

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5203-----P30

Equipment Class: (5) Horizontal Pumps

Equipment Description: DIESEL GENERATOR/ Fuel Oil Transfer Pump

Project: Dresden 3 SWEL

Location (Bldg, Elev, Room/Area): Turbine, 517.50 ft, ALL

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)?  | Yes |
| 2. | Is the anchorage free of bent, broken, missing or loose hardware?   | 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?<br><i>Minor crack in grout pad judged to be acceptable.</i>   | 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.) | Yes |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?  | Yes |

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5203-----P30

Equipment Class: (5) Horizontal Pumps

Equipment Description: DIESEL GENERATOR/ Fuel Oil Transfer Pump

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

SEWS Anchorage Notes:

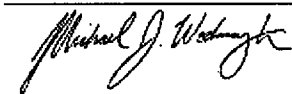
Small transfer pump anchored by four 3/8" cast-in-place anchors.

\*\*\*\*\*

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 7/31/2012

Evaluated by: James Griffith

Date: 9/30/2012



Michael Wodarczyk

9/30/2012



Status: ☒ Y ☐ N ☐ U

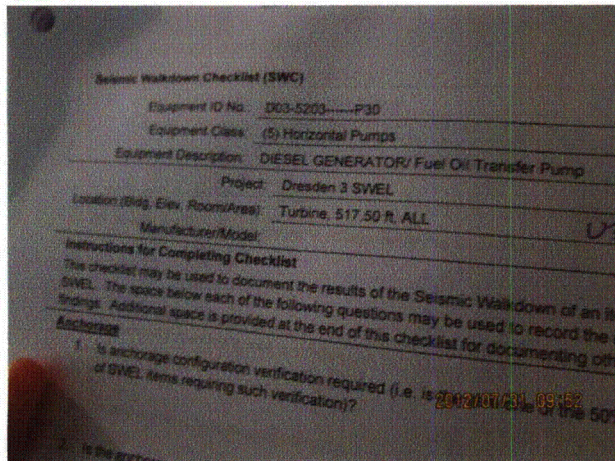
### Seismic Walkdown Checklist (SWC)

Equipment ID No.: D03-5203-----P30

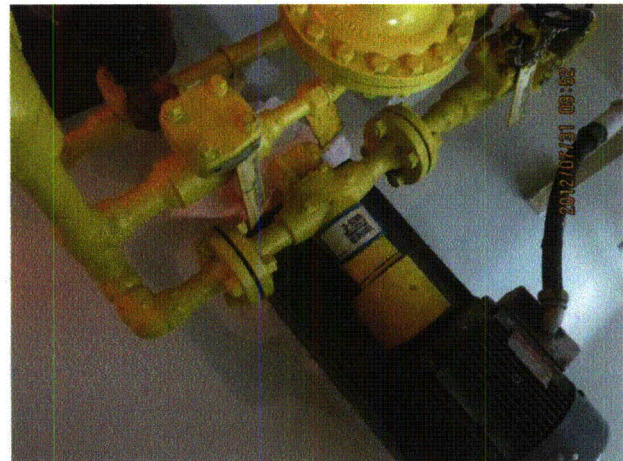
Equipment Class: (5) Horizontal Pumps

Equipment Description: DIESEL GENERATOR/ Fuel Oil Transfer Pump

#### Photos



20120731-Dresden-3 132



20120731-Dresden-3 133



20120731-Dresden-3 134



20120731-Dresden-3 135



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5203-----P30

Equipment Class: (5) Horizontal Pumps

Equipment Description: DIESEL GENERATOR/ Fuel Oil Transfer Pump



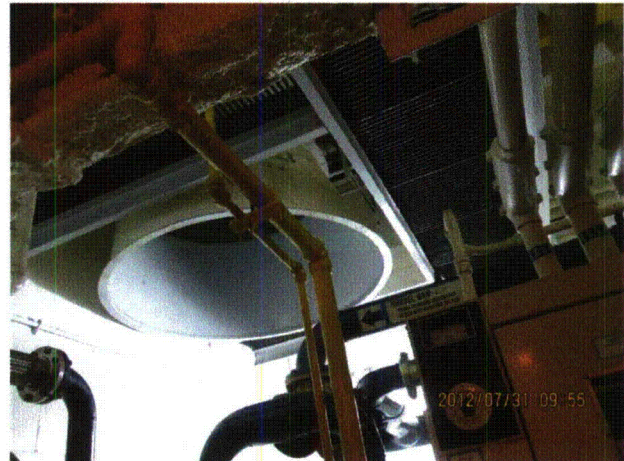
20120731-Dresden-3 136



20120731-Dresden-3 137



20120731-Dresden-3 138



20120731-Dresden-3 139



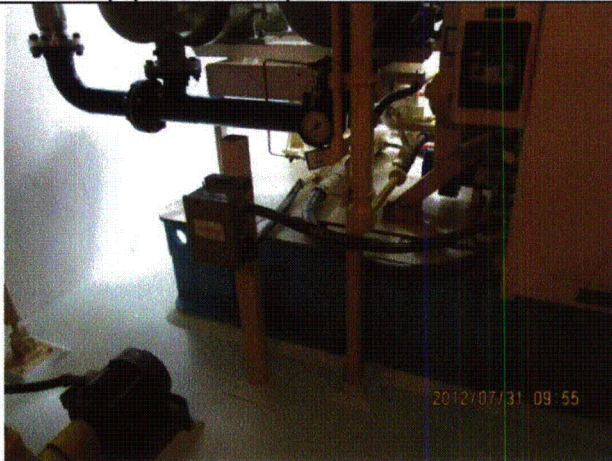
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

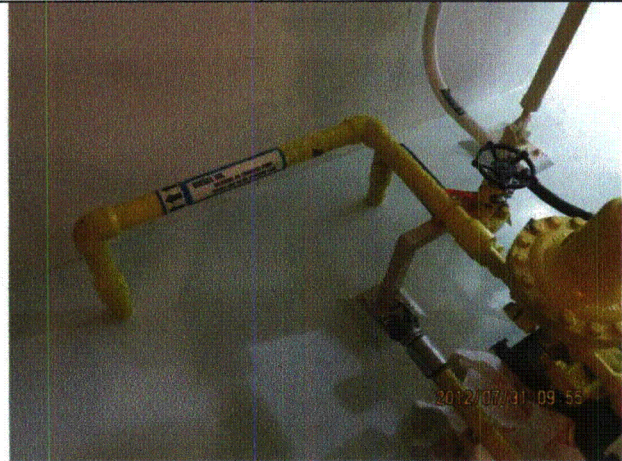
Equipment ID No.: D03-5203-----P30

Equipment Class: (5) Horizontal Pumps

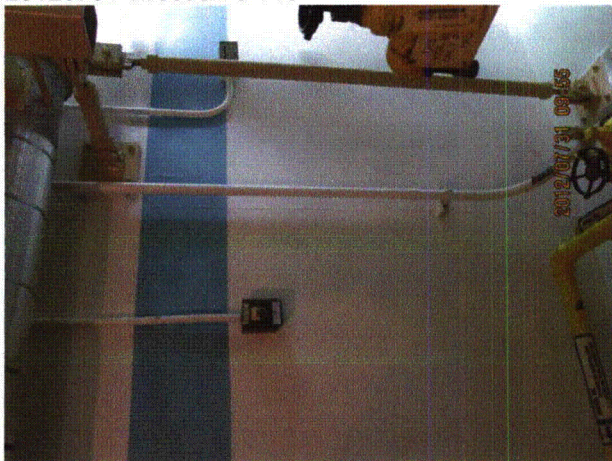
Equipment Description: DIESEL GENERATOR/ Fuel Oil Transfer Pump



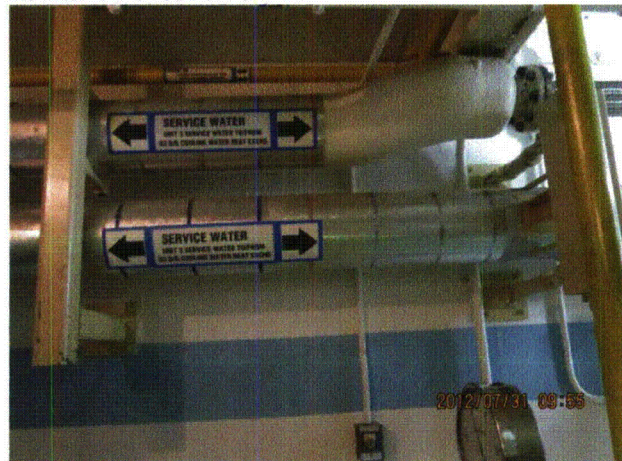
20120731-Dresden-3 140



20120731-Dresden-3 141



20120731-Dresden-3 142



20120731-Dresden-3 143



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

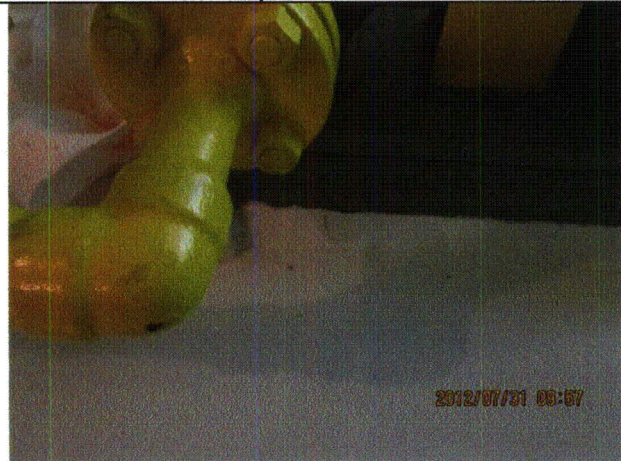
Equipment ID No.: D03-5203-----P30

Equipment Class: (5) Horizontal Pumps

Equipment Description: DIESEL GENERATOR/ Fuel Oil Transfer Pump



20120731-Dresden-3 144



20120731-Dresden-3 145



20120731-Dresden-3 146



20120731-Dresden-3 147

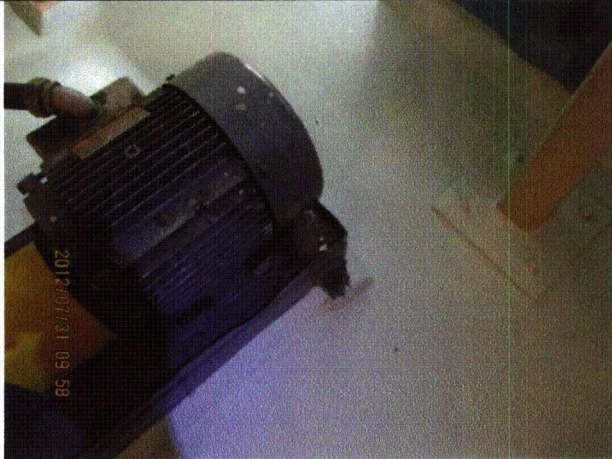
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5203-----P30

Equipment Class: (5) Horizontal Pumps

Equipment Description: DIESEL GENERATOR/ Fuel Oil Transfer Pump



20120731-Dresden-3 148

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5746-A—H15

Equipment Class: (10) Air Handlers

Equipment Description: LPCI/ LPCI Emergency Room Air Cooler

Project: Dresden 3 SWEL

Location (Bldg, Elev, Room/Area): Reactor, 476.50 ft, ALL

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)? Yes
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes  
*Abandoned anchor hole located at least 2 anchor diameters away from one rod support in accordance with station procedures. Judged to be acceptable.*
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  
*Minor shrinkage cracks in underside of ceiling slab judged to be acceptable.*
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.) Yes
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5746-A---H15

Equipment Class: (10) Air Handlers

Equipment Description: LPCI/ LPCI Emergency Room Air Cooler

**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 |
| <i>Cooler secured to wall. Thus, there are no relative flexibility concerns between cooler and associated piping.</i>                           |     |
| 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?                   | Yes |

**Other Adverse Conditions**

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

**Comments**

SEWS Anchorage Notes:

Air cooler is hung from the ceiling with six 1/2" diameter rod hangers (3 on each side).

\*\*\*\*\*

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/1/2012

Evaluated by: James D. Griffith James Griffith

Date: 9/30/2012

Michael J. Wodarczyk

Michael Wodarczyk

9/30/2012



Status: ☒ Y ☐ N ☐ U

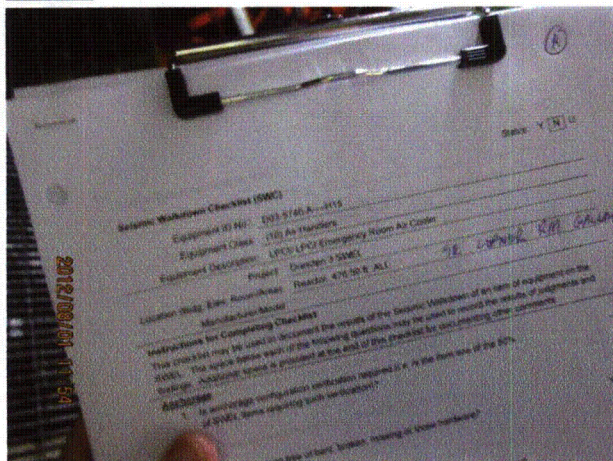
### Seismic Walkdown Checklist (SWC)

Equipment ID No.: D03-5746-A---H15

Equipment Class: (10) Air Handlers

Equipment Description: LPCI/ LPCI Emergency Room Air Cooler

### Photos



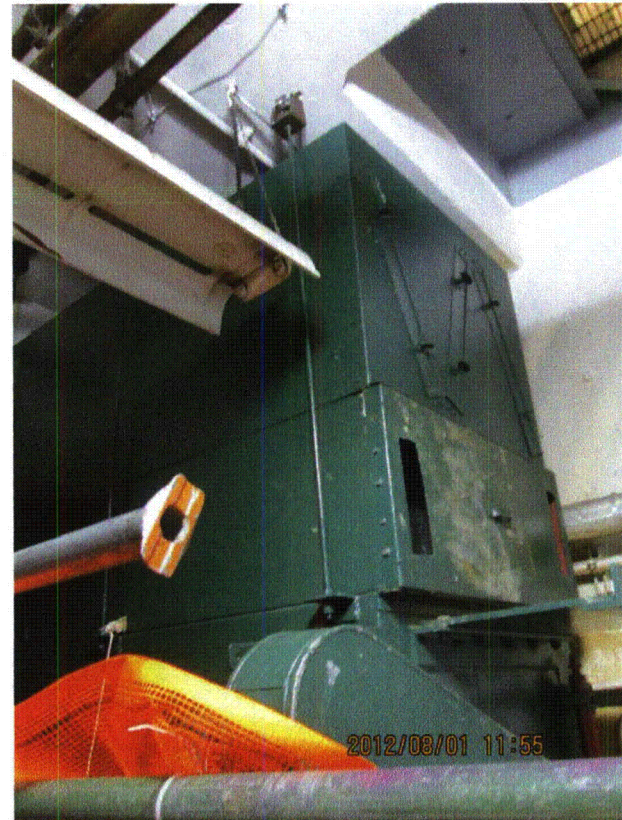
20120801-Dresden-3 237



20120801-Dresden-3 238



20120801-Dresden-3 239



20120801-Dresden-3 240



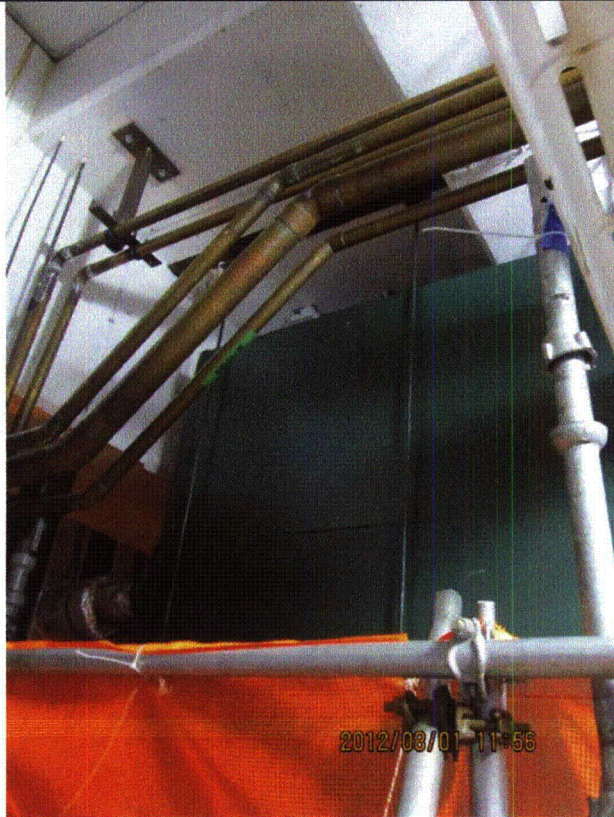
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

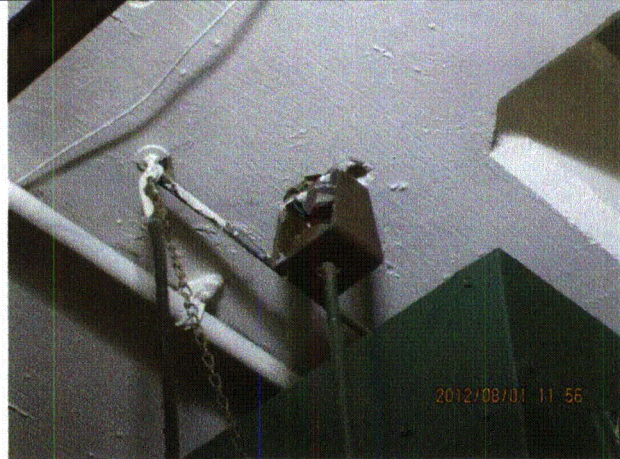
Equipment ID No.: D03-5746-A----H15

Equipment Class: (10) Air Handlers

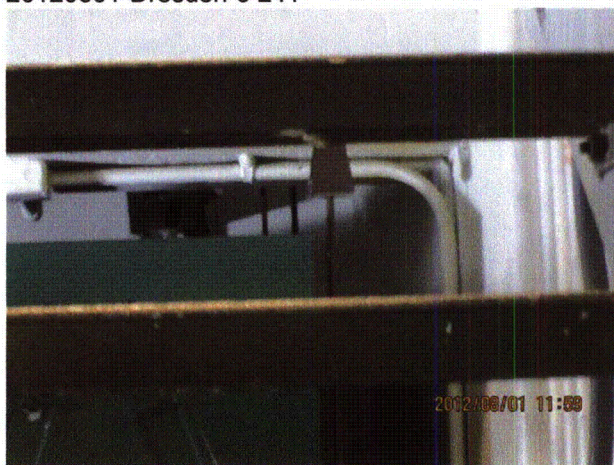
Equipment Description: LPCI/ LPCI Emergency Room Air Cooler



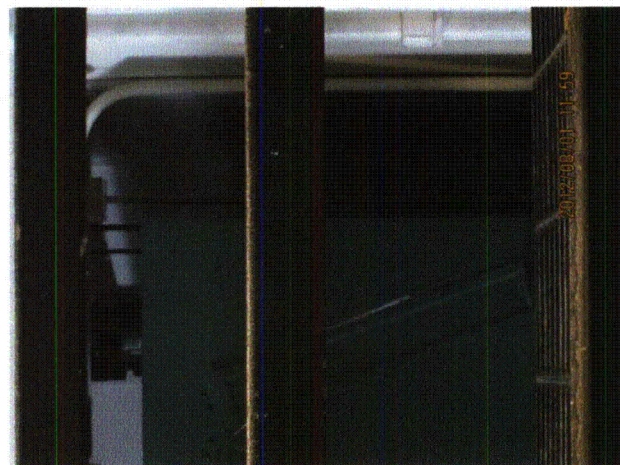
20120801-Dresden-3 241



20120801-Dresden-3 242



20120801-Dresden-3 243



20120801-Dresden-3 244



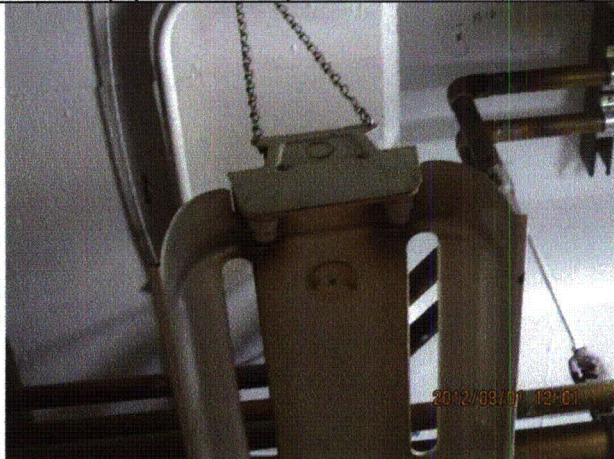
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

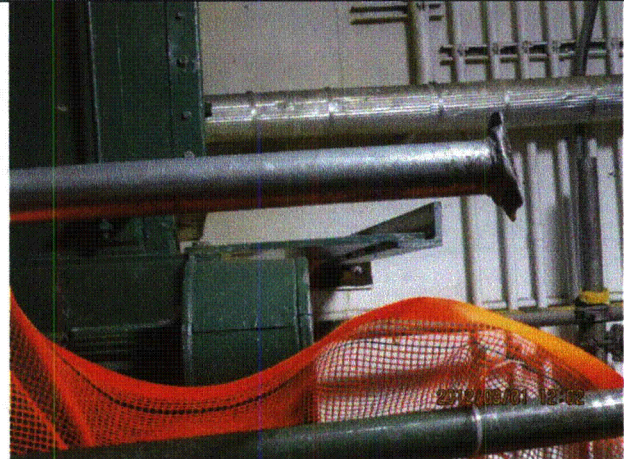
Equipment ID No.: D03-5746-A---H15

Equipment Class: (10) Air Handlers

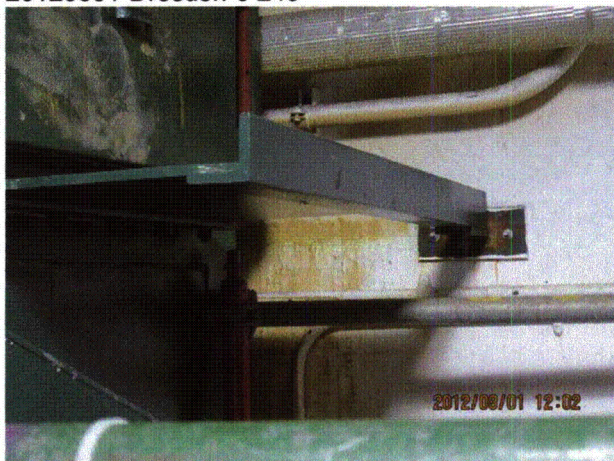
Equipment Description: LPCI/ LPCI Emergency Room Air Cooler



20120801-Dresden-3 245



20120801-Dresden-3 246



20120801-Dresden-3 247



20120801-Dresden-3 248



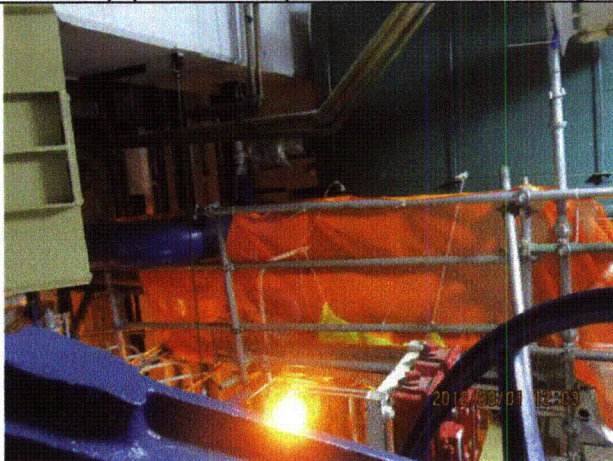
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

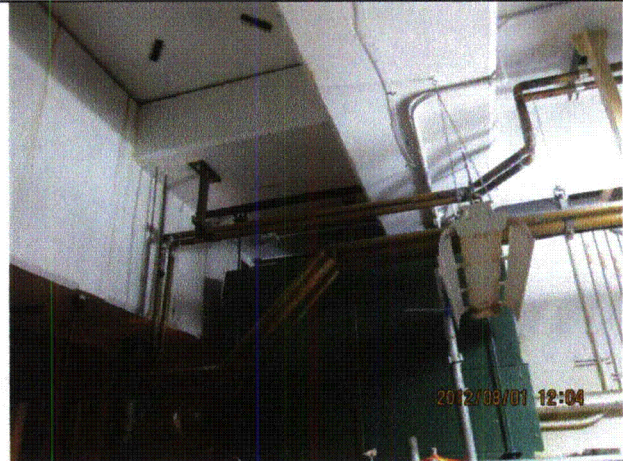
Equipment ID No.: D03-5746-A---H15

Equipment Class: (10) Air Handlers

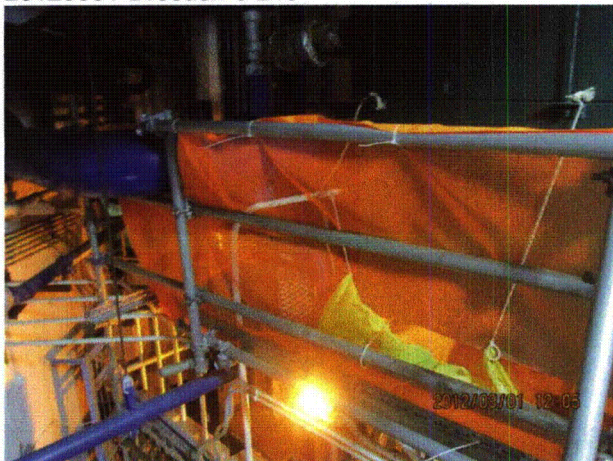
Equipment Description: LPCI/ LPCI Emergency Room Air Cooler



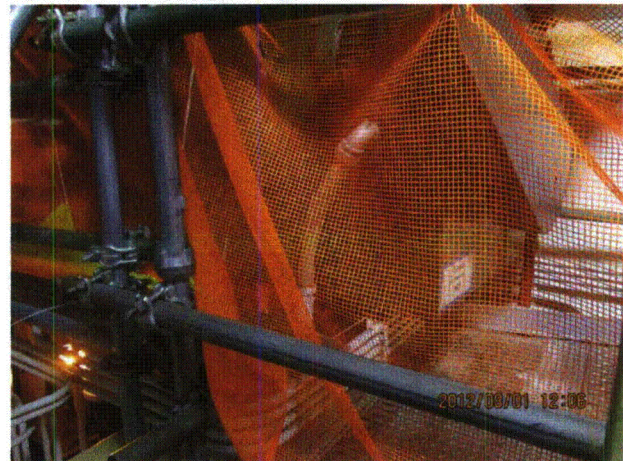
20120801-Dresden-3 249



20120801-Dresden-3 250



20120801-Dresden-3 251



20120801-Dresden-3 252



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

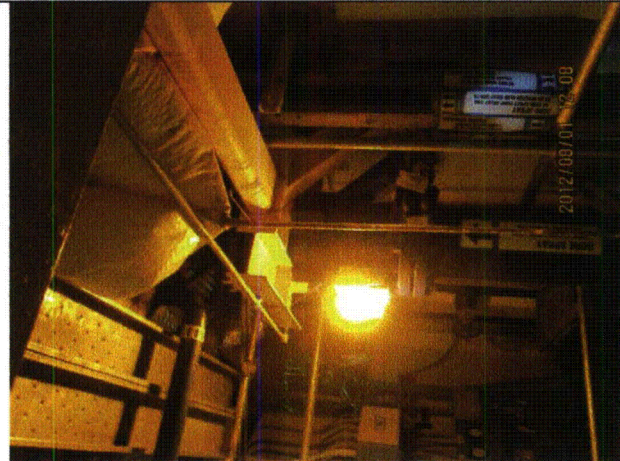
Equipment ID No.: D03-5746-A---H15

Equipment Class: (10) Air Handlers

Equipment Description: LPCI/ LPCI Emergency Room Air Cooler



20120801-Dresden-3 253



20120801-Dresden-3 254

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler

Project: Dresden 3 SWEL

Location (Bldg, Elev, Room/Area): Reactor, 476.50 ft, ALL

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)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? 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  
*Minor shrinkage cracks in ceiling judged to be acceptable.*
  
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.) Yes
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Potential interaction between cooler and channel support of HVAC duct judged to be non-damaging and acceptable.*

*Insulated pipe for cooler touching duct judged to be acceptable.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

9. Do attached lines have adequate flexibility to avoid damage? Yes

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

**Other Adverse Conditions**

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

**Comments**

SEWS Anchorage Notes:

Air cooler is hung from the ceiling with six 1/2" diameter rod hangers (3 on each side).

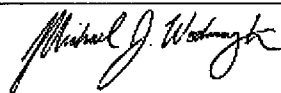
\*\*\*\*\*

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/3/2012

See U3 HPCI Room area walk-by for further information.

Evaluated by: James D. Griffith James Griffith

Date: 9/30/2012



Michael Wodarczyk

9/30/2012



Status: ☒ Y ☐ N ☐ U

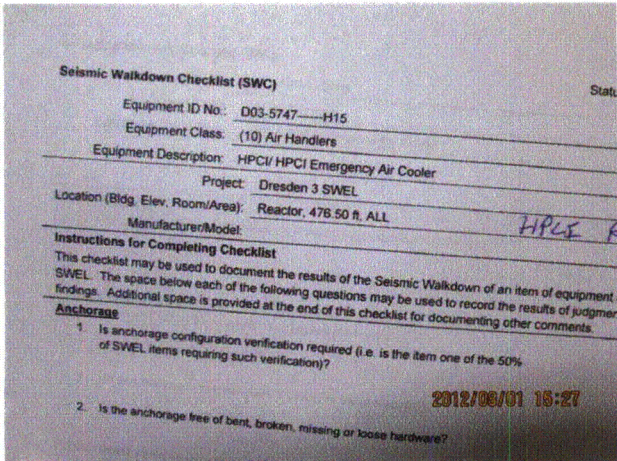
Seismic Walkdown Checklist (SWC)

Equipment ID No.: D03-5747-----H15

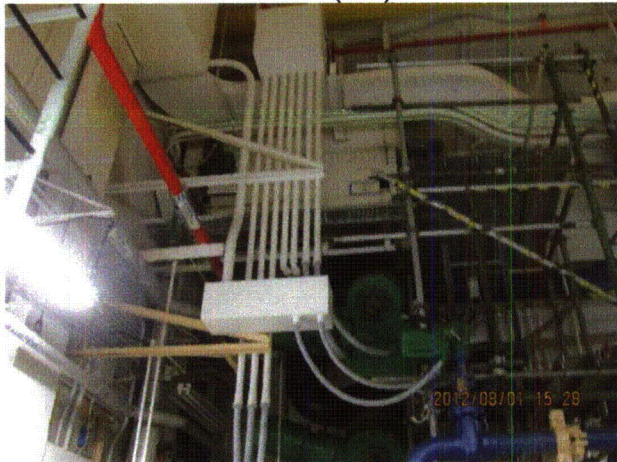
Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler

Photos



20120801-Dresden-3 Part 2 (142)



20120801-Dresden-3 Part 2 (144)



20120801-Dresden-3 Part 2 (143)



20120801-Dresden-3 Part 2 (145)



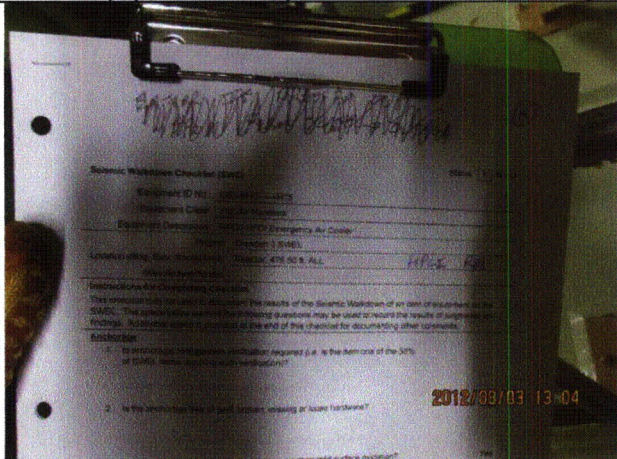
Status: ☒ Y ☐ N ☐ U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler



20120803-Dresden-3 169



20120803-Dresden-3 170



20120803-Dresden-3 171



20120803-Dresden-3 172



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler



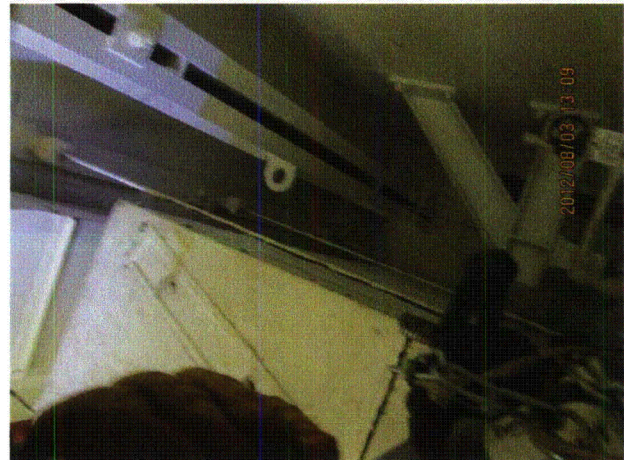
20120803-Dresden-3 173



20120803-Dresden-3 174



20120803-Dresden-3 175



20120803-Dresden-3 176



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler



20120803-Dresden-3 177



20120803-Dresden-3 178



20120803-Dresden-3 179



20120803-Dresden-3 180



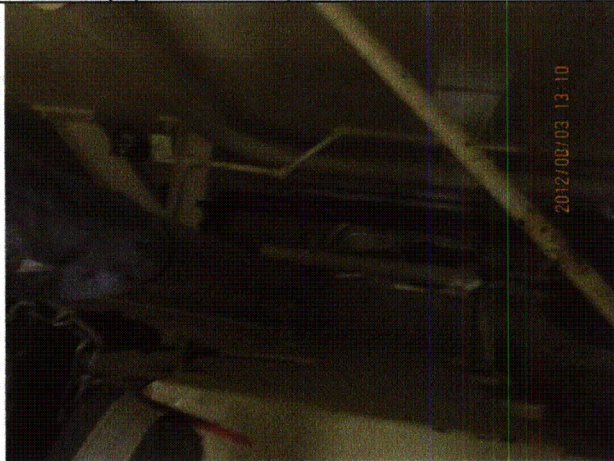
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

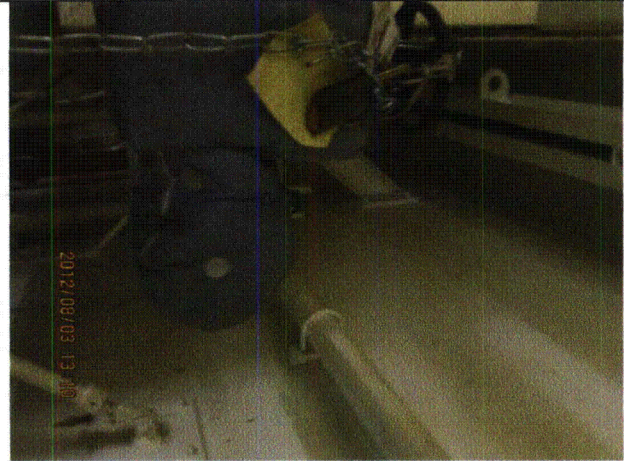
Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler



20120803-Dresden-3 181



20120803-Dresden-3 182



20120803-Dresden-3 183



20120803-Dresden-3 184



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

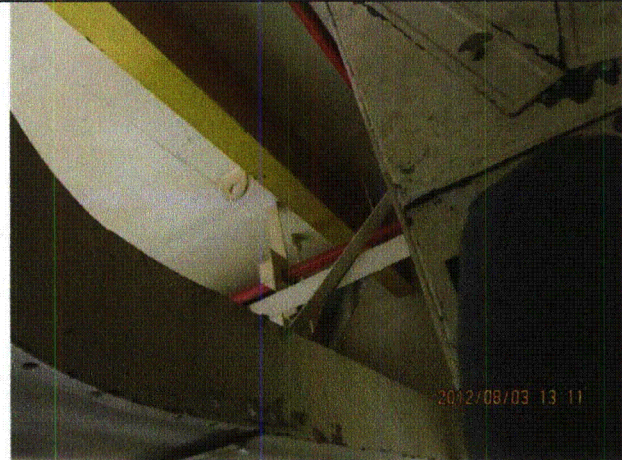
Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler



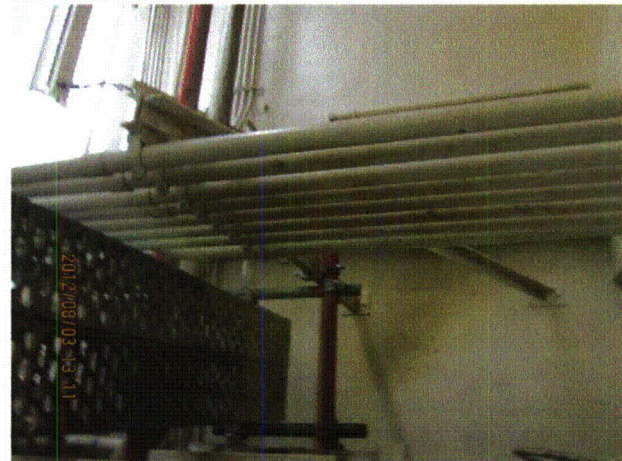
20120803-Dresden-3 185



20120803-Dresden-3 186



20120803-Dresden-3 187



20120803-Dresden-3 188



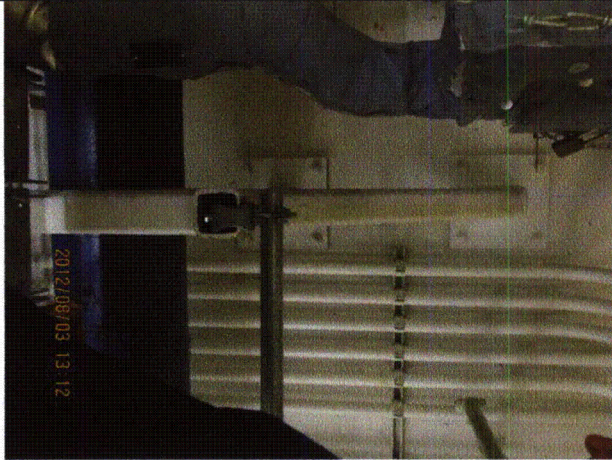
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler



20120803-Dresden-3 189



20120803-Dresden-3 190



20120803-Dresden-3 191



20120803-Dresden-3 192



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler



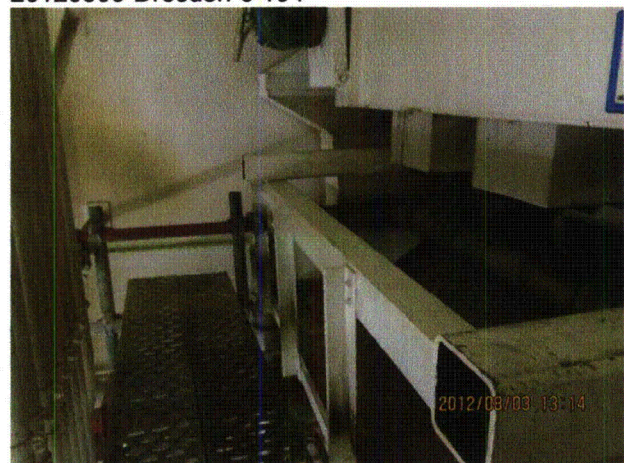
20120803-Dresden-3 193



20120803-Dresden-3 194



20120803-Dresden-3 195



20120803-Dresden-3 196



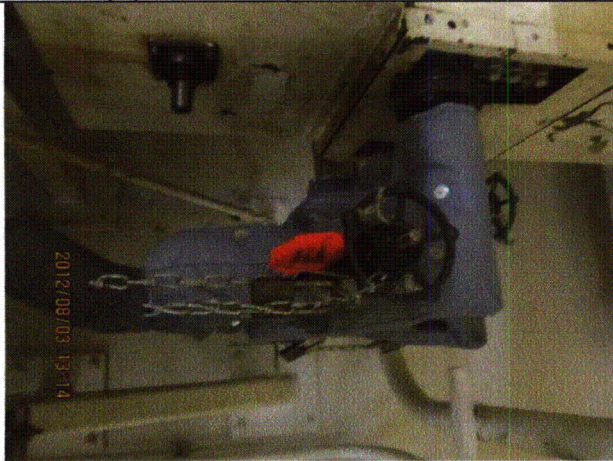
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler



20120803-Dresden-3 197



20120803-Dresden-3 198



20120803-Dresden-3 199



20120803-Dresden-3 200



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

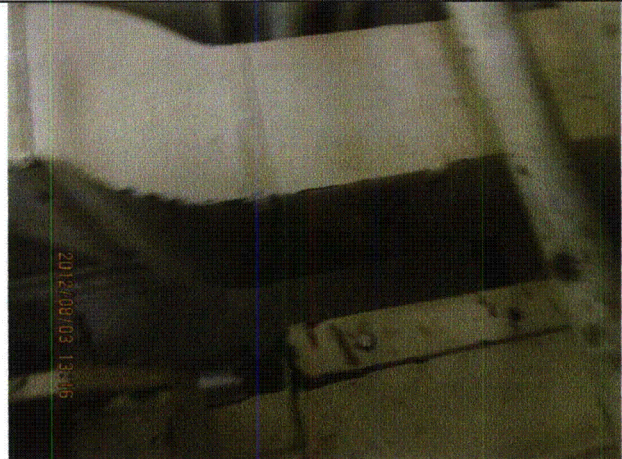
Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler



20120803-Dresden-3 201



20120803-Dresden-3 202



20120803-Dresden-3 203



20120803-Dresden-3 204



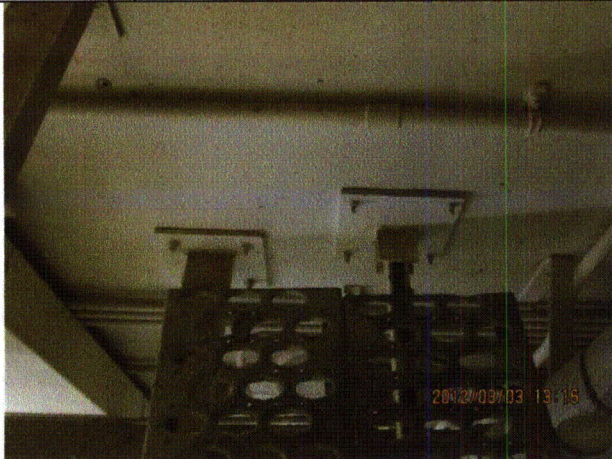
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

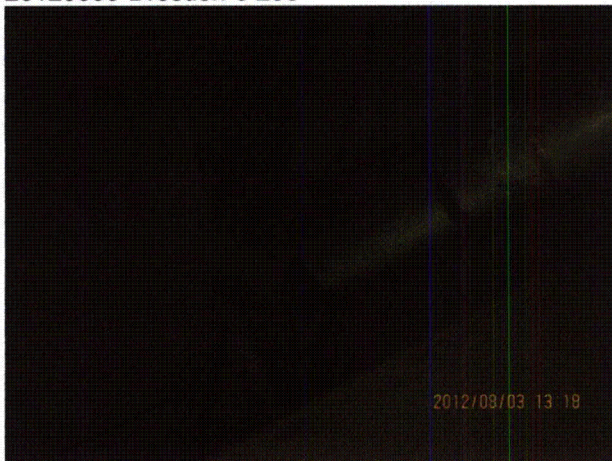
Equipment Description: HPCI/ HPCI Emergency Air Cooler



20120803-Dresden-3 205



20120803-Dresden-3 206



20120803-Dresden-3 207



20120803-Dresden-3 208

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-5747-----H15

Equipment Class: (10) Air Handlers

Equipment Description: HPCI/ HPCI Emergency Air Cooler



20120803-Dresden-3 209

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-6601-----G05

Equipment Class: (17) Engine-Generators

Equipment Description: DIESEL GENERATOR/ Diesel Engine Driven Generator

Project: Dresden 3 SWEL

Location (Bldg, Elev, Room/Area): Turbine, 517.50 ft, ALL

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)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? 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  
*Minor shrinkage cracks in floor judged to be acceptable.*
  
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.) Yes
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-6601-----G05

Equipment Class: (17) Engine-Generators

Equipment Description: DIESEL GENERATOR/ Diesel Engine Driven Generator

**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?<br><i>Adjacent masonry wall is safety-related.</i> | Yes |
| 9. Do attached lines have adequate flexibility to avoid damage?  | Yes |
| 10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?  | Yes |

**Other Adverse Conditions**

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

**Comments**

SEWS Anchorage Notes:

Anchored by 14 cast-in-place 1.25" diameter bolts.

\*\*\*\*\*

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 7/31/2012

Evaluated by: James D. Griffith James Griffith

Date: 9/30/2012

Michael J. Wodarczyk

Michael Wodarczyk

9/30/2012



Status: ☒ Y ☐ N ☐ U

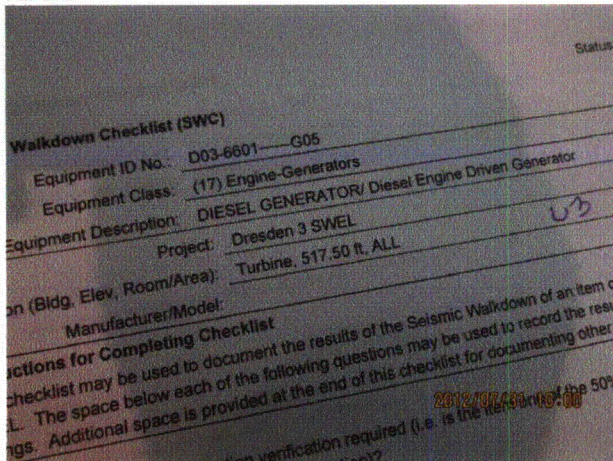
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-6601-----G05

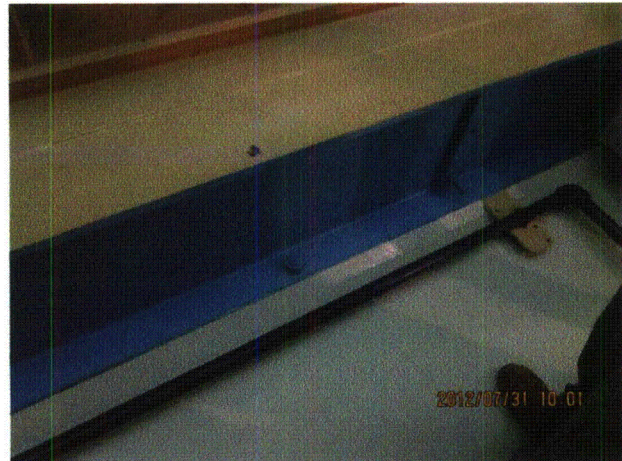
Equipment Class: (17) Engine-Generators

Equipment Description: DIESEL GENERATOR/ Diesel Engine Driven Generator

**Photos**



20120731-Dresden-3 149



20120731-Dresden-3 150



20120731-Dresden-3 151



20120731-Dresden-3 152



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-6601-----G05

Equipment Class: (17) Engine-Generators

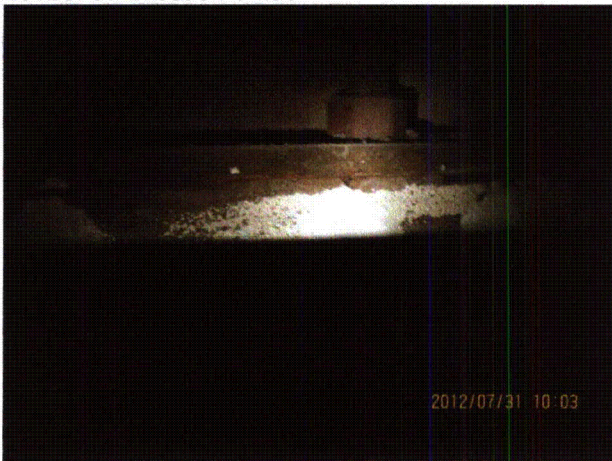
Equipment Description: DIESEL GENERATOR/ Diesel Engine Driven Generator



20120731-Dresden-3 153



20120731-Dresden-3 154



20120731-Dresden-3 155



20120731-Dresden-3 156



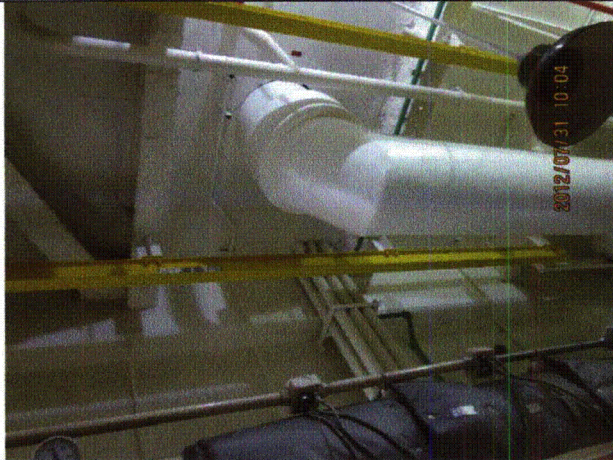
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

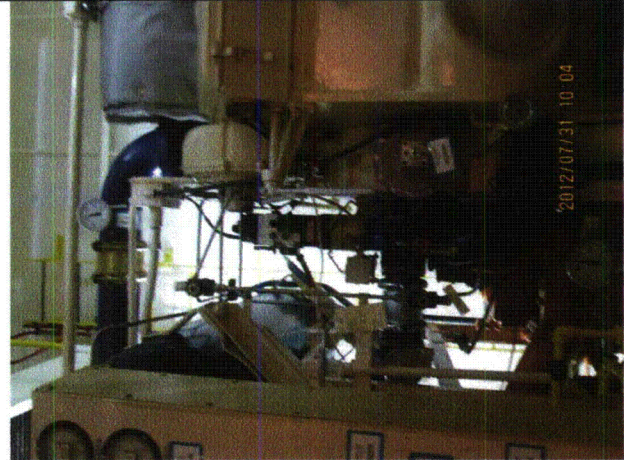
Equipment ID No.: D03-6601-----G05

Equipment Class: (17) Engine-Generators

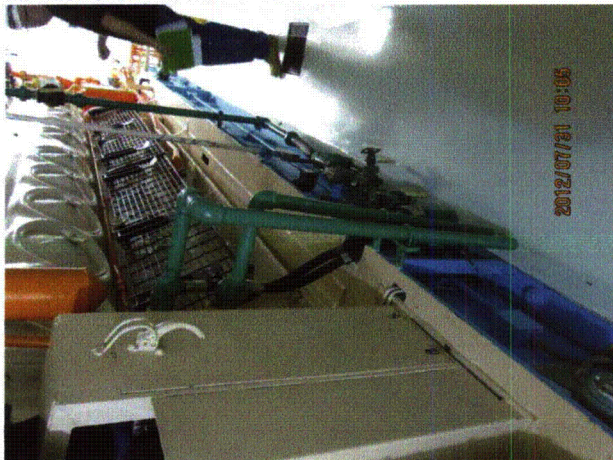
Equipment Description: DIESEL GENERATOR/ Diesel Engine Driven Generator



20120731-Dresden-3 157



20120731-Dresden-3 158



20120731-Dresden-3 159



20120731-Dresden-3 160



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

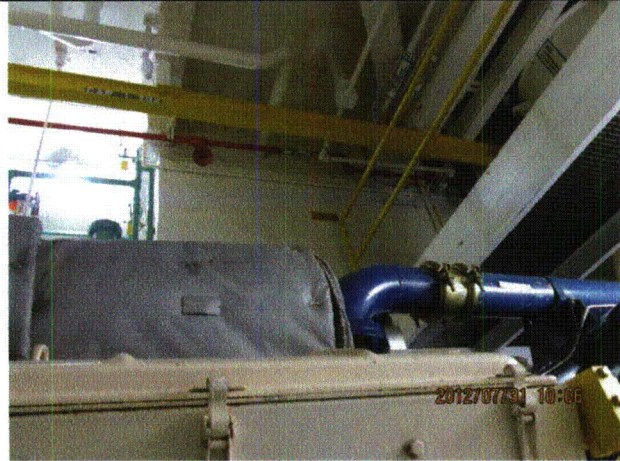
Equipment ID No.: D03-6601-----G05

Equipment Class: (17) Engine-Generators

Equipment Description: DIESEL GENERATOR/ Diesel Engine Driven Generator



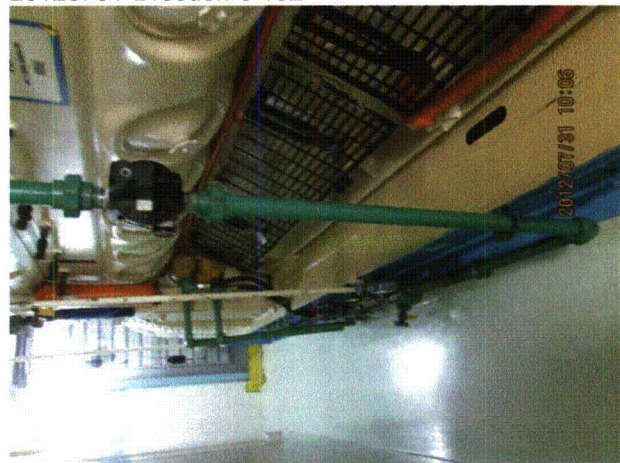
20120731-Dresden-3 161



20120731-Dresden-3 162



20120731-Dresden-3 163



20120731-Dresden-3 164



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

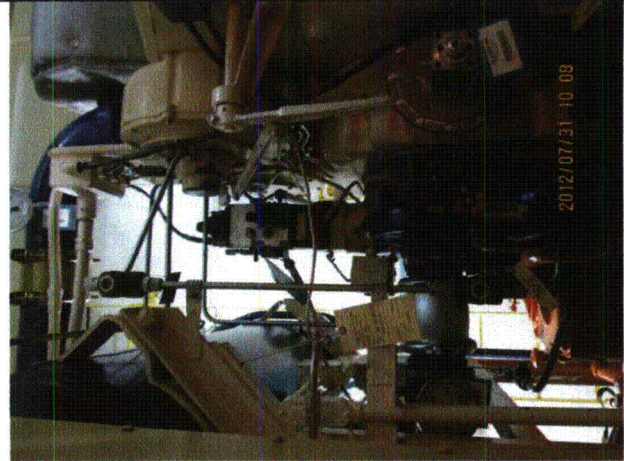
Equipment ID No.: D03-6601-----G05

Equipment Class: (17) Engine-Generators

Equipment Description: DIESEL GENERATOR/ Diesel Engine Driven Generator



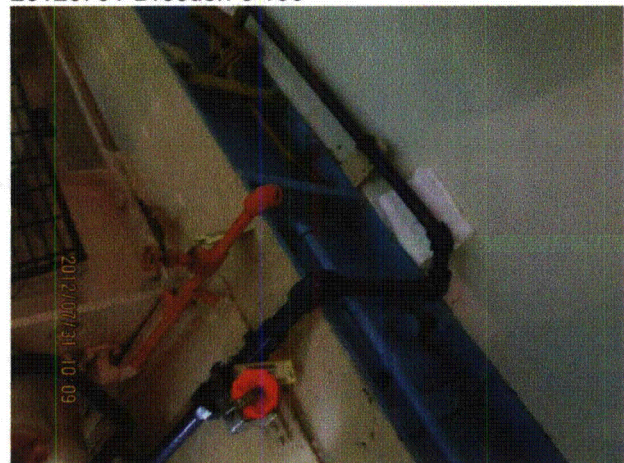
20120731-Dresden-3 165



20120731-Dresden-3 166



20120731-Dresden-3 167



20120731-Dresden-3 168

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-67341-----S35

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4160V AC/ Switchgear 34-1

Project: Dresden 3 SWEL

Location (Bldg, Elev, Room/Area): Reactor, 545.50 ft, ALL

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)? Yes
  
2. Is the anchorage free of bent, broken, missing or loose hardware? 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.) Yes
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-67341-----S35

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4160V AC/ Switchgear 34-1

**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  
*Overhead roof structure well-supported and judged to be acceptable.*  
*Overhead light fixtures are judged to be acceptable.*  
*Masonry wall at east end of switchgear is safety-related.*
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

**Other Adverse Conditions**

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

**Comments**

SEWS Anchorage Notes:

Anchored by small base plates welded to switchgear and anchored by 3/8" concrete expansion anchors.  
Switchgear braced back to wall.

\*\*\*\*\*

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/2/2012

Evaluated by: James Griffith

Date: 9/30/2012



Michael Wodarczyk

9/30/2012

Status: ☒ Y ☐ N ☐ U

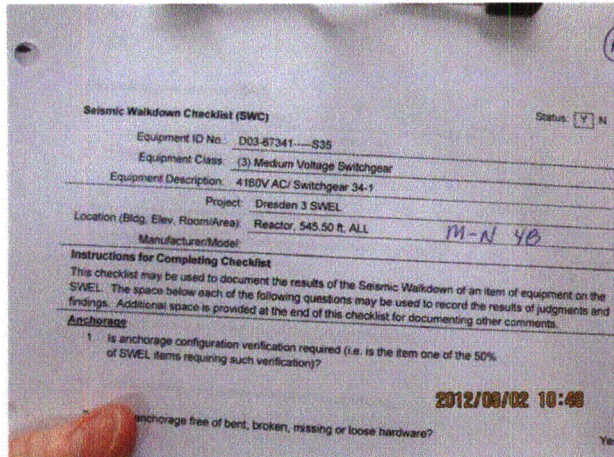
### Seismic Walkdown Checklist (SWC)

Equipment ID No.: D03-67341-----S35

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4160V AC/ Switchgear 34-1

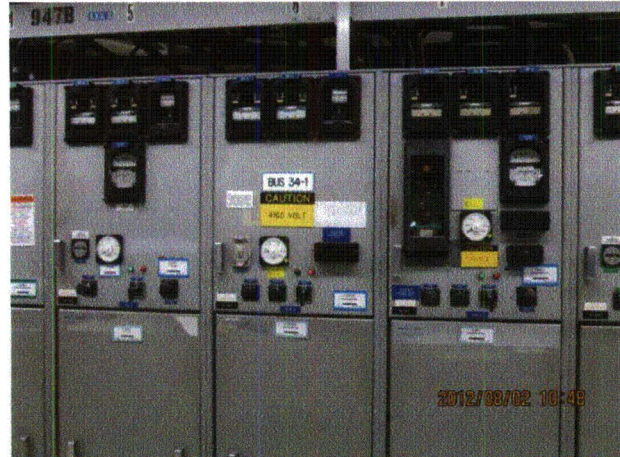
### Photos



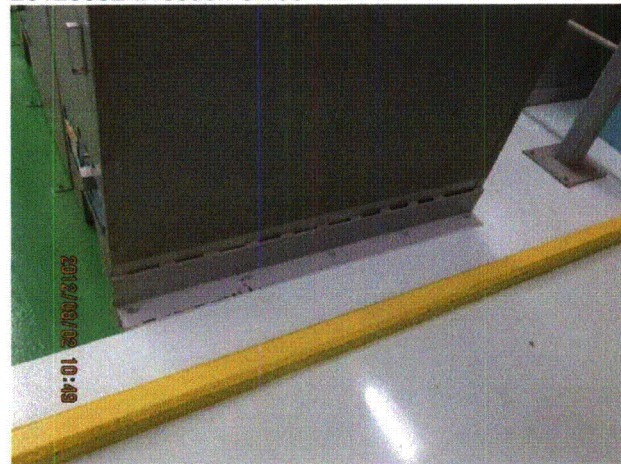
20120802-Dresden-3 134



20120802-Dresden-3 136



20120802-Dresden-3 135



20120802-Dresden-3 137



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

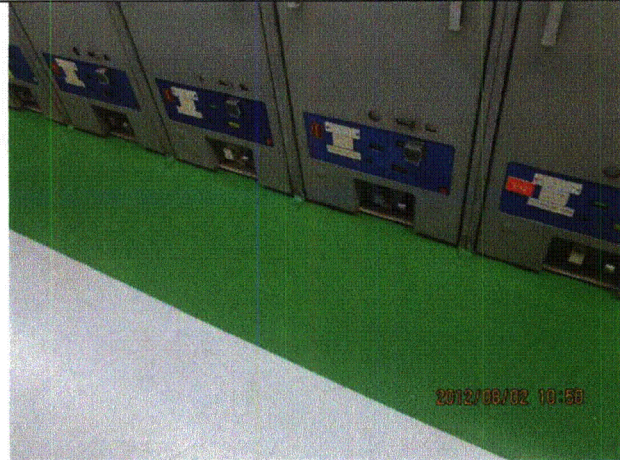
Equipment ID No.: D03-67341-----S35

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4160V AC/ Switchgear 34-1



20120802-Dresden-3 138



20120802-Dresden-3 139



20120802-Dresden-3 140



20120802-Dresden-3 141



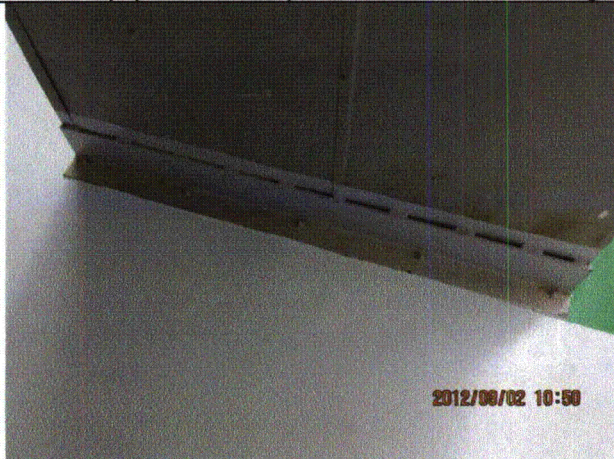
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

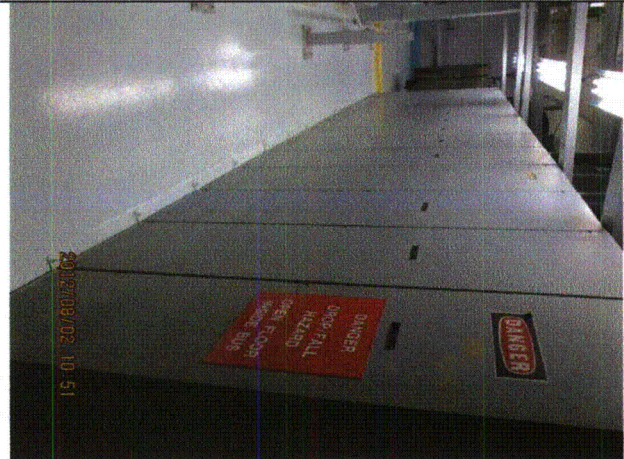
Equipment ID No.: D03-67341-----S35

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4160V AC/ Switchgear 34-1



20120802-Dresden-3 142



20120802-Dresden-3 143



20120802-Dresden-3 144



20120802-Dresden-3 145



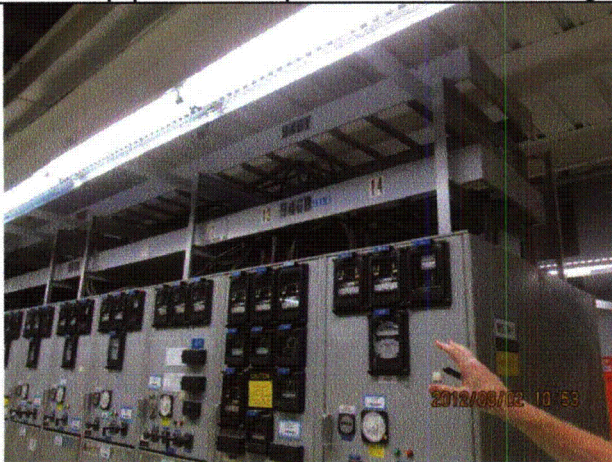
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

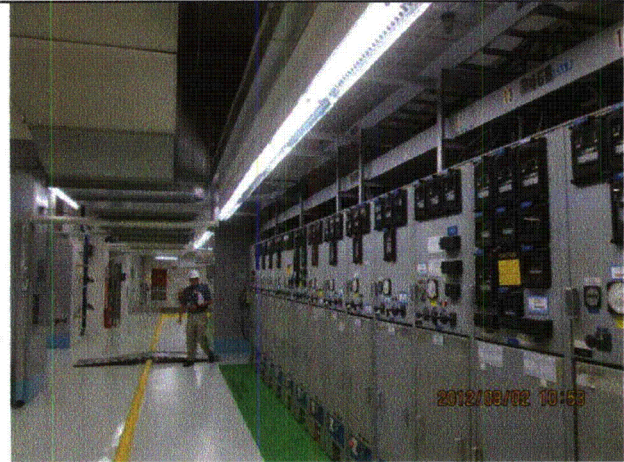
Equipment ID No.: D03-67341-----S35

Equipment Class: (3) Medium Voltage Switchgear

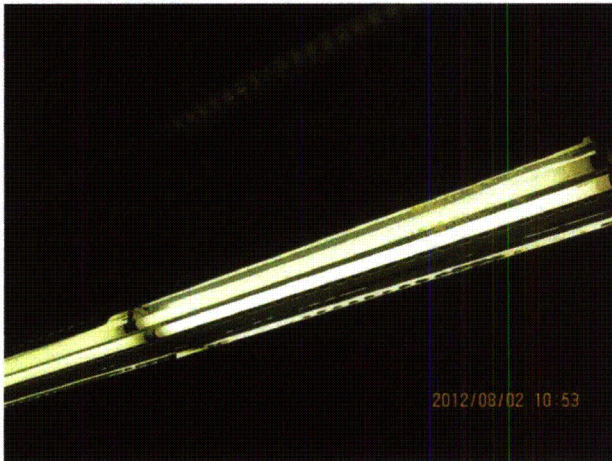
Equipment Description: 4160V AC/ Switchgear 34-1



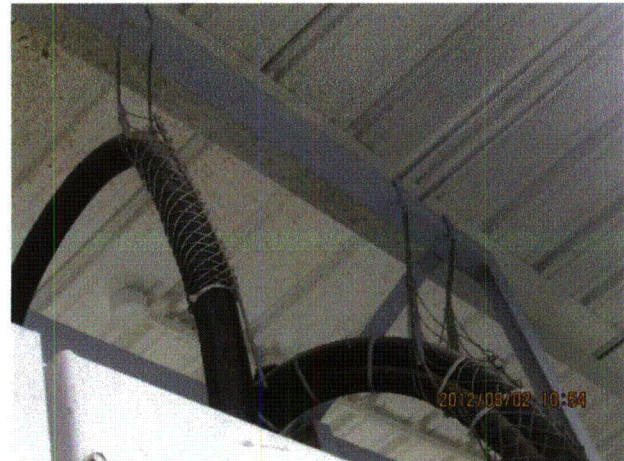
20120802-Dresden-3 146



20120802-Dresden-3 147



20120802-Dresden-3 148



20120802-Dresden-3 149



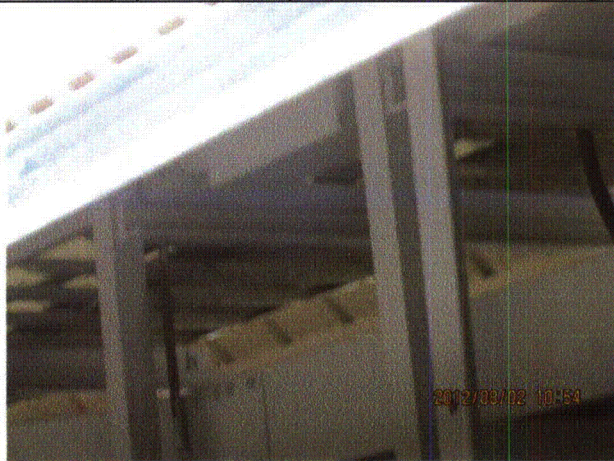
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

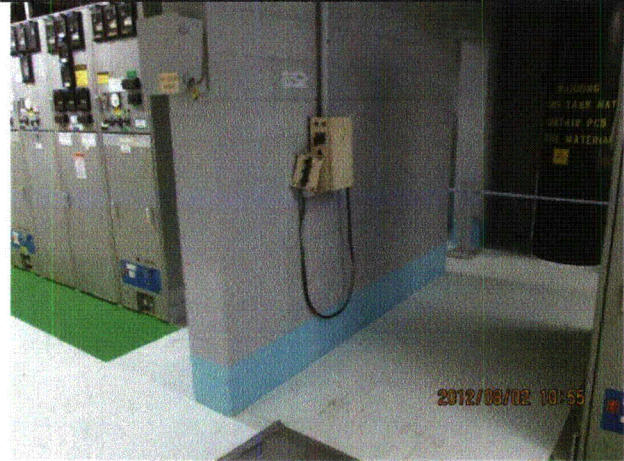
Equipment ID No.: D03-67341-----S35

Equipment Class: (3) Medium Voltage Switchgear

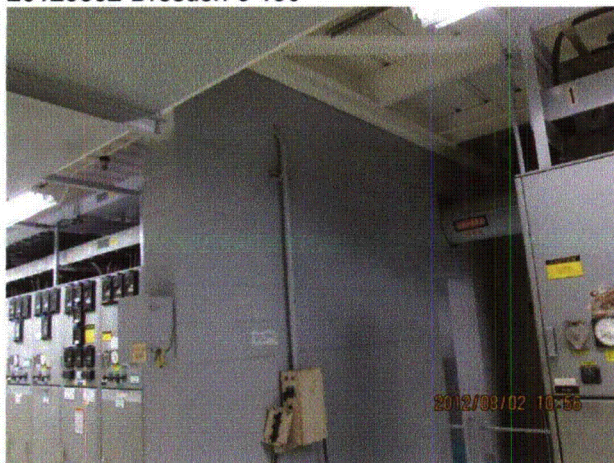
Equipment Description: 4160V AC/ Switchgear 34-1



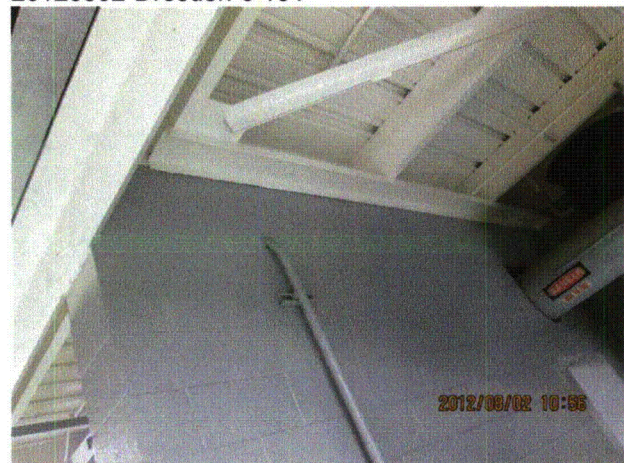
20120802-Dresden-3 150



20120802-Dresden-3 151



20120802-Dresden-3 152



20120802-Dresden-3 153



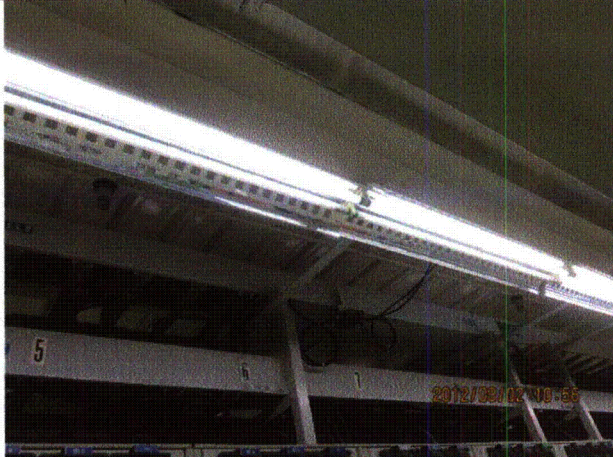
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

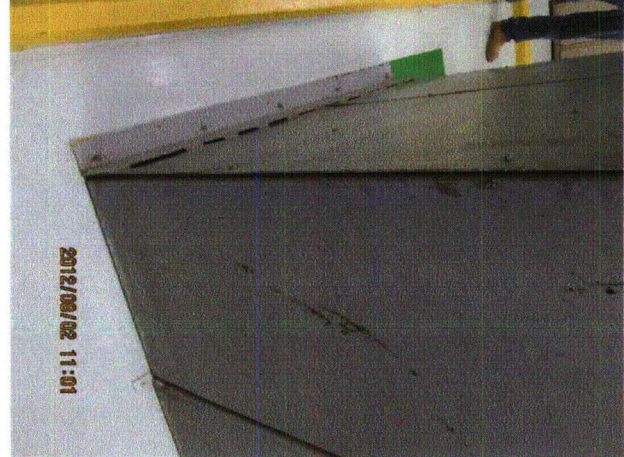
Equipment ID No.: D03-67341-----S35

Equipment Class: (3) Medium Voltage Switchgear

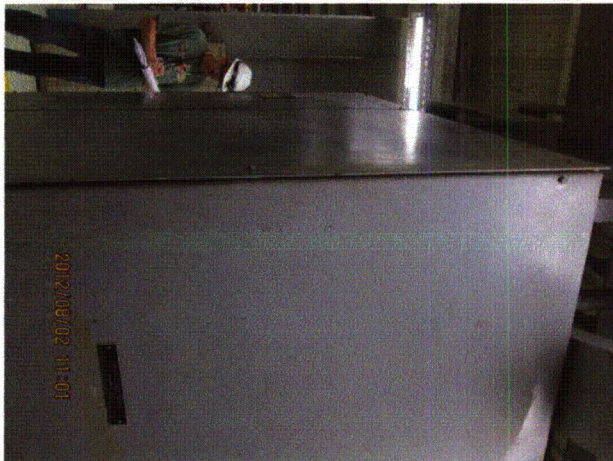
Equipment Description: 4160V AC/ Switchgear 34-1



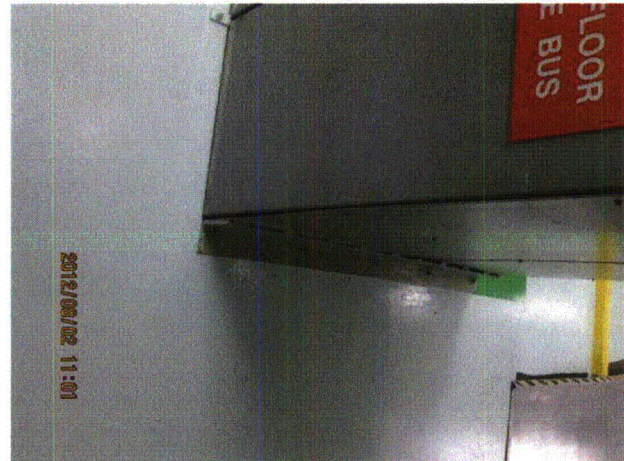
20120802-Dresden-3 154



20120802-Dresden-3 155



20120802-Dresden-3 156



20120802-Dresden-3 157



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-67341-----S35

Equipment Class: (3) Medium Voltage Switchgear

Equipment Description: 4160V AC/ Switchgear 34-1



20120802-Dresden-3 158



20120802-Dresden-3 159



20120802-Dresden-3 160



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-7338-----S35

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V AC/ Switchgear 38

Project: Dresden 3 SWEL

Location (Bldg, Elev, Room/Area): Reactor, 570.00 ft, ALL

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            |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation?  | Yes            |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors?   | Yes            |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?  | Yes            |

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-7338-----S35

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V AC/ Switchgear 38

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

IR 1396562:

**UNPINNED SWITCHGEAR HOISTS**

*During Fukushima seismic walkdowns, two movable trolley hoists mounted on top of SWGR 38 and one movable trolley hoist mounted on top of SWGR 39 were found unrestrained against horizontal movement due to the restraining pin for each hoist not being installed while each hoist was in the stored position. The switchgears are located at U3, N-47, EL. 570.*

*Unit supervisor and shift manager were informed of the condition and station personnel installed the pins for the trolley hoists. Therefore, hoists are judged acceptable.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

*Overhead light fixture judged to be acceptable.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

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

**Other Adverse Conditions**

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

**Comments**

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/2/2012



Status: ☒ Y ☐ N ☐ U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: D03-7338-----S35

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V AC/ Switchgear 38

Evaluated by: James D. Griffith James Griffith

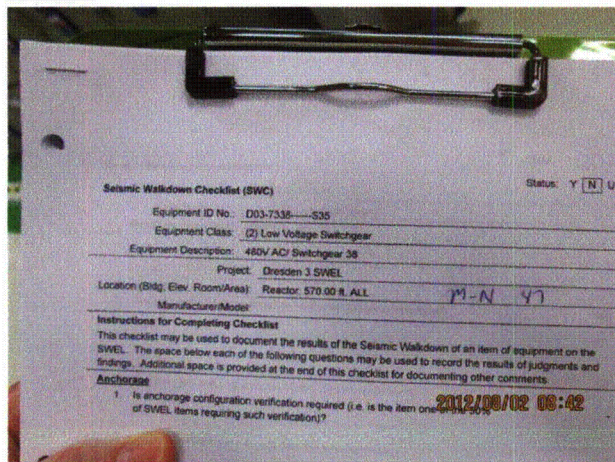
Date: 10/24/2012

Michael J. Wodarczyk

Michael Wodarczyk

10/24/2012

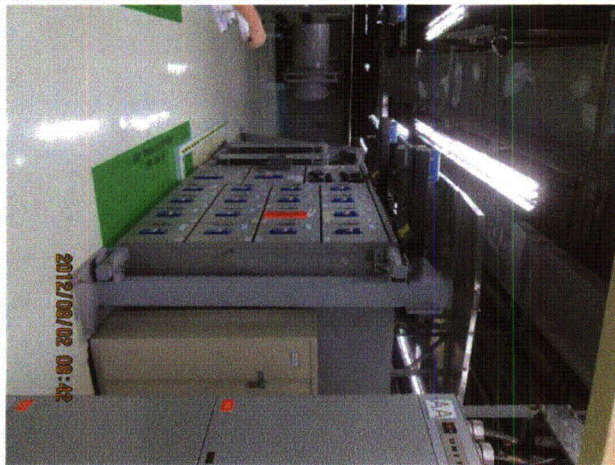
### Photos



20120802-Dresden-3 032



20120802-Dresden-3 033



20120802-Dresden-3 034



20120802-Dresden-3 035



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

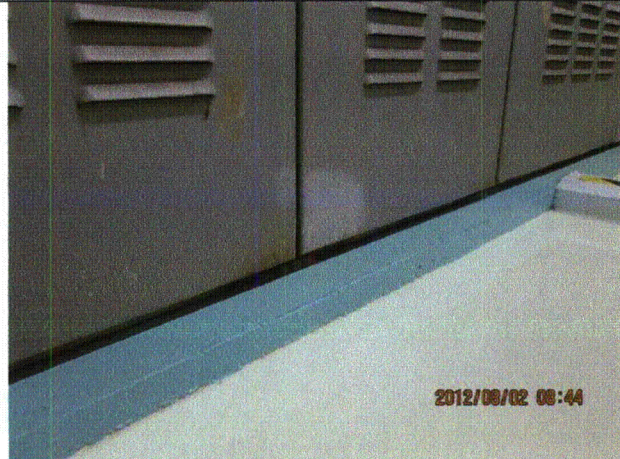
Equipment ID No.: D03-7338-----S35

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V AC/ Switchgear 38



20120802-Dresden-3 036



20120802-Dresden-3 037



20120802-Dresden-3 038



20120802-Dresden-3 039



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-7338-----S35

Equipment Class: (2) Low Voltage Switchgear

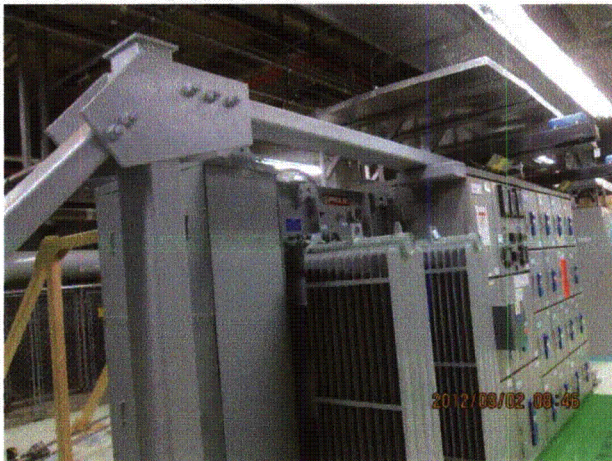
Equipment Description: 480V AC/ Switchgear 38



20120802-Dresden-3 040



20120802-Dresden-3 041



20120802-Dresden-3 043



20120802-Dresden-3 044



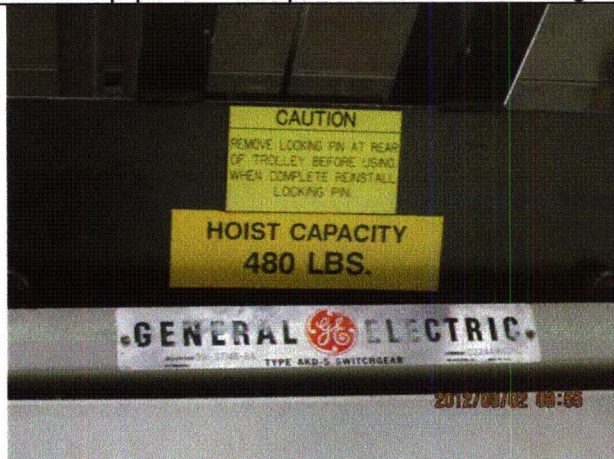
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-7338-----S35

Equipment Class: (2) Low Voltage Switchgear

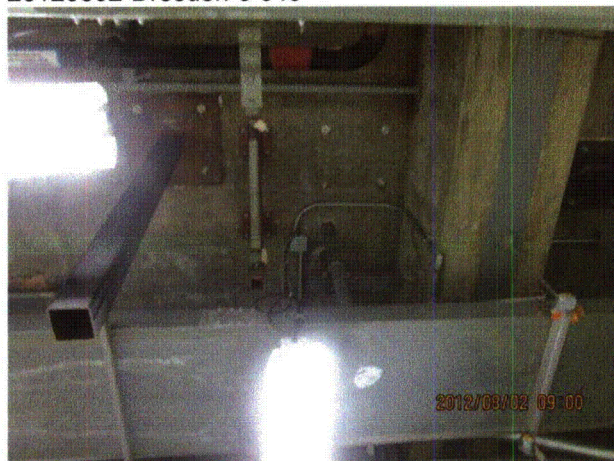
Equipment Description: 480V AC/ Switchgear 38



20120802-Dresden-3 045



20120802-Dresden-3 046



20120802-Dresden-3 047



20120802-Dresden-3 048



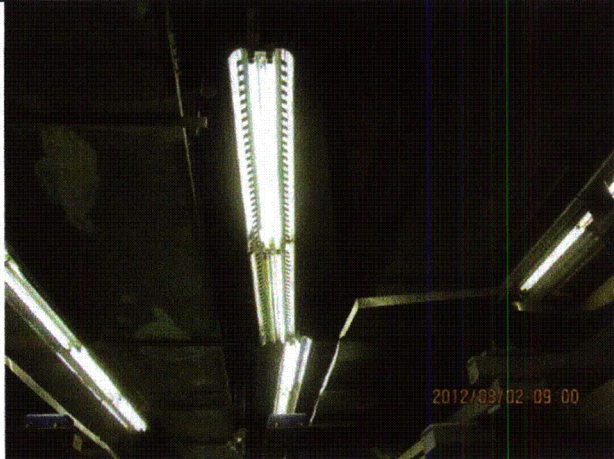
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-7338-----S35

Equipment Class: (2) Low Voltage Switchgear

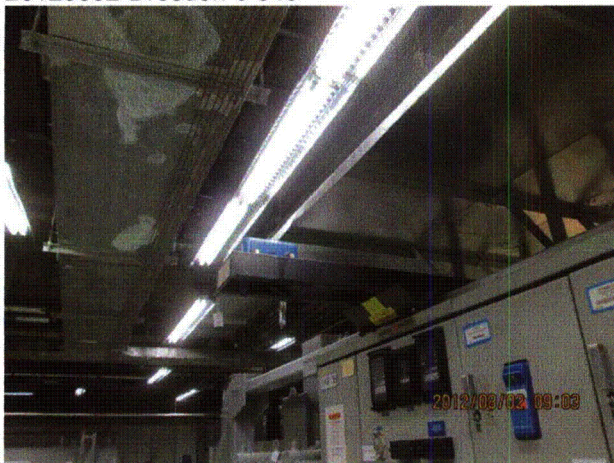
Equipment Description: 480V AC/ Switchgear 38



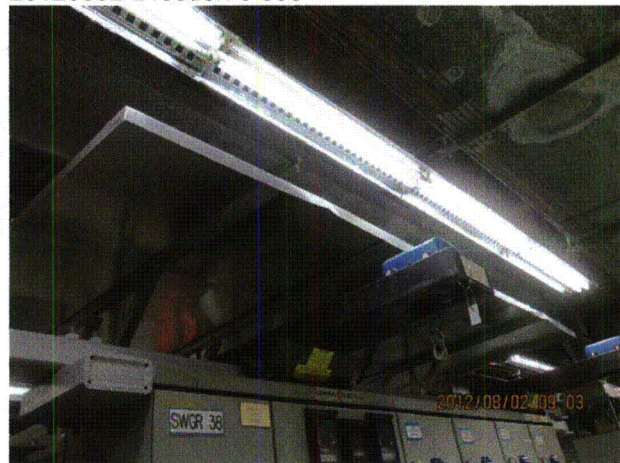
20120802-Dresden-3 049



20120802-Dresden-3 050



20120802-Dresden-3 051



20120802-Dresden-3 052

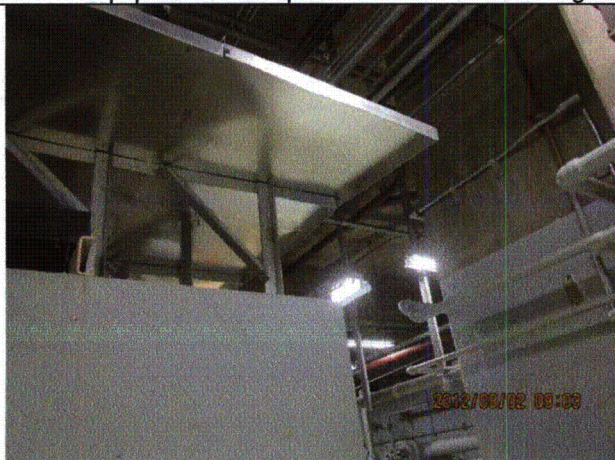
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

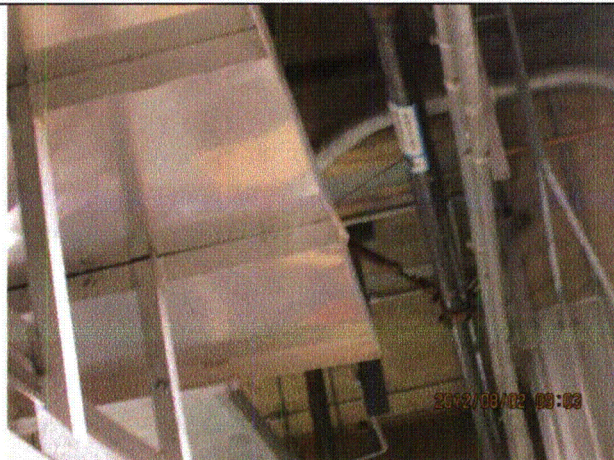
Equipment ID No.: D03-7338-----S35

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V AC/ Switchgear 38



20120802-Dresden-3 053



20120802-Dresden-3 054



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-7338-----T10

Equipment Class: (4) Transformers

Equipment Description: 480V AC/ Transformer 38, Feed to Switchgear 38

Project: Dresden 3 SWEL

Location (Bldg, Elev, Room/Area): Reactor, 570.00 ft, ALL

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            |
| 3. | Is the anchorage free of corrosion that is more than mild surface oxidation?  | Yes            |
| 4. | Is the anchorage free of visible cracks in the concrete near the anchors?   | Yes            |
| 5. | Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. | Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?  | Yes            |

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-7338-----T10

Equipment Class: (4) Transformers

Equipment Description: 480V AC/ Transformer 38, Feed to Switchgear 38

**Interaction Effects**

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

**Other Adverse Conditions**

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

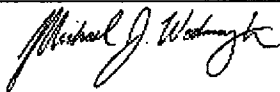
**Comments**

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/2/2012

Transformer has been replaced since SQUG walkdown.

Evaluated by:  James Griffith

Date: 9/30/2012



Michael Wodarczyk

9/30/2012



Status: ☒ Y ☐ N ☐ U

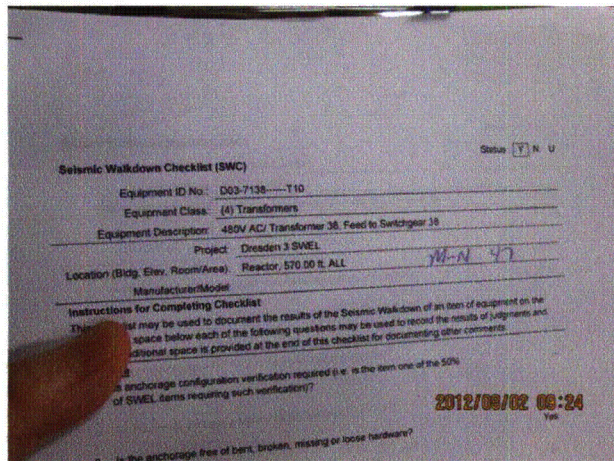
### Seismic Walkdown Checklist (SWC)

Equipment ID No.: D03-7338-----T10

Equipment Class: (4) Transformers

Equipment Description: 480V AC/ Transformer 38, Feed to Switchgear 38

#### Photos



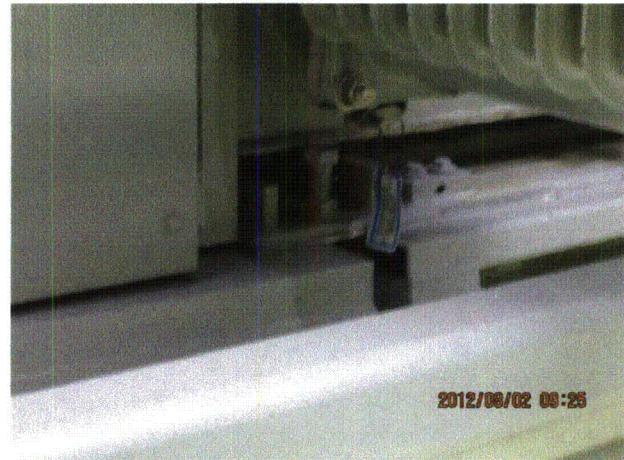
20120802-Dresden-3 074



20120802-Dresden-3 075



20120802-Dresden-3 076



20120802-Dresden-3 077



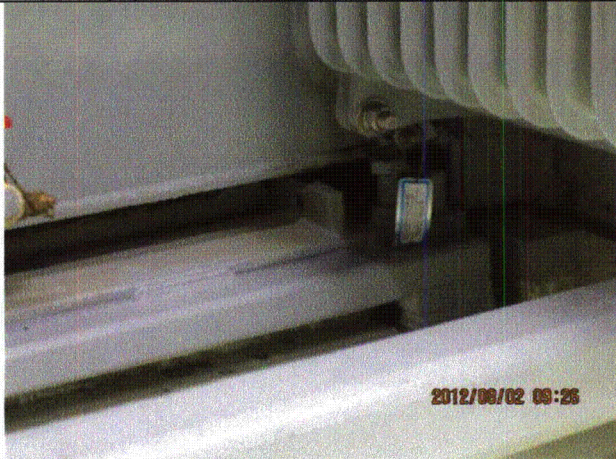
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

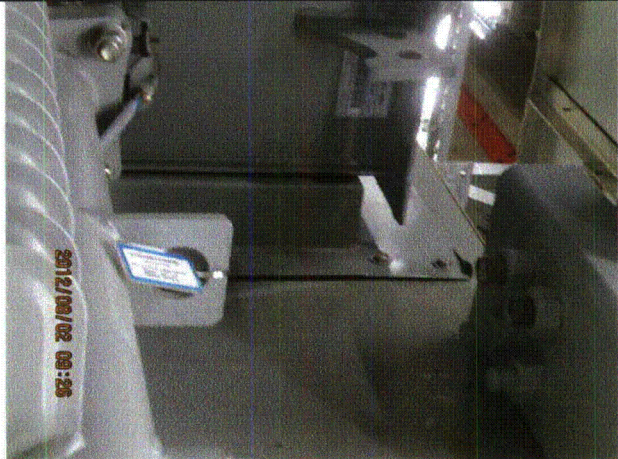
Equipment ID No.: D03-7338-----T10

Equipment Class: (4) Transformers

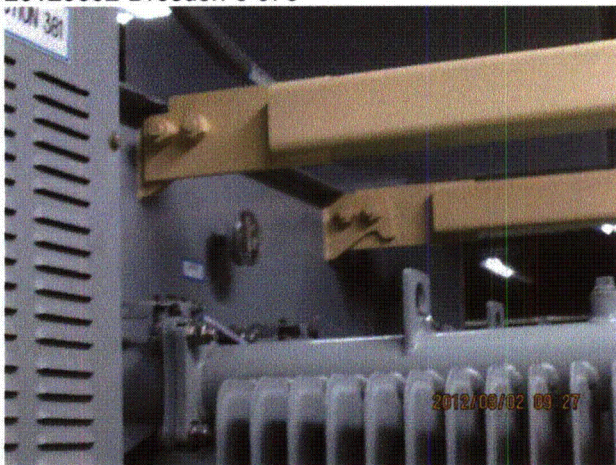
Equipment Description: 480V AC/ Transformer 38, Feed to Switchgear 38



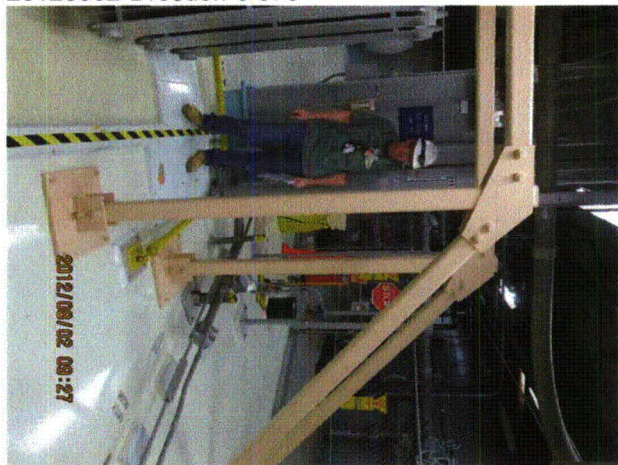
20120802-Dresden-3 078



20120802-Dresden-3 079



20120802-Dresden-3 080



20120802-Dresden-3 081



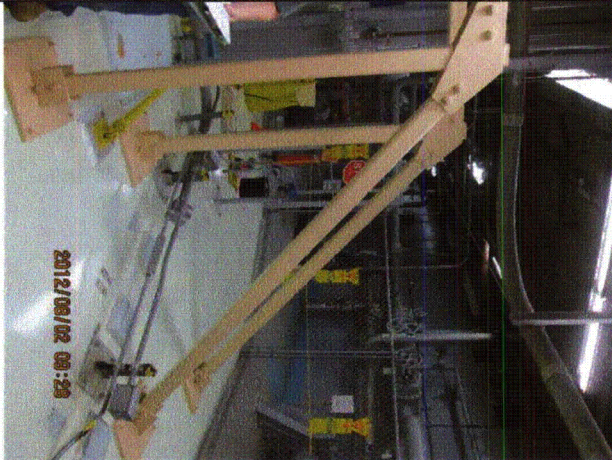
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

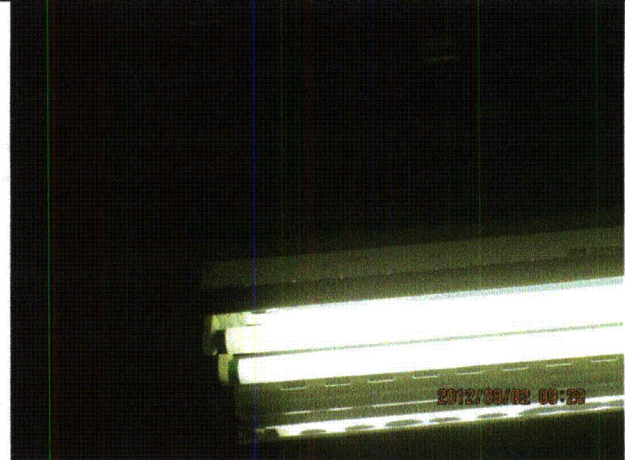
Equipment ID No.: D03-7338-----T10

Equipment Class: (4) Transformers

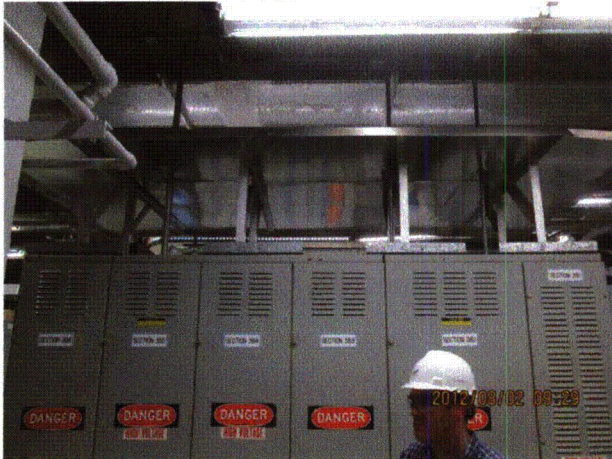
Equipment Description: 480V AC/ Transformer 38, Feed to Switchgear 38



20120802-Dresden-3 082



20120802-Dresden-3 083



20120802-Dresden-3 084



20120802-Dresden-3 085

Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-7339-----S35

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V AC/ 480V Switchgear 39

Project: Dresden 3 SWEL

Location (Bldg, Elev, Room/Area): Reactor, 570.00 ft, ALL

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
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-7339-----S35

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V AC/ 480V Switchgear 39

**Interaction Effects**

7. Are soft targets free from impact by nearby equipment or structures? Yes

*Bottom of eastern-most door at back of switchgear is bent out slightly. Door is adequately latched and judged to be acceptable.*

*IR 1396562:*

**UNPINNED SWITCHGEAR HOISTS**

*During Fukushima seismic walkdowns, two movable trolley hoists mounted on top of SWGR 38 and one movable trolley hoist mounted on top of SWGR 39 were found unrestrained against horizontal movement due to the restraining pin for each hoist not being installed while each hoist was in the stored position. The switchgears are located at U3, N-47, EL. 570.*

*Unit supervisor and shift manager were informed of the condition and station personnel installed the pins for the trolley hoists. Therefore, hoists are judged acceptable.*

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes

*Overhead light fixtures judged to be acceptable.*

9. Do attached lines have adequate flexibility to avoid damage? Yes

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

**Other Adverse Conditions**

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

Status: ☒ Y ☐ N ☐ U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: D03-7339-----S35

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V AC/ 480V Switchgear 39

### Comments

Seismic Walkdown Team: J. Griffith & M. Wodarczyk - 8/2/2012

Evaluated by: *James D. Griffith* James Griffith

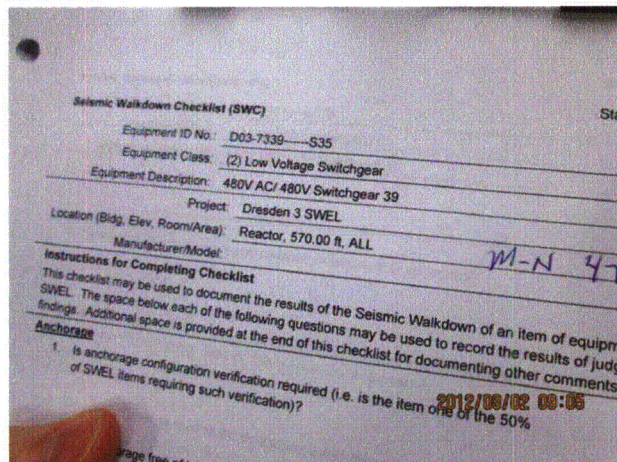
Date: 9/30/2012

*Michael J. Wodarczyk*

Michael Wodarczyk

9/30/2012

### Photos



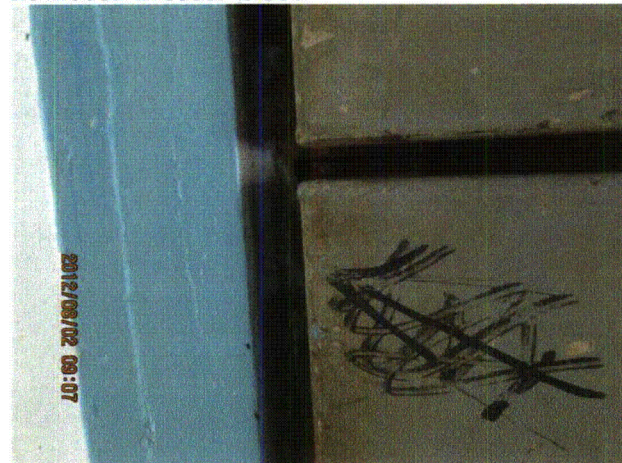
20120802-Dresden-3 055



20120802-Dresden-3 056



20120802-Dresden-3 057



20120802-Dresden-3 058



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

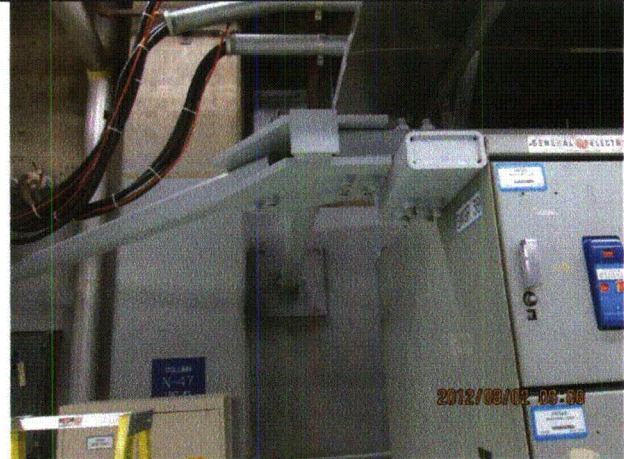
Equipment ID No.: D03-7339-----S35

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V AC/ 480V Switchgear 39



20120802-Dresden-3 059



20120802-Dresden-3 060



20120802-Dresden-3 061



20120802-Dresden-3 062



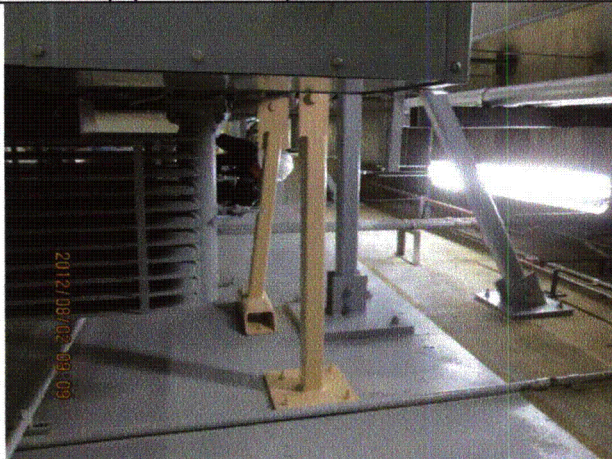
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

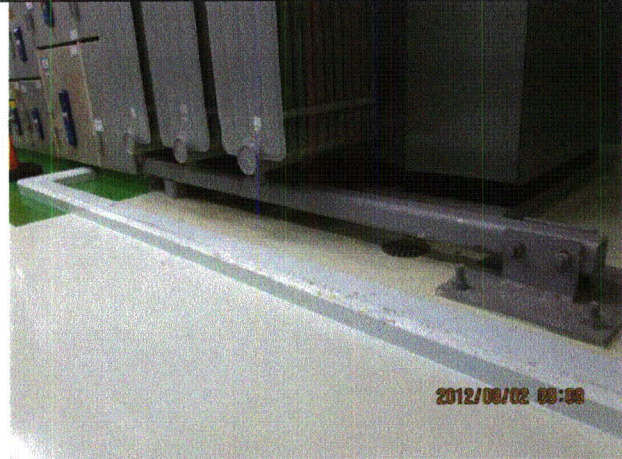
Equipment ID No.: D03-7339-----S35

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V AC/ 480V Switchgear 39



20120802-Dresden-3 063



20120802-Dresden-3 064



20120802-Dresden-3 065



20120802-Dresden-3 066



Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: D03-7339-----S35

Equipment Class: (2) Low Voltage Switchgear

Equipment Description: 480V AC/ 480V Switchgear 39



20120802-Dresden-3 067



20120802-Dresden-3 068



20120802-Dresden-3 069



20120802-Dresden-3 070



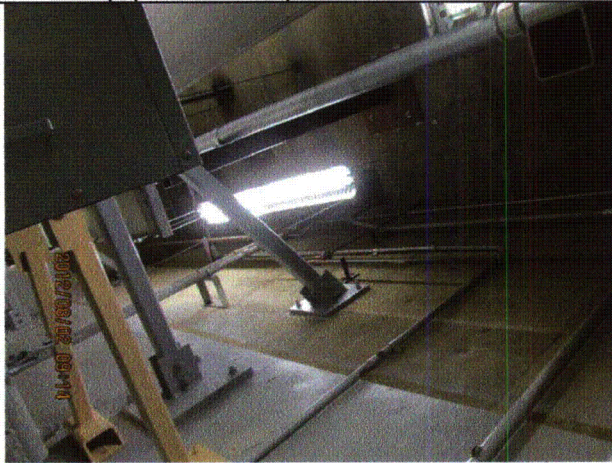
Status: ☒ Y ☐ N ☐ U

**Seismic Walkdown Checklist (SWC)**

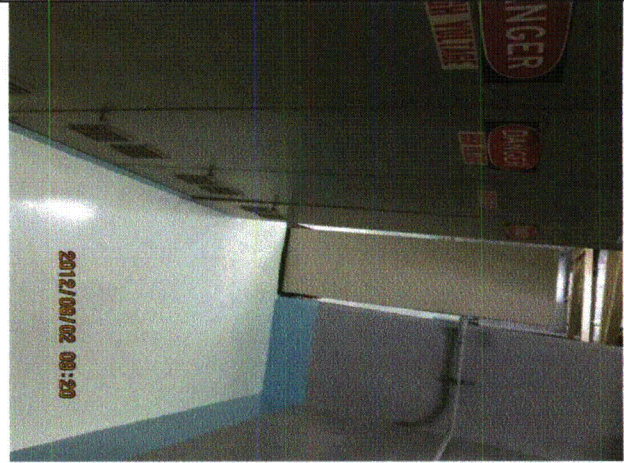
Equipment ID No.: D03-7339-----S35

Equipment Class: (2) Low Voltage Switchgear

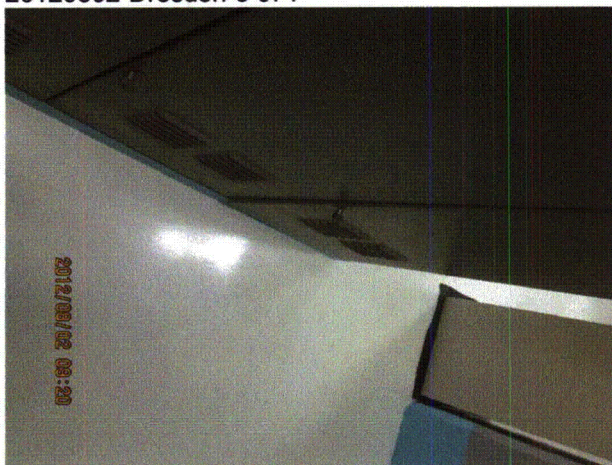
Equipment Description: 480V AC/ 480V Switchgear 39



20120802-Dresden-3 071



20120802-Dresden-3 072



20120802-Dresden-3 073