptable | |
| 9. Do attached lines have adequate flexibility to avoid damage? YENU UNA | |
| 10. Based on the above seismic interaction evaluations, is equipment free YUN UD of potentially adverse seismic interaction effects? Front fright parel to pond connectring nut not fully engage (lof 3) is judge accepteble borced on expected loads | |
| Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could Y V N U U adversely affect the safety functions of the equipment? | |
| | |
| Comments (Additional pages may be added as necessary) O TANS Fermer Seconic Qualification performed under SQ-T1-1T-480V-SHES (SQ Kev. I | iug) |
| | |
| Evaluated by: Juan A. Lopez / Juan Date: 11/11/13 | |
| David Yerkes John - 1/11/13 | |
| < C-4 > AC-48 | |

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 |

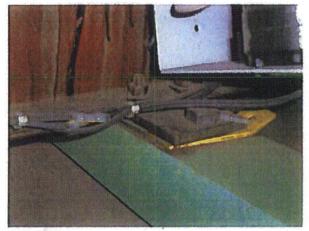
Photos





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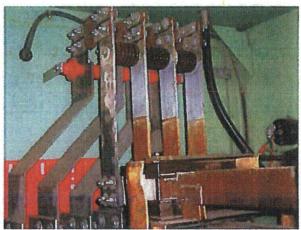
Status: Y N U

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

100_0497



100_0500



100_0498

| 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 |
| Is anchorage configuration verification required (i.e., is the Item one of the 50% No of SWEL items requiring such verification)? |
| |
| 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 |
| Is the anchorage configuration consistent with plant documentation? (Note: Not Applicable 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 Yes potentially adverse seismic conditions? |

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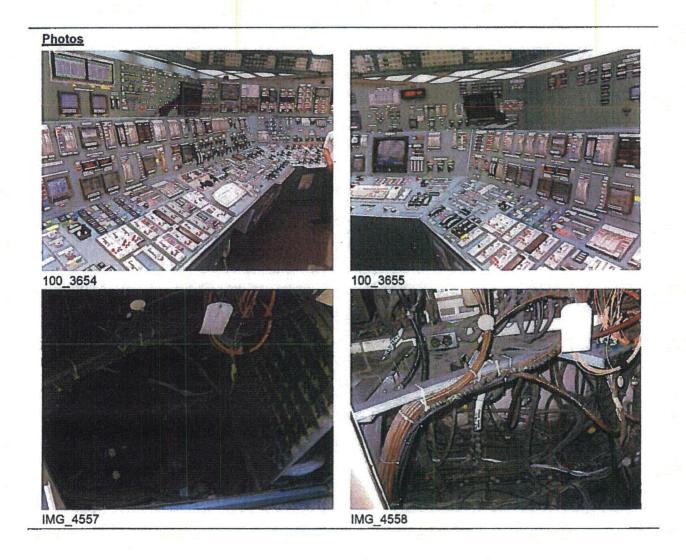
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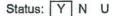
| Seismic | Walkdown Checklist | (SWC) | | Status: | Y |
|-------------------|---------------------------|--|---------------------|------------|-----|
| | Equipment ID No.: | СС | | | |
| | Equipment Class: | (20) Instrumentation and Control P | anels and Cabinets | | |
| Ec | | CONTROL RM CONSOLE CENTE | | | |
| | on Effects | | | | |
| 7. A | Are soft targets free fro | m impact by nearby equipment or st | ructures? | | |
| | | nt, distribution systems, ceiling tiles a t likely to collapse onto the equipme | | | |
| 9. E | Do attached lines have | adequate flexibility to avoid damage | ≥? | | |
| | | ismic interaction evaluations, is equi mic interaction effects? | ipment free of | | |
| 11. H | dversely affect the saf | d found no adverse seismic conditio ety functions of the equipment? pection and did not find any Other A | | | |
| Commer Equipme | | accordance with Seismic Qualificati | ion No. SQ-T1-CC, R | ev 001 | |
| Instrume | nt Calibration device w | as stored on top of CC panel. Remo | oved by operations. | | |
| | | Not a Seismic interaction issue. | | | |
| Evaluated | d by: Man | S Card Mark Etre | Date: | 11/12/2012 | |
| | | Seth Baker | | 11/12/2012 | |
| | | | | | AC- |
| | | | | | |

Status: Y N U

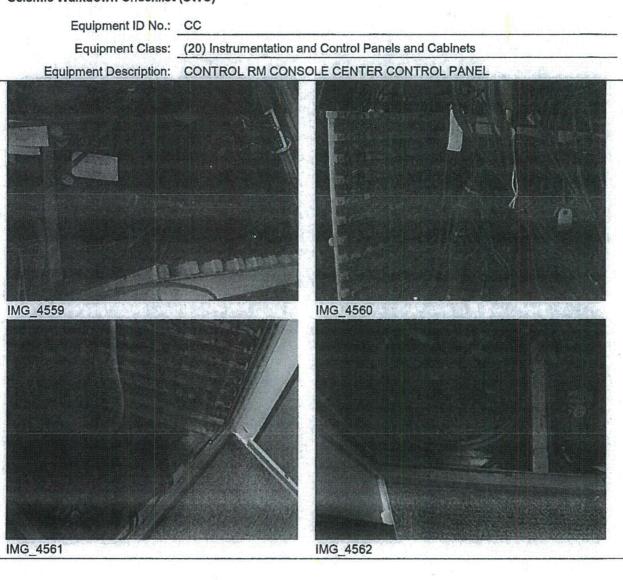
Seismic Walkdown Checklist (SWC)

| Equipment ID No.: | CC | |
|------------------------|--|--|
| Equipment Class: | (20) Instrumentation and Control Panels and Cabinets | |
| Equipment Description: | CONTROL RM CONSOLE CENTER CONTROL PANEL | |





Seismic Walkdown Checklist (SWC)





Seismic Walkdown Checklist (SWC)

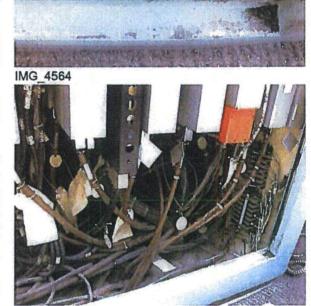
| Equipment ID No.: | CC | |
|------------------------|--|--|
| Equipment Class: | (20) Instrumentation and Control Panels and Cabinets | |
| Equipment Description: | CONTROL RM CONSOLE CENTER CONTROL PANEL | |



IMG_4563



IMG_4565



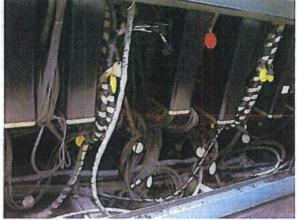
IMG_4566

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 | |





IMG_4567

IMG_4568

Three Mile Island Generating Station Unit 1 Correspondence NoteRS 14-532

Status: Y N U

| Seismic Walkdown Checklist (SWC) |
|---|
| Equipment ID No. <u>DH-T-0001</u> Equip. Class ¹² (21) Tank & Heat Exchangers |
| Equipment Description Borated Water Storage Tank (BWST) |
| Location: Bldg. YO Floor El. 305' Room, Area |
| Manufacturer, Model, Etc. (optional but recommended) PrHsburg, 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 |
| Is the anchorage configuration verification required (i.e., is the item one Y N N N N of the 50% of SWEL items requiring such verification)? |
| |
| 2. Is the anchorage free of bent, broken, missing or loose hardware? YIN UN N/A |
| 3. Is the anchorage free of corrosion that is more than mild surface Y IN U N/A N/A |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors? YIN NO UNAD Cracks observed at growt area not at concret foundation |
| 5. Is the anchorage configuration consistent with plant documentation? Y N U N/A (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) |
| 6. Based on the above anchorage evaluations, is the anchorage free of Y V NU U potentially adverse seismic conditions? |
| |

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

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Status: Y N U

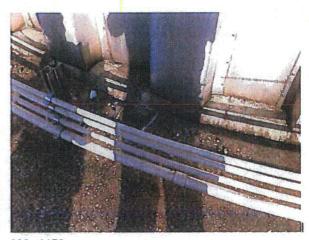
Seismic Walkdown Checklist (SWC)

| Equipment ID No.: | DH-T-0001 |
|-------------------|--------------------------------|
| Equipment Class: | (21) Tanks and Heat Exchangers |
| | |

Equipment Description: BWST

Photos





IMG_1155



IMG_1163

MG_1159



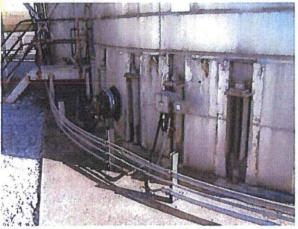
DSCN1735

Status: Y N U

Seismic Walkdown Checklist (SWC)

| Equipment ID No.: | DH-T-0001 | |
|------------------------|--------------------------------|--|
| Equipment Class: | (21) Tanks and Heat Exchangers | |
| Equipment Description: | BWST | All and a second se |

Photos (continue)



DSCN1733





DCSN1729

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

| Equipment ID No:: ED-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 queetions 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 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 Kick plates were removed and weids were inspected. 3. 3. Is the anchorage free of visible cracks in the concrete near the anchors? Yes 4. 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 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? Yes potentia | Seismic Walkdown Checklist (SWC) | Status: YNU |
|---|--|----------------|
| Equipment Description: 125/250V DC DIST PANEL 18 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? Yes Kick plates were removed and welds were inspected. 3. 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 is required.) Not Applicable 6. Based on the above anchorage evaluations, is the anchorage free of Yes Yes | Equipment ID No.: EED-PNL-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? Yes Kick plates were removed and welds were inspected. 3. 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 is required.) Not Applicable 6. Based on the above anchorage evaluations, is the anchorage free of Yes Yes | Equipment Class: (14) Distribution Panels | |
| Location (Bidg, 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? Yes Kick plates were removed and welds were inspected. 3. 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 Yes Yes | Equipment Description: 125/250V DC DIST PANEL 1B | <u></u> |
| 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 Kick plates were removed and welds were inspected. | Project: TMI SWEL | |
| 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 Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Is the anchorage free of bent, broken, missing or loose hardware? Yes Kick plates were removed and welds were inspected. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes 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 Is the anchorage configuration is required.) | Location (Bldg, Elev, Room/Area): CB, 322.00 ft, 18 | |
| 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 Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Is the anchorage free of bent, broken, missing or loose hardware? Yes Kick plates were removed and welds were inspected. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes Is the anchorage free of visible cracks in the concrete near the anchors? Yes 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 Is the anchorage evaluations, is the anchorage free of Yes Based on the above anchorage evaluations, is the anchorage free of Yes | Manufacturer/Model: | |
| 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 Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Is the anchorage free of bent, broken, missing or loose hardware? Yes Kick plates were removed and welds were inspected. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes 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 is required.) 6. Based on the above anchorage evaluations, is the anchorage free of Yes | Instructions for Completing Checklist | |
| 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 <i>Kick plates were removed and welds were inspected</i> . 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 is required.) Not Applicable 6. Based on the above anchorage evaluations, is the anchorage free of Yes | SWEL. The space below each of the following questions may be used to record the results of | judgments and |
| of SWEL items requiring such verification)? 2. Is the anchorage free of bent, broken, missing or loose hardware? Yes <i>Kick plates were removed and welds were inspected.</i> 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 is required.) Not Applicable 6. Based on the above anchorage evaluations, is the anchorage free of Yes | | |
| Is the anchorage free of bent, broken, missing or loose hardware? Yes <i>Kick plates were removed and welds were inspected.</i> Is the anchorage free of corrosion that is more than mild surface oxidation? Yes Is the anchorage free of visible cracks in the concrete near the anchors? Yes Is the anchorage free of visible cracks in the concrete near the anchors? Yes 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.) Based on the above anchorage evaluations, is the anchorage free of Yes | | No |
| Kick plates were removed and welds were inspected. 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 Yes | | |
| Kick plates were removed and welds were inspected. 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 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.) 6. Based on the above anchorage evaluations, is the anchorage free of Yes | 2. Is the anchorage free of bent, broken, missing or loose hardware? | 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: Not Applicable 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 Yes | Kick plates were removed and welds were inspected. | |
| 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: Not Applicable 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 Yes | | |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: Not Applicable 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 Yes | 3. Is the anchorage free of corrosion that is more than mild surface oxidation? | Yes |
| 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 Yes | 4. Is the anchorage free of visible cracks in the concrete near the anchors? | Yes |
| | This question only applies if the item is one of the 50% for which an anchorage | Not Applicable |
| | | Yes |

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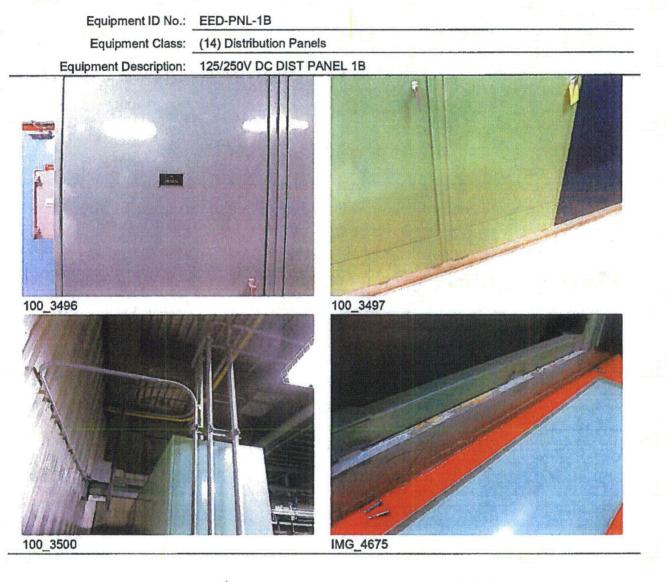
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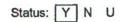
| Seismic Walkdown | n Chacklist (SINC) | Status: Y N U |
|---|---|---|
| | | |
| | ent ID No.: EED-PNL-1B | <u></u> |
| | nent Class: (14) Distribution Panels | |
| Equipment De | | |
| Interaction Effects 7. Are soft targ | gets free from impact by nearby equipment or structures? | Yes |
| | ad equipment, distribution systems, ceiling tiles and lighting, and ock walls not likely to collapse onto the equipment? | Yes |
| 9. Do attached | l lines have adequate flexibility to avoid damage? | Yes |
| | ne above seismic interaction evaluations, is equipment free of adverse selsmic interaction effects? | Yes |
| adversely af | boked for and found no adverse seismic conditions that could ffect the safety functions of the equipment? I kick plates were opened and no other Other Adverse Conditions | Yes |
| <u>Comments</u> Equipment was verif | fied to be in accordance with Seismic Qualification No. SQ-T1-1B-D | IC, Rev 000 |
| Evaluated by: | Man S Erre Date: | 11/13/2012 |
| | Seth Baker | 11/13/2012 |
| <u>Photos</u> | | AC-63 |
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Seismic Walkdown Checklist (SWC)

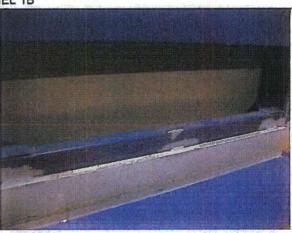




| Seismic Walkdown Checklist (SWC) | Seismic | Walkdown | Checklist | (SWC) |
|----------------------------------|---------|----------|-----------|-------|
|----------------------------------|---------|----------|-----------|-------|

| E | quipment ID No.: | EED-PNL-1B | |
|------------------------|---------------------------|--------------------------|--|
| E | Equipment Class: | (14) Distribution Panels | |
| Equipment Description: | 125/250V DC DIST PANEL 1B | | |





IMG_4676







| Equipment ID No.: | EED-PNL-1B | a da anti- |
|------------------------|---------------------------|------------|
| Equipment Class: | (14) Distribution Panels | |
| Equipment Description: | 125/250V DC DIST PANEL 1B | |
| | | |

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 No 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? Not Applicable 3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable Not Applicable 4. Is the anchorage free of visible cracks in the concrete near the anchors? 5. Is the anchorage configuration consistent with plant documentation? (Note: Not Applicable 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 Yes potentially adverse seismic conditions?

| Seismic Walkdown Checklist (SWC) | Status: YNU |
|---|-----------------------|
| 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 |
| <u>Other Adverse Conditions</u> 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? <i>Performed internal inspection and did not find any Other Adverse Condition</i> | Yes |
| <u>Comments</u> See SQ-T1-1B-480V-ES, Revision 000, This component is a subcomponent of 1B-48 anchorage to a civil structure. | 30V-ES and has no |
| Evaluated by: Mark Etre Da | te: <u>11/13/2012</u> |
| Seth Baker | 11/13/2012 |

Status: Y N U

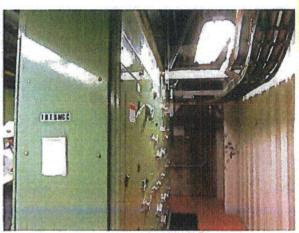
Seismic Walkdown Checklist (SWC)

| Equipment ID No.: | SF-P-1B-BK | یند : ۲۰۰۱ - ۲۰۰۰ - ۲۰۰۰ ۲۰۰۱ - ۲۰۰۰ - ۲۰۰۰ |
|------------------------|---------------------------|---|
| Equipment Class: | (1) Motor Control Centers | na |
| Equipment Description: | 1B ES MCC UNIT 6A | |

Photos







100_3728



IMG_4682

| Status: YNU 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 (Bidg, 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 |
| Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? 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 |

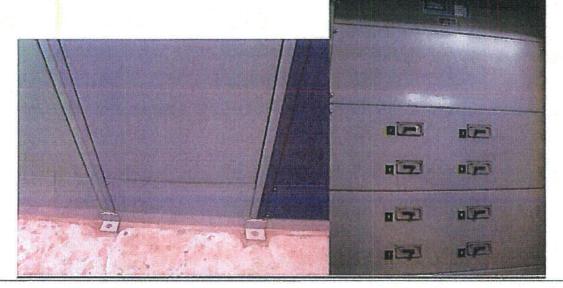
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| Fouipr | | SEE APPENDIX C PAG | E C-276) | | |
|--|--|--|---|----------------|-----------------|
| ÷ | | | E 0-210j | | |
| | ment Class: (14) D | | DTDD | | |
| | Description: 120V | REG AC INSTR. POWE | | | |
| ther Adverse Co | onditions (SUPPLE | MENTAL CABINET INS | PECTION) | | |
| | | I no adverse seismic cor ctions of the equipment? | | | |
| e diama e a filiamania in fi | <u>8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</u> | ecured? (i.e. no loose or | | s) | MNU |
| | e adjacent cabinets | | initiality instanta | 7 | Mиu |
| | o other adverse seis | | | | MNU |
| comments | | | | | |
| uipment has exte | rnal anchorage | | | | |
| aipment nuo exte | maranonorage. | - | | | |
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| valuated by: | | Mark Etre | norman en Norman en | Date: 11/12/20 |)12 |
| | Jaz | Mark Etre | | | |
| | | Seth Baker | en en de die een een de see | 11/12/20 |)12 |
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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 selsmic 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? |
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SEE SWC IN APPENDIX C FOR RESPONSES

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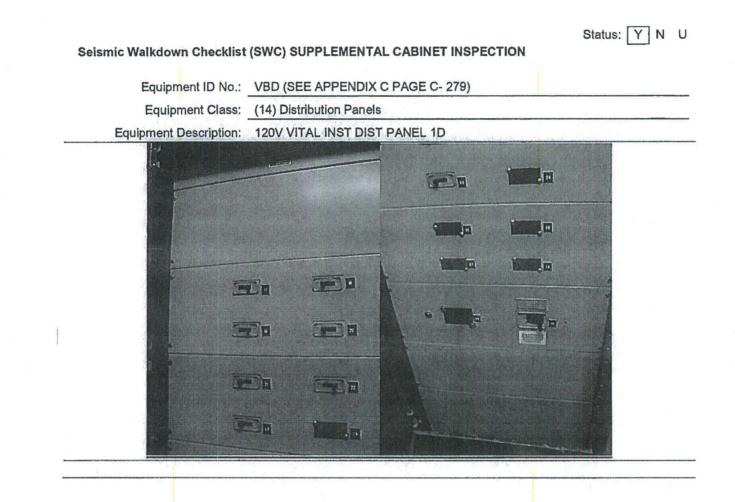
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| | No.: VBD (SE | | GE C- 279) | | | |
|-------------------------|-------------------------|--|------------|-------|--|--------|
| | Class: (14) Distr | | | | | |
| Equipment Descri | ption: 120V VIT | AL INST DIST PAN | IEL 1D | | | |
| Other Adverse Condition | ons (SUPPLEME | NTAL CABINET IN | SPECTION) | | | |
| 11. Have you looked | | | | ld | | |
| | | ns of the equipmen ired? (i.e. no loose | | ers) | | MNU |
| b. Are adja | cent cabinets sec | cured together? | | | | MNU |
| c. No othe | r adverse seismic | conditions? | | | an Billion ann an Airtean Bhann an Airtean | MNU |
| omments | | | | | | |
| | m 1 1 5 | | | | | |
| valuated by: | Non/S Elie Sold Bake | Mark Etre | | Date: | 11/12/2012 | |
| _ | Jost Bake | Seth Baker | Cr | | 11/12/2012 | |
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| hotos | | | | | | |
| hotos | | | | | | |
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| Photos EEIIII | | | | 411 | | |



| | Status: Y N U | U |
|---------|--|---|
| Seism | ic 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 | |
| Locatio | on (Bldg, Elev, Room/Area): CB, 322.00 ft, 24 : INVERTER ROOM B | _ |
| | Manufacturer/Model: | |
| Instru | ctions for Completing Checklist | |
| | hecklist may be used to document the results of the Seismic Walkdown of an item of equipment on the | |
| | . The space below each of the following questions may be used to record the results of judgments and s. Additional space is provided at the end of this checklist for documenting other comments. | |
| Ancho | | |
| | 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 | |
| 6. | configuration verification is required.) Based on the above anchorage evaluations, is the anchorage free of - | |
| 0. | potentially adverse seismic conditions? | • |
| | | |
| | SEE SWC IN APPENDIX C FOR RESPONSES | |
| Intera | ction 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 | |
| | | |

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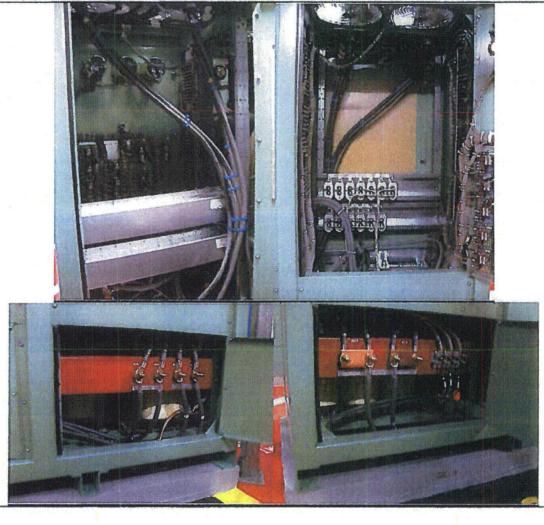
| E | quipment ID No.: | EE-INV-1B (| SEE APPENDIX | C PAGE C-103) | | | |
|------------|----------------------|------------------|-------------------------|---------------------------------|-------|---------------------------------|---------------------------------|
| in ant i | Equipment Class: | (16) Inverters | 5 | | | | |
| Equip | ment Description: | INVERTER 1 | IB ELEL6 | | | | |
| ther Adver | se Conditions (S | UPPLEMENT | AL CABINET IN | PECTION) | | | |
| | you looked for an | | | | ł | | |
| | rsely affect the sat | | | | | | - |
| | a. Internal compo | | | r <mark>m</mark> issing fastene | rs) | | MNU |
| | b. Are adjacent ca | | | | | | pplicable |
| (| . No other adver | se seismic coi | nditions? | | | | MNU |
| omments | | | | | | | |
| | s external anchora | ge. | | | | | |
| | s external anchora | ge. | | | | | Si Si Lider House support |
| uipment ha | | | | | | | |
| uipment ha | | | ļ Mark Etre | | Date: | 11/14/2012 | |
| | | S Evel a Bahn | Mark Etre Seth Baker | | Date: | <u>11/14/2012</u> 11/14/2012 | |



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 | an i ar an | |
| 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) | enere | |
|------------------------|--|-----------|--|
| Equipment Class: | (16) Inverters | | |
| Equipment Description: | INVERTER 1B ELEL6 | | |
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| | Lister and a state | | |
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| Seism | Status: Y | NU |
|---------|---|------|
| | Equipment ID No.:EE-INV-1F (SEE APPENDIX C PAGE C-106) | |
| | Equipment Class: (16) Inverters | |
| | Equipment Description: 1F INVERTER | |
| | Project: TMI SWEL | |
| Locatio | on (Bidg, Elev, Room/Area): CB, 322.00 ft, 24 : CONTROL TWR 322: A INVERTER ROOM | |
| | Manufacturer/Model: | |
| Instru | ctions for Completing Checklist | |
| | necklist may be used to document the results of the Seismic Walkdown of an item of equipment on th | |
| | . The space below each of the following questions may be used to record the results of judgments and of this sharklist for documenting other commenter. | nd |
| | s. Additional space is provided at the end of this checklist for documenting other comments. | |
| Ancho | | ···· |
| 1. | ······································ | - |
| ~ | 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 | |
| 6. | configuration verification is required.) Based on the above anchorage evaluations, is the anchorage free of | _ |
| υ. | potentially adverse seismic conditions? | - |

SEE SWC IN APPENDIX C FOR RESPONSES

Interaction Effects

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| 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

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| Seismic Walkdown Checklist | (SWC) SUPPLEMENTAL CABINET INSPECTION | Status: Y N U |
|-----------------------------|--|---|
| Equipment ID No.: | EE-INV-1F (SEE APPENDIX C PAGE C-106) | 1 |
| Equipment Class: | (16) Inverters | 1 1 1 |
| Equipment Description: | 1F INVERTER | analalan analar sa tan wasan analan ang ang ang ang ang ang ang ang ang a |
| Other Adverse Conditions (S | JPPLEMENTAL CABINET INSPECTION) | |
| | d found no adverse seismic conditions that could | a na na na falana an finisan falangan na hana ana hana ana ha |
| | ety functions of the equipment? nents secured? (i.e. no loose or missing fasteners) | MNU |
| b. Are adjacent c | abinets secured together? | Not Applicable |
| c. No other adver | se seismic conditions? | Миυ |

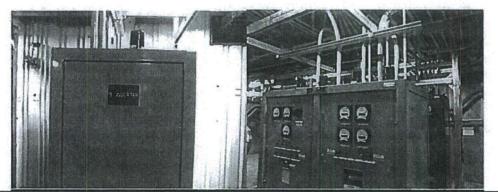
Comments

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: | Man S Eline Mark Etre | Date: | 11/13/2012 |
|---------------|-------------------------|-------|------------|
| | Jut Baker Seth Baker | | 11/13/2012 |

Photos

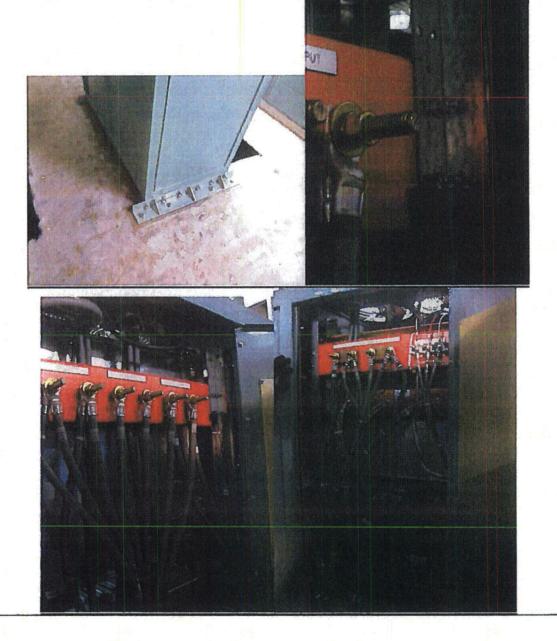


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Status: Y N U

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 | | |



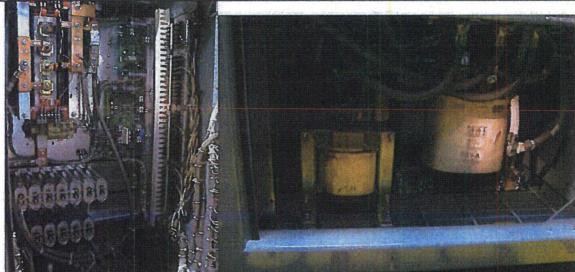
Status: Y N U

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.) 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: | YN U |
|---------------------|--------------------|---|---|------------|-------|
| Seismic Walkdow | n Checklist (SWC |) SUPPLEMENTAL CABINET IN | SPECTION | | |
| Equipm | nent ID No.: 1B (S | SEE APPENDIX C PAGE C-7) | | | |
| | | Instrumentation and Control Panel | Is and Cabinets | | |
| | | INEERED SAFEGUARDS CABIN | | | |
| Other Adverse Co | onditions (SUPPLE | EMENTAL CABINET INSPECTIO | <u>N)</u> | | |
| | | d no adverse seismic conditions the | hat could | | |
| | | nctions of the equipment? secured? (i.e. no loose or missing | fasteners) | | MNU |
| | | s secured together? | | | MNU |
| c. No | other adverse seis | smic conditions? | | | Μ̈́NU |
| Comments | | | | | |
| | 8 - 64 | | | | |
| Equipment has exten | mal anchorage. | | | 1 | |
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| | | | ana Ang Ang ang ang ang ang ang ang ang ang ang a | | |
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| | mIIE | \$ | | | |
| Evaluated by: | Man SE | Mark Etre | Date: | 11/12/2012 | 2 |
| | Jaz | Seth Baker | | 11/12/2012 | |
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| Photos: | | | | | |
| after shirts | Carl Stree | | | | |
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| | | * COMPARTMENT IB | | | |

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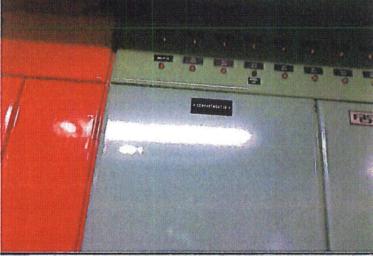
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Status: Y N U

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 | |





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|---|---------|
| 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 of | |
| SWEL. The space below each of the following questions may be used to record the results of judgmen | its 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 | |

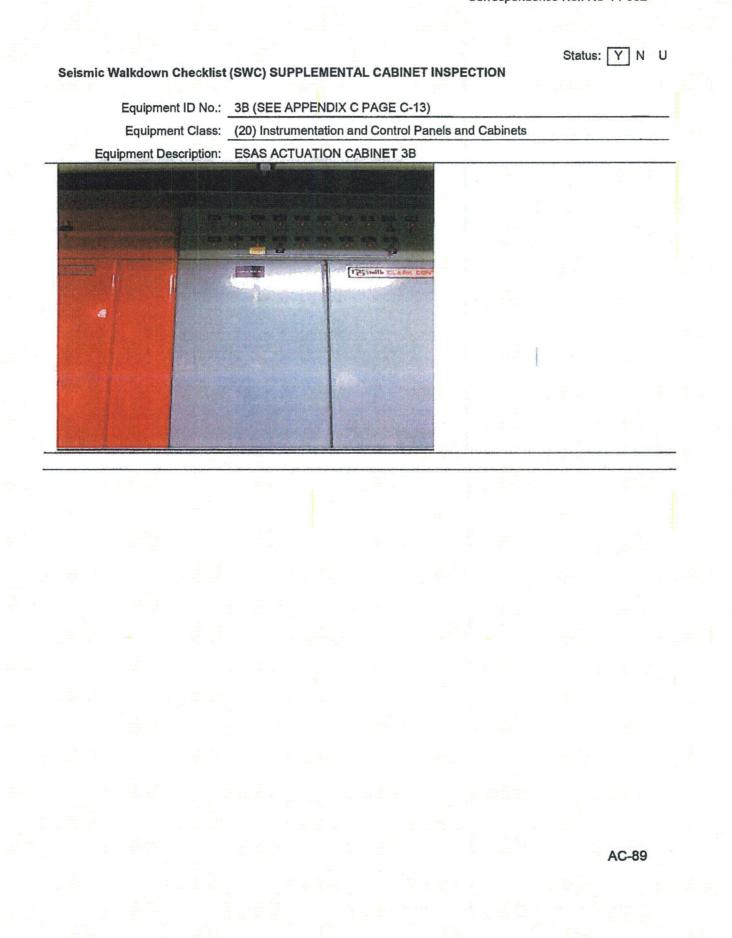
| 7. | Are soft targets free from impact by nearby equipment or structures? | - |
|-----|---|---|
| 8. | Are overhead equipment, distribution systems, ceiling tiles and lighting, and | - |
| | masonry block walls not likely to collapse onto the equipment? | |
| 9. | Do attached lines have adequate flexibility 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

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| Seismic Walkdown Checklist | (SWC) SUPPLEMENTAL CABINET IN | Status: Y N | U |
|---|---|------------------|---|
| Equipment ID No.: | 3B (SEE APPENDIX C PAGE C-13) | | |
| Equipment Class: | (20) Instrumentation and Control Panel | s and Cabinets | |
| Equipment Description: | ESAS ACTUATION CABINET 3B | | |
| Other Adverse Conditions (Si | JPPLEMENTAL CABINET INSPECTIO | <u>N)</u> | |
| adversely affect the saf a. Internal compo b. Are adjacent ca | d found no adverse seismic conditions the ety functions of the equipment? nents secured? (i.e. no loose or missing abinets secured together? se seismic conditions? | | |
| Comments | | | |
| quipment has external anchora | ge. | | |
| | | | |
| | | | |
| Evaluated by: | S Cho Mark Etre | Date: 11/12/2012 | |
| | Seth Baker | | |
| Photos | | | |
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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)? | 1 | - |
|---|------------|---|---|---|
| | 2 . | Is the anchorage free of bent, broken, missing or loose hardware? | 4 | - |
| | 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 selsmic 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

| Seismic Walkdown | | | |
|------------------------------------|---|---|--|
| | nt ID No.: 4B (SEE APPENDI) | | |
| | | and Control Panels and Cabinets | |
| Equipment De | escription: ESAS ACTUATION | CABINET 4B | |
| Other Adverse Con | ditions (SUPPLEMENTAL CAE | BINET INSPECTION) | |
| adversely af a. Inter b. Are | oked for and found no adverse s fect the safety functions of the ed rnal components secured? (i.e. n adjacent cabinets secured toget other adverse seismic conditions | quipment? oo loose or missing fasteners) her? | Мии Мии Мии |
| Comments | | | |
| | | | |
| quipment has extern | al anchorage. | | |
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| | mal & Ett | | |
| Evaluated by: | Man S Etre Mark | Etre Date: | 11/12/2012 |
| Evaluated by: | Mary S Cher Mark | Etre Date: | 11/12/2012 |
| Evaluated by: | Man S Etwo Mark Sea Baken Seth Ba | | 11/12/2012 |
| Evaluated by: | Marl S Cive Mark Sol Baker Seth Ba | | |
| Evaluated by: | Man S Clove Mark Sold Baken Seth Ba | | |
| Evaluated by: | Man S Chee Mark Sol Baken Seth Ba | | |
| | Man S Elwer Sold Baken Seth Ba | | |
| | Man S Etwe Set Baker Seth Ba | | |
| | Man S Etwe Sort Baken Seth Ba | | |
| | Man S Ctwo Set Baker Seth Ba | | |
| | Man S Etwe Sort Baker Seth Ba | | |
| | Man S Ctool Sott Baken Seth Ba | | |
| | Man S Ctoo Set Bahn Seth Ba | | |
| | Man S Cover Mark | | |
| Photos | | | |
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| Photos | | | |

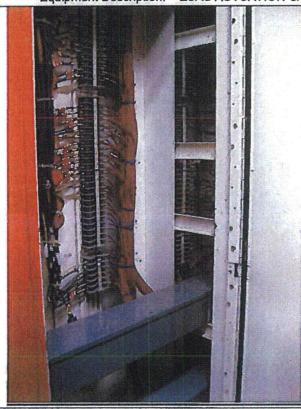
Status: Y N U

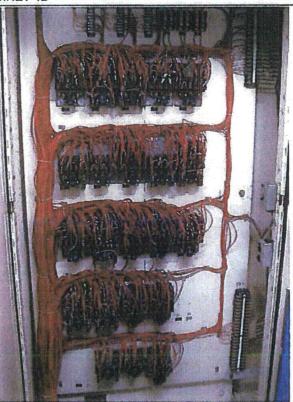
Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

 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

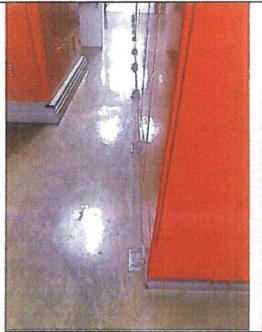


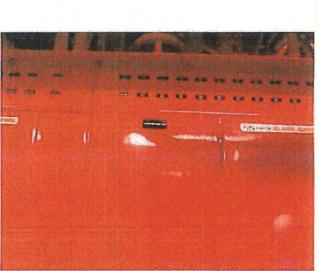


Status: Y N U

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. | | - |
| 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? | - |
| g | Is the anchorage configuration consistent with plant documentation? (Note: | |

- 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 | - |

SEE SWC IN APPENDIX C FOR RESPONSES

potentially adverse seismic interaction effects?

| Status: | Y | N | U |
|---------|---|---|---|
| | | | |

| Faultan | | |
|--------------------|--|--------------|
| | nent ID No.: 5B (SEE APPENDIX C PAGE C-19) nent Class: (20) Instrumentation and Control Panels and Cabinets | |
| | | |
| Equipment D | Description: ESAS ACTUATION CABINET 5B | |
| Other Adverse Co | onditions (SUPPLEMENTAL CABINET INSPECTION) | |
| | ooked for and found no adverse seismic conditions that could | |
| | affect the safety functions of the equipment? | |
| | ernal components secured? (i.e. no loose or missing fasteners) e adjacent cabinets secured together? | Ми u Ми u |
| | o other adverse seismic conditions? | |
| Comments | | |
| <u>Sources</u> | | |
| quipment has exten | rnal anchorage. | |
| | | |
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| | | |
| | Man S Elize Mark Etre Date: | |
| Evaluated by: | Mark Etre Date: | 11/12/2012 |
| | Just Baker Seth Baker | 11/12/2012 |
| | Geui Bakei | 11/12/2012 |
| | | |
| | | |
| hotos | | |
| Photos | | |

4

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.

<u>Anchorage</u>

| 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? | ł | - |
| 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 | - |

SEE SWC IN APPENDIX C FOR RESPONSES

potentially adverse seismic interaction effects?

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| Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION | Status: Y N U |
|---|----------------------------------|
| 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 selsmic conditions that could adversely affect the safety functions of the equipment? a. Internal components secured? (i.e. no loose or missing fasteners) b. Are adjacent cabinets secured together? c. No other adverse seismic conditions? | M N U Not Applicable M N U |
| Comments | |
| Equipment has external anchorage. | |
| | |
| Evaluated by: Mark Etre Date: | 11/13/2012 11/13/2012 |
| | |

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.)

 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 | - |
| 9. | masonry block walls not likely to collapse onto the equipment? Do attached lines have adequate flexibility to avoid damage? | - |
| 10. | Based on the above seismic interaction evaluations, is equipment free of | - |

The alternation is a second second second

SEE SWC IN APPENDIX C FOR RESPONSES

potentially adverse seismic interaction effects?

| Status: | Y | N | U |
|---------|---|---|---|

| Seismic Walkdown Checklist | (SWC) SUPPLEMENTAL CABINET INSPECTION | |
|----------------------------------|--|------------------|
| Equipment ID No.: | CRD-CB-1D (SEE APPENDIX C PAGE C- 67) | 8 (19 10) |
| Equipment Class: | (20) Instrumentation and Control Panels and Cabinets | |
| Equipment Description: | CRD CIRCUIT BREAKER 1D | |
| Other Adverse Conditions (S | UPPLEMENTAL CABINET INSPECTION) | |
| | d found no adverse seismic conditions that could | |
| | ety functions of the equipment? nents secured? (i.e. no loose or missing fasteners) | MNU |
| | abinets secured together? | М́мυ |
| c. No other adver | se seismic conditions? | ΜNU |
| Comments | | |
| Equipment has external anchora | ge. | |
| Back panel of the breaker consis | ted of large grating that provided suitable view of the internals. | |
| | | |
| | | |

| | Man & Elist | | |
|---------------|--------------------------|-------|------------|
| Evaluated by: | Mark Etre | Date: | 11/12/2012 |
| | Juit Baker Seth Baker | | 11/12/2012 |
| | | | |



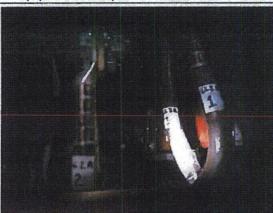
Status: Y N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

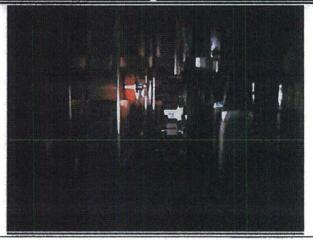
 Equipment ID No.:
 CRD-CB-1D (SEE APPENDIX C PAGE C- 67)

 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

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| Equipme | ent ID No.: EE-PNI | VBB (SEE APPENDIX C PAG | GE C-109) | | |
|--------------------|---------------------------|--|--|--------------------------|-----|
| | Concernant and the second | rumentation and Control Pane | and the second sec | | |
| | escription: VBB 120 | | | | |
| Equipment | | WAGT MALL | | | |
| Other Adverse Con | nditions (SUPPLEME | ENTAL CABINET INSPECTIO | <u>IN)</u> | | |
| | | o adverse seismic conditions t | hat could | | |
| | ffect the safety functio | ons of the equipment? ured? (i.e. no loose or missing | (fasteners) | | MNU |
| b. Are | adjacent cabinets sed | cured together? | | | MNU |
| c. No | other adverse seismic | c conditions? | 600 | | MNU |
| <u>Comments</u> | | | | | |
| uinmont has auto- | nal anabarasa | | | | |
| uipment has exten | nai anchorage. | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | Man! & Elect | 7 | | | |
| Evaluated by: | Man S Eline | / Mark Etre | Date: | 11/12/2012 | |
| Evaluated by: | Mar S Etre | Mark Etre | Date: | | |
| Evaluated by: - | Marl & Etro Sort Barn | Mark Etre | Date: | 11/12/2012 11/12/2012 | |
| Evaluated by: _ | Marl & Etwo Sort Bake | Mark Etre | Date: _ | | |
| | Marl & Etro Sota Bak | Mark Etre | Date: | | |
| Evaluated by: - | Marl & Etro Son Ban | Mark Etre Seth Baker | Date: | | |
| 1 () 1 | Marl & Ethe Sola Bah | Mark Etre Seth Baker | Date: | | |
| 2 1 1 | Marl & Etro | Mark Etre Seth Baker | Date: | | |
| 1 () 1 | Man S Ette Sola Bahn | Mark Etre Seth Baker | Date: | | |
| 2 1 1 | | Mark Etre Seth Baker | Date: | | |
| | | Mark Etre Seth Baker | Date: | | |
| 1 () 1 | | Mark Etre Seth Baker | Date: | | |
| 1 () 1 | | Mark Etre Seth Baker | Date: | | |
| 2 1 1 | | Mark Etre Seth Baker | Date: | | |
| 2 1 1 | | Mark Etre Seth Baker | Date: | | |
| 1 () 1 | | Seth Baker | Date: | | |
| 1 () 1 | | Mark Etre Seth Baker | | | |
| 1 () 1 | | Seth Baker | | | |

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.

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

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? | - |

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SEE SWC IN APPENDIX C FOR RESPONSES

in a strain in a su

| | HSPS-CH-2 (SEE APPENDIX C PAGE C-149) (20) Instrumentation and Control Panels and Cabinets | |
|--|--|-------------------|
| Equipment Description: | | |
| | UPPLEMENTAL CABINET INSPECTION) | |
| | nd found no adverse seismic conditions that could | |
| a. Internal compo b. Are adjacent c | fety functions of the equipment? onents secured? (i.e. no loose or missing fasteners) abinets secured together? rse seismic conditions? | Мии Мии Мии |
| Comments | | |
| | | |
| valuated by: | a Baker | 2/2012 |
| | Mark Etre Date: 11/1 Baker 11/1 | 2/2012 2/2012 |
| valuated by: | Mark Etre Date: 11/1 Baker 11/1 | |
| | Mark Etre Date: 11/1 Both Seth Baker 11/1 | |

Status: Y N U

Seismic Walkdown Checklist (SWC) SUPPLEMENTAL CABINET INSPECTION

| Equipment ID No.: | HSPS-CH-2 (SEE APPENDIX C PAGE C-149) |
|------------------------|--|
| | (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 (Bidg, 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 anchoraige 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 guestion 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

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

SEE SWC IN APPENDIX C FOR RESPONSES

potentially adverse seismic interaction effects?

Interaction Effects

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| Seismic Walkdown Checklis | t (SWC) SUPPLEMENTAL CABINET INSPECTION | Status: Y N U |
|----------------------------|--|-------------------------|
| 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) | |
| adversely affect the s | nd found no adverse seismic conditions that could afety functions of the equipment? onents secured? (i.e. no loose or missing fasteners) | Миu |
| b. Are adjacent | cabinets secured together? erse seismic conditions? | Not Applicable ∭ N U |

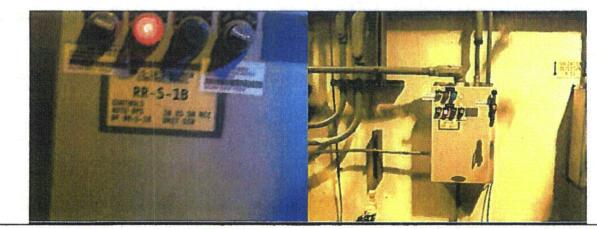
Comments

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.

Man S Eter Mark Etre Date: 11/13/2012 Evaluated by: Seth Baker 11/13/2012

Photos



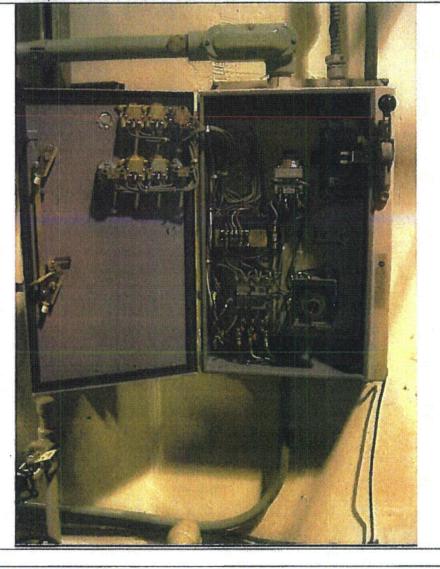
Status: Y N U

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

| | Seism | ic 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 | |
| - | | Proje | ect: TMI SWEL | |
| | | | CB, 338.50 ft, 23 : RELAY ROOM, SOUTH OF CRD CONTROL | |
| | Locatio | on (Bldg, Elev, Room/Are | | |
| - | | Manufacturer/Moo | | |
| | | tions for Completing C | | |
| | | • | locument the results of the Seismic Walkdown of an item of equipment on the of the following questions may be used to record the results of judgments and | |
| | | • | ovided at the end of this checklist for documenting other comments. | |
| - | Ancho | rage | | |
| - | 1. | | tion verification required (i.e., is the item one of the 50% | - |
| I | - | of SWEL items requirin | - | |
| | 2. | Is the anchorage free o | f bent, broken, missing or loose hardware? | - |
| | 3. | Is the anchorage free o | f corrosion that is more than mild surface oxidation? | - |
| | 4. | Is the anchorage free o | f visible cracks in the concrete near the anchors? | - |
| | 5. | | uration consistent with plant documentation? (Note: | - |
| | | | ies if the item is one of the 50% for which an anchorage | |
| | e | configuration verificatio | n is required.) chorage evaluations, is the anchorage free of | |
| | θ. | potentially adverse seis | | - |
| | | , | | |
| | | SEE SWC IN APPEND | IX C FOR RESPONSES | |
| - | Interac | tion Effects | | |
| - | | · · · · · · · · · · · · · · · · · · · | m impact by nearby equipment or structures? | |
| | | - | nt, distribution systems, ceiling tiles and lighting, and | - |
| | | | t likely to collapse onto the equipment? | |
| | 9. | Do attached lines have | adequate flexibility to avoid damage? | - |
| | 10. | Based on the above se potentially adverse seis | ismic interaction evaluations, is equipment free of mic interaction effects? | - |
| | | SEE SWC IN APPEND | IX C FOR RESPONSES | |

AC-113

الدار الايار الحاف مستجديات الشهرات الشار الارتباطية من المالية المراجبة المنابقاتين التيزة الحاليات والمراجب

| Seismic Walkdown Checklist | (SWC) SUPPLEMENTAL CABINET INSPECTION | Status: Y N U |
|-----------------------------|---|----------------|
| Equipment ID No.: | XCLA (SEE APPENDIX C PAGE C-282) | |
| Equipment Class: | (20) Instrumentation and Control Panels and Cabine | ts |
| Equipment Description: | XCLA RELAY PANEL | |
| Other Adverse Conditions (S | UPPLEMENTAL CABINET INSPECTION) | |
| | nd found no adverse seismic conditions that could fety functions of the equipment? | |
| | nents secured? (i.e. no loose or missing fasteners) | ΜNU |
| | abinets secured together? | Not Applicable |
| c. No other adver | rse seismic conditions? | MNU |

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.

Man S Elie Mark Etre Evaluated by: Date: 11/12/2012 Seth Baker 11/12/2012

Photos





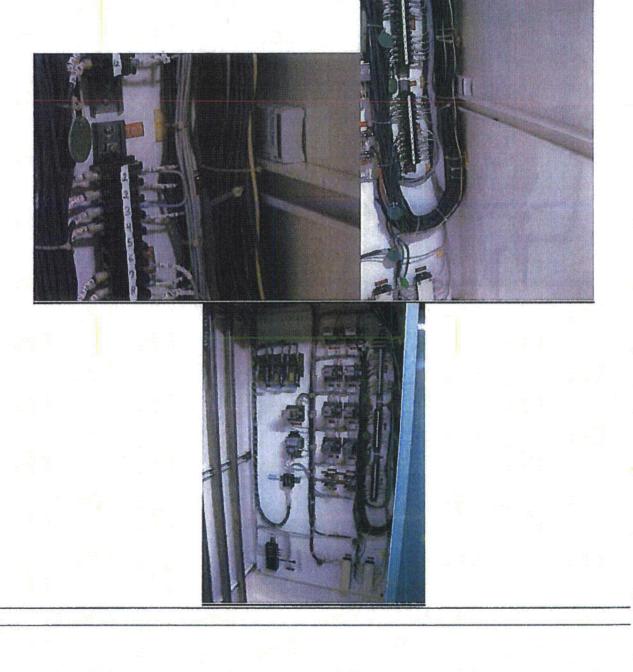
Status: Y N U

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-1

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AD Area Walk-By Checklists (AWCs)

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_ : · **1**. .

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.

1.1.1

| AREA WALK-BY | DESCRIPTION | ID | COMMENTS | PAGE |
|-----------------|-------------|------------|----------|------|
| | | DH-T-0001 | | |
| 8 | DH-T-0001 | CO-V-0010B | | AD-3 |
| | | CO-T-0001B | 1 | |

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

Table AD-1, Page 1 of 1

·____

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AD-2

Status: 🕅 N U

| is for Completing Ch ist may be used to doo veach of the following space is provided at th s anchorage of equipn ntially adverse seismining cabinets)? | sument the results g questions may b e end of this chec went in the area ap | e used to record the klist for documen pear to be free of | he results of the test of test | judgments and findin | ıgs. |
|---|--|---|--|---|--|
| ntially adverse seismi | | | | | |
| | | | essarily | | |
| s anchorage of equipn aded conditions? | ient in the area ap | pear to be free of | significant | Y๗๎ № | , <mark>C</mark> |
| ways and HVAC duct mic conditions (e.g., c | ing appear to be for a support of | ree of potentially rts is adequate and | adverse d fill | Y N U N/A | . G |
| ractions with other equ ting)? Arby lighting fi | ipment in the are three does no | a (e.g., ceiling tile | es and | | Ú |
| | aded conditions? ad on a visual inspection ways and HVAC duct nic conditions (e.g., conditions of cable trays a litions of cable trays a s it appear that the are actions with other equing)? arby high fing first | aded conditions? ed on a visual inspection from the floor, ways and HVAC ducting appear to be finic conditions (e.g., condition of suppor litions of cable trays appear to be inside s it appear that the area is free of potent actions with other equipment in the area ing)? | aded conditions? ed on a visual inspection from the floor, do the cable/cond ways and HVAC ducting appear to be free of potentially nic conditions (e.g., condition of supports is adequate and litions of cable trays appear to be inside acceptable limits s it appear that the area is free of potentially adverse seisu actions with other equipment in the area (e.g., ceiling tild ing)? Arby highting fix hure does not por a credu | aded conditions? ed on a visual inspection from the floor, do the cable/conduit ways and HVAC ducting appear to be free of potentially adverse nic conditions (e.g., condition of supports is adequate and fill litions of cable trays appear to be inside acceptable limits)? s it appear that the area is free of potentially adverse seismic spatial actions with other equipment in the area (e.g., ceiling tiles and ing)? arby highting fixture does not poor a credible horor | ed on a visual inspection from the floor, do the cable/conduit $Y \square N \square U \square N/A$ ways and HVAC ducting appear to be free of potentially adverse nic conditions (e.g., condition of supports is adequate and fill litions of cable trays appear to be inside acceptable limits)? s it appear that the area is free of potentially adverse seismic spatial $Y \square N \square U \square N/A$ actions with other equipment in the area (e.g., ceiling tiles and ing)? arby highting fixture does not poor a credible harow bo |

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nan seria an ang ang anan sa matang nang matang na sa sa nangang sa sa ang sa sa

Area Walk-By Checklist (AWC)

ł

| Location: Bldg. YD Floor El. <u>305'</u> 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? | |
| 6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? | |
| 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)? | |
| 8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? | |
| Comments (Additional pages may be added as necessary) | |
| SQ-T1-PH-T-0001 Rev. 2 provider seconic verificati CB19-T-1'5) DWG. E-435-201 provider tanks foundation drawing | on oftenks near BWST |
| | |
| Evaluated by: Juan A. Lopez / Juan Agen | Date: 10/18/13 |
| Dave Verkes / Das Afre | 10/18/13 |
| < C-6 ≻ | AD-4 |

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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.

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| | Table | AE-1. Inaccessible and | Deferred I | 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 | Ciosed | 1R20 | 11/12/2013 | |
| 18-480V- SHES | 480V SCREEN HOUSE ENGINEERED SAFEGUARDS MCC 1B | Energized equipment with internal anchorage | 1422453 | Closed | 1R20 | 11/11/2013 | |
| SF-P-18-8K | 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 | 1Ř20 | 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 | |
| СС | CONTROL RM CONSOLE CENTER CONTROL PANEL | Risk management due to covered internal anchorage | 1422453 | Closed | 4Q2012 | 11/12/2012 | |
| EED-PNL-18 | 125/250V DC DIST PANEL 1B | Risk management due to covered internal anchorage | 1422453 | Closed | 4Q2012 | 11/13/2012 | |

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Table AE-1. Inaccessible and Deferred Equipment

Table AE-1 Page 1 of 1

| 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 | Ciosed | 11/12/2012 | |
| 58 | 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 | ¥ | | 4Q2012 | 1422453 | Closed | 11/12/2012 | |

Table AE-2. Supplemental Internal Cabinet Inspection List

Table AE-2 Page 1 of 2

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| 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 | |

Table AE-2 Page 2 of 2

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AF Peer Review Report

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

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

<u>Annex A</u>

January 16, 2014

Prepared by Peer Reviewers

Dennis McGettrick (Team Leader) Patrick Mullens

Deer Review Team Leader Certification Signature

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1/17/14 Date

Sheet 1 of 8

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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

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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.

Sheet 2 of 8

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.

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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:

| 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 |

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

Sheet 4 of 8

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| | 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 |
| сс | 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 |

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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'.

Sheet 6 of 8

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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.

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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.

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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.

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