

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV4142OP

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: REFUELING WATER TANK DISCHARGE

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 45.00 ft, CAL-AB-439

Manufacturer/Model: _____

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

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

Interaction Effects

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV4142OP

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: REFUELING WATER TANK DISCHARGE

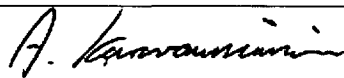
7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based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

Evaluated by:



A. Karavoussianis

Date: 11/09/2012



C. Figliolini

11/09/2012

Photos

ATTACHMENT 3
WALKDOWN CHECKLISTS

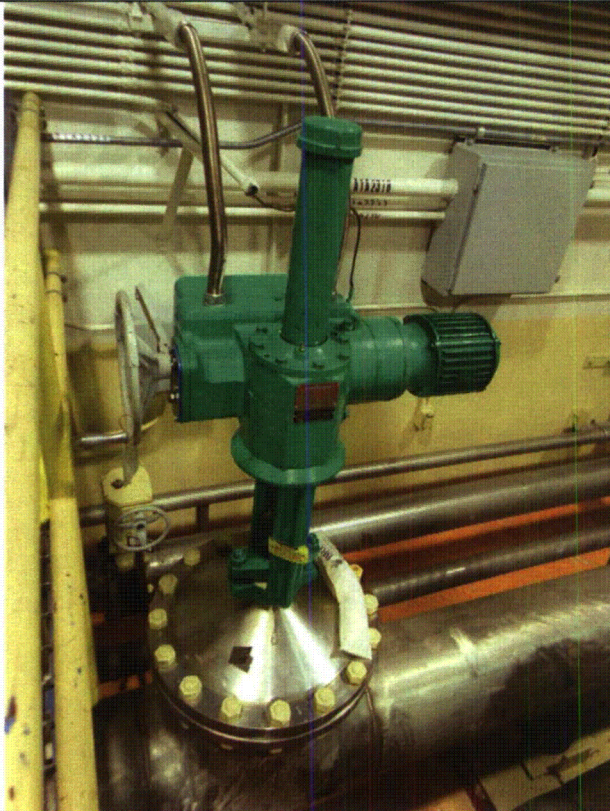
Status: Y N U

Seismic Walkdown Checklist (SWC)

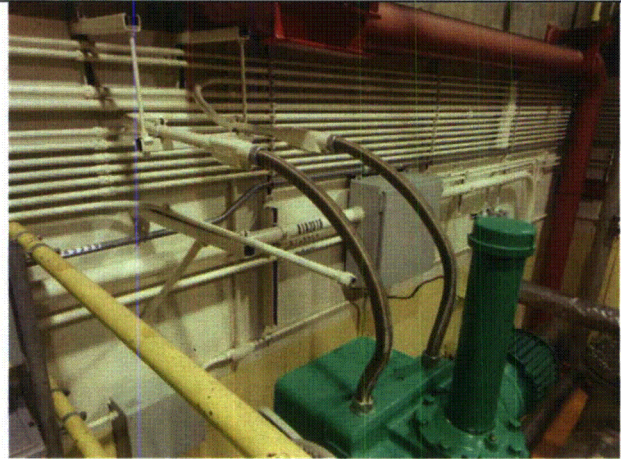
Equipment ID No.: 1MOV4142OP

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: REFUELING WATER TANK DISCHARGE



1MOV4142OP 8-13-12 268



1MOV4142OP 8-13-12 269

ATTACHMENT 3
WALKDOWN CHECKLISTS

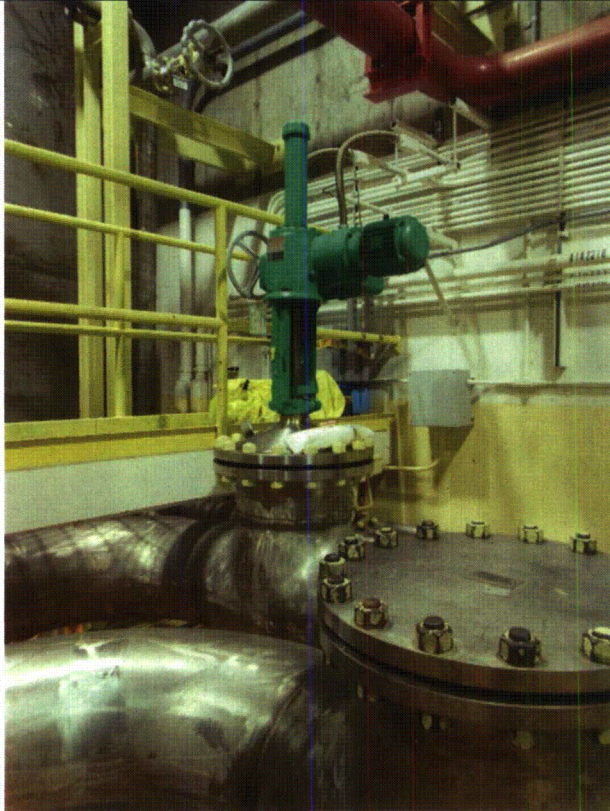
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Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV4142OP

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

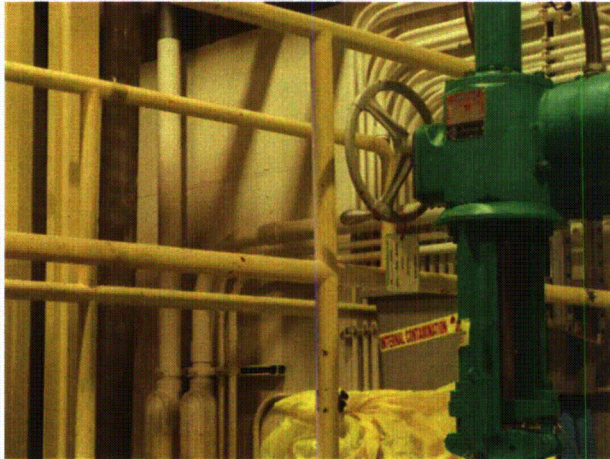
Equipment Description: REFUELING WATER TANK DISCHARGE



1MOV4142OP 8-13-12 271



1MOV4142OP 8-13-12 272



1MOV4142OP 8-13-12 273

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV4516

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11 SG FW ISOL

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 27.00 ft, CAL-AB-315

Manufacturer/Model: _____

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

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

Interaction Effects

**ATTACHMENT 3
WALKDOWN CHECKLISTS**

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV4516

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11 SG FW ISOL

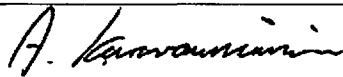
7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
- There is a conduit is touching the operator. The conduit is supported on a unistrut frame that is anchored to the ceiling above and floor below. The differential motion between the ceiling and floor and the valve movement are minimal, therefore this condition is judged acceptable.*
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

Evaluated by:



A. Karavoussianis

Date: 11/09/2012



C. Figliolini

11/09/2012

Photos

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

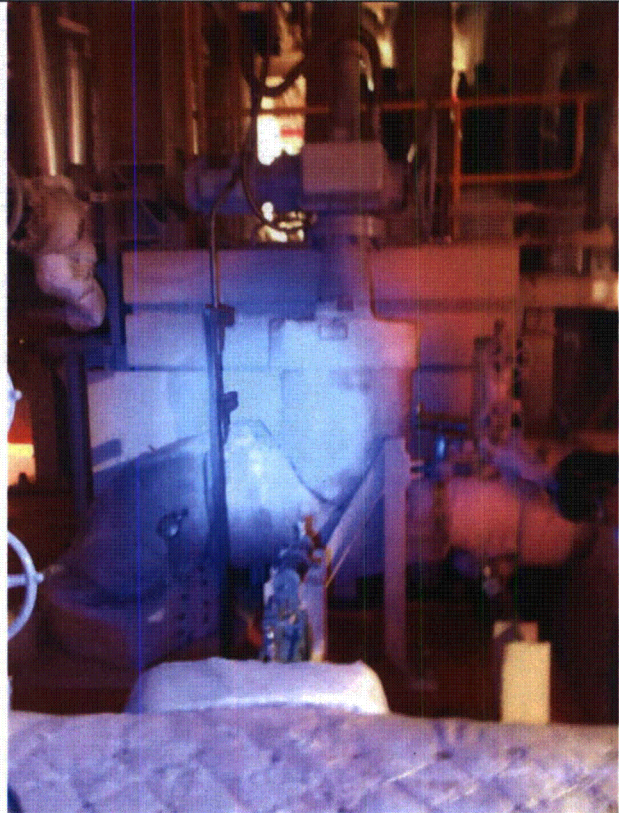
Equipment ID No.: 1MOV4516

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11 SG FW ISOL



1MOV4516 8-8-12 001



1MOV4516 8-8-12 002

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

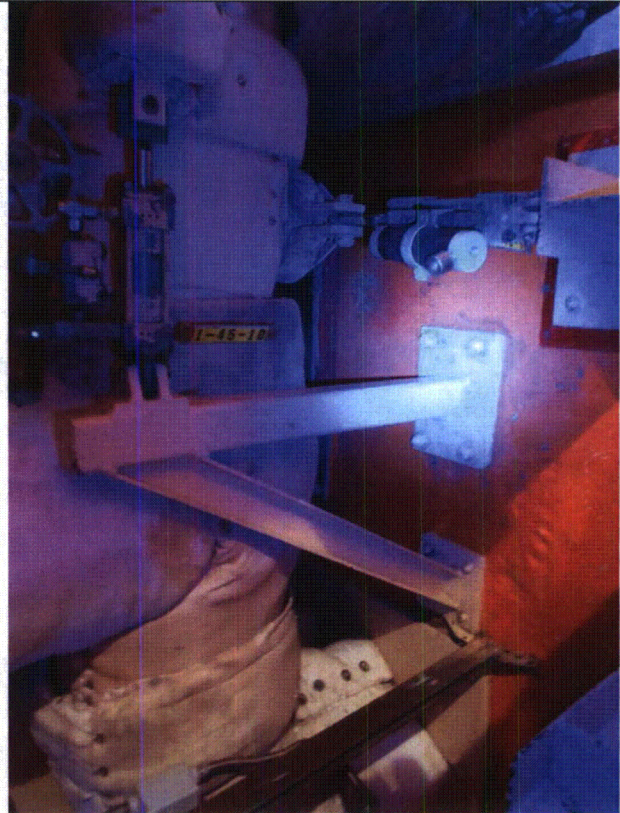
Equipment ID No.: 1MOV4516

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11 SG FW ISOL



1MOV4516 8-8-12 003



1MOV4516 8-8-12 004

ATTACHMENT 3

WALKDOWN CHECKLISTS

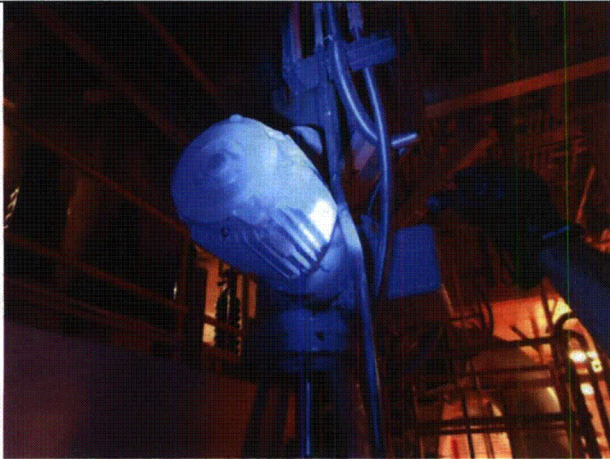
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Seismic Walkdown Checklist (SWC)

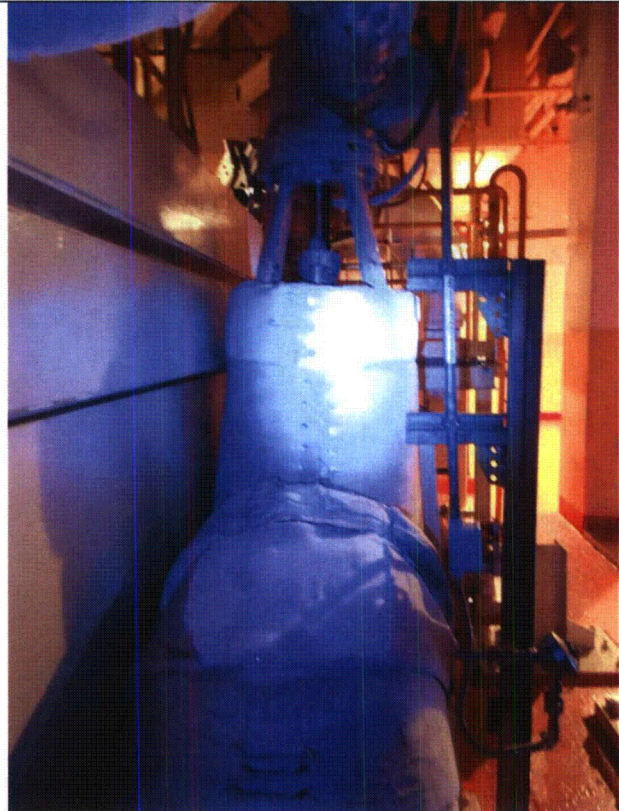
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Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

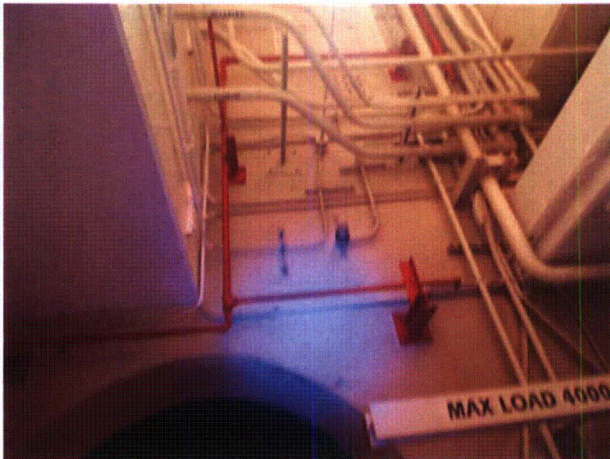
Equipment Description: 11 SG FW ISOL



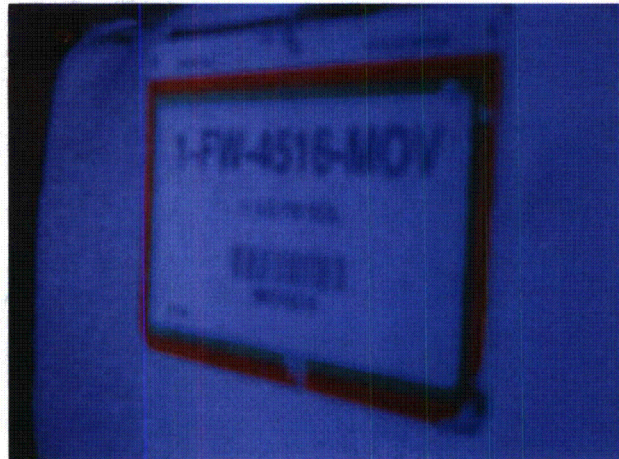
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1MOV4516 8-8-12 006



1MOV4516 8-8-12 007



1MOV4516 8-8-12 018

ATTACHMENT 3
WALKDOWN CHECKLISTS

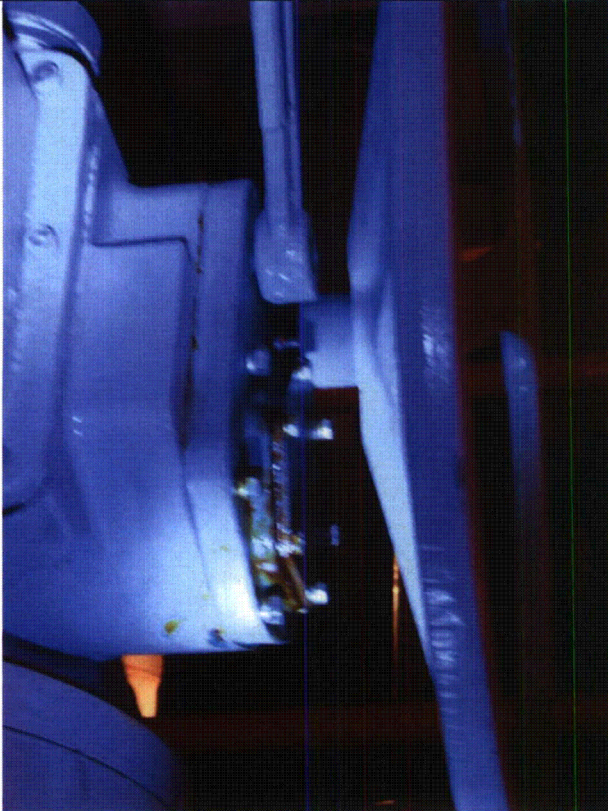
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Seismic Walkdown Checklist (SWC)

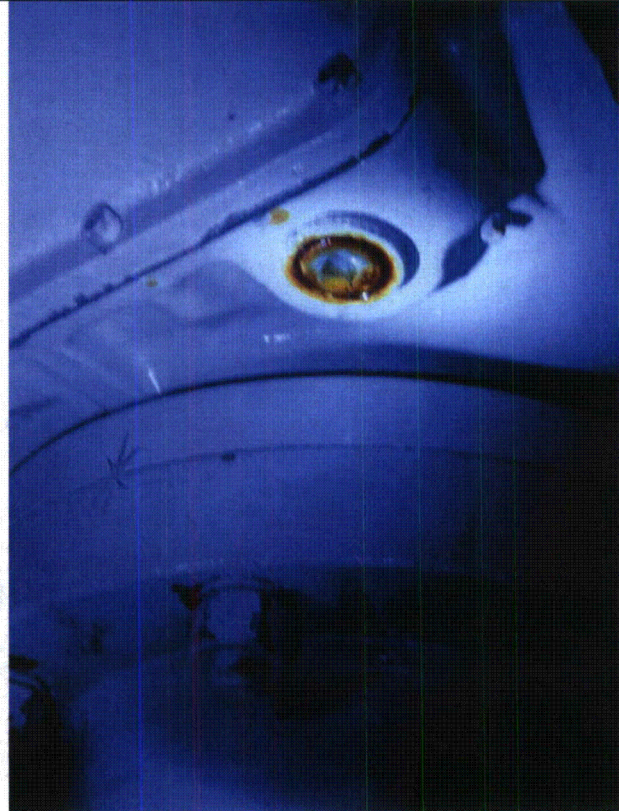
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Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

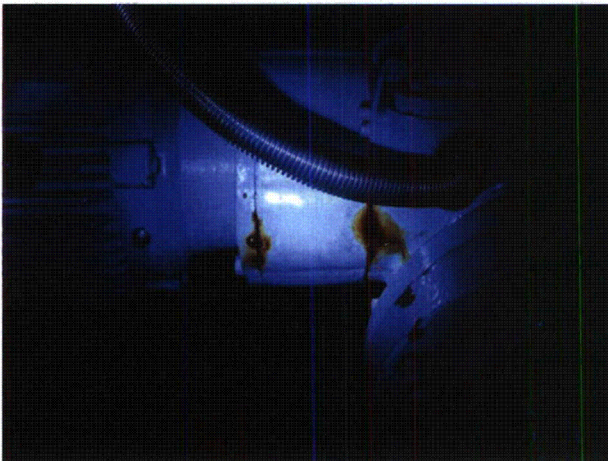
Equipment Description: 11 SG FW ISOL



1MOV4516 8-8-12 019



1MOV4516 8-8-12 020



1MOV4516 8-8-12 021

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV4517

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 SG FW ISOL

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 27.00 ft, CAL-AB-315

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

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

Interaction Effects

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV4517

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 SG FW ISOL

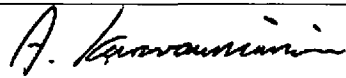
7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
- There is small conduit in contact with the MS line insulation. The line displacement is judged to be negligible due to nearby pipe support, therefore the condition is not a seismic concern.*
- There is conduit support unistrut frame in contact with valve body's insulation box. Minor scrapes on the unistrut frame were observed. The frame has adequate flexibility and the valve piping is supported nearby, therefore not a seismic concern by judgment.*
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

Evaluated by:



A. Karavoussianis

Date: 11/09/2012



C. Figliolini

11/09/2012

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

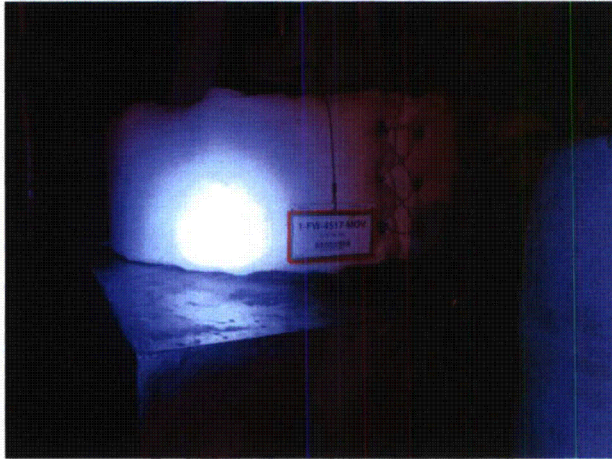
Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV4517

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 SG FW ISOL

Photos



1MOV4517 8-8-12 008



1MOV4517 8-8-12 009

ATTACHMENT 3
WALKDOWN CHECKLISTS

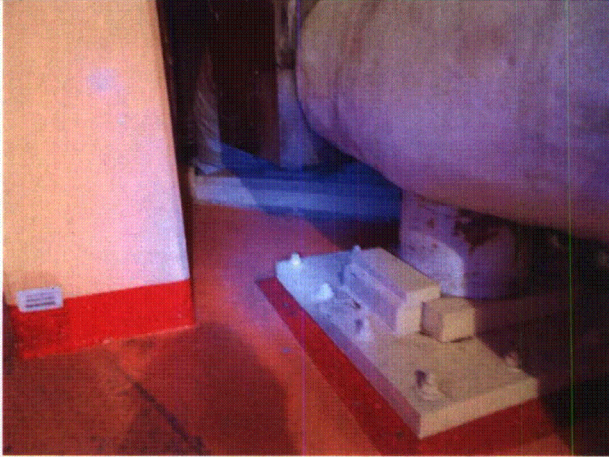
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Seismic Walkdown Checklist (SWC)

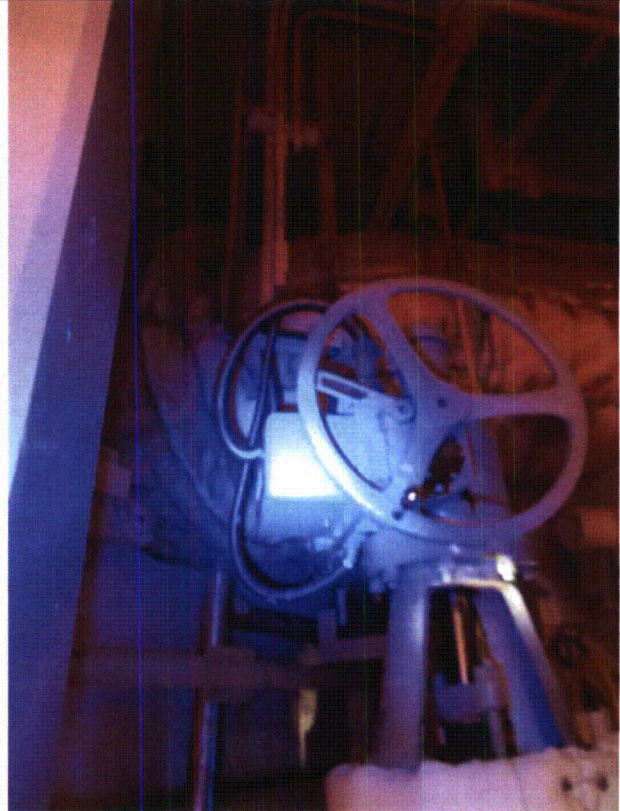
Equipment ID No.: 1MOV4517

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 SG FW ISOL



1MOV4517 8-8-12 010



1MOV4517 8-8-12 011

ATTACHMENT 3
WALKDOWN CHECKLISTS

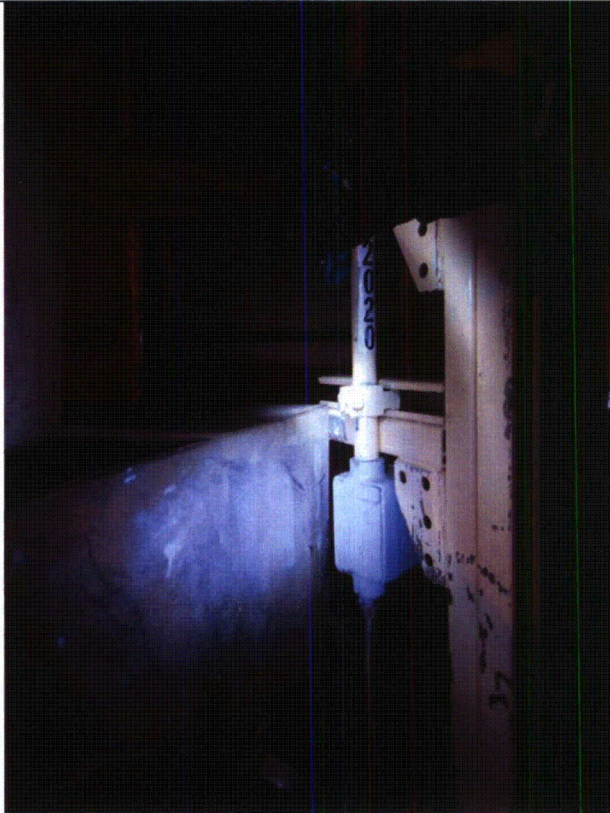
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Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV4517

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 SG FW ISOL



1MOV4517 8-8-12 012



1MOV4517 8-8-12 013

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

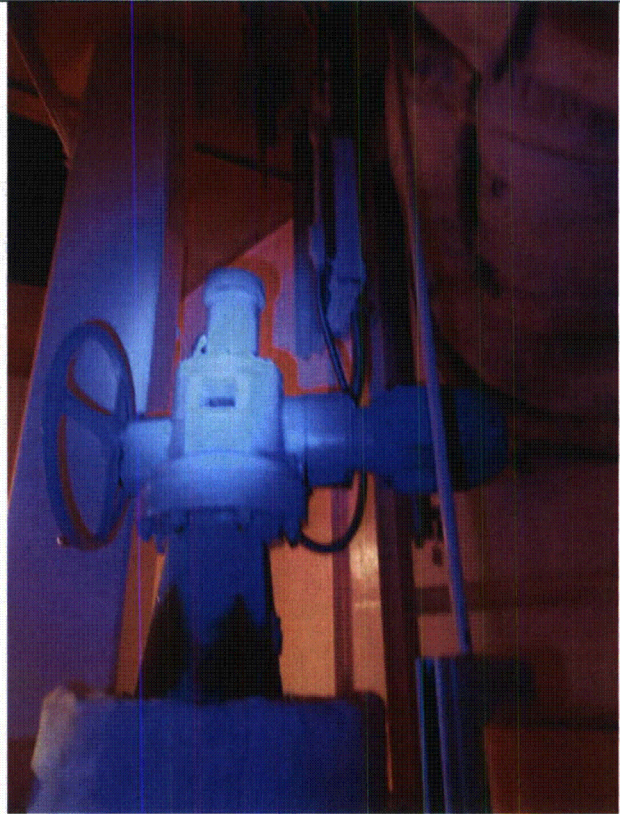
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Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 SG FW ISOL



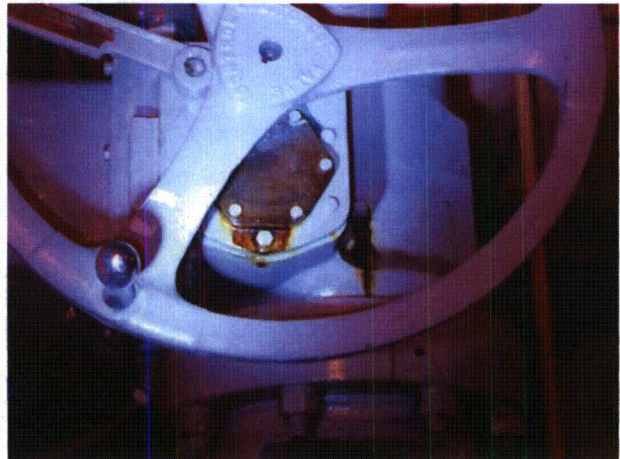
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1MOV4517 8-8-12 015



1MOV4517 8-8-12 016



1MOV4517 8-8-12 017

ATTACHMENT 3
WALKDOWN CHECKLISTS

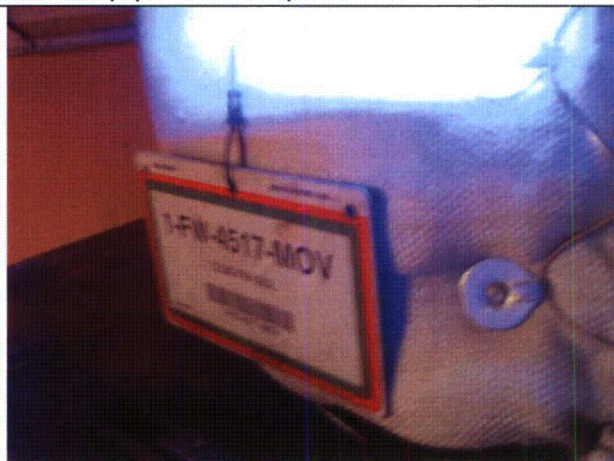
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Seismic Walkdown Checklist (SWC)

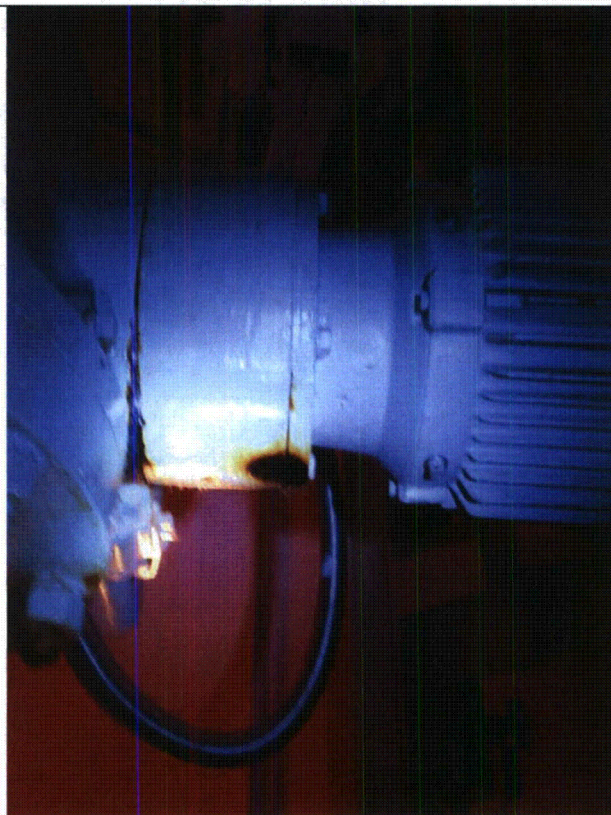
Equipment ID No.: 1MOV4517

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 SG FW ISOL



1MOV4517 8-8-12 022



1MOV4517 8-8-12 023

ATTACHMENT 3
WALKDOWN CHECKLISTS

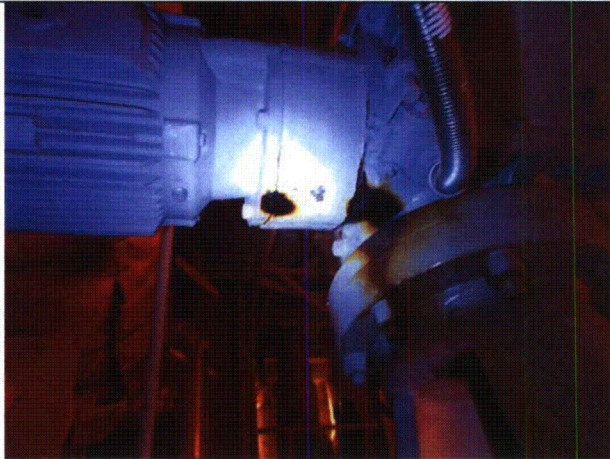
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV4517

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 SG FW ISOL



1MOV4517 8-8-12 024



1MOV4517 8-8-12 025

ATTACHMENT 3
WALKDOWN CHECKLISTS

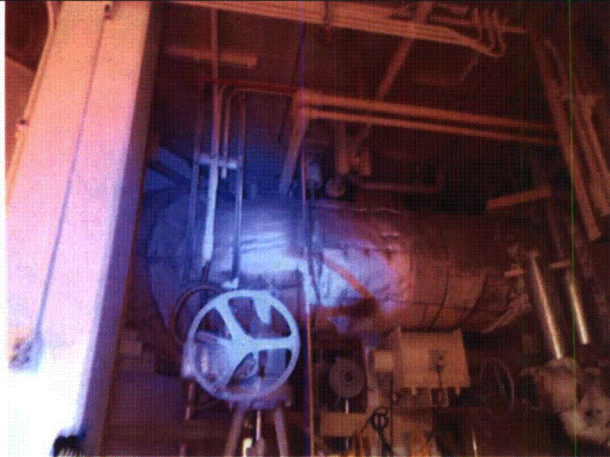
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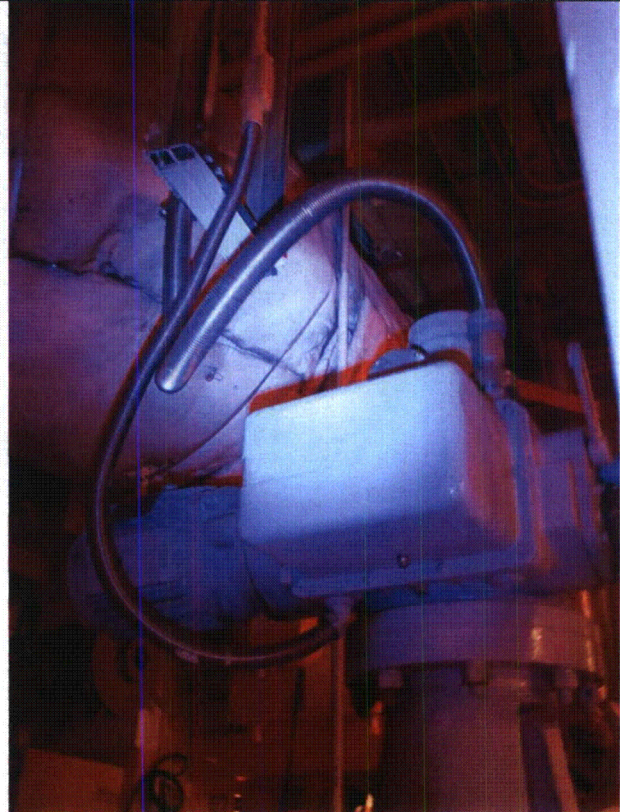
Equipment ID No.: 1MOV4517

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 SG FW ISOL



1MOV4517 8-8-12 026



1MOV4517 8-8-12 027

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV508

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 BAST GRAVITY FD

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 5.00 ft, CAL-AB-217

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? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes
Valve body and operator are supported in all directions.

Interaction Effects

C-263

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV508

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 BAST GRAVITY FD

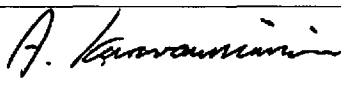
7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
Tools were left on beam and temperature controller, not a good housekeeping practice, but judged not an adverse seismic condition. Work has been performed in this area recently.
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

Work has been performed in this area.

Evaluated by:  A. Karavoussianis Date: 11/09/2012

 11/09/2012
C. Figliolini

Photos

ATTACHMENT 3
WALKDOWN CHECKLISTS

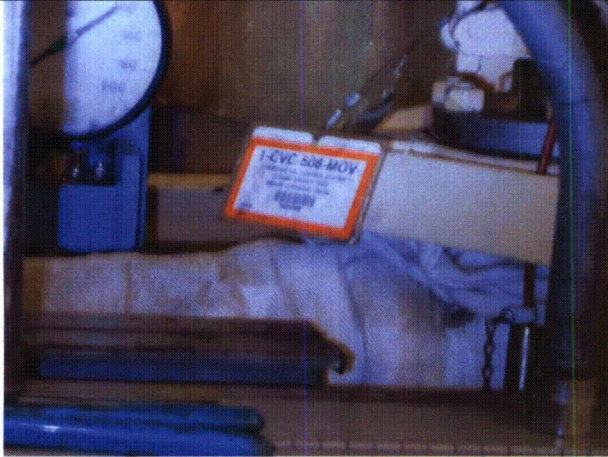
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Seismic Walkdown Checklist (SWC)

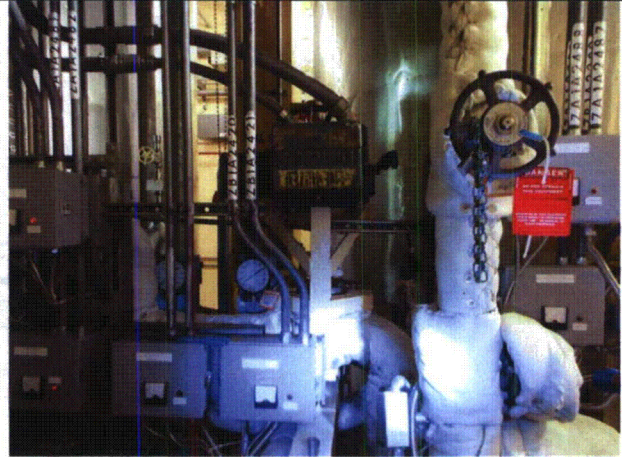
Equipment ID No.: 1MOV508

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

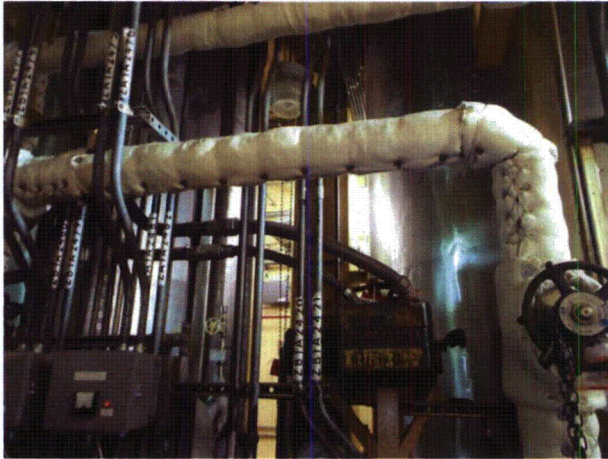
Equipment Description: 12 BAST GRAVITY FD



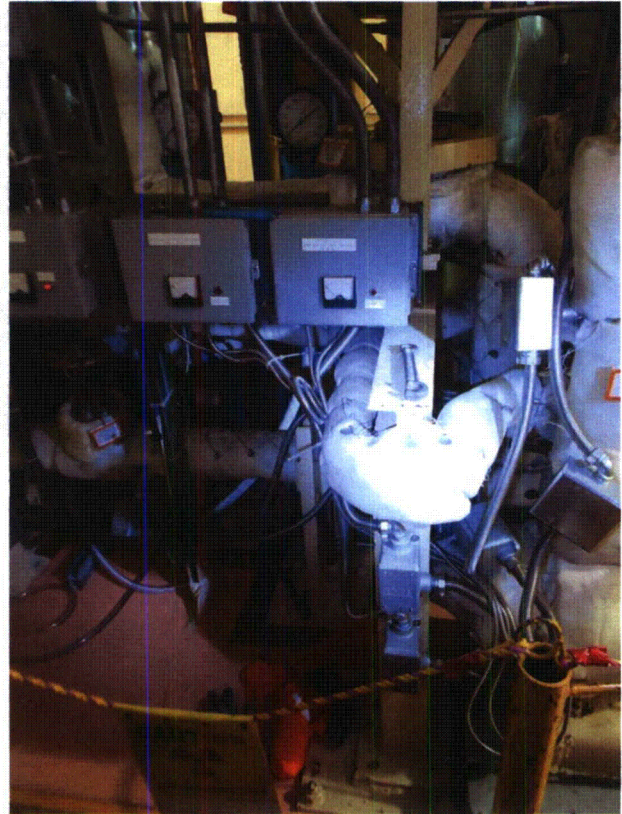
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1MOV508 8-6-12 013



1MOV508 8-6-12 014



1MOV508 8-6-12 015

ATTACHMENT 3
WALKDOWN CHECKLISTS

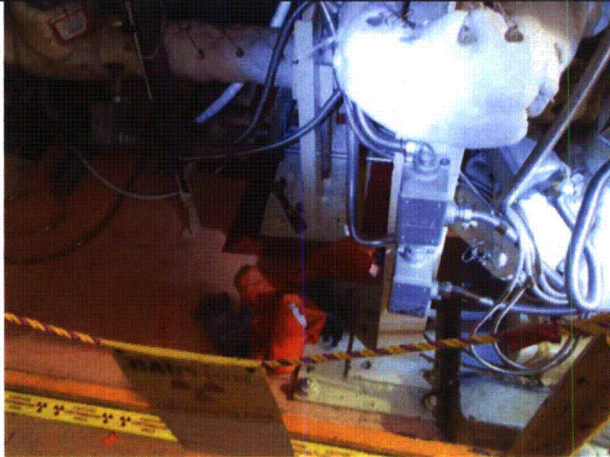
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Seismic Walkdown Checklist (SWC)

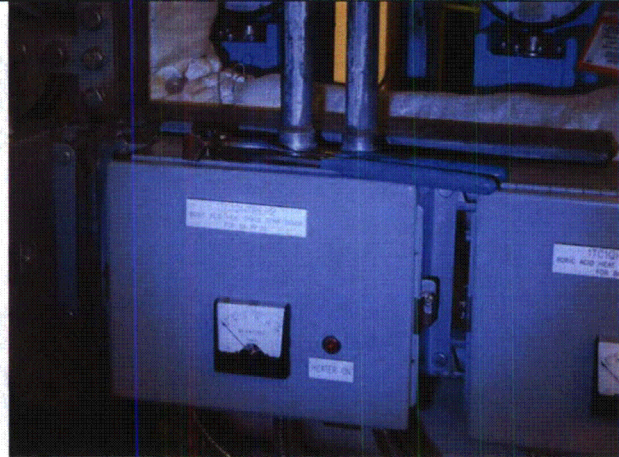
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Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

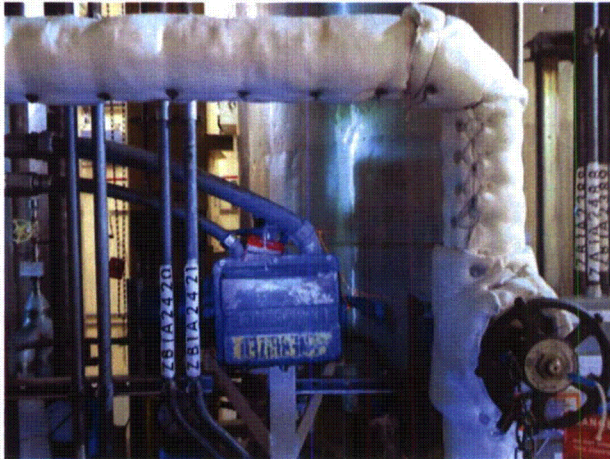
Equipment Description: 12 BAST GRAVITY FD



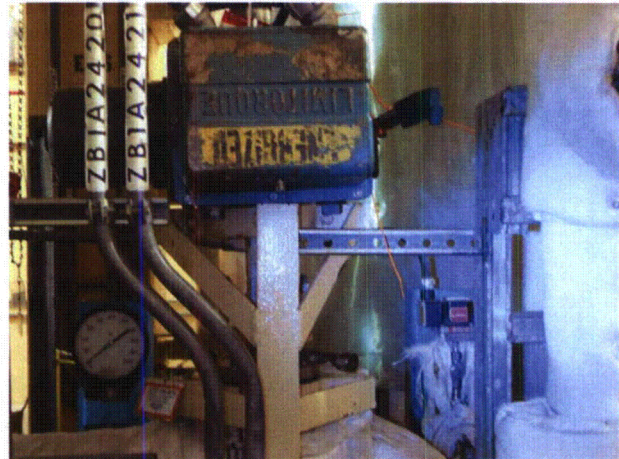
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1MOV508 8-6-12 017



1MOV508 8-6-12 018



1MOV508 8-6-12 019

ATTACHMENT 3
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Status: Y N U

Seismic Walkdown Checklist (SWC)

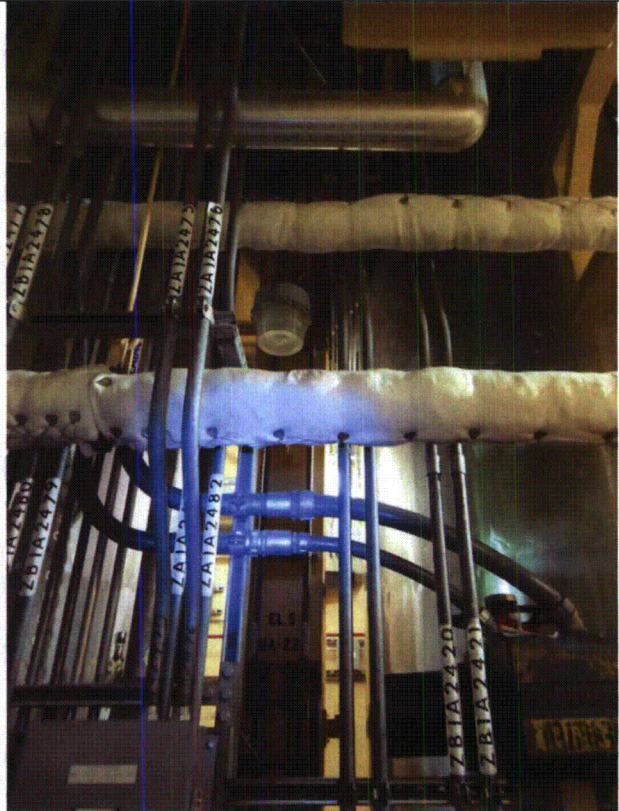
Equipment ID No.: 1MOV508

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 12 BAST GRAVITY FD



1MOV508 8-6-12 020



1MOV508 8-6-12 021

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV509

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11 BAST GRAVITY FD

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 5.00 ft, CAL-AB-217

Manufacturer/Model:

Instructions for Completing Checklist

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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? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes
Valve and operator are supported in all directions.

Interaction Effects

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV509

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11 BAST GRAVITY FD

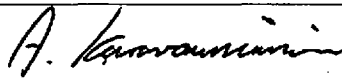
- | | | |
|-----|--|-----|
| 7. | Are soft targets free from impact by nearby equipment or structures? | Yes |
| | | |
| 8. | Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? | Yes |
| | | |
| 9. | Do attached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

Evaluated by:



A. Karavoussianis

Date: 11/09/2012



C. Figliolini

11/09/2012

Photos

ATTACHMENT 3

WALKDOWN CHECKLISTS

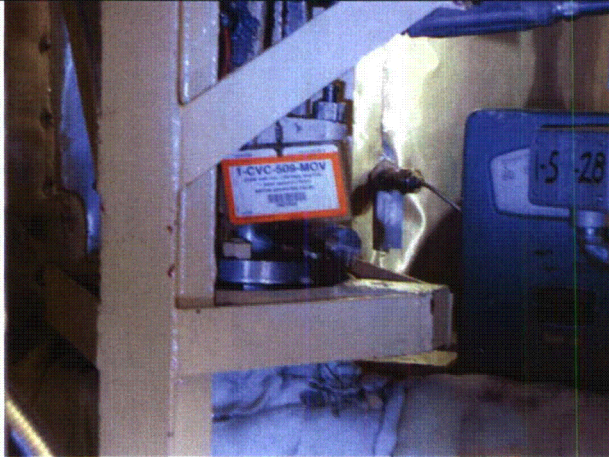
Status: Y N U

Seismic Walkdown Checklist (SWC)

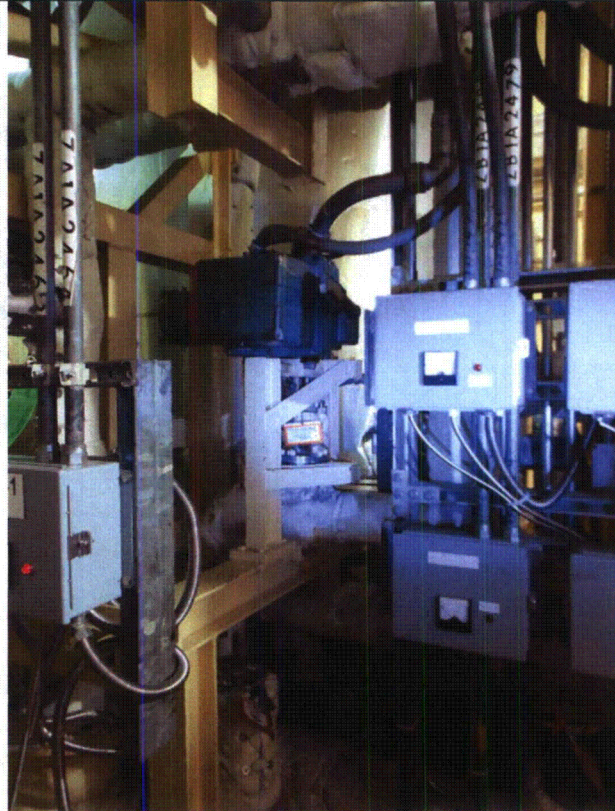
Equipment ID No.: 1MOV509

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11 BAST GRAVITY FD



1MOV509 8-6-12 022



1MOV509 8-6-12 023

ATTACHMENT 3
WALKDOWN CHECKLISTS

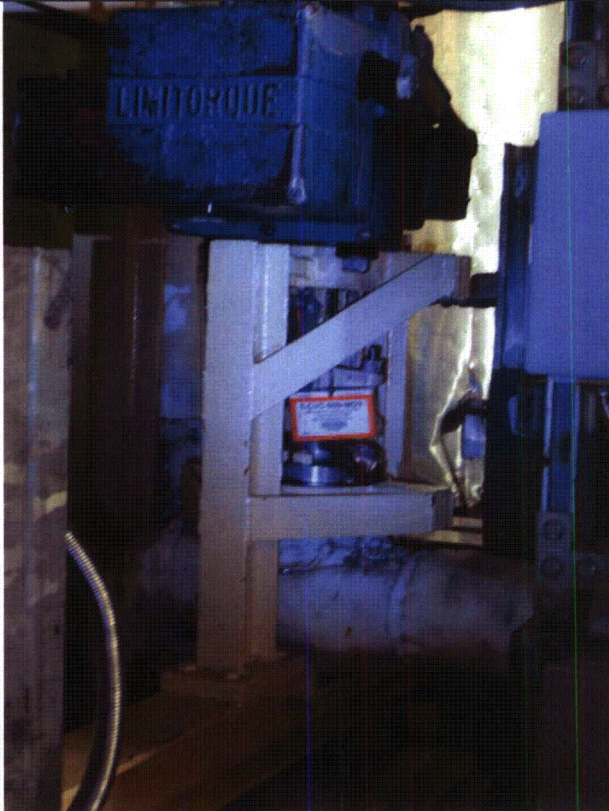
Status: Y N U

Seismic Walkdown Checklist (SWC)

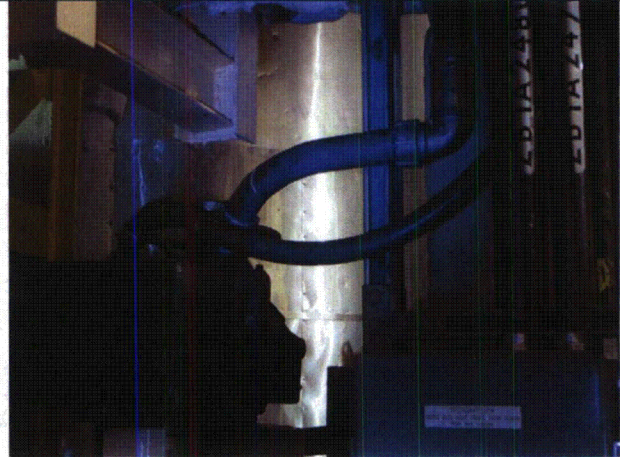
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Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

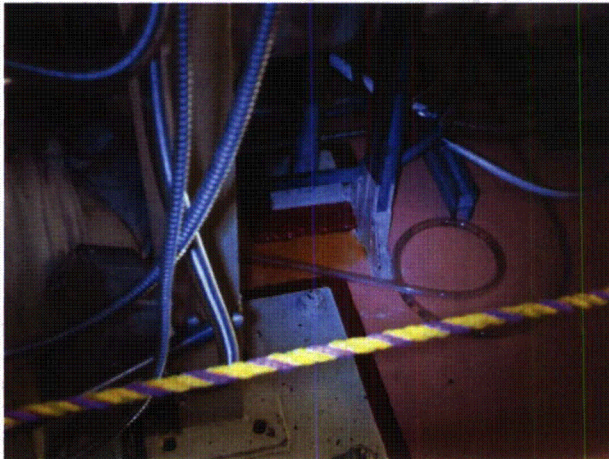
Equipment Description: 11 BAST GRAVITY FD



1MOV509 8-6-12 024



1MOV509 8-6-12 026



1MOV509 8-6-12 027



1MOV509 8-6-12 028

ATTACHMENT 3
WALKDOWN CHECKLISTS

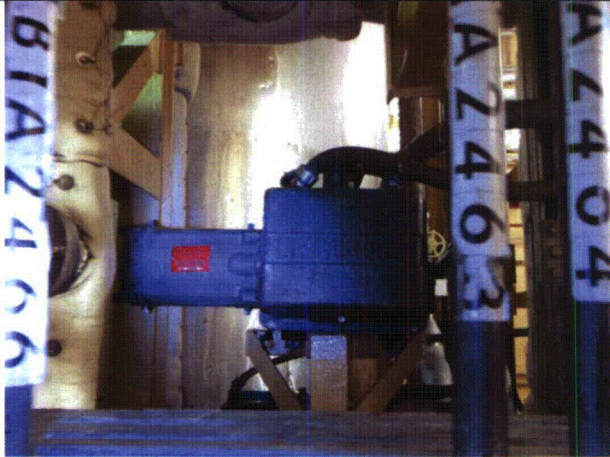
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV509

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11 BAST GRAVITY FD



1MOV509 8-6-12 029

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV514

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: BAPP TO CHG PP SUCT DIREC

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 5.00 ft, CAL-AB-217

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
Valve body and operator are laterally supported on the wall and the pipe is vertically support nearby, therefore not a seismic concern.

Interaction Effects

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV514

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

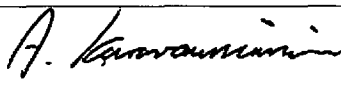
Equipment Description: BAPP TO CHG PP SUCT DIREC

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

Evaluated by:  A. Karavoussianis Date: 11/09/2012

 11/09/2012

Photos

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

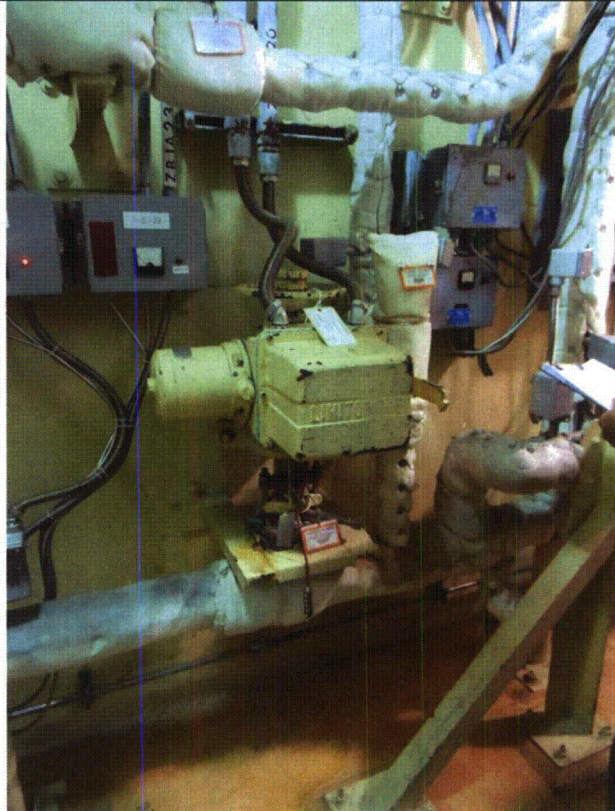
Equipment ID No.: 1MOV514

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: BAPP TO CHG PP SUCT DIREC



1MOV514 8-6-12 001



1MOV514 8-6-12 002

ATTACHMENT 3
WALKDOWN CHECKLISTS

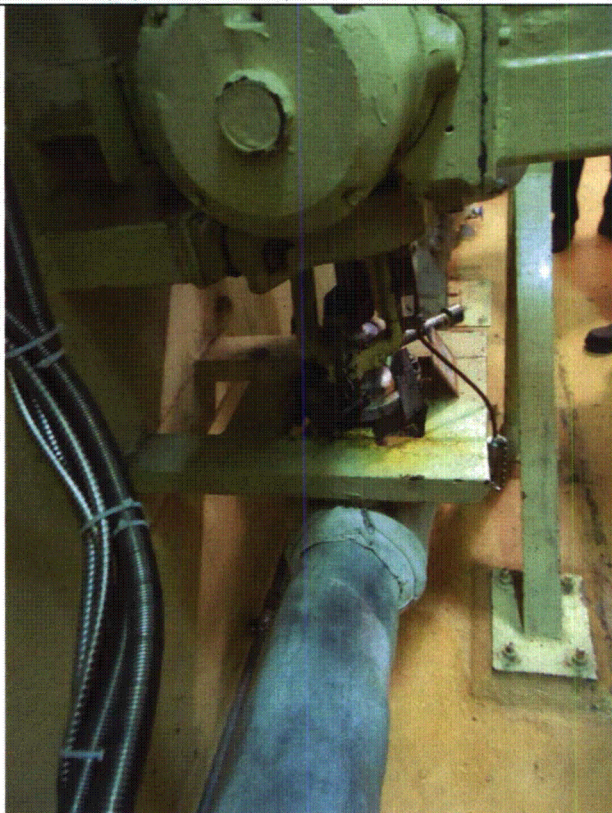
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV514

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: BAPP TO CHG PP SUCT DIREC



1MOV514 8-6-12 003



1MOV514 8-6-12 004

ATTACHMENT 3

WALKDOWN CHECKLISTS

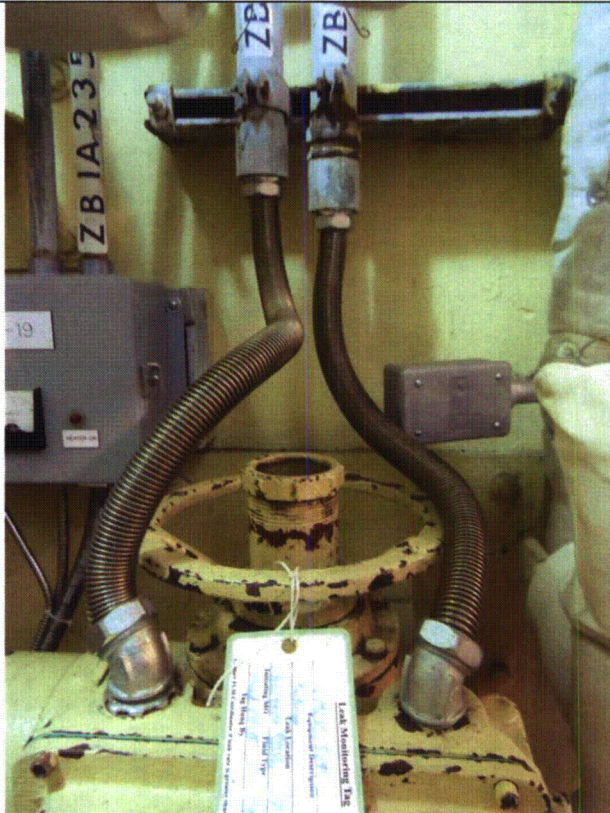
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Seismic Walkdown Checklist (SWC)

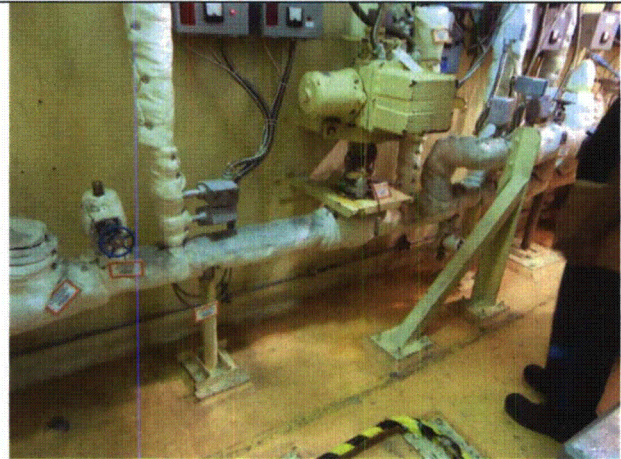
Equipment ID No.: 1MOV514

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: BAPP TO CHG PP SUCT DIREC



1MOV514 8-6-12 005



1MOV514 8-6-12 006

ATTACHMENT 3

WALKDOWN CHECKLISTS

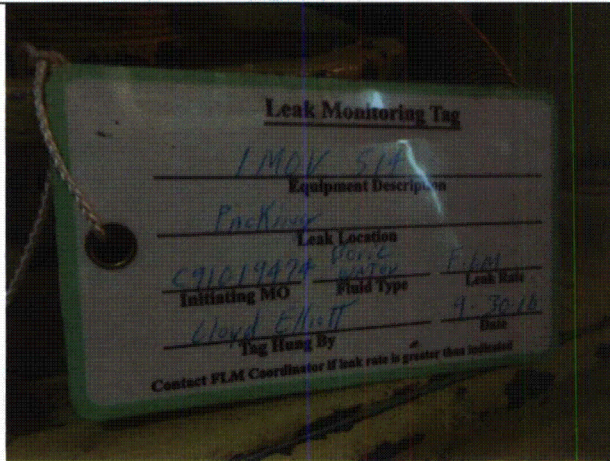
Status: Y N U

Seismic Walkdown Checklist (SWC)

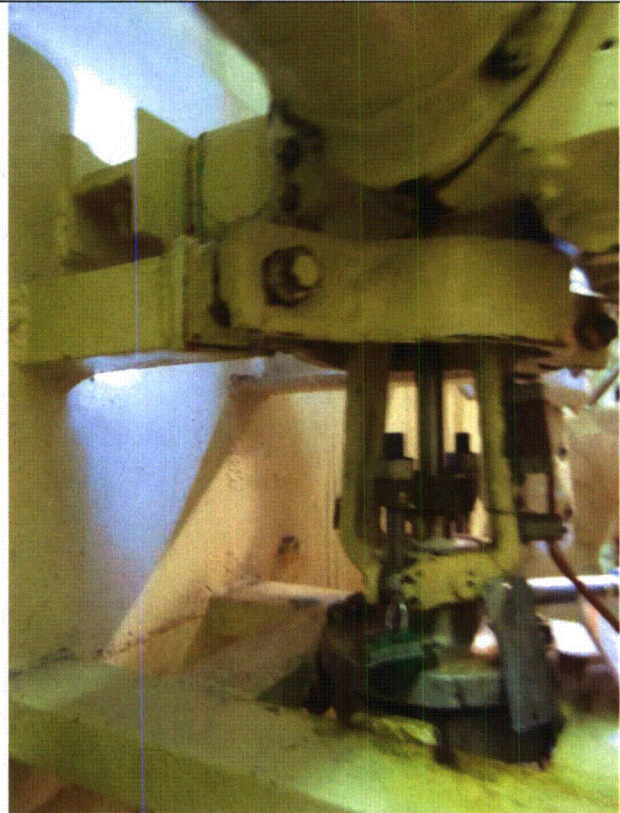
Equipment ID No.: 1MOV514

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: BAPP TO CHG PP SUCT DIREC



1MOV514 8-6-12 007



1MOV514 8-6-12 008

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV514

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: BAPP TO CHG PP SUCT DIREC



1MOV514 8-6-12 010

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV615

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11A LPSI LOOP ISOL

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 5.00 ft, CAL-AB-227

Manufacturer/Model: _____

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

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

Interaction Effects

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV615

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11A LPSI LOOP ISOL

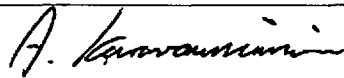
7. Are soft targets free from impact by nearby equipment or structures? Yes
The valve motor is approximately 1/2" from pipe insulation jacket and an insulation box is resting on pipe support, both condition are judged not to be a seismic concern.
8. Are overhead equipment, distribution systems, ceiling 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

Evaluated by:



A. Karavoussianis

Date: 11/09/2012



C. Figliolini

11/09/2012

Photos

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

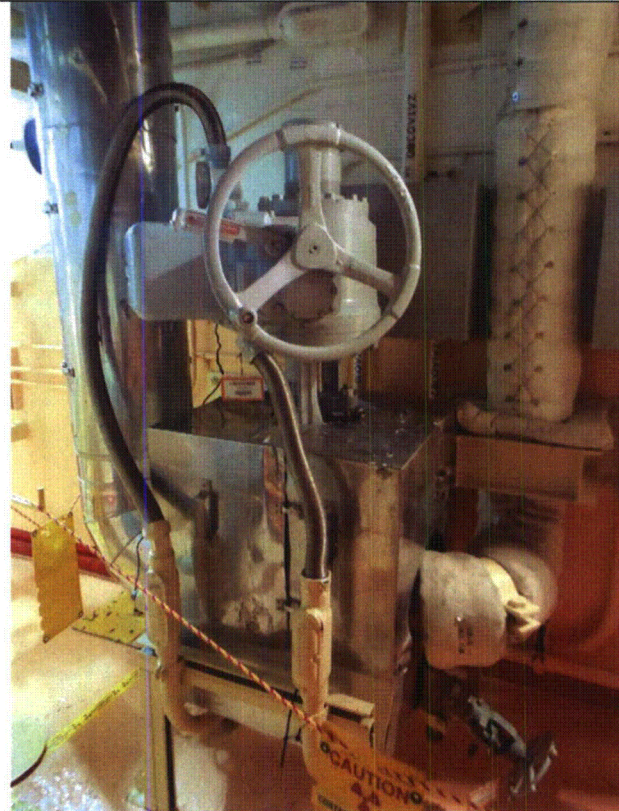
Equipment ID No.: 1MOV615

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11A LPSI LOOP ISOL



1MOV615 8-7-12 199



1MOV615 8-7-12 200

ATTACHMENT 3
WALKDOWN CHECKLISTS

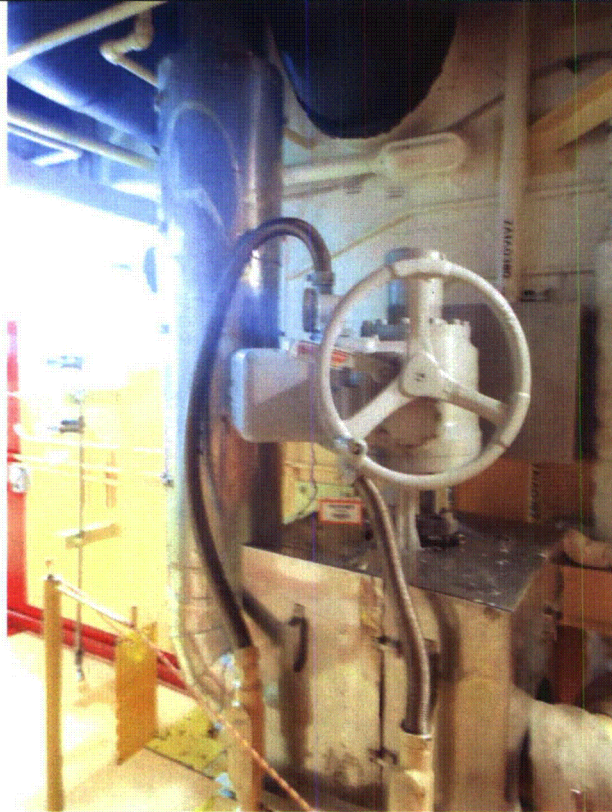
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV615

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11A LPSI LOOP ISOL



1MOV615 8-7-12 201



1MOV615 8-7-12 202

ATTACHMENT 3

WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV615

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11A LPSI LOOP ISOL



1MOV615 8-7-12 203



1MOV615 8-7-12 204

ATTACHMENT 3
WALKDOWN CHECKLISTS

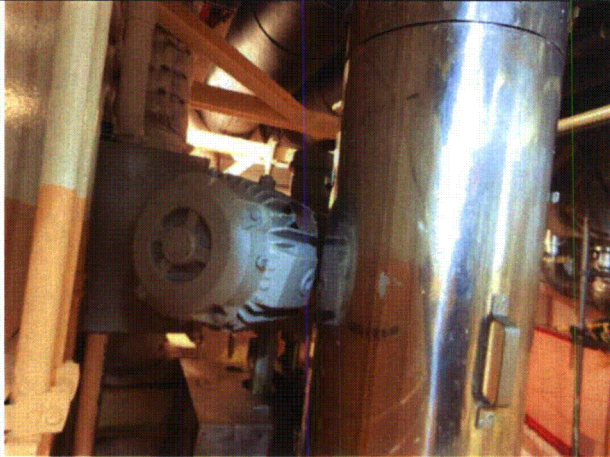
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV615

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11A LPSI LOOP ISOL



1MOV615 8-7-12 205



1MOV615 8-7-12 206

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV625

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11B LPSI LOOP ISOL

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 5.00 ft, CAL-AB-227

Manufacturer/Model:

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

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

Interaction Effects

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV625

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11B LPSI LOOP ISOL

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

The valve box insulation jacket is 1/4" from support, judged not a seismic concern.

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

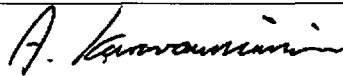
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

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

Evaluated by:



A. Karavoussianis

Date: 11/09/2012



C. Figliolini

11/09/2012

Photos

ATTACHMENT 3

WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV625

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11B LPSI LOOP ISOL



1MOV625 8-7-12 208



1MOV625 8-7-12 209

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

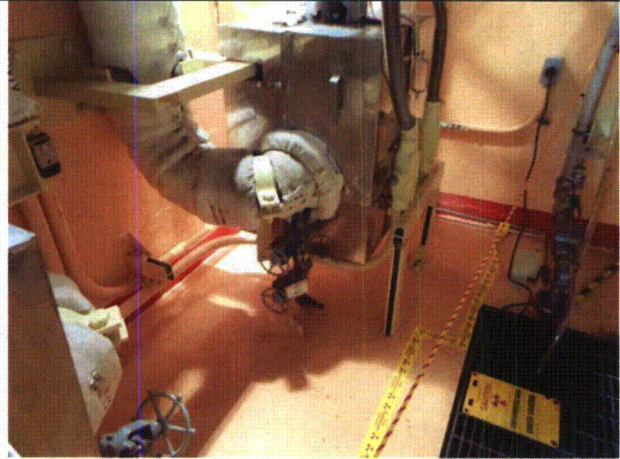
Equipment ID No.: 1MOV625

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11B LPSI LOOP ISOL



1MOV625 8-7-12 210



1MOV625 8-7-12 211

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV627

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11B AUX HPSI LOOP ISOL

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 27.00 ft, CAL-AB-316

Manufacturer/Model: _____

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable

4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable

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

Interaction Effects

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV627

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11B AUX HPSI LOOP ISOL

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

The valve's piping is below the grating and valve projects through the grating. The pipe is supported near the valve. Differential movement between the valve, pipe and support steel is judged to be negligible, therefore there is no seismic concern.

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

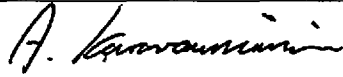
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes
-

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

Evaluated by:



A. Karavoussianis

Date: 11/09/2012



C. Figliolini

11/09/2012

Photos

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

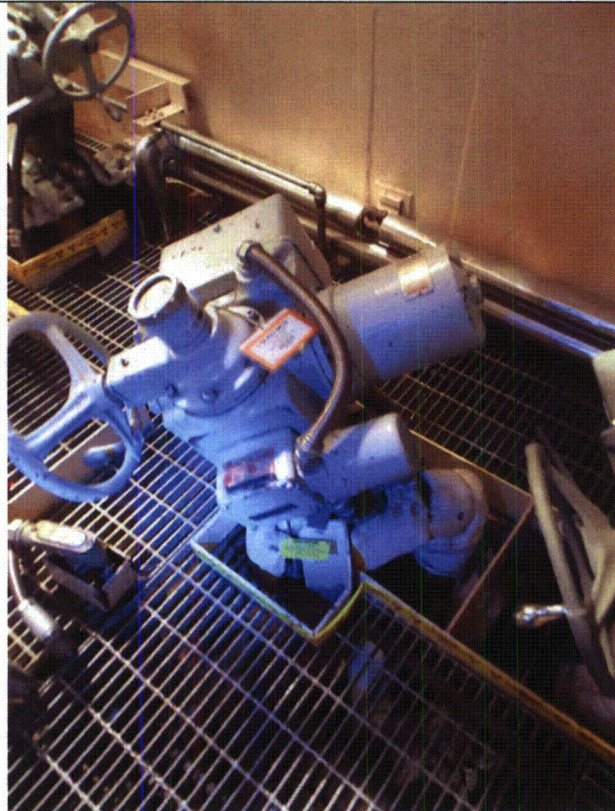
Equipment ID No.: 1MOV627

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11B AUX HPSI LOOP ISOL



1MOV627 8-8-12 055



1MOV627 8-8-12 056

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

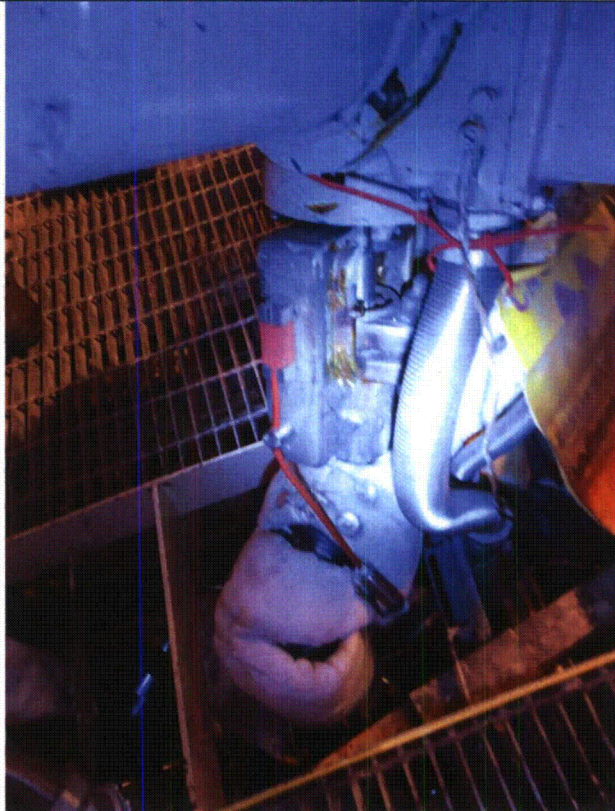
Equipment ID No.: 1MOV627

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

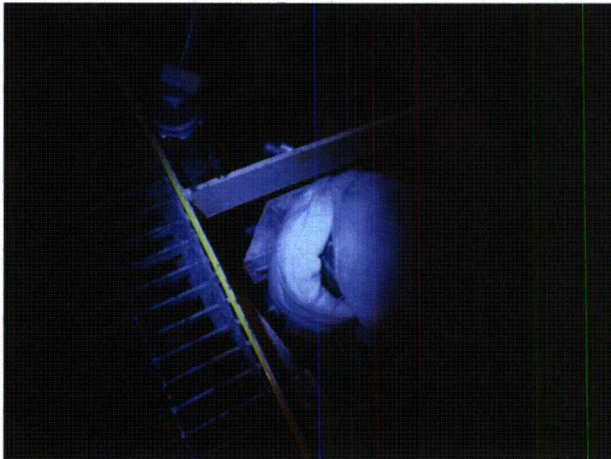
Equipment Description: 11B AUX HPSI LOOP ISOL



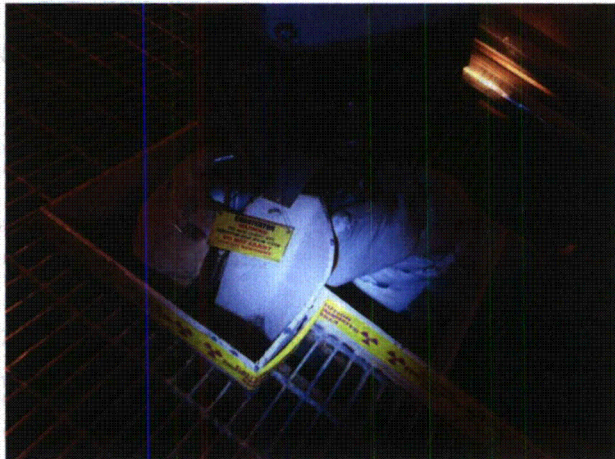
1MOV627 8-8-12 057



1MOV627 8-8-12 058



1MOV627 8-8-12 059



1MOV627 8-8-12 061

ATTACHMENT 3
WALKDOWN CHECKLISTS

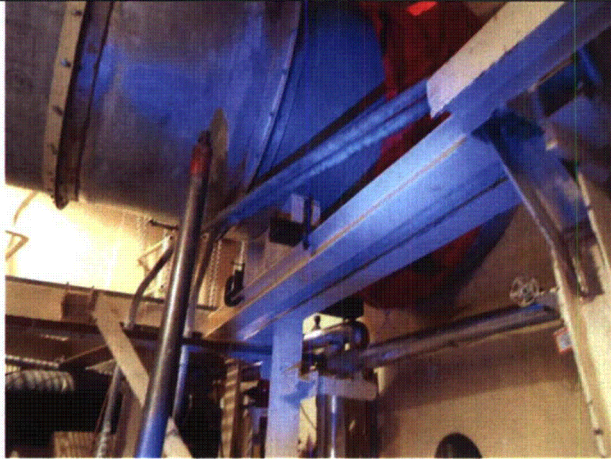
Status: Y N U

Seismic Walkdown Checklist (SWC)

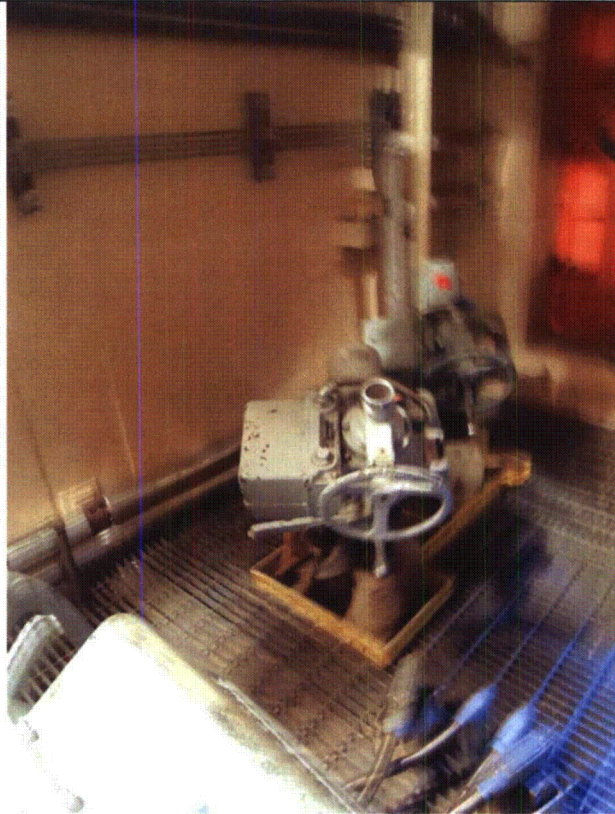
Equipment ID No.: 1MOV627

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11B AUX HPSI LOOP ISOL



1MOV627 8-8-12 062



1MOV627 8-8-12 063

ATTACHMENT 3
WALKDOWN CHECKLISTS

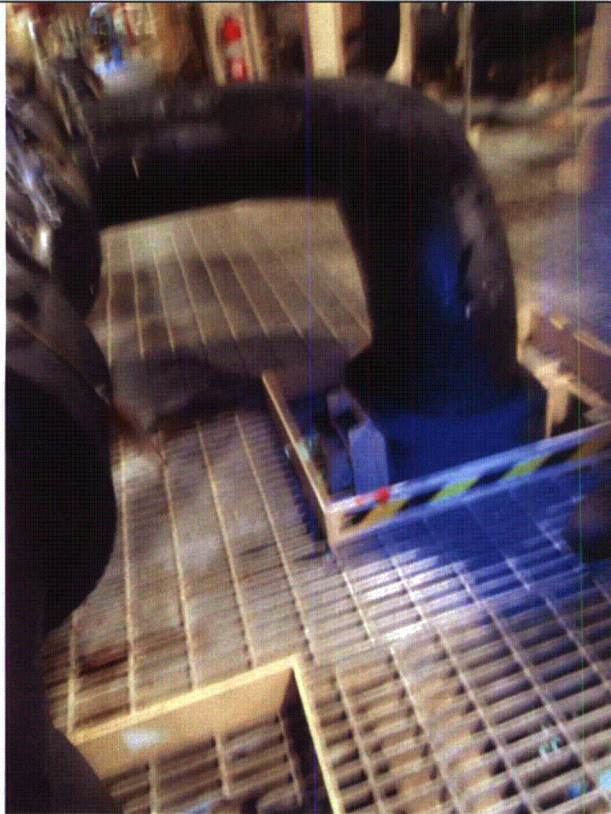
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1MOV627

Equipment Class: (8) Motor-Operated and Solenoid-Operated Valves

Equipment Description: 11B AUX HPSI LOOP ISOL



1MOV627 8-8-12 064

ATTACHMENT 3

WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1NB102

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

Equipment Description: CNTMT COOL FAN 11 CONTROLLER

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 45.00 ft, CAL-AB-429

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? Not Applicable

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) No

The cabinet is bolted to C3 mounting channels along the rear and front of the cabinet. The channels are weld to embedded steel by 1/8" fillet welds. There are 1/2" long fillet welds at the corners along/against the wall and 3 - 1/2" weld along the back channel away from the wall, i.e. seen under the cabinet. Along the front of the cabinet there is a 3" long weld at 3 places.

The anchorage is not consistent with calculation C-89-041. The calculation analyzed the cabinet as being anchored with 3 x 1/8" fillet welds (3" long on each end and 5 1/2" in the middle) along the exterior of each mounting channel.

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1NB102

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

Equipment Description: CNTMT COOL FAN 11 CONTROLLER

CR-2012-009703

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? No

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? No

There is a 1/16" gap between cabinet and wall at the top back of the cabinet. Evaluated this condition using 8Hz and 2% damping. The resulting displacement is 0.048", which is less than 0.0625", therefore the gap is acceptable.

Using response spectrum AW045D2N.dat

Sa = 0.2g

*d = 1.6 * 0.2 * 386.4 / (8 * 2pi)^2 = 0.048" < 0.0625 : OK.*

Also, there is a unistrut support for a fire protection panel that is in contact with the side of the cabinet. This condition will cause the cabinet and unistrut to bang up against each other, therefore it needs to be evaluated. CR-2012-009707

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? No

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1NB102

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

Equipment Description: CNTMT COOL FAN 11 CONTROLLER

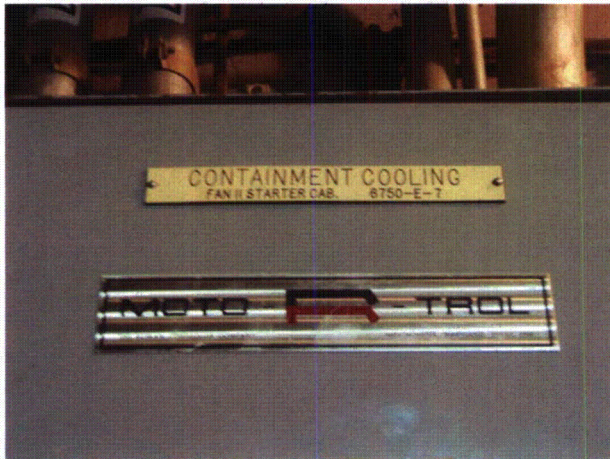
Cabinet is inaccessible for internal inspection.

Comments

Evaluated by: *A. Karavoussianis* A. Karavoussianis Date: 11/09/2012

C. Figliolini C. Figliolini 11/09/2012

Photos



1NB102 8-8-12 078



1NB102 8-8-12 079

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

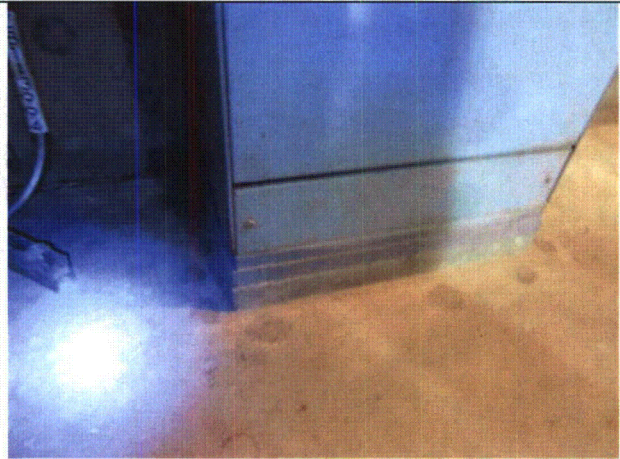
Equipment ID No.: 1NB102

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

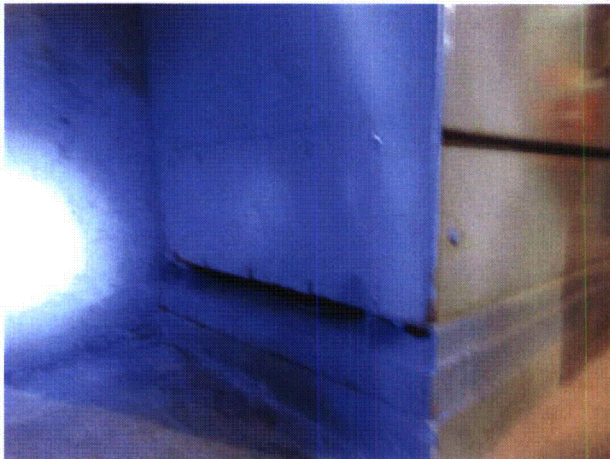
Equipment Description: CNTMT COOL FAN 11 CONTROLLER



1NB102 8-8-12 080



1NB102 8-8-12 081



1NB102 8-8-12 082



1NB102 8-8-12 083

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

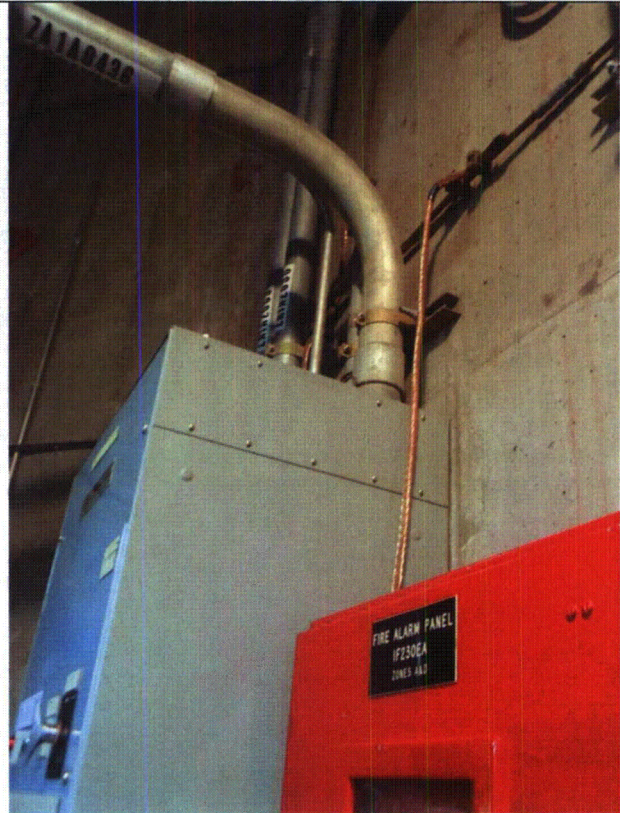
Equipment ID No.: 1NB102

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

Equipment Description: CNTMT COOL FAN 11 CONTROLLER



1NB102 8-8-12 084



1NB102 8-8-12 085

ATTACHMENT 3
WALKDOWN CHECKLISTS

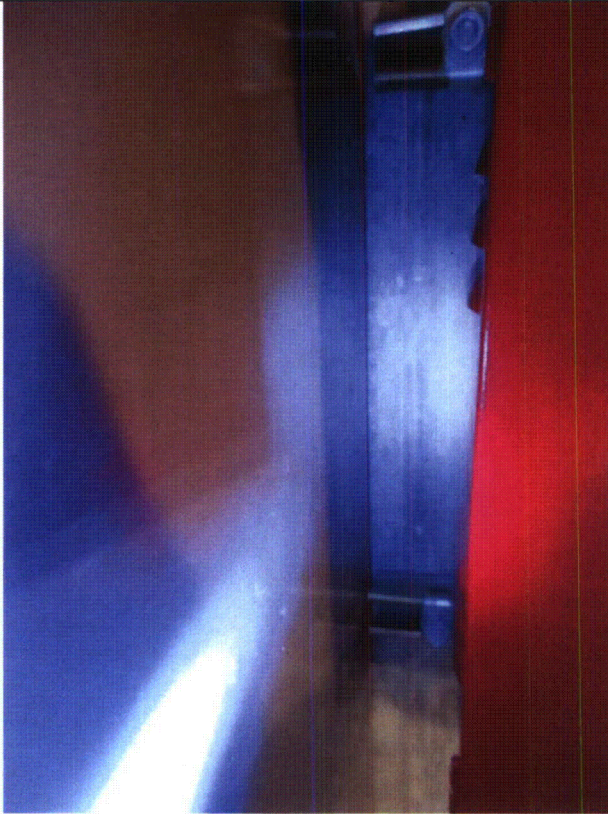
Status: Y N U

Seismic Walkdown Checklist (SWC)

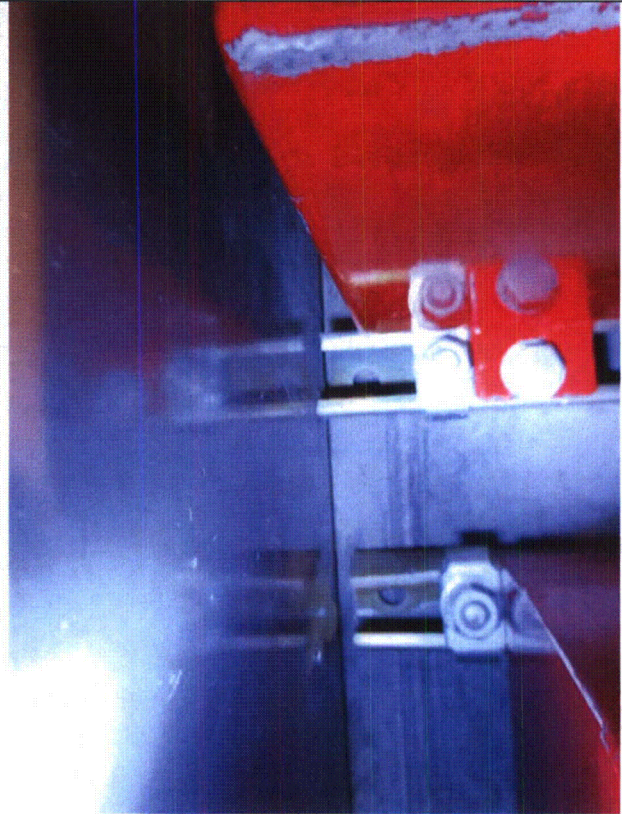
Equipment ID No.: 1NB102

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

Equipment Description: CNTMT COOL FAN 11 CONTROLLER



1NB102 8-8-12 086



1NB102 8-8-12 087

ATTACHMENT 3
WALKDOWN CHECKLISTS

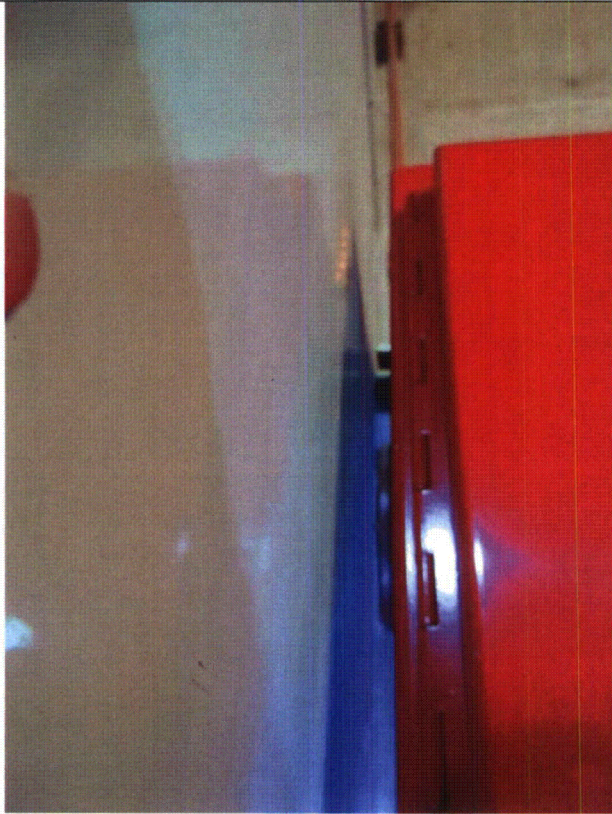
Status: Y N U

Seismic Walkdown Checklist (SWC)

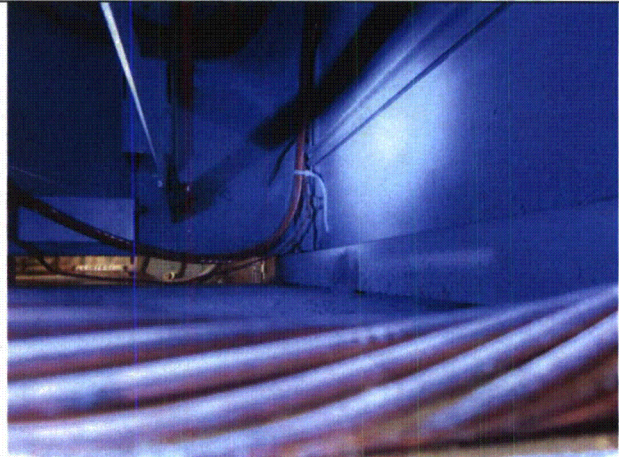
Equipment ID No.: 1NB102

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

Equipment Description: CNTMT COOL FAN 11 CONTROLLER



1NB102 8-8-12 088



1NB102 8-8-12 090

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PCV3938A

Equipment Class: (0) Other

Equipment Description: A/S TO 11/P3938

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 45.00 ft, CAL-AB-428

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 |

Interaction Effects

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PCV3938A

Equipment Class: (0) Other

Equipment Description: A/S TO 11/P3938

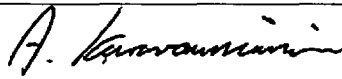
7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
Tubing lines go from component to component and/or are mounted on the same wall, therefore acceptable.
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

Evaluated by:



A. Karavoussianis

Date: 11/09/2012



C. Figliolini

11/09/2012

Photos

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PCV3938A

Equipment Class: (0) Other

Equipment Description: A/S TO 1I/P3938



1PCV3938A 8-8-12 154



1PCV3938A 8-8-12 155

ATTACHMENT 3
WALKDOWN CHECKLISTS

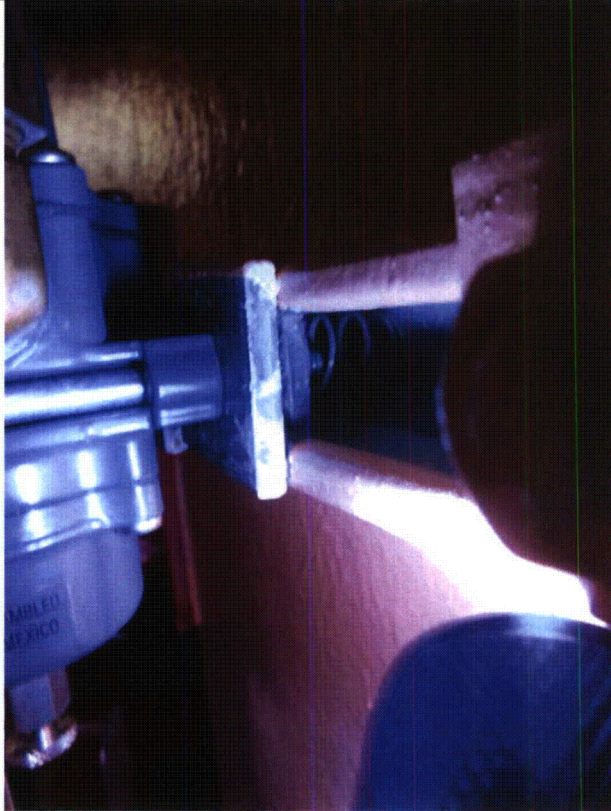
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PCV3938A

Equipment Class: (0) Other

Equipment Description: A/S TO 11/P3938



1PCV3938A 8-8-12 157



1PCV3938A 8-8-12 158

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PCV3939A

Equipment Class: (0) Other

Equipment Description: A/S TO 11/P3939

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 45.00 ft, CAL-AB-428

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.) No
Mounted by 2-7/16 F-F bolts to unistrut along with PCV-3938A and I/A. Unistrut is 46" long and anchored by 3 - 1/2" (3/4" F-F) CEA to the concrete wall. Need plant documentation to determine if anchorage is consistent with field anchorage as described. CR-2012-009737

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? No

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PCV3939A

Equipment Class: (0) Other

Equipment Description: A/S TO 11/P3939

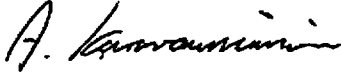
Interaction Effects

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

Evaluated by:  A. Karavoussianis Date: 11/09/2012



C. Figliolini

11/09/2012

Photos

ATTACHMENT 3
WALKDOWN CHECKLISTS

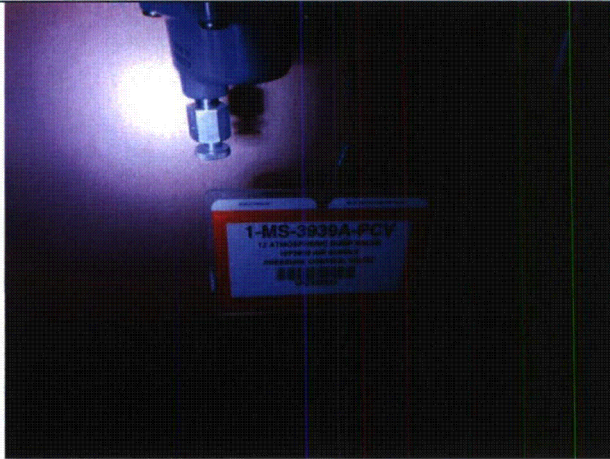
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Seismic Walkdown Checklist (SWC)

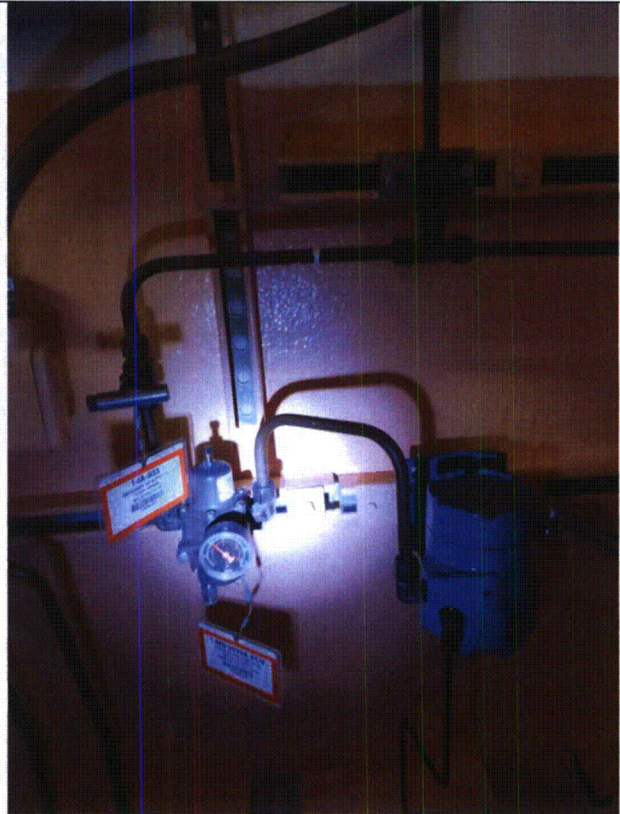
Equipment ID No.: 1PCV3939A

Equipment Class: (0) Other

Equipment Description: A/S TO 11/P3939



1PCV3939A 8-8-12 159



1PCV3939A 8-8-12 160

ATTACHMENT 3
WALKDOWN CHECKLISTS

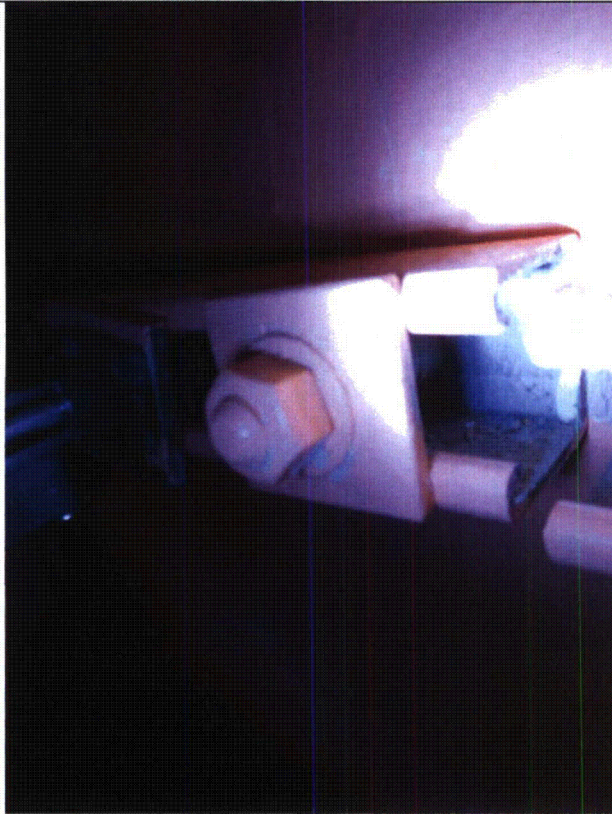
Status: Y N U

Seismic Walkdown Checklist (SWC)

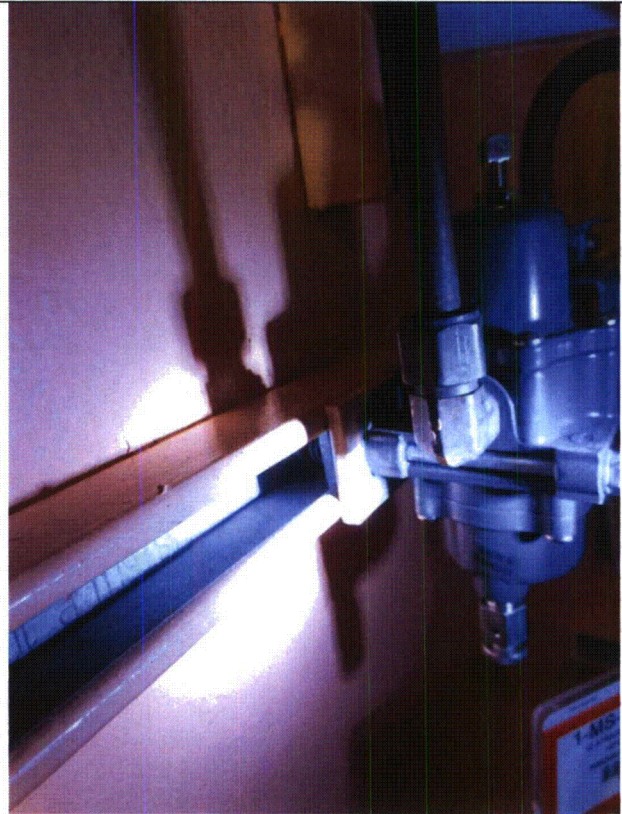
Equipment ID No.: 1PCV3939A

Equipment Class: (0) Other

Equipment Description: A/S TO 1I/P3939



1PCV3939A 8-8-12 161



1PCV3939A 8-8-12 162

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

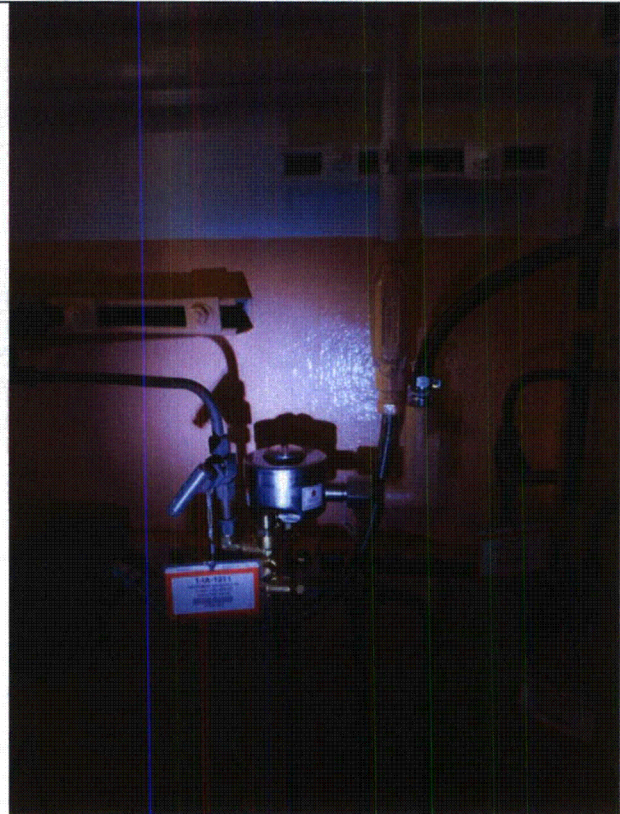
Equipment ID No.: 1PCV3939A

Equipment Class: (0) Other

Equipment Description: A/S TO 11/P3939



1PCV3939A 8-8-12 163



1PCV3939A 8-8-12 164

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PCV3939B

Equipment Class: (0) Other

Equipment Description: A/S TO 1CV3939

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 45.00 ft, CAL-AB-428

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

Interaction Effects

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PCV3939B

Equipment Class: (0) Other

Equipment Description: A/S TO 1CV3939

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

Nearby masonry block wall, identified as RR on drawing A-259, is safety-related and thus seismically rated per IE Bulletin 80-11.

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

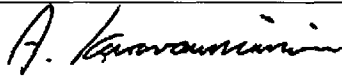
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Yes

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

Evaluated by:



A. Karavoussianis

Date: 11/09/2012



C. Figliolini

11/09/2012

Photos

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PCV3939B

Equipment Class: (0) Other

Equipment Description: A/S TO 1CV3939



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1PCV3939B 8-8-12 168

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PCV3939B

Equipment Class: (0) Other

Equipment Description: A/S TO 1CV3939



1PCV3939B 8-8-12 169



1PCV3939B 8-8-12 170

ATTACHMENT 3
WALKDOWN CHECKLISTS

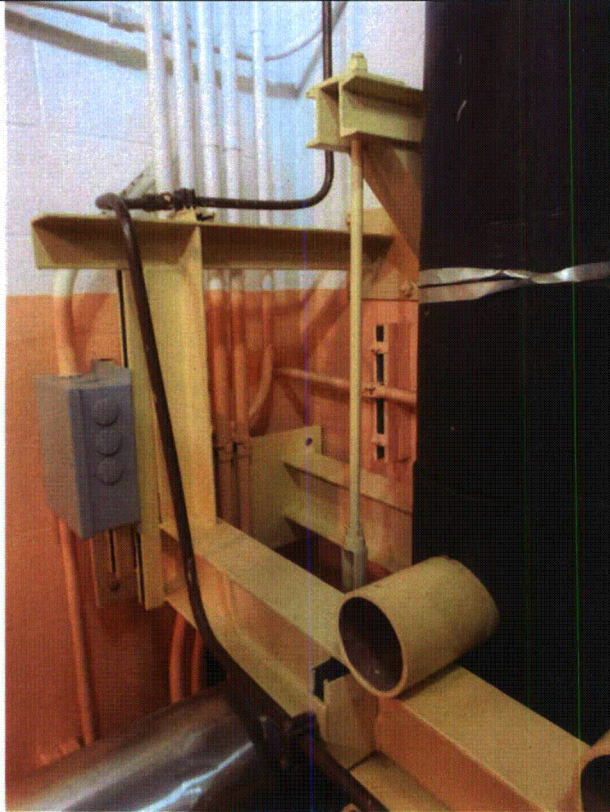
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PCV3939B

Equipment Class: (0) Other

Equipment Description: A/S TO 1CV3939



1PCV3939B 8-8-12 171

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C08

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 45.00 ft, CAL-AB-405

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.) No
Anchorage used details that are not shown on the drawing, but are judged to be equivalent. See as-built on drawing G1992 SH0004 Rev. 9. CR-2012-009725

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes
The anchorage detail deviations do not adversely affect the cabinet's anchorage, therefore there is no potential seismic

concern. This is simple a documentation issue.

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C08

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? No

Metrological cabinet is in close proximity to the cabinets, tipping over may be a concern. The Met. Cabinet dimension are 24"x29"x58"H and estimated to weigh less than 200#.

Based on NUREG CR 6865, Fig. VI.59

Using 1 Hz, 5% Damping and max. friction coefficient of 0.8.

From AE045D5N – Sa=0.19g and AE045DEE – Sa=0.21g (use this)

Dmax (tip over) = 0.15", Theta max = 0.04 Deg.

Actual tipping angle, alpha = tan⁻¹(12/39) = 17 Deg >> Theta max, therefore the Met. Cabinet will not tip over.

Craft back board may fall on back of panel or may strike strip recorder.

Recommend moving it. CR-2012-008387

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

Drop ceiling with light diffusers, need details to determine seismic adequacy. 10/3/12 - The control room ceiling has been previously evaluated by CCNPP and was determined to not be a credible seismic concern.

A masonry block wall, identified as Y on drawing A-259, is located behind the panels. This wall is safety-related and thus seismically rated per IE Bulletin 80-11.

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

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C08

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL

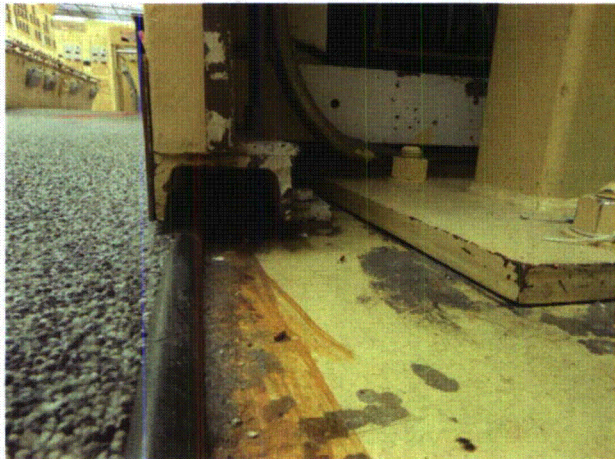
Evaluated by: *A. Karavoussianis* A. Karavoussianis Date: 11/09/2012

C. Figliolini
C. Figliolini Date: 11/09/2012

Photos



1PNL1C08 8-14-12 106



1PNL1C08 8-14-12 107



1PNL1C08 8-14-12 108



1PNL1C08 8-14-12 109

ATTACHMENT 3
WALKDOWN CHECKLISTS

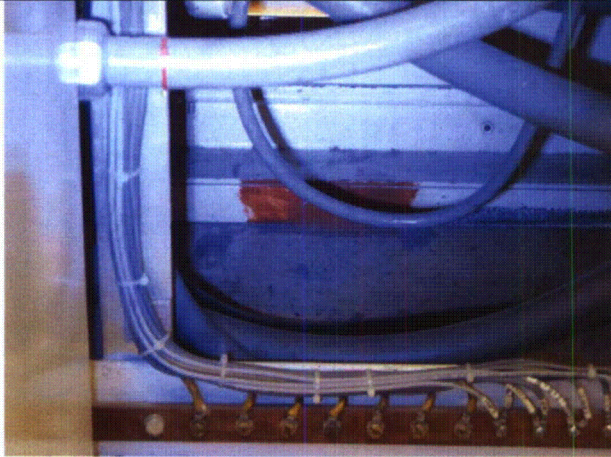
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Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C08

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

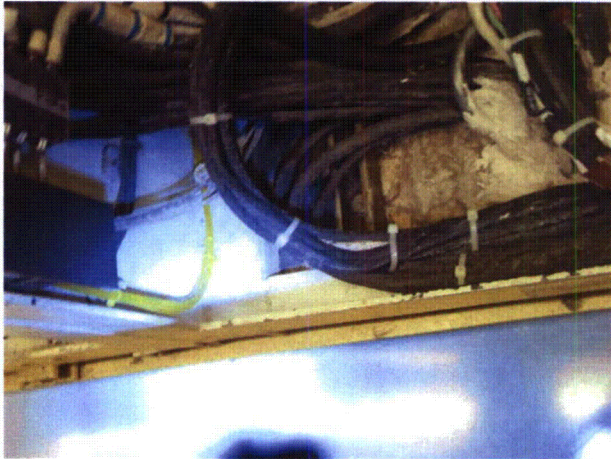
Equipment Description: ENGINEERING SAFEGUARDS CONTROL



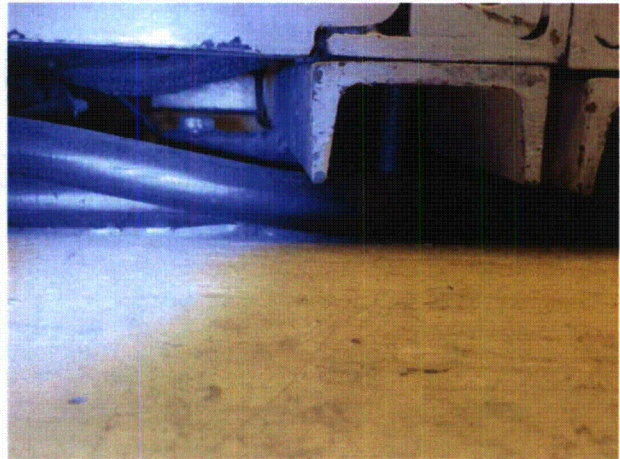
1PNL1C08 8-14-12 110



1PNL1C08 8-14-12 111



1PNL1C08 8-14-12 112



1PNL1C08 8-14-12 113

ATTACHMENT 3
WALKDOWN CHECKLISTS

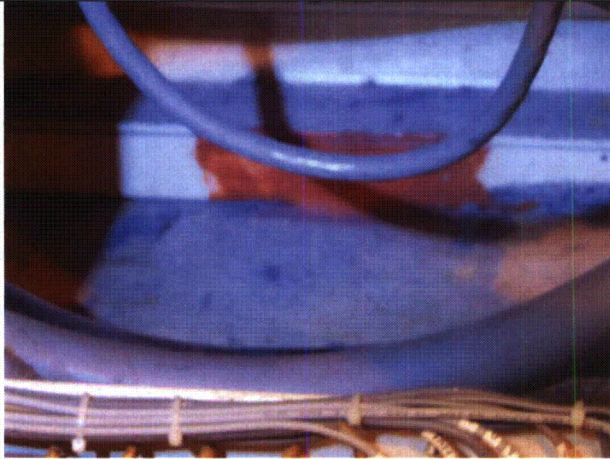
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C08

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



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1PNL1C08 8-14-12 116

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C08

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



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1PNL1C08 8-14-12 118

ATTACHMENT 3
WALKDOWN CHECKLISTS

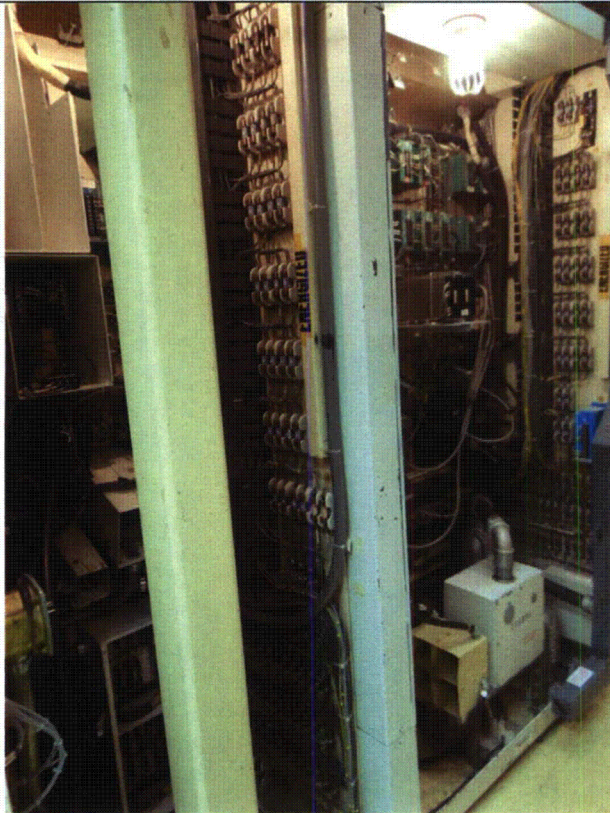
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C08

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



1PNL1C08 8-14-12 119



1PNL1C08 8-14-12 120

ATTACHMENT 3

WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C08

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



1PNL1C08 8-14-12 121



1PNL1C08 8-14-12 122

ATTACHMENT 3
WALKDOWN CHECKLISTS

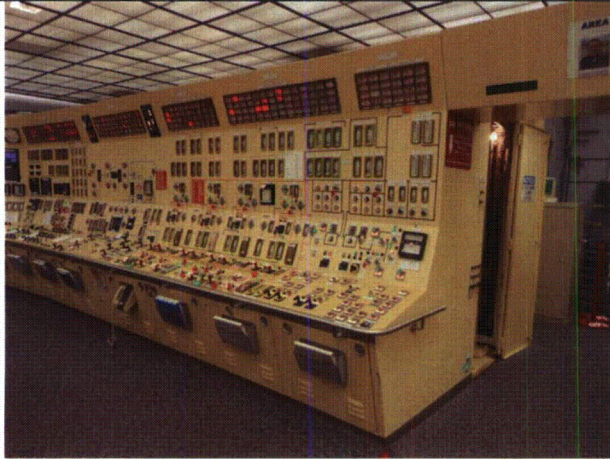
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C08

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



1PNL1C08 8-14-12 123



1PNL1C08 8-14-12 124

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C08

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



1PNL1C08 8-14-12 126



1PNL1C08 8-14-12 127

ATTACHMENT 3

WALKDOWN CHECKLISTS

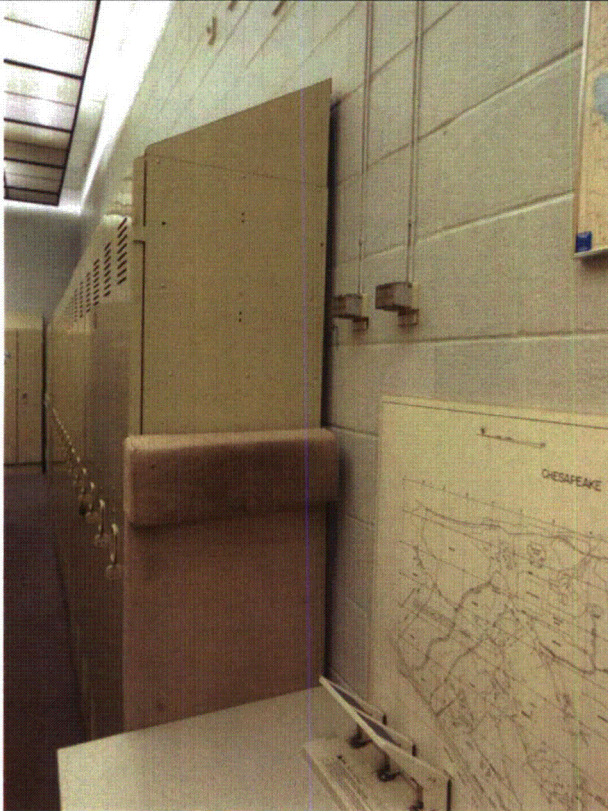
Status: Y N U

Seismic Walkdown Checklist (SWC)

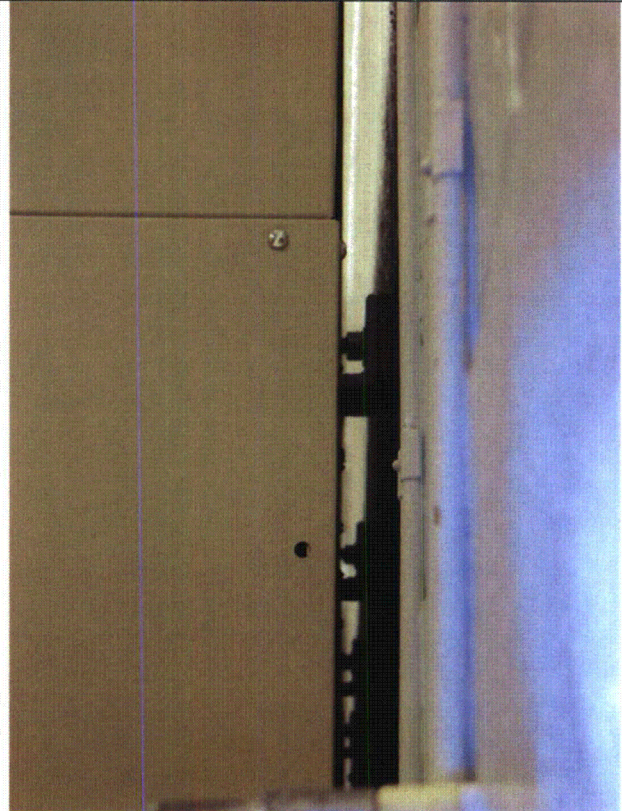
Equipment ID No.: 1PNL1C08

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



1PNL1C08 8-14-12 128



1PNL1C08 8-14-12 129

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C08

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



1PNL1C08 8-14-12 130

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C09

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL

Project: CCNPP 1 SWEL

Location (Bldg, Elev, Room/Area): AUX, 45.00 ft, CAL-AB-405

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

Interaction Effects

ATTACHMENT 3

WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C09

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL

7. Are soft targets free from impact by nearby equipment or structures? No

Metrological cabinet is in close proximity to the cabinets, tipping over may be a concern. The Met. cabinet dimension are 24"x29"x58"H and estimated to weigh less than 200#.

Based on NUREG CR 6865, Fig. VI.59

Using 1 Hz, 5% Damping and max. friction coefficient of 0.8.

From AE045D5N – Sa=0.19g and AE045DEE – Sa=0.21g (use this)

Dmax (tip over) = 0.15", Theta max = 0.04 Deg.

Actual tipping angle, alpha = tan⁻¹ (12/39) = 17 Deg >> Theta max, therefore the Met. Cabinet will not tip over.

Craft back board may fall on back of panel or may strike strip recorder.

Recommend moving it. CR-2012-008387

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

Drop ceiling with light diffusers, need details to determine seismic adequacy. 10/3/12 - The control room ceiling has been previously evaluated by CCNPP and was determined to not be a credible seismic concern.

A masonry block wall, identified as Y on drawing A-259, is located behind the panels. This wall is safety-related and thus seismically rated per IE Bulletin 80-11.

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

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C09

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL

Evaluated by:

A. Karavoussianis

A. Karavoussianis

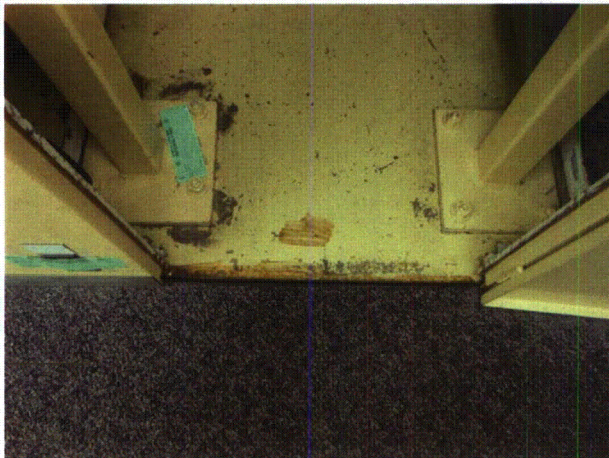
Date: 11/09/2012

C. Figliolini

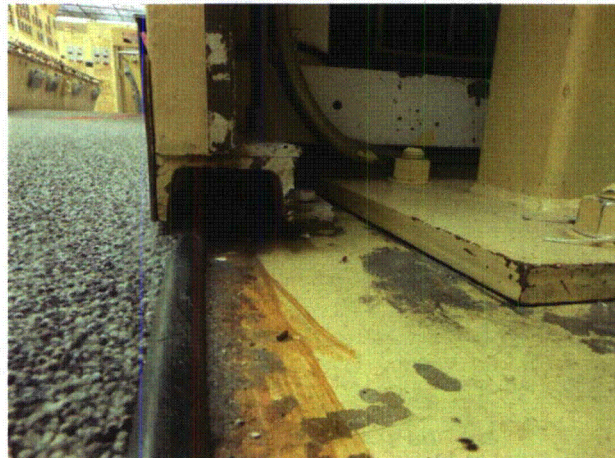
C. Figliolini

11/09/2012

Photos



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1PNL1C09 8-14-12 107



1PNL1C09 8-14-12 108



1PNL1C09 8-14-12 109

ATTACHMENT 3

WALKDOWN CHECKLISTS

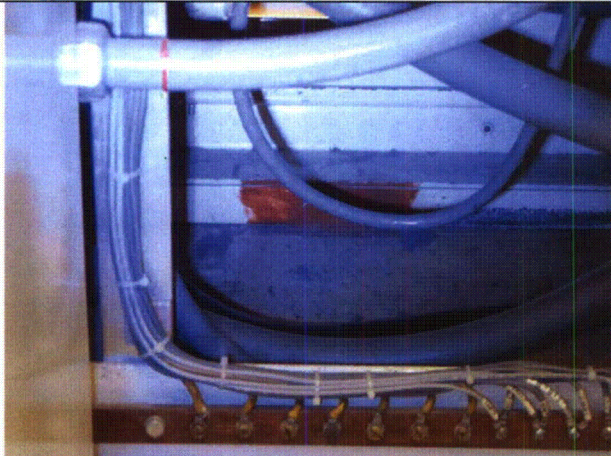
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C09

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



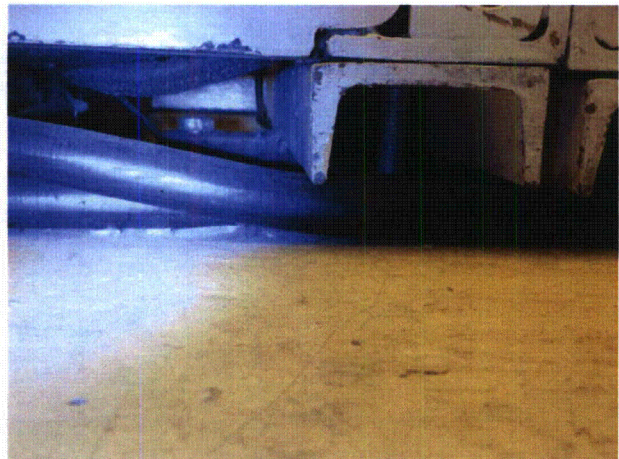
1PNL1C09 8-14-12 110



1PNL1C09 8-14-12 111



1PNL1C09 8-14-12 112



1PNL1C09 8-14-12 113

ATTACHMENT 3

WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C09

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



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ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

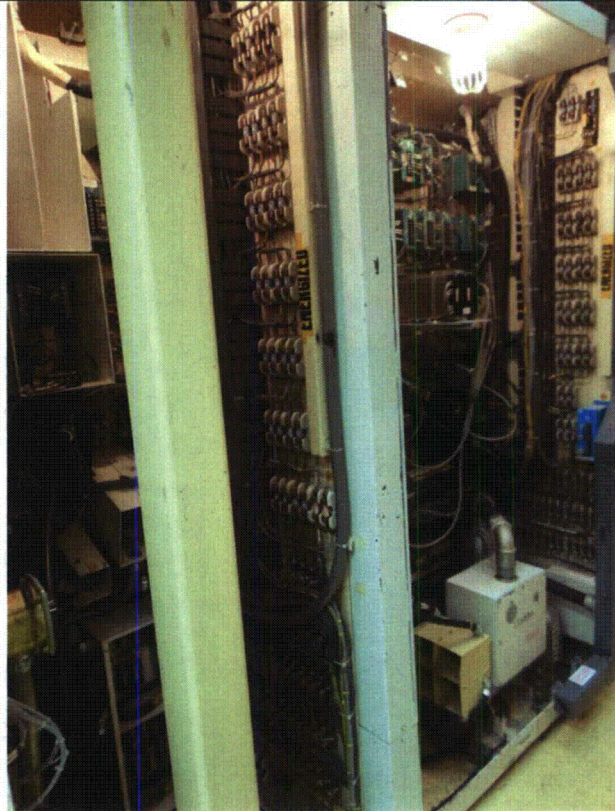
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Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



1PNL1C09 8-14-12 118



1PNL1C09 8-14-12 119

ATTACHMENT 3
WALKDOWN CHECKLISTS

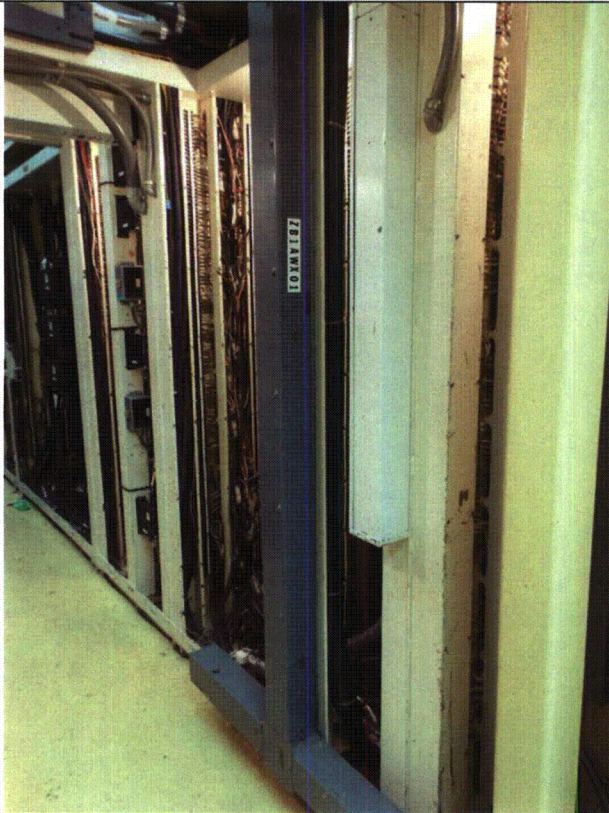
Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C09

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



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1PNL1C09 8-14-12 121

ATTACHMENT 3

WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

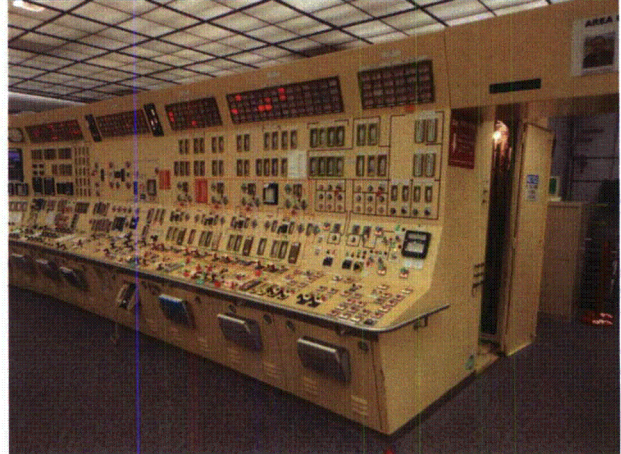
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Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



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1PNL1C09 8-14-12 123

ATTACHMENT 3

WALKDOWN CHECKLISTS

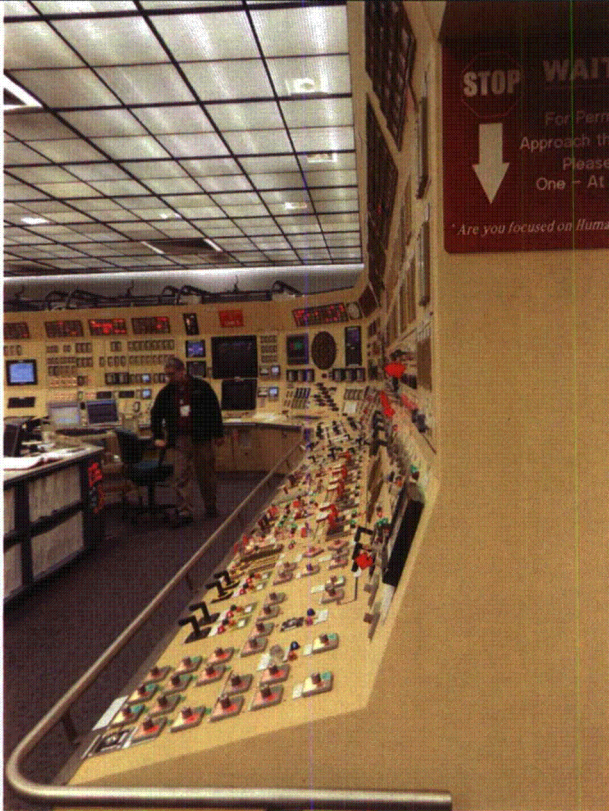
Status: Y N U

Seismic Walkdown Checklist (SWC)

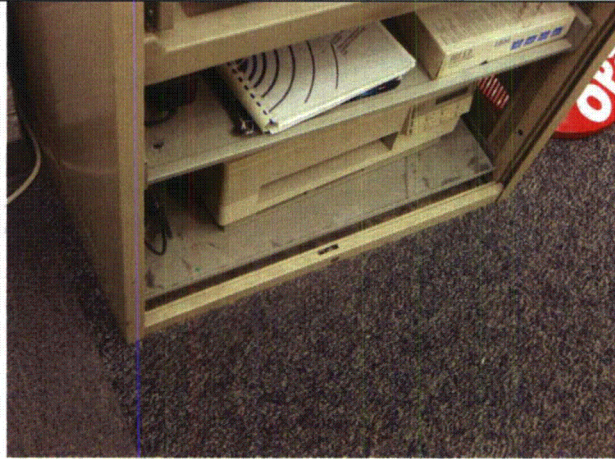
Equipment ID No.: 1PNL1C09

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



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1PNL1C09 8-14-12 126

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

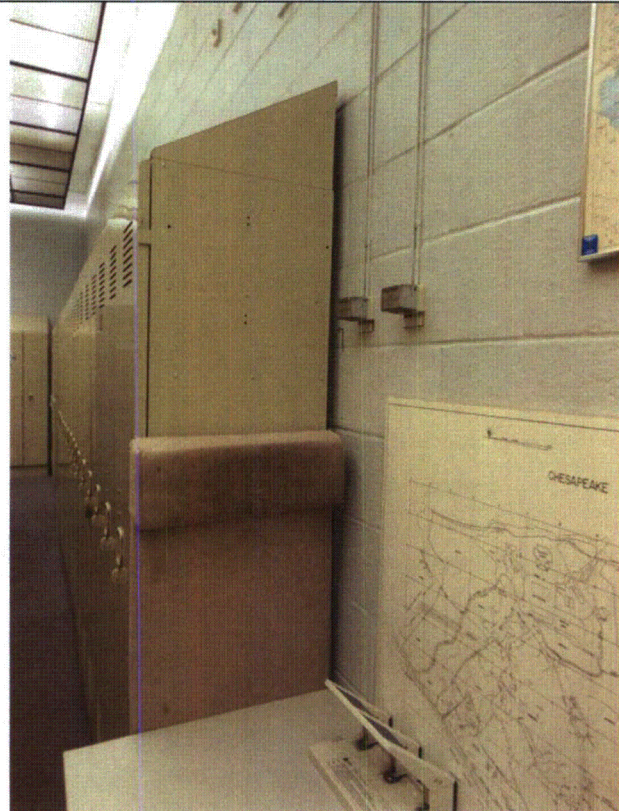
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Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



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1PNL1C09 8-14-12 128

ATTACHMENT 3
WALKDOWN CHECKLISTS

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1PNL1C09

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

Equipment Description: ENGINEERING SAFEGUARDS CONTROL



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1PNL1C09 8-14-12 130