APPENDIX B
SEISMIC WALKDOWN CHECKLISTS (SWCs)

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2N Equip. Class 15. Battery Racks

Equipment Description BATTERY 2N

Location: Bldg. AUXB Floor El. 603 Room 428A

Manufacturer, Model, Etc. _____

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

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

Mounting frame consists of single tier/two row braced racks.

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

Rack to floor anchorage verified and no significant degraded condition identified.

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

Anchorage inspected and no corrosion identified.

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

Drawings C-752 (Section B) and E-854Q-115-1 identify the configuration as four cast in place bolts per row and it was confirmed in the field during walkdown inspection.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2N Equip. Class 15. Battery Racks

Equipment Description BATTERY 2N

Interaction Effects

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

Nearby wooden platform identified as a seismic concern.
During inspection it was verified in control process that scaffold is within working period..

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

Seismic capacity of block walls in the area verified.
Block walls 4016 and 4026 verified to be to be seismically adequate based on ref. VBW20-B001-100, Rev 14 (12/6/88).

	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

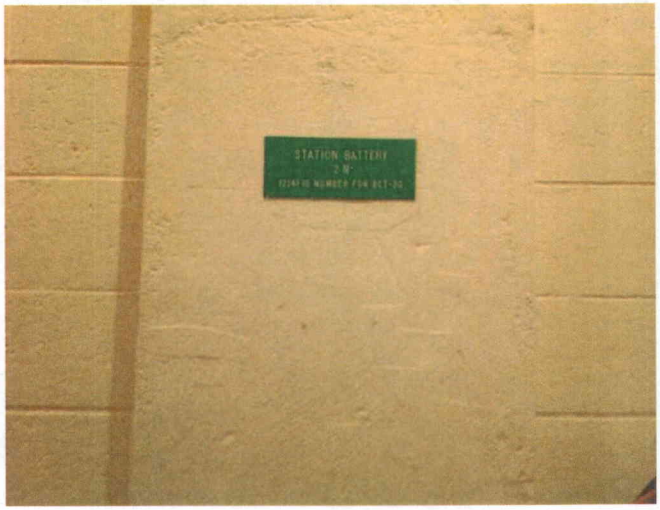
Status (Y) N U

Seismic Walkdown Checklist (SWC)

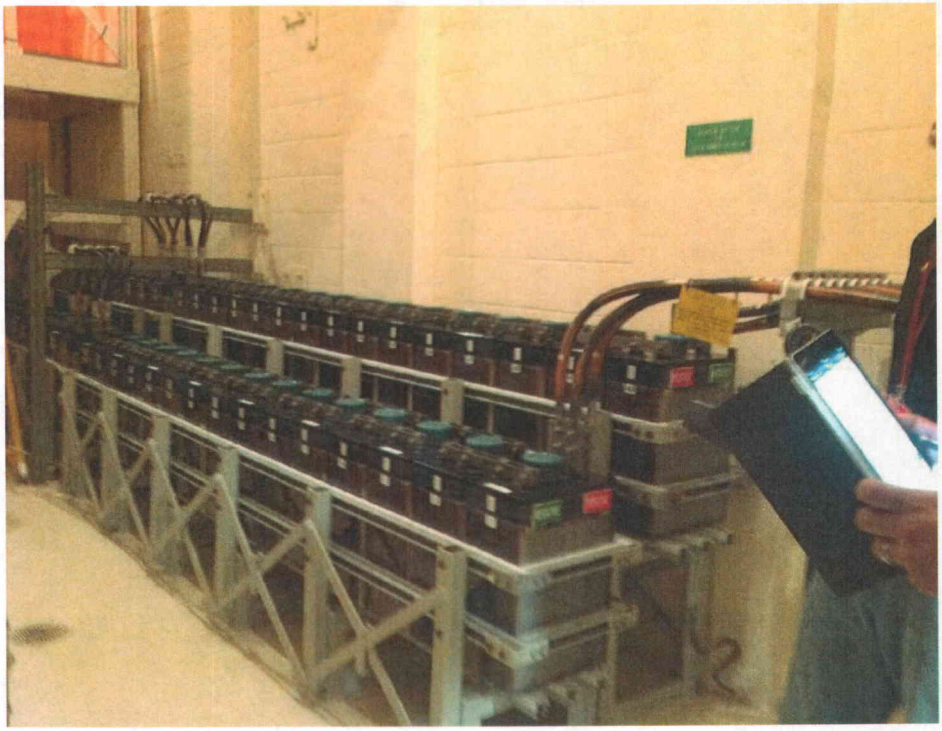
Equipment ID No. 2N Equip. Class 15. Battery Racks

Equipment Description BATTERY 2N

Other supporting or relevant documents and photos (if any):



2N plate
ID Plate of component



2N general
General view of component

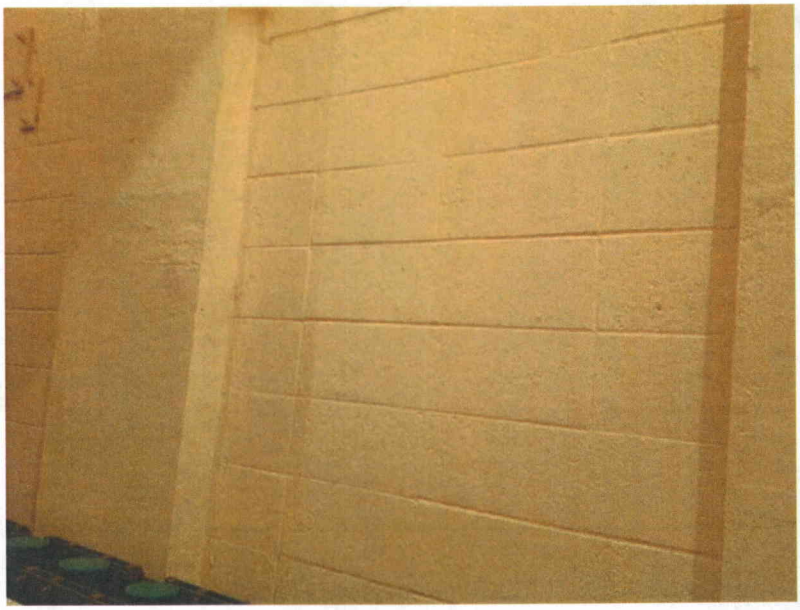
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2N Equip. Class 15. Battery Racks

Equipment Description BATTERY 2N

2N Anchorage
Partial view of anchorage, view is typical of all anchors



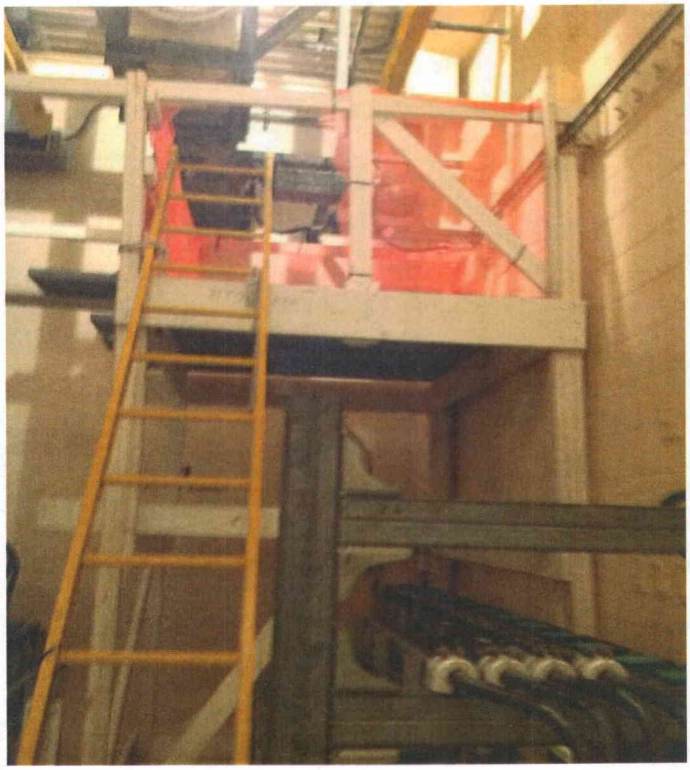
2N Masonry Wall
Potential interaction hazard from masonry wall near unit

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2N Equip. Class 15. Battery Racks

Equipment Description BATTERY 2N



2N wood platform
Wood platform erected above battery

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2P Equip. Class 15. Battery Racks

Equipment Description BATTERY 2P

Location: Bldg. AUXB Floor El. 603 Room 428A

Manufacturer, Model, Etc. _____

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

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

Mounting frame consists of single tier/two row braced racks.
Same configuration as 2N.

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

Rack to floor anchorage verified and no significant degraded condition identified.

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

Anchorage inspected and no corrosion identified.

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

Drawings C-752 (Section B) E-854Q-115-1 identify the configuration as four cast in place bolts per row and it was confirmed in the field during walkdown inspection.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 2P Equip. Class 15. Battery Racks

Equipment Description BATTERY 2P

Interaction Effects

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

Nearby wooden platform identified as a seismic concern.
During inspection it was verified in control process that scaffold is within working period..

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

Seismic capacity of block walls in the area verified.
Block walls 4016 and 4026 verified to be to be seismically adequate based on ref. VBW20-B001-100, Rev 14 (12/6/88).

	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. AF19 Equip. Class 0d. Other - check/manual valve

Equipment Description CHECK VALVE AF 19

Location: Bldg. AUXB Floor El. 565 Room 237

Manufacturer, Model, Etc. _____

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

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

Valve in line with 6" pipe properly supported.

Main line supports inspected and no missing bolts/parts identified.

Main line supports showed adequate condition and no missing parts.

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. AF19 Equip. Class 0d. Other - check/manual valve

Equipment Description CHECK VALVE AF 19

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

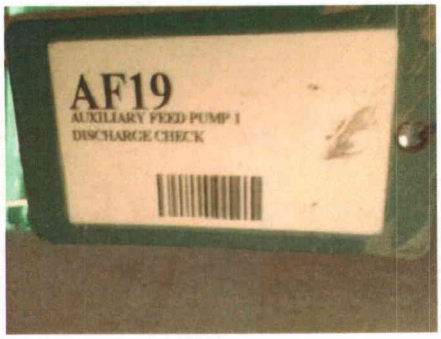
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. AF19 Equip. Class 0d. Other - check/manual valve

Equipment Description CHECK VALVE AF 19

Other supporting or relevant documents and photos (if any):



AF19 Plate
ID Plate of component

AF19 General
General view of component

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. AF608 Equip. Class 8A. Motor-Operated Valves

Equipment Description AUX FEED TO STEAM GEN 1-1 LINE STOP VLV

Location: Bldg. AUXB Floor El. 585 Room 303

Manufacturer, Model, Etc. _____

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

	Y	N	U	N/A
1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? *Valve in line with 8" pipe properly supported.*		X		
2. Is the anchorage free of bent, broken, missing or loose hardware?				X
3. Is the anchorage free of corrosion that is more than mild surface oxidation?				X
4. Is the anchorage free of visible cracks in the concrete near the anchors?				X
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.)				X
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	X			

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. AF608 Equip. Class 8A. Motor-Operated Valves

Equipment Description AUX FEED TO STEAM GEN 1-1 LINE STOP VLV

Interaction Effects

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

Pipe runs through shield building from Auxiliary Building.
The effect of seismic differential displacement between the Auxiliary Building and the Shield Building on this piping was verified from Calc No.1B R/12 and found acceptable.

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

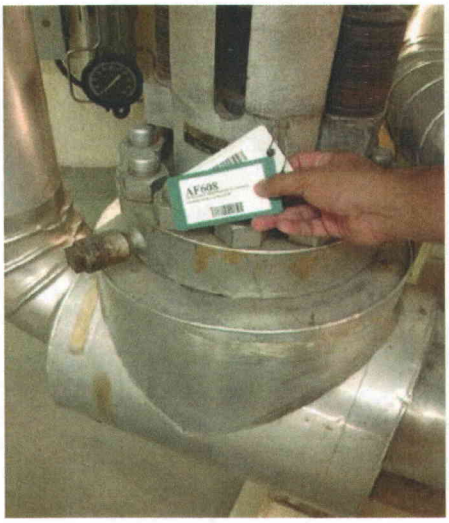
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. AF608 Equip. Class 8A. Motor-Operated Valves

Equipment Description AUX FEED TO STEAM GEN 1-1 LINE STOP VLV

Other supporting or relevant documents and photos (if any):



AF608 plate
ID Plate of component

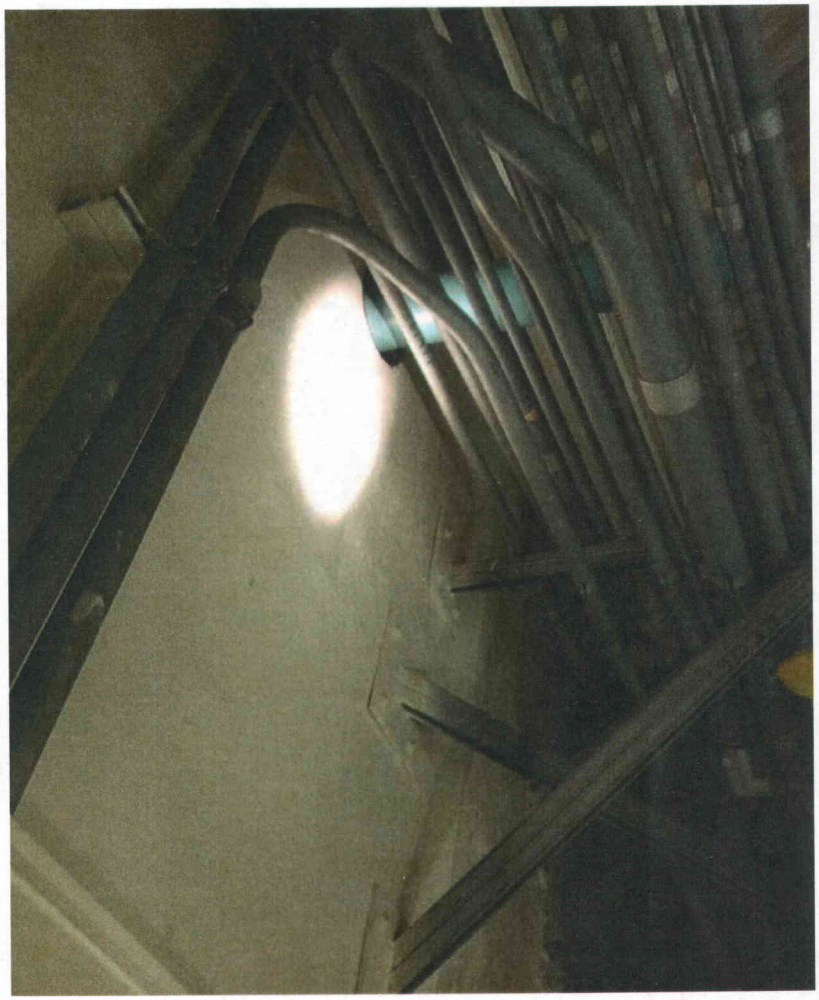
AF608 general
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. AF608 Equip. Class 8A. Motor-Operated Valves

Equipment Description AUX FEED TO STEAM GEN 1-1 LINE STOP VLV



Run of pipe from AF608 from Auxiliary Building to Shield Building
Subject to seismic anchor movements

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. BW10 Equip. Class 0d. Other - check valve or manual valve

Equipment Description Flush Connection

Location: Bldg. AUXB Floor El. 565'10.25" Room 209

Manufacturer, Model, Etc.

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?
Valve located on pipe around 3" diameter.

Y	N
	X

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

Y	N	U	N/A
			X

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

Y	N	U	N/A
			X

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

Y	N	U	N/A
			X

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Y	N	U	N/A
			X

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

Y	N	U
X		

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. BW10 Equip. Class 0d. Other - check valve or manual valve

Equipment Description Flush Connection

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

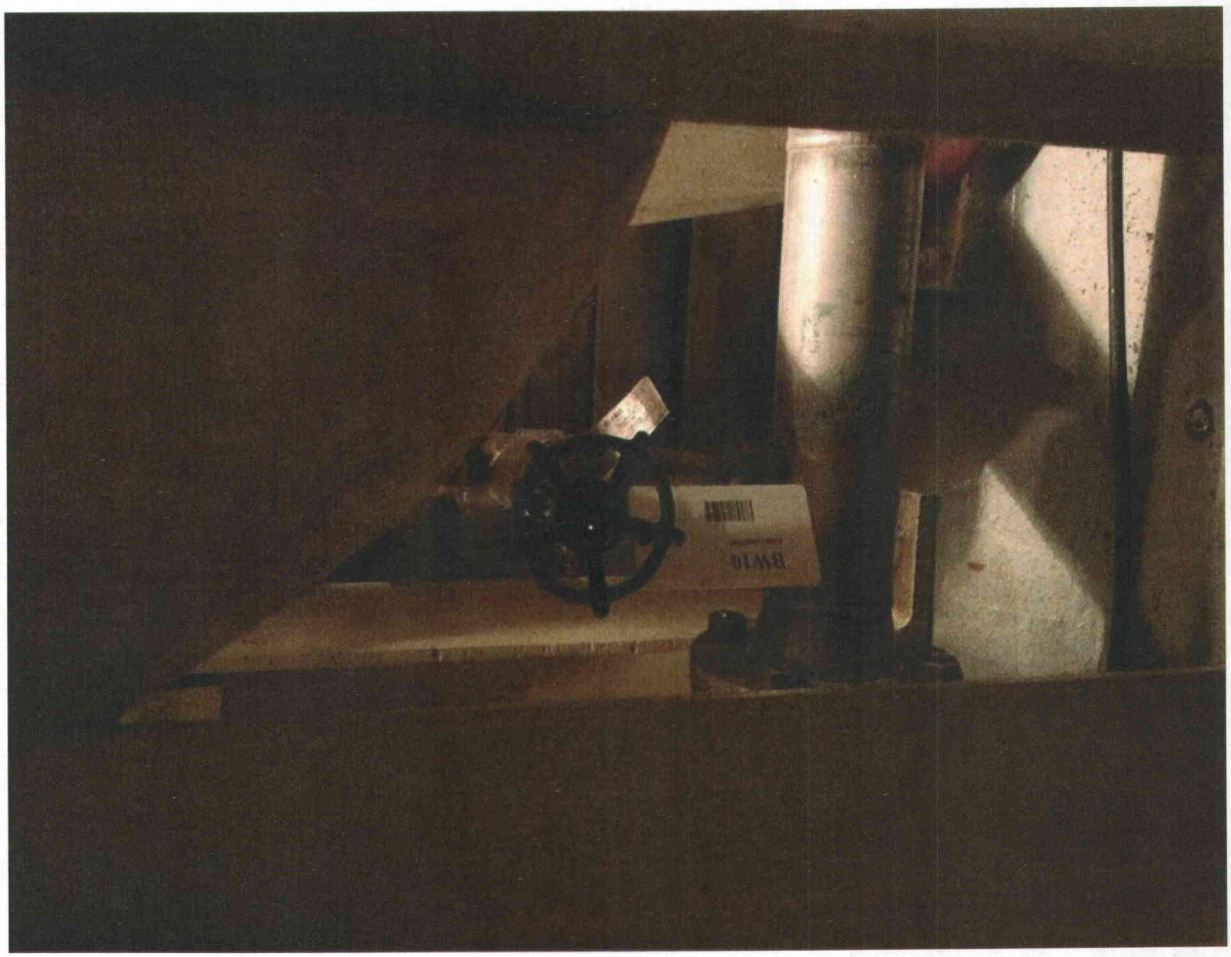
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. BW10 Equip. Class 0d. Other - check valve or manual valve

Equipment Description Flush Connection

Other supporting or relevant documents and photos (if any):



BW10 Plate and General
ID plate and general view of component

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. BW21 Equip. Class 0d. Other - check valve or manual valve

Equipment Description Borated Water Storage Tank Outlet Isolation

Location: Bldg. AUXB Floor El. 586' Room 304

Manufacturer, Model, Etc. _____

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

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

No degraded condition found. Valve located on ~10" pipe.

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. BW21 Equip. Class 0d. Other - check valve or manual valve

Equipment Description Borated Water Storage Tank Outlet Isolation

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. BW21 Equip. Class 0d. Other - check valve or manual valve

Equipment Description Borated Water Storage Tank Outlet Isolation

Other supporting or relevant documents and photos (if any):

BW21 Plate
ID plate of component

BW21 General
General view of component

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C1 Equip. Class 3. Medium Voltage Switchgear

Equipment Description BUS C1

Location: Bldg. AUXB Floor El. 585 Room 325

Manufacturer, Model, Etc.

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

	Y	N	U	N/A
1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?		X		
2. Is the anchorage free of bent, broken, missing or loose hardware? *Cabinet could not be opened during walkdown. Mounting base found in adequate condition. (See also item 5 below)*	X			
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X			
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
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.) *Panel door was closed and anchorage inside cabinet could not be verified. However, SQUG C-CSS-C1 calculation was used and it was verified that anchorage capacity is adequate for the configuration shown.*				X
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	X			

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C1 Equip. Class 3. Medium Voltage Switchgear

Equipment Description BUS C1

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures? *Nearby fire extinguisher not fixed to wall. Judged not to be significant interaction*	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

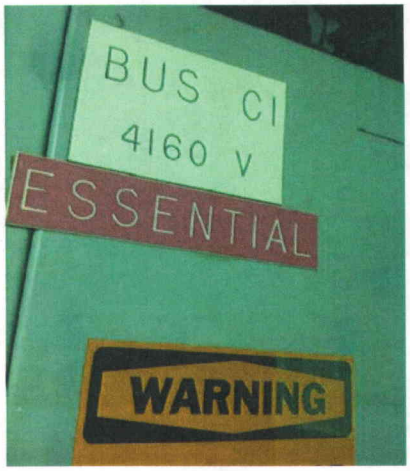
Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C1 Equip. Class 3. Medium Voltage Switchgear

Equipment Description BUS C1

Other supporting or relevant documents and photos (if any):



C1 Plate
ID Plate of component

C1 General
General view of component

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C11-1 Equip. Class 12. Air Compressors

Equipment Description Emergency Diesel Generator Starting Air compressor 1-1

Location: Bldg. AUXB Floor El. 585 Room 318

Manufacturer, Model, Etc. _____

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

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

Compressor rigidly mounted on skid with 4-1/2" bolts.
Skid is welded to a larger skid. Larger skid anchored to floor with eight 1/2" bolts.

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

Bolts on frame-skid mounting found in adequate condition

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

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				X

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C11-1 Equip. Class 12. Air Compressors

Equipment Description Emergency Diesel Generator Starting Air compressor 1-1

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

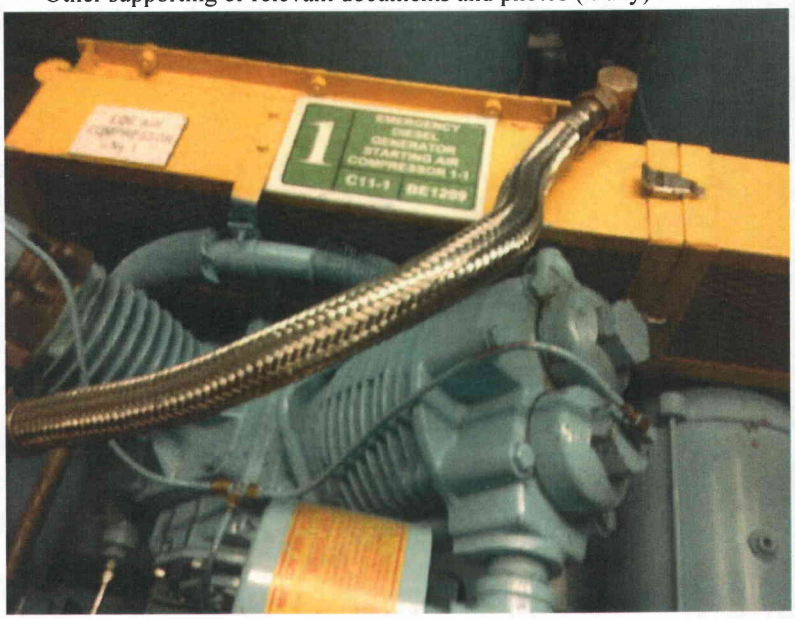
Status (Y) N U

Seismic Walkdown Checklist (SWC)

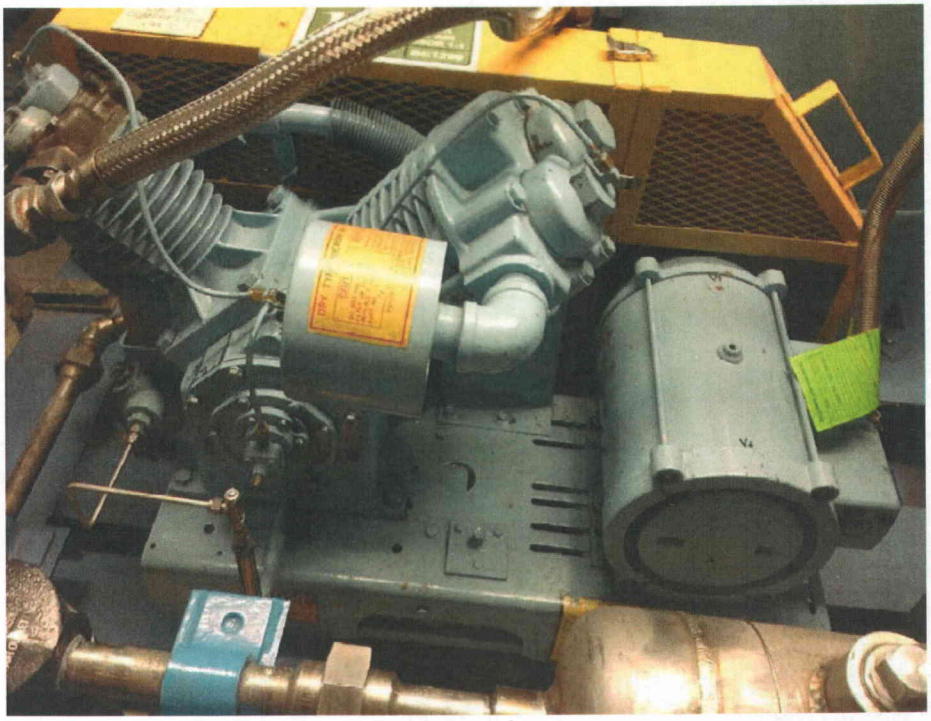
Equipment ID No. C11-1 Equip. Class 12. Air Compressors

Equipment Description Emergency Diesel Generator Starting Air compressor 1-1

Other supporting or relevant documents and photos (if any):



C11-1 plate
ID Plate of component



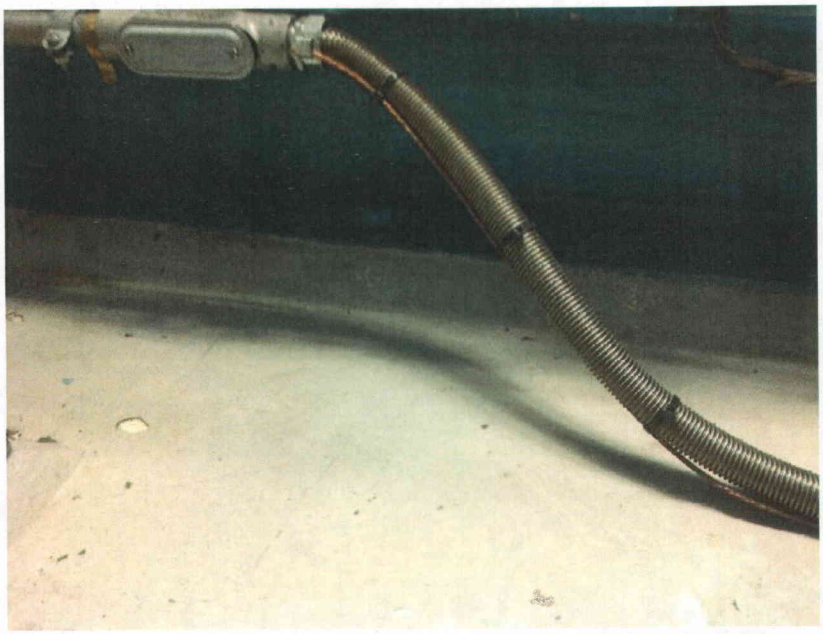
C11-1 general
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C11-1 Equip. Class 12. Air Compressors

Equipment Description Emergency Diesel Generator Starting Air compressor 1-1



C11-1 skid anchor
Partial view of anchorage, view is typical of all anchors

C11-1 connection to skid underneath
Attachment of component to skid underneath

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C21-1 Equip. Class 9. Fans

Equipment Description CNTRL RM EMERG VENT SYS FAN1-1

Location: Bldg. AUXB Floor El. 638 Room 603

Manufacturer, Model, Etc. _____

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

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

Mounted on 4 spring isolators, each with 2-5/8" anchor bolts found in good condition.

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

No degraded condition found for bolts on component base frame

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

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

SQUG C-CSS-C21-1 calculation identifies the configuration as four spring isolators and it was confirmed in the field during walkdown inspection.

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

SQUG calculation C-CSS-C21-1 identified outlier - vibration isolators on fan base did not provide adequate restraint of overturning moment.
Fixity provided to resolve outlier presented in SQUG calc (MOD95-0031).

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C21-1 Equip. Class 9. Fans

Equipment Description CNTRL RM EMERG VENT SYS FAN1-1

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures? *No maintenance equipment identified in the congested area.*	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

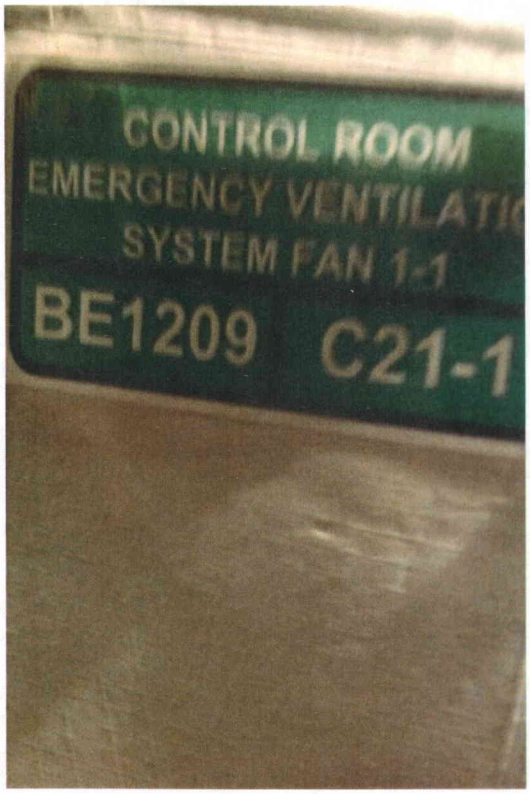
Status (Y) N U

Seismic Walkdown Checklist (SWC)

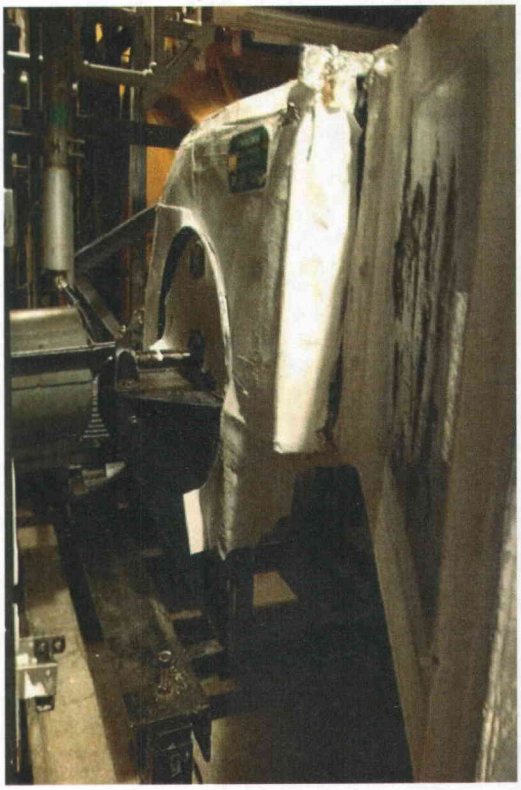
Equipment ID No. C21-1 Equip. Class 9. Fans

Equipment Description CNTRL RM EMERG VENT SYS FAN1-1

Other supporting or relevant documents and photos (if any):



C21-1 Plate
ID Plate of component



C21-1 General
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C21-1 Equip. Class 9. Fans

Equipment Description CNTRL RM EMERG VENT SYS FAN1-1

C21-1 anchorage typical
View of anchorage

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C25-3 Equip. Class 9. Fans

Equipment Description VENT FAN 3

Location: Bldg. AUXB Floor El. 585 Room 319

Manufacturer, Model, Etc.

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

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

Fan suspended from a frame, anchor bolted to ceiling.

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

Fan is part of ventilation system.

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

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

Previous SQUG calculation C-CSS-C25-3 identified connection has adequate flexibility (p.5 of 8).
SQUG calculation identified anchors that did not achieve full embedment.
Anchorage found acceptable after calculation (p. 8 of 8).

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C25-3 Equip. Class 9. Fans

Equipment Description VENT FAN 3

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures? *No potential interaction due to fan location.*	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

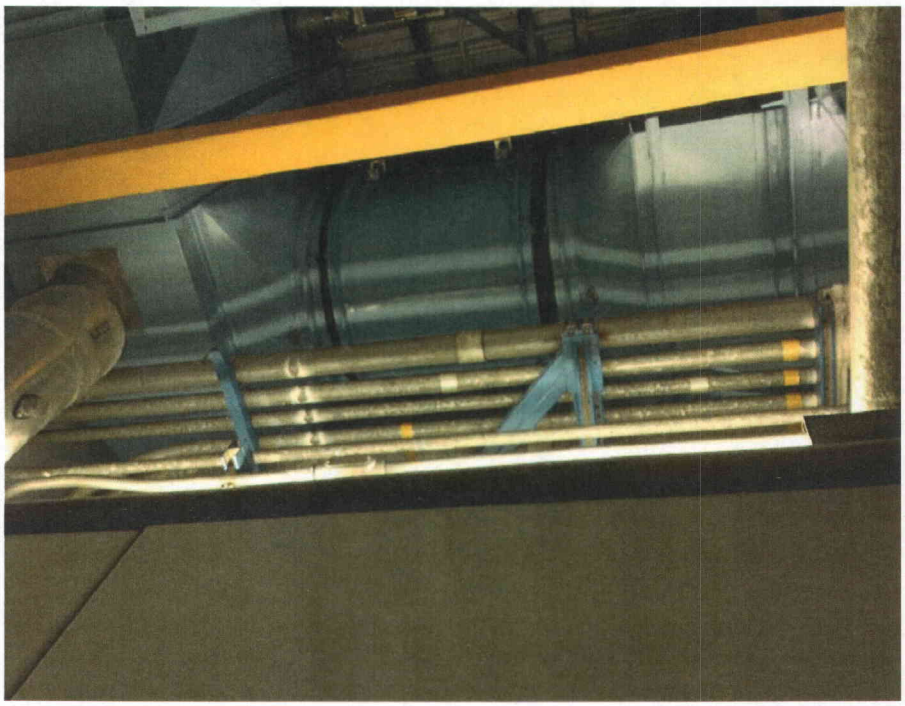
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C25-3 Equip. Class 9. Fans

Equipment Description VENT FAN 3

Other supporting or relevant documents and photos (if any):



Vent Fan C25-3

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C31-4 Equip. Class 9. Fans

Equipment Description FAN C31-4

Location: Bldg. AUXB Floor El. 545 Room 105

Manufacturer, Model, Etc.

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

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

Mounted on 4 W-shape supports.
Each W-shape is anchored with two 5/8" diameter anchor bolts.

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

Missing closure nuts along one side of the unit.
Confirmed with maintenance that sheet metal screws are used and nuts are not required.

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

Slight corrosion found in wide flanges used for mounting base.

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				X

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

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ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C31-4 Equip. Class 9. Fans

Equipment Description FAN C31-4

Interaction Effects

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

Y	N	U	N/A
X			

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

Y	N	U	N/A
X			

9. Do attached lines have adequate flexibility to avoid damage?
Several pipe lines running into fan housing properly supported with floor mounted HSS sections.

Y	N	U	N/A
X			

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

Y	N	U
X		

Other Adverse Conditions

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

Y	N	U
X		

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

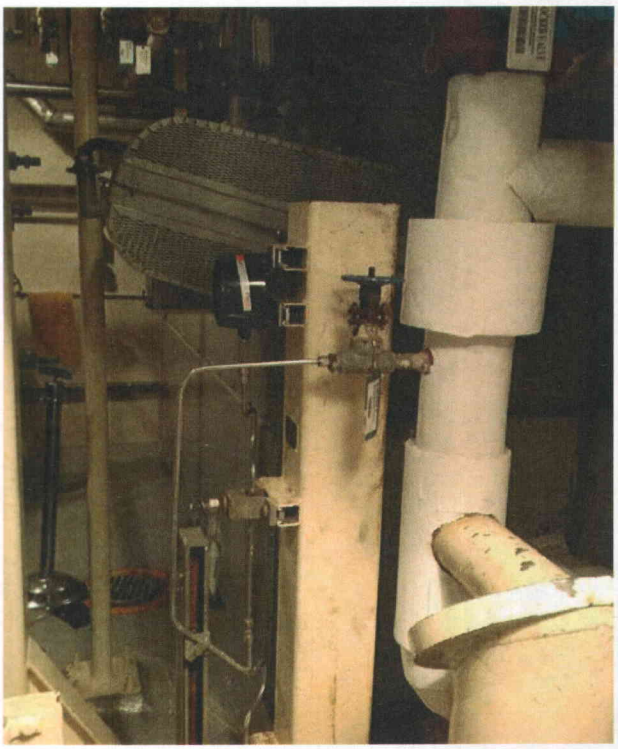
Seismic Walkdown Checklist (SWC)

Equipment ID No. C31-4 Equip. Class 9. Fans

Equipment Description FAN C31-4

Other supporting or relevant documents and photos (if any):

C31-4 plate
ID Plate of component



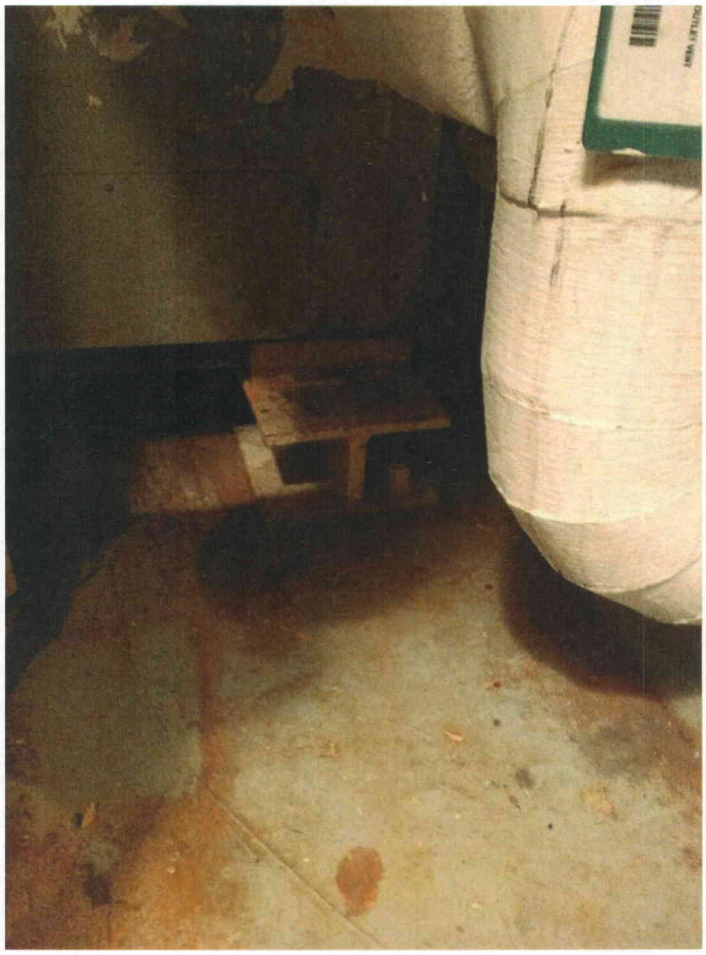
C31-4 general
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C31-4 Equip. Class 9. Fans

Equipment Description FAN C31-4



C31-4 anchorage
Partial view of anchorage, view is typical of all anchors

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C3615 Equip. Class 20. Instrument and Control Panels

Equipment Description EDG 1 CONTROL PANEL

Location: Bldg. AUXB Floor El. 585 Room 318

Manufacturer, Model, Etc. _____

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

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

3 section panel anchored with 10-1/2" bolts.

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

Cabinet was opened for inspection and no degraded condition or missing parts were observed.

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

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

Calculation C-CSS-C3615 identifies the configuration as ten anchor bolts and it was confirmed in the field during walkdown inspection.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C3615 Equip. Class 20. Instrument and Control Panels

Equipment Description EDG 1 CONTROL PANEL

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C3615 Equip. Class 20. Instrument and Control Panels

Equipment Description EDG 1 CONTROL PANEL

Other supporting or relevant documents and photos (if any):

C3615 plate
ID Plate of component

C3615 general
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C3615 Equip. Class 20. Instrument and Control Panels

Equipment Description EDG 1 CONTROL PANEL

C3616 anchorage

Anchorage from unit C3616 is similar to C3615 which is currently energized

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C3645 Equip. Class 20. Instrument and Control Panels

Equipment Description CONTROL PANEL (AUX FEEDWATER)

Location: Bldg. AUXB Floor El. 585 Room 325

Manufacturer, Model, Etc. _____

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

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

Cabinet anchored with 6~1" bolts.

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

Mounting base found in adequate condition.

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

No signs of significant corrosion found.

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

No cracks identified in mounting base.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

SQUG C-CSS-C3645 and C-CSS-C4625 calculations were used and it was verified that anchorage capacity is adequate for the configuration shown.

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

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ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C3645 Equip. Class 20. Instrument and Control Panels

Equipment Description CONTROL PANEL (AUX FEEDWATER)

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)
Mantainance or movable equipment found in the area with proper tight conditions.

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C3645 Equip. Class 20. Instrument and Control Panels

Equipment Description CONTROL PANEL (AUX FEEDWATER)

Other supporting or relevant documents and photos (if any):

C3645 Plate
ID Plate of component

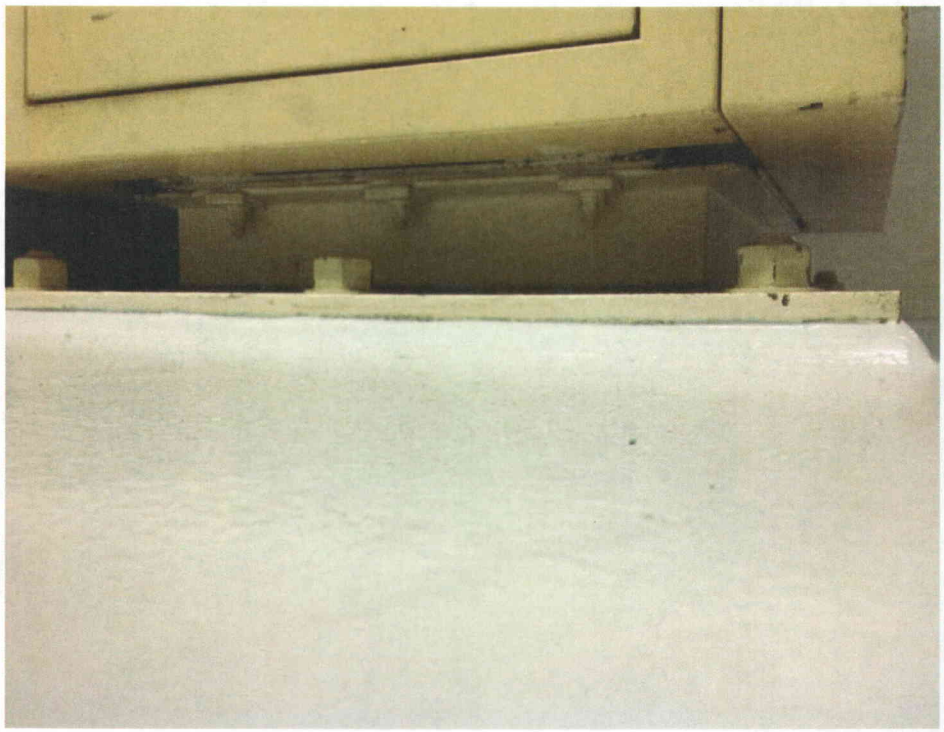
C3645 General
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C3645 Equip. Class 20. Instrument and Control Panels

Equipment Description CONTROL PANEL (AUX FEEDWATER)



C3645 Achor Bolts
Partial view of anchorage, view is typical of all anchors

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C4606 Equip. Class 2. Low Voltage Switchgear

Equipment Description REACTOR TRIP BREAKER A (TYPICAL OF 4)

Location: Bldg. AUXB Floor El. 603 Room 428

Manufacturer, Model, Etc.

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

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

Panel is welded to embed with stitch welds around the perimeter of the panel base, similar to as-built shown in Calc. C-CSS-4603.

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

Component could not be opened during walkdown. Mounting base found in adequate condition.

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

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

SQUG C-CSS-C4606 and C-CSS-C4603 calculations were used and it was verified that anchorage capacity is adequate for the configuration shown.

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

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C4606 Equip. Class 2. Low Voltage Switchgear

Equipment Description REACTOR TRIP BREAKER A (TYPICAL OF 4)

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures? *Monorail-hoist located in vicinity deemed not an interaction concern.*	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Rigid conduits on end have rigid supports and will provide lateral restraint*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

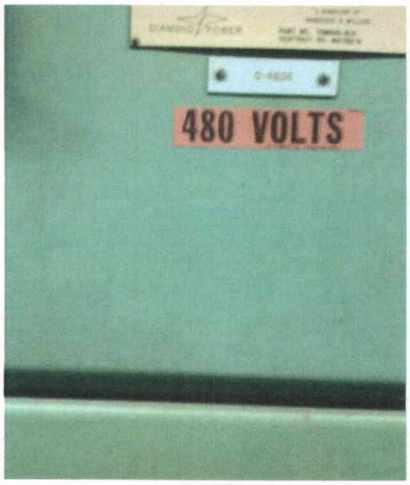
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C4606 Equip. Class 2. Low Voltage Switchgear

Equipment Description REACTOR TRIP BREAKER A (TYPICAL OF 4)

Other supporting or relevant documents and photos (if any):



C4606 Plate
ID Plate of component

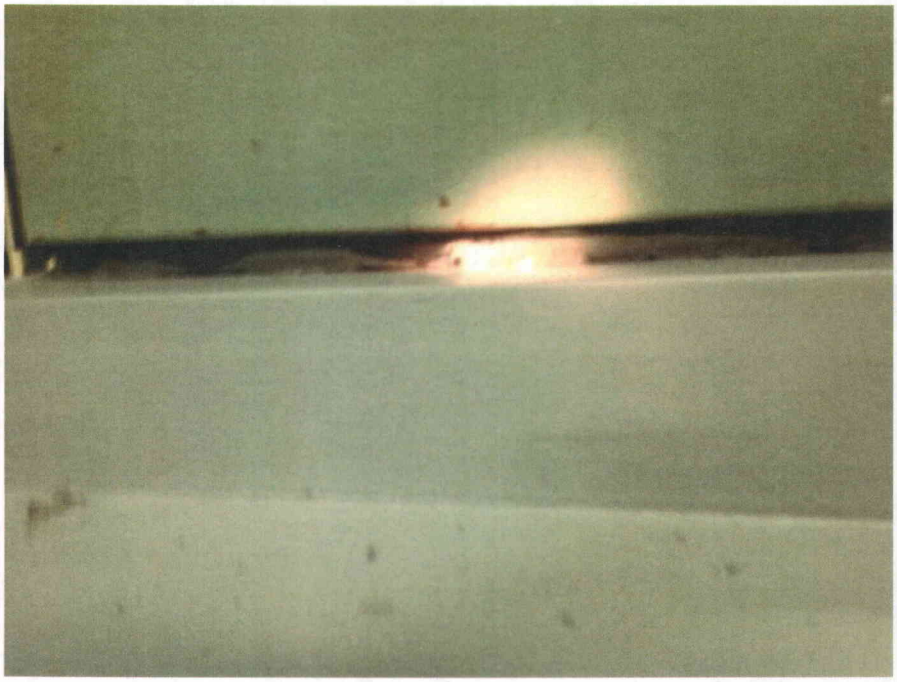
C4606 General
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C4606 Equip. Class 2. Low Voltage Switchgear

Equipment Description REACTOR TRIP BREAKER A (TYPICAL OF 4)



C4606 stitch weld
Partial view of anchorage, view is typical of all anchors

C4606 crane int
Sliding crane located in component vicinity.

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5702 Equip. Class 20. Instrument and Control Panels

Equipment Description operator console panels - left

Location: Bldg. AUXB Floor El. 623 Room 505

Manufacturer, Model, Etc. _____

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

Y	N
	X

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

Anchorage not verified since is covered with fire proofing material. Back panel doors are adequately attached to panel structure with 4-1/2" screws.

Y	N	U	N/A
X			

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

None observed during inspection.

Y	N	U	N/A
X			

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

No significant corrosion observed in the component.

Y	N	U	N/A
X			

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

None observed.

Y	N	U	N/A
			X

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.)

SQUG C-CSS-C5702 calculation was used and it was verified that anchorage capacity is adequate for the configuration shown.

Y	N	U
X		

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5702 Equip. Class 20. Instrument and Control Panels

Equipment Description operator console panels - left

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures? *No maintenance equipment identified in the area.*	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

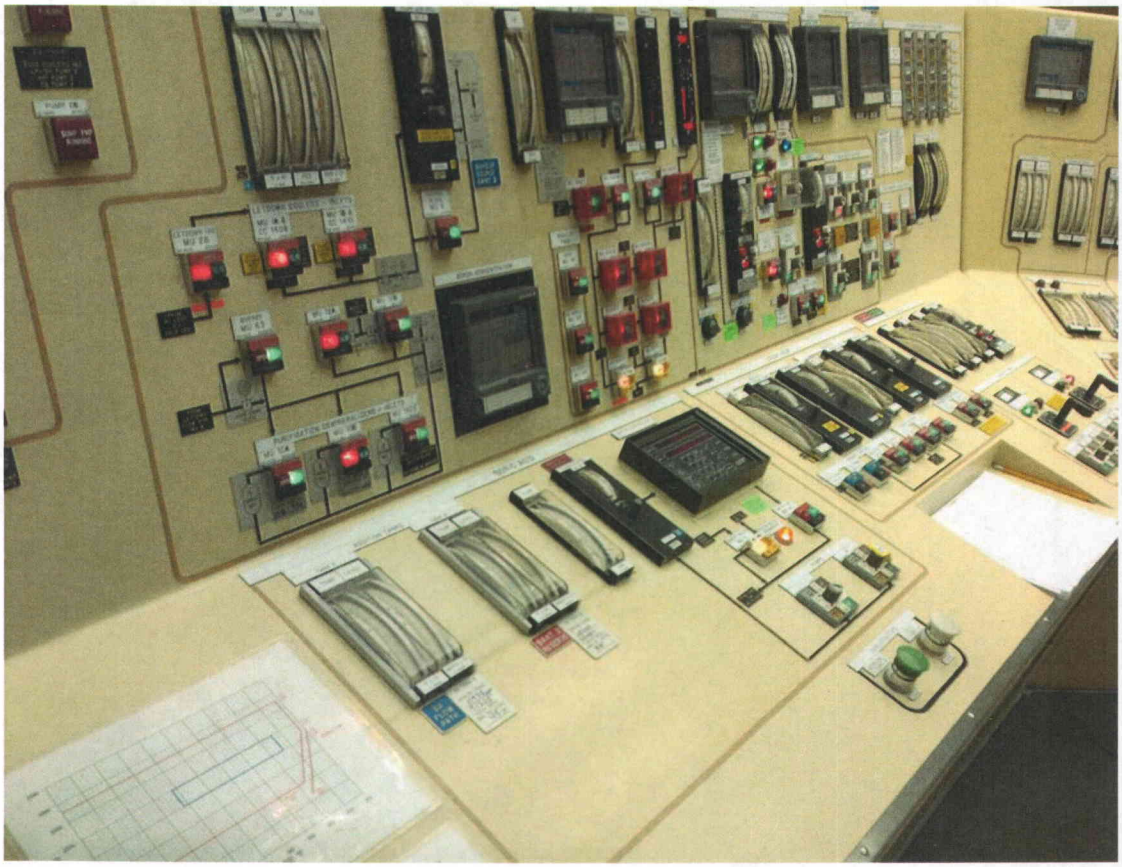
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5702 Equip. Class 20. Instrument and Control Panels

Equipment Description operator console panels - left

Other supporting or relevant documents and photos (if any):



C5702
General view of component

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5706 Equip. Class 2. Low Voltage Switchgear

Equipment Description MANUAL REACTOR TRIP SWITCHES (2) IN CONTROL ROOM

Location: Bldg. AUXB Floor El. 623 Room 505

Manufacturer, Model, Etc. _____

Instructions for Completing Checklist

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

Anchorage

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

Y	N
	X

2. Is the anchorage free of bent, broken, missing or loose hardware?
Anchorage not accessible during inspection since it was covered with fireproofing material.

Y	N	U	N/A
X			

3. Is the anchorage free of corrosion that is more than mild surface oxidation?
None observed due to fireproofing material.

Y	N	U	N/A
X			

4. Is the anchorage free of visible cracks in the concrete near the anchors?
None observed during walkdown.

Y	N	U	N/A
X			

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.)
SQUG C-CSS-C5702 and C-CSS-C5706 calculations were used and it was verified that anchorage capacity is adequate for the configuration shown.

Y	N	U	N/A
			X

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

Y	N	U
X		

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5706 Equip. Class 2. Low Voltage Switchgear

Equipment Description MANUAL REACTOR TRIP SWITCHES (2) IN CONTROL ROOM

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures? *No maintenance equipment identified in the area.*	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

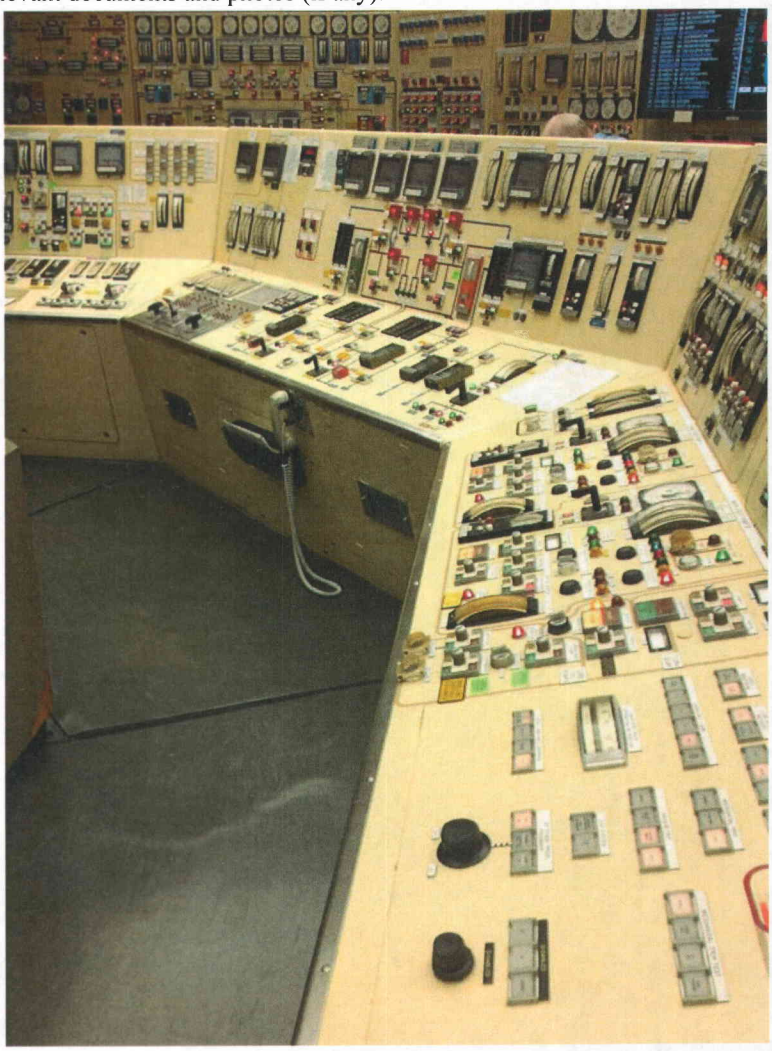
Seismic Walkdown Checklist (SWC)

Equipment ID No. C5706 Equip. Class 2. Low Voltage Switchgear

Equipment Description MANUAL REACTOR TRIP SWITCHES (2) IN CONTROL ROOM

Other supporting or relevant documents and photos (if any):

C5706 plate
ID Plate of component



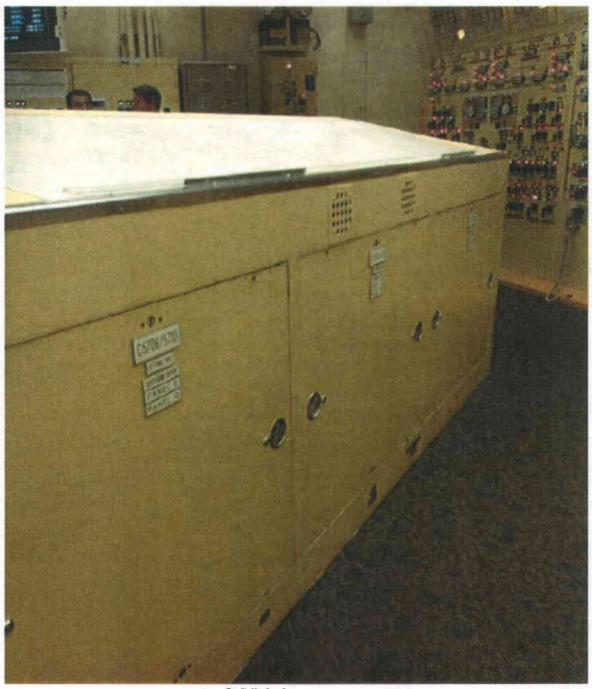
C5706 front
General view of component

Status (Y) N U

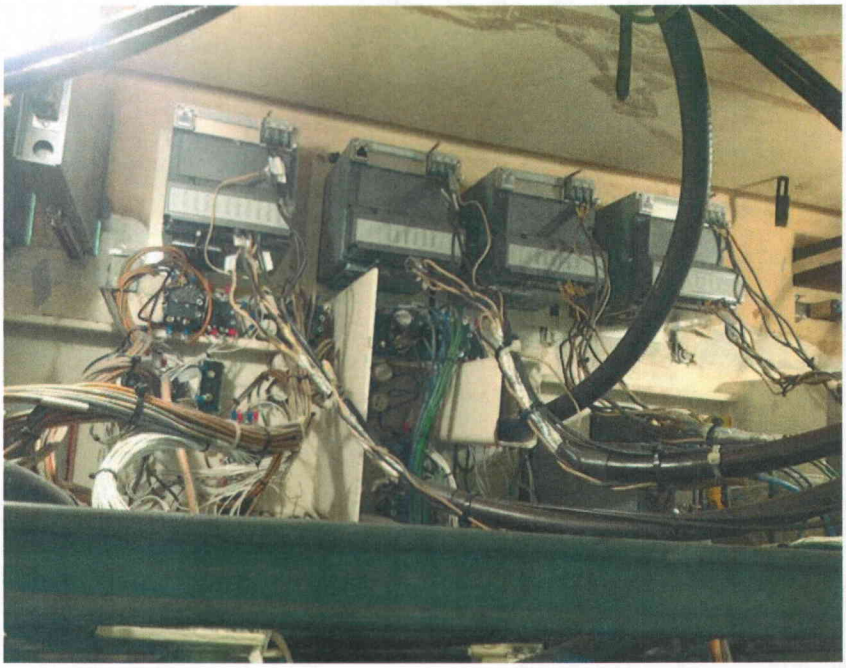
Seismic Walkdown Checklist (SWC)

Equipment ID No. C5706 Equip. Class 2. Low Voltage Switchgear

Equipment Description MANUAL REACTOR TRIP SWITCHES (2) IN CONTROL ROOM



C5706 rear
General view of component



C5706 typical interior3
Typical view of interior components

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5706 Equip. Class 2. Low Voltage Switchgear

Equipment Description MANUAL REACTOR TRIP SWITCHES (2) IN CONTROL ROOM

C5706 bolted to left and right sides
Cabinets are bolted together on both sides

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5712 Equip. Class 20. Instrument and Control Panels

Equipment Description operator console panels - right

Location: Bldg. AUXB Floor El. 623 Room 505

Manufacturer, Model, Etc.

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

Y	N
	X

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

Anchorage not verified since is covered with fire proofing material. Back panel doors are adequately attached to panel structure with 4-1/2" screws.

Y	N	U	N/A
X			

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

None observed during inspection.

Y	N	U	N/A
X			

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

No significant corrosion observed in the component.

Y	N	U	N/A
X			

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

None observed.

Y	N	U	N/A
			X

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.)

Panel is similar to Panel C5702. SQUG calculation C-CSS-C5702 verifies that anchorage capacity is adequate for the configuration shown.

Y	N	U
X		

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5712 Equip. Class 20. Instrument and Control Panels

Equipment Description operator console panels - right

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures? *No maintenance equipment identified in the area.*	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5755 Equip. Class 20. Instrument and Control Panels

Equipment Description Control Room cabinet room

Location: Bldg. AUXB Floor El. 623 Room 502

Manufacturer, Model, Etc.

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

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

7-Sections cabinet. End cabinets connected by ~1/4" welded plates.
No access available inside of cabinet.

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

Anchor bolts are inaccessible for inspection. However, calculation references C-CSS-C5755C, D & G shows anchorage oultiers were resolved.

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

None observed during inspection.

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

None observed during inspection.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				X

Panel door was closed and anchorage inside cabinet could not be verified. However, C-CSS-C5755C, D & G calculations indicate that MOD95-0032 resolves anchorage concerns. Anchorage adequacy deemed seismically adequate.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5755 Equip. Class 20. Instrument and Control Panels

Equipment Description Control Room cabinet room

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Attached lines found with adequate flexibility.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

C-CSS-C5755C, D & G indicate cabinets A to G need to be bolted together to prevent pounding interaction. Issue resolved by MOD95-0032.

Field walkdown verified top connection of adjacent panels are per MOD95-0032.

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

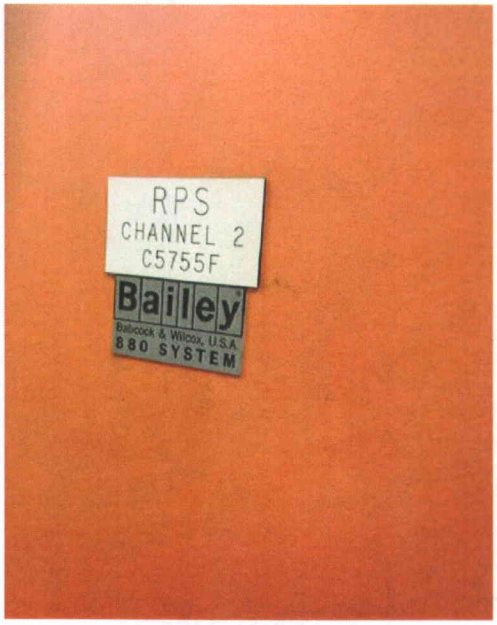
Status (Y) N U

Seismic Walkdown Checklist (SWC)

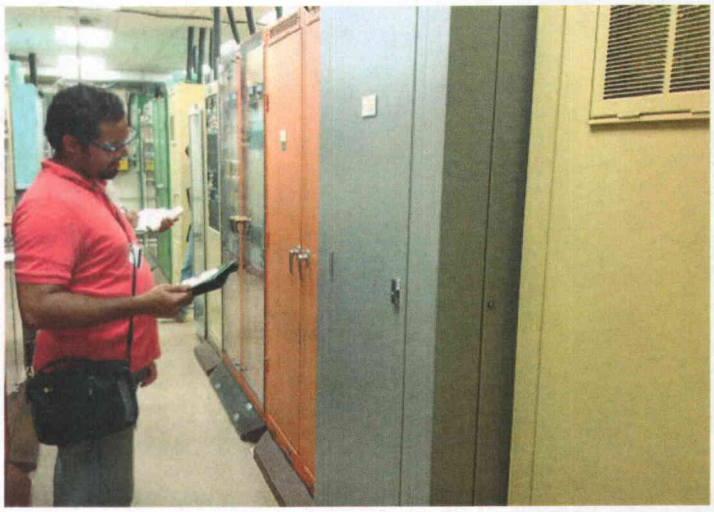
Equipment ID No. C5755 Equip. Class 20. Instrument and Control Panels

Equipment Description Control Room cabinet room

Other supporting or relevant documents and photos (if any):

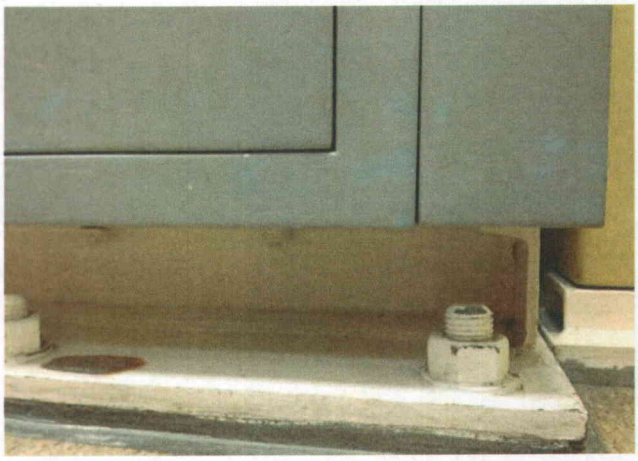


C5755 plate
ID Plate of component



C5755 general
General view of component

C5755 anchorage
General view of anchorage detail



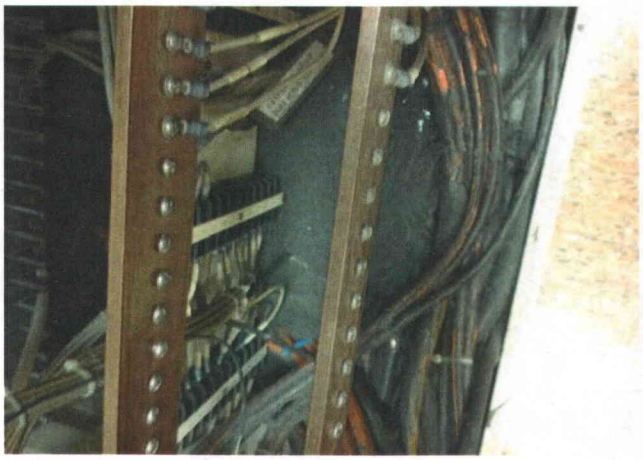
C5755 anchorage
Closeup of anchor bolts and channel mounting base.

Status (Y) N U

Seismic Walkdown Checklist (SWC)

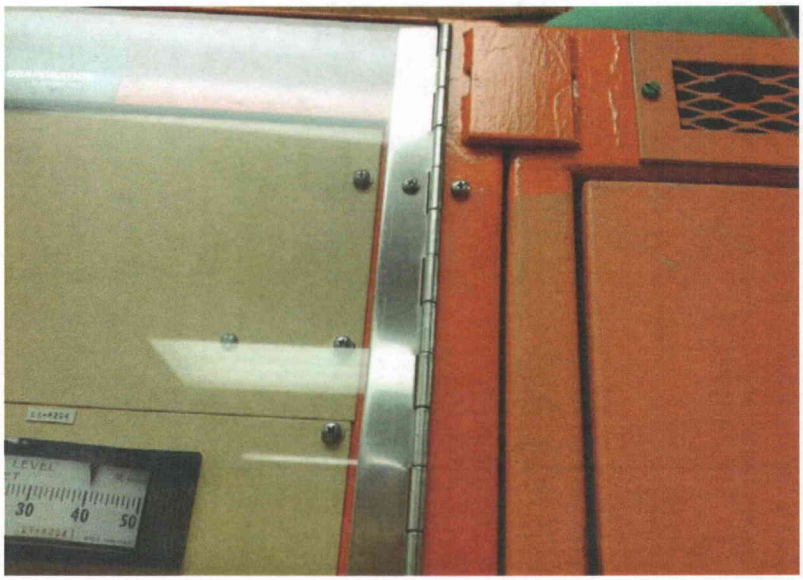
Equipment ID No. C5755 Equip. Class 20. Instrument and Control Panels

Equipment Description Control Room cabinet room



C5755 anchorage blocked interior

C5755 Cabinet bracing
Top bracing detail for end cabinets



C5755 Cabinets welding
Welded plates detail for middle cabinets

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5792A LB2 Equip. Class 20a. Inst. in control panel/cabinet

Equipment Description SFRCS CHANNEL 2 LOGIC BOARD

Location: Bldg. AUXB Floor El. 623 Room 502

Manufacturer, Model, Etc. _____

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

Y	N
	X

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

No degraded condition identified.Cabinet is attached to adjacent panel C5782 at top. Panel is composed of 2 sections which are attached together at top and mounted on same skid with 12-1/2" bolts.

Y	N	U	N/A
X			

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

Anchor bolts are inaccessible for inspection. However, SQUG calculation C-CSS-C5792A presents no significant degraded condition.

Y	N	U	N/A
X			

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

None observed during walkdown.

Y	N	U	N/A
X			

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

No cracks identified near cabinet base.

Y	N	U	N/A
			X

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.)

At the time of the walkdown the equipment could not be opened for inspection. SQUG C-CSS-C5792 calculation was used and it was verified that anchorage capacity is adequate for the configuration shown.

Y	N	U
X		

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

Skid mounting and base framing found in adequate conditions.

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5792A LB2 Equip. Class 20a. Inst. in control panel/cabinet

Equipment Description SFRCS CHANNEL 2 LOGIC BOARD

Interaction Effects

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

Seismic capacity of block walls in the area verified.
Wall identified as 5197 confirmed to be adequqate based on Ref C-CSS-C5792

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5792A LB2 Equip. Class 20a. Inst. in control panel/cabinet

Equipment Description SFRCS CHANNEL 2 LOGIC BOARD

Other supporting or relevant documents and photos (if any):

C5792A plate
ID Plate of component

C5792A general
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C5792A LB2 Equip. Class 20a. Inst. in control panel/cabinet

Equipment Description SFRCS CHANNEL 2 LOGIC BOARD

C5792A anchorage
Partial view of anchorage, view is typical of all anchors

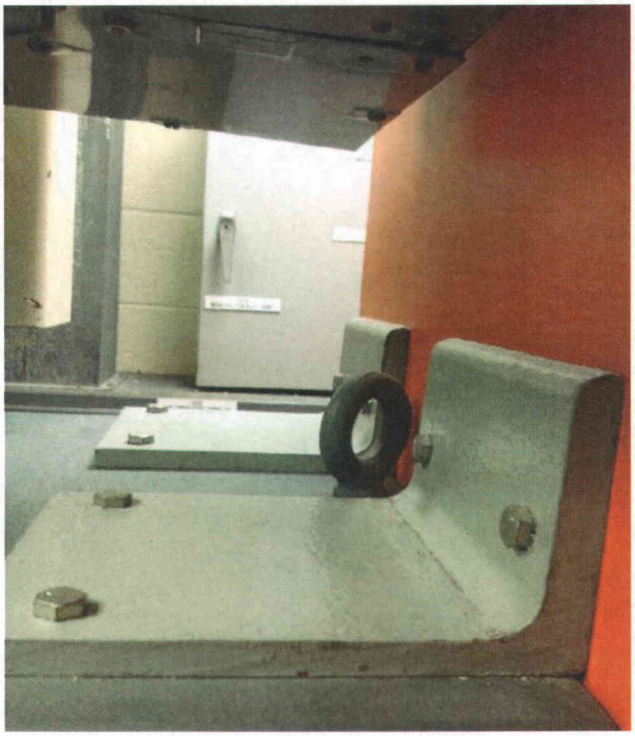
C5792A bolted to cabinet at right
Adjacent cabinets are bolted together

Status (Y) N U

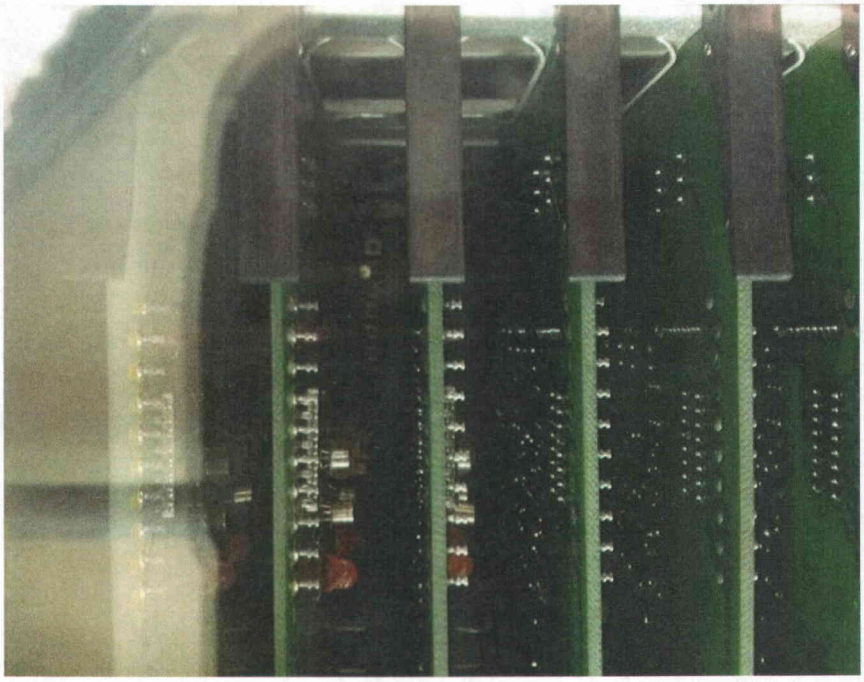
Seismic Walkdown Checklist (SWC)

Equipment ID No. C5792A LB2 Equip. Class 20a. Inst. in control panel/cabinet

Equipment Description SFRCS CHANNEL 2 LOGIC BOARD



C5792A bolted to cabinet at left
Adjacent cabinets are bolted together



C5792A logic board inside cabinet
View of Logic Board inside the cabinet

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C73-1 Equip. Class 9. Fans

Equipment Description AFP ROOM EXHAUST FAN

Location: Bldg. AUXB Floor El. 565 Room 237

Manufacturer, Model, Etc. _____

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

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

Fan is mounted on four spring isolators supported by rod hangers. Rod hangers are attached to steel support structure, which is anchored to the Q-deck with four 3/8" diameter anchor bolts.

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

No missing bolts identified associated with component supports.

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

None observed during inspection.

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

3/8" diameter anchor bolts supporting the fan support assembly are shown to be seismically adequate in Calculation C-CSS-73-1.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C73-1 Equip. Class 9. Fans

Equipment Description AFP ROOM EXHAUST FAN

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Calculation C-CSS-73-1 evaluates the expansion joints and shows seismic adequacy.

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

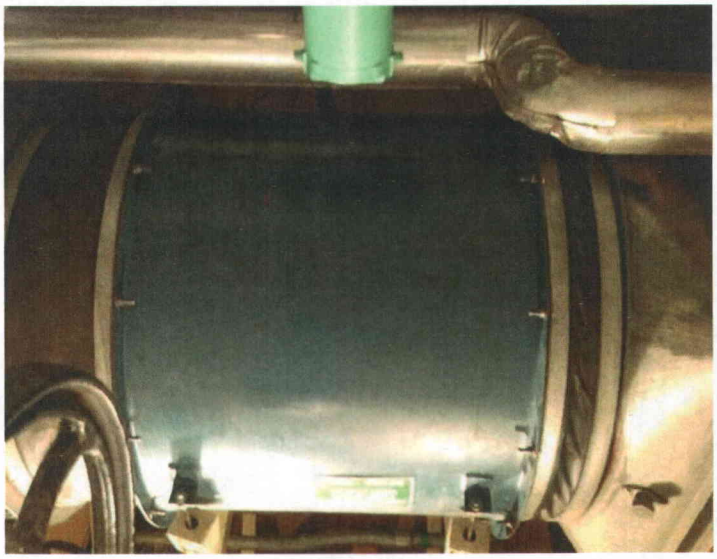
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C73-1 Equip. Class 9. Fans

Equipment Description AFP ROOM EXHAUST FAN

Other supporting or relevant documents and photos (if any):



C73-1 General
General view of component

C73-1 plate and anchorage no lateral bracing
View of anchorage, no lateral bracing is visible for hanging fan

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C78-2 Equip. Class 9. Fans

Equipment Description BATTERY ROOM VENT FAN 2-2

Location: Bldg. AUXB Floor El. 603 Room 428A

Manufacturer, Model, Etc.

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

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

Anchors identified to be installed into decking ridges.
SQUG calc C-CSS-C78-1 used as reference since is similar component.

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

None observed during walkdown.

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

None observed during walkdown.

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

Anchors installed through steel decking.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

Yes. Verification based on calculations for component C78-1, calc ID C-CSS-C78-1.
Calcualtion C-CSS-C78-1 shows 1/2"diam anchors inserted into ridges are acceptable.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C78-2 Equip. Class 9. Fans

Equipment Description BATTERY ROOM VENT FAN 2-2

Interaction Effects

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

Scaffold in the area not a concern due to fan elevation.

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

Seismic capacity of block walls in the area verified.
Block wall 4016 verified to be seismically adequate
based on ref. VBW20-B001-100, Rev 14 (12/6/88).

	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)
Fan found to be adequately stiffened against lateral motion with bracing and component framing.

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

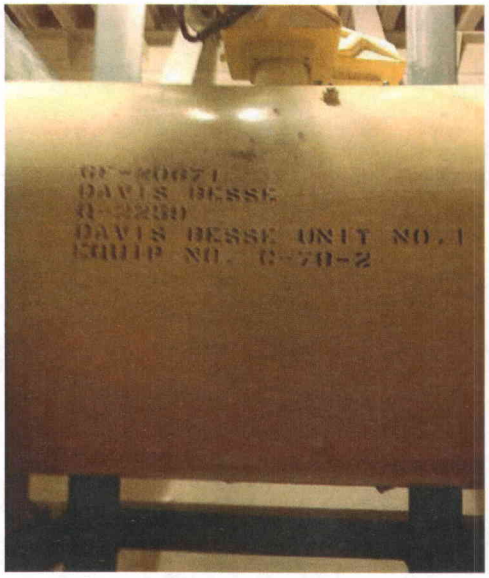
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C78-2 Equip. Class 9. Fans

Equipment Description BATTERY ROOM VENT FAN 2-2

Other supporting or relevant documents and photos (if any):



C78-2 Plate
ID Plate of component

C78-2 General
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. C78-2 Equip. Class 9. Fans

Equipment Description BATTERY ROOM VENT FAN 2-2

C78-2 anchorage
Partial view of anchorage, view is typical of all anchors

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. CC1469 Equip. Class 7. Pneumatic-Operated Valves

Equipment Description AOV CC 1469

Location: Bldg. AUXB Floor El. 545 Room 113

Manufacturer, Model, Etc. _____

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

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

Mounted on ~16" diam line installed right before containment penetration.

	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?				X
3. Is the anchorage free of corrosion that is more than mild surface oxidation?				X
4. Is the anchorage free of visible cracks in the concrete near the anchors?				X
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.)				X

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. CC1469 Equip. Class 7. Pneumatic-Operated Valves

Equipment Description AOV CC 1469

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Attached lines showed adequate flexibility.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

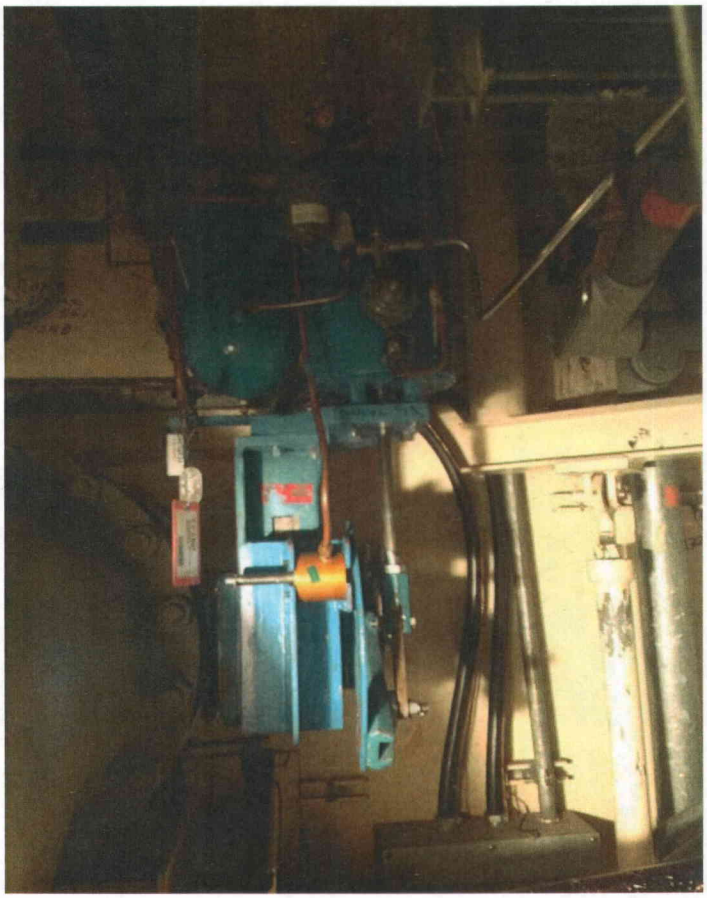
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. CC1469 Equip. Class 7. Pneumatic-Operated Valves

Equipment Description AOV CC 1469

Other supporting or relevant documents and photos (if any):



CC1469
General view of component

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. CS1530 Equip. Class 8A. Motor-Operated Valves

Equipment Description CONTAINMENT SPRAY TRAIN 1 INJECTION VALVE AT PUMP 1-1 DISCHARGE

Location: Bldg. AUXB Floor El. 585 Room 303

Manufacturer, Model, Etc. _____

Instructions for Completing Checklist

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

Anchorage

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

Y	N
	X

2. Is the anchorage free of bent, broken, missing or loose hardware?
Limitorgue has a nut on the lower part of the actuator that holds the cover on that is not fully torgued down. Judged not to affect operability of component.

Y	N	U	N/A
X			

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

Y	N	U	N/A
X			

4. Is the anchorage free of visible cracks in the concrete near the anchors?
Main line anchor support shows not enough grout below anchor plate. Main line presents sufficient lateral bracing. Not considered as adverse condition.

Y	N	U	N/A
X			

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Y	N	U	N/A
			X

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

Y	N	U
X		

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. CS1530 Equip. Class 8A. Motor-Operated Valves

Equipment Description CONTAINMENT SPRAY TRAIN 1 INJECTION VALVE AT PUMP 1-1 DISCHARGE

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Seismic anchor motion confirmed acceptable per calc 1B R/12.*	X			
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X			

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

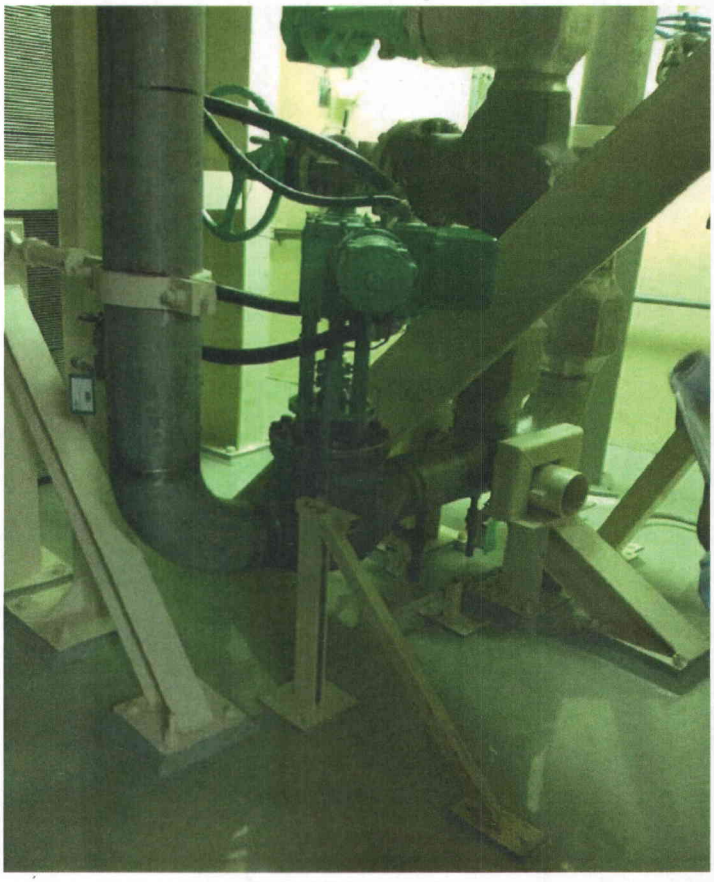
Seismic Walkdown Checklist (SWC)

Equipment ID No. CS1530 Equip. Class 8A. Motor-Operated Valves

Equipment Description CONTAINMENT SPRAY TRAIN 1 INJECTION VALVE AT PUMP 1-1 DISCHARGE

Other supporting or relevant documents and photos (if any):

CS1530 plate
ID Plate of component



CS1530 general
General view of component

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. CV-5005 Equip. Class 0d. Other - check/manual valve

Equipment Description PURGE VALVE ISOLATION

Location: Bldg. AUXB Floor El. 643 Room 600

Manufacturer, Model, Etc. _____

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

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

	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?				X
3. Is the anchorage free of corrosion that is more than mild surface oxidation?				X
4. Is the anchorage free of visible cracks in the concrete near the anchors?				X
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.)				X

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

Valve located to the side of main line right before wall penetration.

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. CV-5005 Equip. Class 0d. Other - check/manual valve

Equipment Description PURGE VALVE ISOLATION

Interaction Effects

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

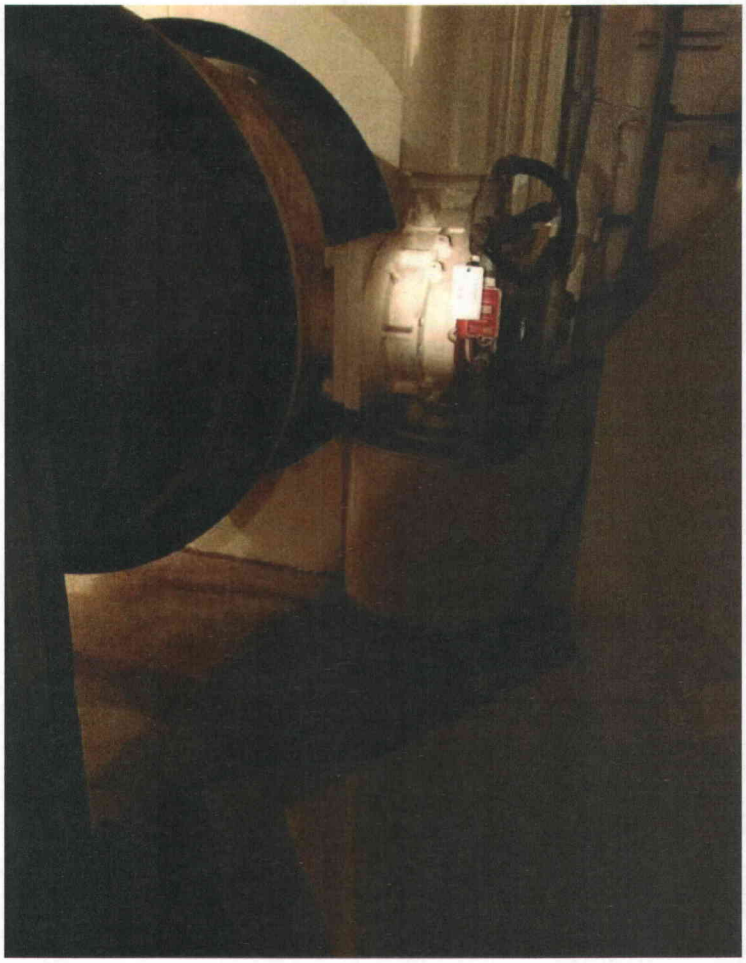
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. CV-5005 Equip. Class 0d. Other - check/manual valve

Equipment Description PURGE VALVE ISOLATION

Other supporting or relevant documents and photos (if any):



CV-5005 general
General view of valve connected to main lines

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D1 Equip. Class 3. Medium Voltage Switchgear

Equipment Description BUS D1

Location: Bldg. AUXB Floor El. 585 Room 323

Manufacturer, Model, Etc.

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

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

Cabinet composed of 13 sections.

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

Verified plug welds at the front of one section that was opened for inspection.
Verification of anchorage of other sections deferred to previous SEWS in Calc C-CSS-D1.

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

None observed during inspection.

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

None observed during inspection.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				X

Panel door was closed and anchorage inside cabinet could not be verified. However, SQUG C-CSS-D1 calculation was used and it was verified that anchorage capacity is adequate for the configuration shown. Verified the three 7/8" to 1.25" plug welds at front of one opened panel section.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D1 Equip. Class 3. Medium Voltage Switchgear

Equipment Description BUS D1

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures? *No maintenance equipment identified in the area.*	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Relative movement not a concern since attached lines are rigidly connected with component.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? *Fire extinguisher in area judged not to be operability issue.*	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D1 Equip. Class 3. Medium Voltage Switchgear

Equipment Description BUS D1

Other supporting or relevant documents and photos (if any):

D1 Plate ID
ID Plate of component

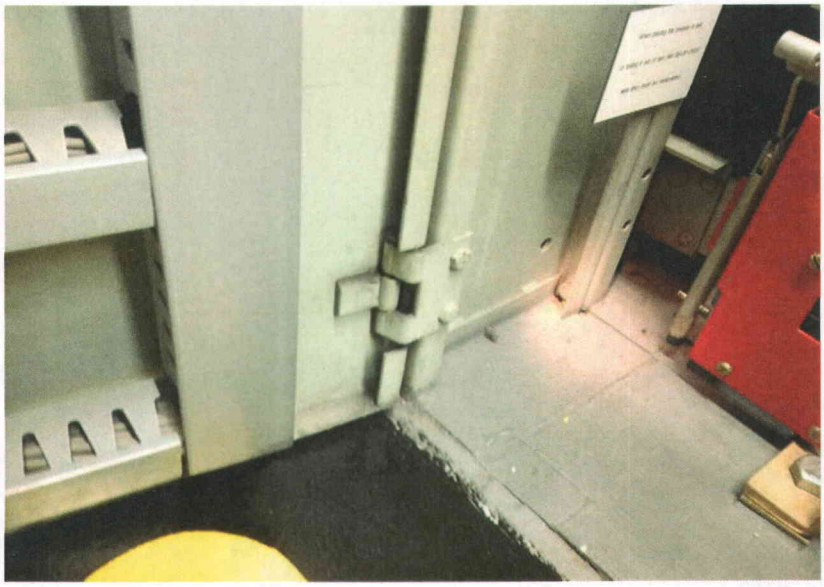
D1 General
General view of component

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D1 Equip. Class 3. Medium Voltage Switchgear

Equipment Description BUS D1



D1 Inside Cabinet
View of floor detail inside D1 cabinet

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D1_ED Equip. Class 1. Motor Control Centers

Equipment Description MCC 1

Location: Bldg. AUXB Floor El. 603 Room 429

Manufacturer, Model, Etc.

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

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

MCC composed of 14 sections welded to embedded channels with an average of 5.5" long 3/16" welds at front and back of the unit.

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

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

None observed during walkdown.

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

None observed during walkdown.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

Top bracing verified against drawing C-0233 and SQUG calculation CSS-CS-DCMCC1 verified existing anchorage.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D1_ED Equip. Class 1. Motor Control Centers

Equipment Description MCC 1

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Cabinets are interconnected and braced to wall at top.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D1_ED Equip. Class 1. Motor Control Centers

Equipment Description MCC 1

Other supporting or relevant documents and photos (if any):

D1_ED plate
ID Plate of component

D1_ED general
General view of component

D1_ED stitch weld
Partial view of welded base detail.

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D1N Equip. Class 14. Distribution Panels

Equipment Description PNL D1N

Location: Bldg. AUXB Floor El. 603 Room 429A

Manufacturer, Model, Etc.

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

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

Similar anchorage configuration as for D2N (Drawing E-20-4-7).

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

Mounting inspected and no missing parts identified.

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

No signs of excesive corrosion identified during inspection.

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

No cracks identified at based anchorage grout.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

Configuration for D2N is used as reference. Drawing C-0220D identifies the configuration as four 7/8"diam anchor bolts and it was confirmed in the field during walkdown inspection.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D1N Equip. Class 14. Distribution Panels

Equipment Description PNL D1N

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? *No maintenance equipment identified in the area.*	X			
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)
Components YRF3 and YV3 associated with D1N.

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D1N Equip. Class 14. Distribution Panels

Equipment Description PNL D1N

Other supporting or relevant documents and photos (if any):

D1N plate
ID Plate of component

D1N General
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D1N Equip. Class 14. Distribution Panels

Equipment Description PNL D1N

D1N anchorage
Partial view of anchorage, view is typical of all anchors

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D2_ED Equip. Class 1. Motor Control Centers

Equipment Description MCC 2

Location: Bldg. AUXB Floor El. 603 Room 428

Manufacturer, Model, Etc.

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

Y	N
X	

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

MCC composed of 14 sections welded to embedded channels with an average of 5.5" long 3/16" welds at front and back of the unit.

Y	N	U	N/A
X			

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

No access to inside of component for anchorage inspection.
Missing bolt mentioned in C-CSS-DCMCC-002. Resolved by work request 95-1368.

Y	N	U	N/A
X			

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

No excesive corrosion identified around base detail.

Y	N	U	N/A
X			

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

No cracks identified at cabinet base.

Y	N	U	N/A
X			

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.)

Top bracing provided by numerous top entry conduit. SQUG calculation CSS-CS-DCMCC1 and CS-DCMCC2 verified existing anchorage.

Y	N	U
X		

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

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D2_ED Equip. Class 1. Motor Control Centers

Equipment Description MCC 2

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *MCC supported at the top by large conduits providing lateral restraint.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

	Y	N	U
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? *Mantainance cart found near the area. Judged not to be a significant interaction.*	X		

Comments (Additional pages may be added as necessary)

Evaluated by: Eddie M. Guerra Date: 7/25/2012

Adam L. Helffrich Date: 7/25/2012

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D2_ED Equip. Class 1. Motor Control Centers

Equipment Description MCC 2

Other supporting or relevant documents and photos (if any):

D2 ED plate
ID Plate of component

D2 ED general
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D2_ED Equip. Class 1. Motor Control Centers

Equipment Description MCC 2

D2 ED stitch weld
Partial view of anchorage, view is typical of all anchors

D2 ED carts int
Unsecured carts near unit can cause relay chatter on impact

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D2N Equip. Class 14. Distribution Panels

Equipment Description PNL D2N

Location: Bldg. AUXB Floor El. 603 Room 428B

Manufacturer, Model, Etc.

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

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

This panel is part of a line-up that includes YRF4 and YV4. Each panel is anchored to the concrete with four 3/4" diameter anchor bolts.

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

No missing parts or degraded condition identified during the inspection.

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

No significant corrosion identified in cabinet and mounting base.

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

SQUG calculation C-CSS-YV4 includes seismic qualification of the anchorage for this panel.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D2N Equip. Class 14. Distribution Panels

Equipment Description PNL D2N

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? *Seismic capacity of block walls in the area verified. Block wall 4016 verified to be to be seismically adequate based on ref. VBW20-B001-100, Rev 14 (12/6/88).*	X			
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D2N Equip. Class 14. Distribution Panels

Equipment Description PNL D2N

Other supporting or relevant documents and photos (if any):

D2N plate
ID Plate of component

D2N general
General view of component

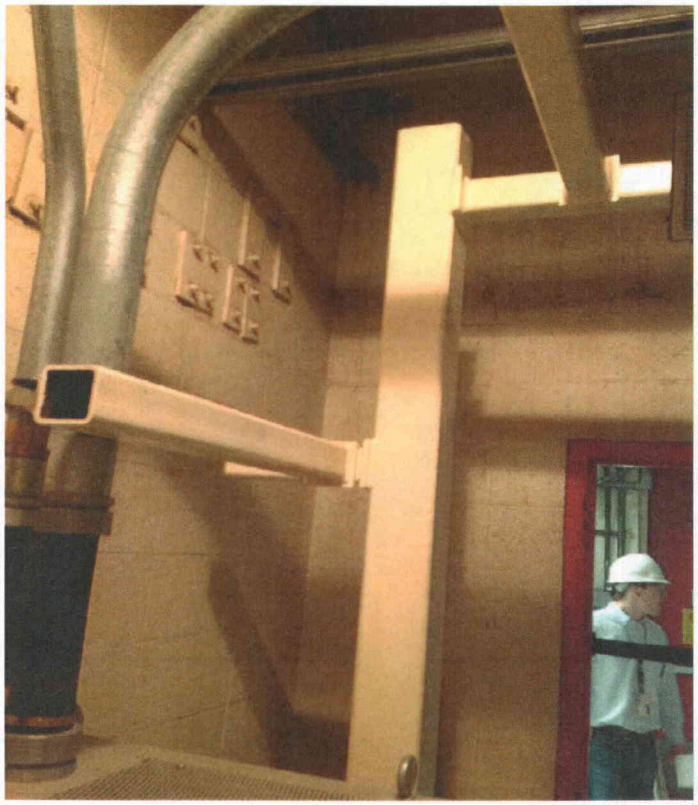
Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D2N Equip. Class 14. Distribution Panels

Equipment Description PNL D2N

D2N 4 anchor bolts
Partial view of anchorage, view is typical of all anchors



D2N masonry walls
Potential interaction hazard from masonry wall near unit

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D2P Equip. Class 14. Distribution Panels

Equipment Description PNL D2P

Location: Bldg. AUXB Floor El. 603 Room 428

Manufacturer, Model, Etc.

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

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

No significant corrosion identifeid

Drawing C-0220E identifies the configuration as four 3/4" anchor bolts and it was confirmed in the field during walkdown inspection.

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D2P Equip. Class 14. Distribution Panels

Equipment Description PNL D2P

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? *Fire extinguisher in area judged not to be an operability issue.*	X			
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. D2P Equip. Class 14. Distribution Panels

Equipment Description PNL D2P

Other supporting or relevant documents and photos (if any):

D2P plate
ID Plate of component

D2P general
General view of component

D2P anchor bolts
Partial view of anchorage, view is typical of all anchors

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DA-3783 Equip. Class 8B. Solenoid Valves

Equipment Description SOLENOID VALVE FROM AIR START RECEIVER 1-1-1, T86-1

Location: Bldg. AUXB Floor El. 585 Room 318

Manufacturer, Model, Etc. _____

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?
Mounted on 1/4" pipe line.

Y	N
	X

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

Y	N	U	N/A
			X

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

Y	N	U	N/A
			X

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

Y	N	U	N/A
			X

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Y	N	U	N/A
			X

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

Y	N	U
X		

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DA-3783 Equip. Class 8B. Solenoid Valves

Equipment Description SOLENOID VALVE FROM AIR START RECEIVER 1-1-1, T86-1

Interaction Effects

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

Components is surrounded by air compressor tanks.
No significant potential interaction was founded.

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

	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

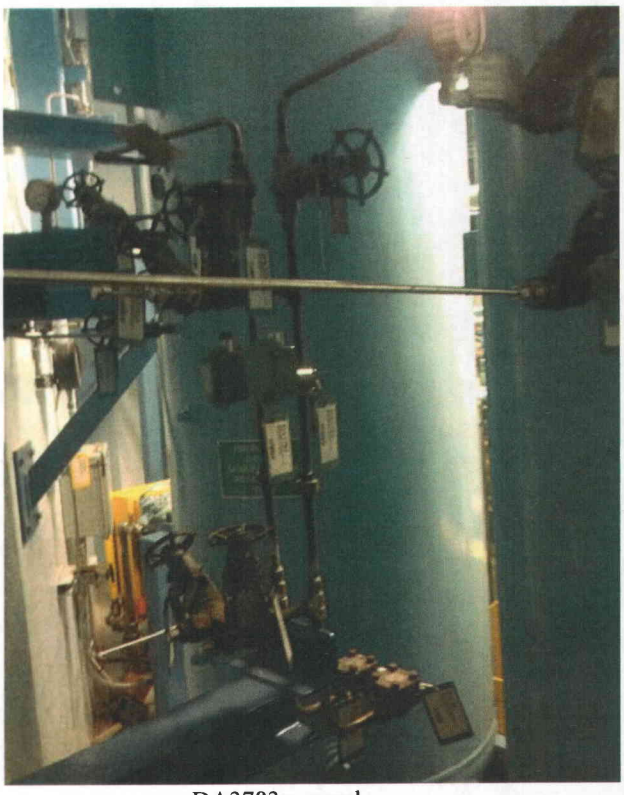
Seismic Walkdown Checklist (SWC)

Equipment ID No. DA-3783 Equip. Class 8B. Solenoid Valves

Equipment Description SOLENOID VALVE FROM AIR START RECEIVER 1-1-1, T86-1

Other supporting or relevant documents and photos (if any):

DA3783 plate
ID Plate of component



DA3783 general
General view of component

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DBC1PN Equip. Class 16. Battery Chargers and Inverters

Equipment Description CHARGER (Newly installed equipment)

Location: Bldg. AUXB Floor El. 603 Room 429

Manufacturer, Model, Etc. _____

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

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

Four 1" diameter anchors at corners and six 1" diameter anchors on sides. OK Stiffened base on ~1 1/2" grout pad.

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

No access to mounting anchorage and/or documentation.

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

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				X

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

Based on previously inspected similar mounting and skid details, it is judged that no potential adverse condition is presented by this newly installed charger. Outside condition looks in good state and no adverse condition were identified for previous similar cases.

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DBC1PN Equip. Class 16. Battery Chargers and Inverters

Equipment Description CHARGER (Newly installed equipment)

Interaction Effects

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

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

Seismic capacity of block walls in the area verified.
Block wall 4016 verified to be to be seismically adequate
based on ref. VBW20-B001-100, Rev 14 (12/6/88).
Nearby fire extinguisher judged not to be an operability issue.

	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DBC1PN Equip. Class 16. Battery Chargers and Inverters

Equipment Description CHARGER (Newly installed equipment)

Other supporting or relevant documents and photos (if any):

DBC1PN plate
ID Plate of component

DBC1PN general
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DBC1PN Equip. Class 16. Battery Chargers and Inverters

Equipment Description CHARGER (Newly installed equipment)

DBC1PN anchorage inaccessible
Anchorage is not visible

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DBC2P Equip. Class 16. Battery Chargers and Inverters

Equipment Description CHARGER 2P

Location: Bldg. AUXB Floor El. 603 Room 428

Manufacturer, Model, Etc. _____

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

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

Skid mounting identified with 4-1" anchor bolts.

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

No missing parts or degraded condition identified during the inspection.

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

No significant corrosion identified in cabinet and mounting base.

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

No cracks identified at base grout.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

SQUG C-CSS-DBC2P calculation was used and it was verified that anchorage capacity is adequate for the configuration shown.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DBC2P Equip. Class 16. Battery Chargers and Inverters

Equipment Description CHARGER 2P

Interaction Effects

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

Seismic capacity of block walls in the area verified.
Block wall 4026 no references found for seismic analysis.

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

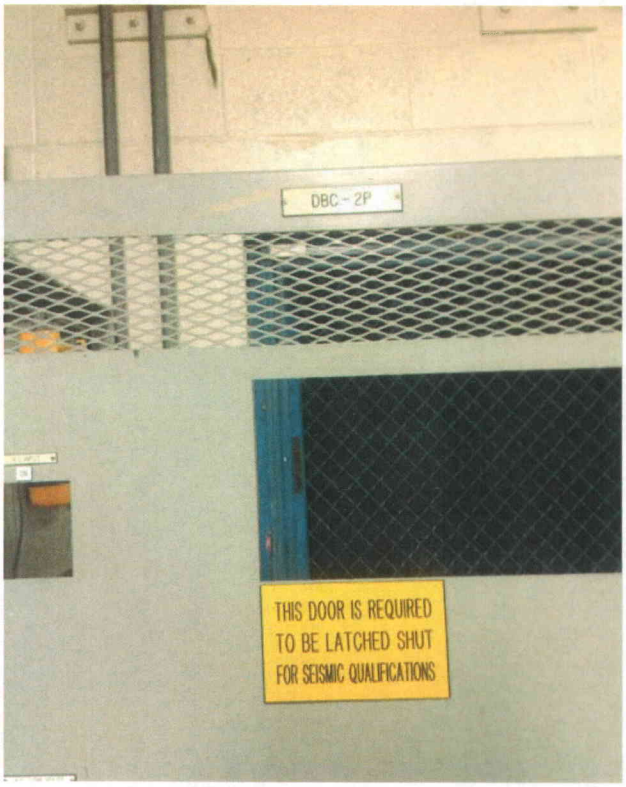
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DBC2P Equip. Class 16. Battery Chargers and Inverters

Equipment Description CHARGER 2P

Other supporting or relevant documents and photos (if any):



DBC2P plate
ID Plate of component

DBC2P masonry walls
Potential interaction hazard from masonry wall near unit

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DBC2PN Equip. Class 16. Battery Chargers and Inverters

Equipment Description CHARGER (Newly installed equipment)

Location: Bldg. AUXB Floor El. 603 Room 428

Manufacturer, Model, Etc.

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

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

No access to inside of cabinets.

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

No access to mounting anchorage and/or documentation.

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

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				X

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

Based on previously inspected similar mounting and skid details, it is judged that no potential adverse condition is presented by this newly installed charger. Outside condition looks in good state and no adverse condition were identified for previous similar cases.

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DBC2PN Equip. Class 16. Battery Chargers and Inverters

Equipment Description CHARGER (Newly installed equipment)

Interaction Effects

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

Seismic capacity of block walls in the area verified.
Block wall 4016 verified to be to be seismically adequate
based on ref. VBW20-B001-100, Rev 14 (12/6/88).
Nearby fire extinguisher and barrier judged not to be significant interactions.

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?		X	

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DBC2PN Equip. Class 16. Battery Chargers and Inverters

Equipment Description CHARGER (Newly installed equipment)

Other supporting or relevant documents and photos (if any):

DBC2PN plate
ID Plate of component

DBC2PN general
General view of component

DBC2PN anchorage inaccessible
Anchorage is not visible

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DH101 Equip. Class 0d. Other - check valve or manual valve

Equipment Description SFP Inlet Line Vent from DHR

Location: Bldg. AUXB Floor El. 597' Room 312

Manufacturer, Model, Etc. _____

Instructions for Completing Checklist

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

Anchorage

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

Y	N
	X

Small check valve located on ~10" diameter pipe line.
No degraded condition identified.

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

Y	N	U	N/A
			X

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

Y	N	U	N/A
			X

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

Y	N	U	N/A
			X

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Y	N	U	N/A
			X

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

Y	N	U
X		

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DH101 Equip. Class 0d. Other - check valve or manual valve

Equipment Description SFP Inlet Line Vent from DHR

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? *Seismic capacity of block walls in the area verified. Block walls 3257 and 3267 verified to be to be seismically adequate based on ref. VBW16-B001-083, Rev 2 (4/27/88) and VBW16-B001-084, Rev 5 (4/27/88).*	X			
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

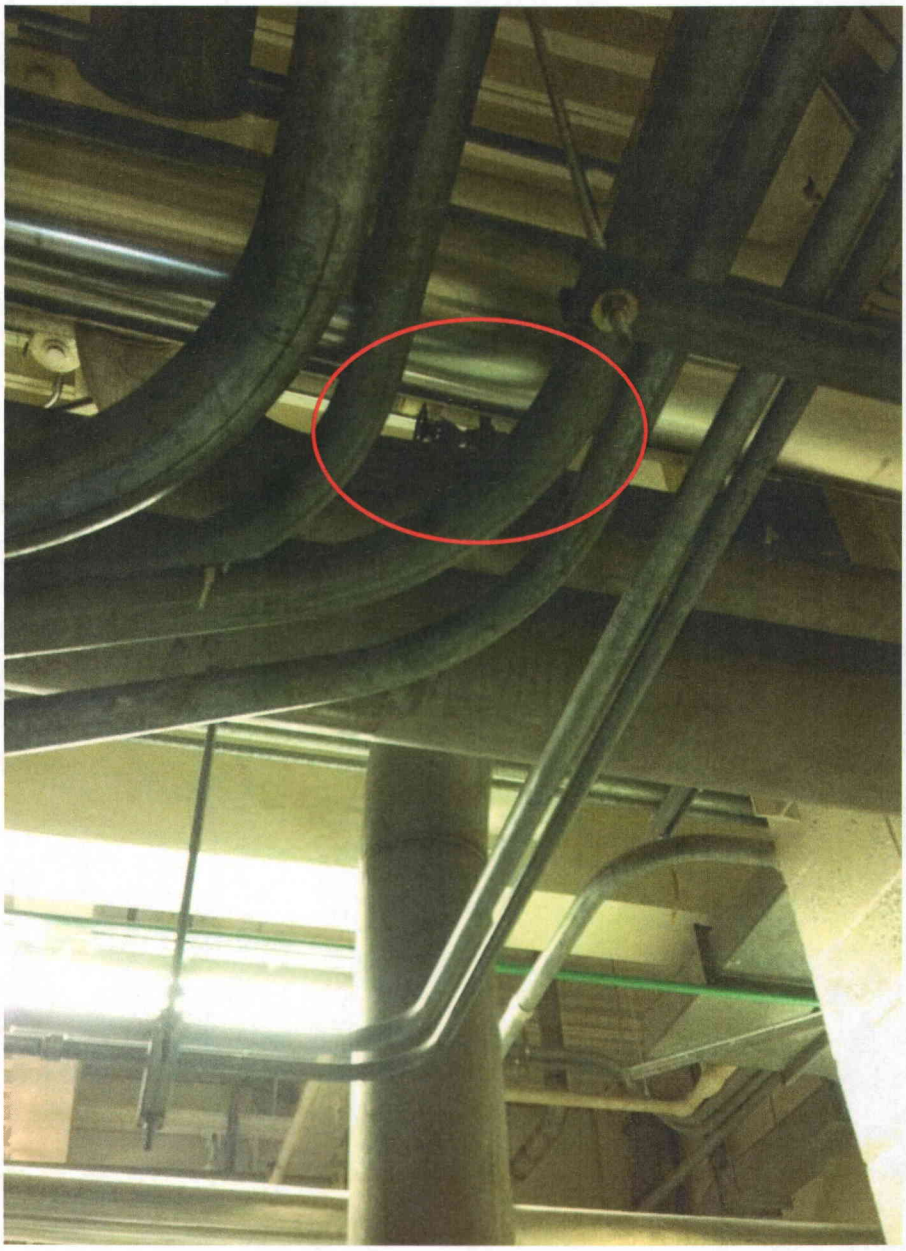
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DH101 Equip. Class 0d. Other - check valve or manual valve

Equipment Description SFP Inlet Line Vent from DHR

Other supporting or relevant documents and photos (if any):



DH101 general
General view of component

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DH9B Equip. Class 8A. Motor-Operated Valves

Equipment Description MOV DH 9B

Location: Bldg. AUXB Floor El. 545 Room 225

Manufacturer, Model, Etc. _____

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

	Y	N	U	N/A
1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? *Valve located on line attached to containment wall.*		X		
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X			
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
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.)	X			
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	X			

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. DH9B Equip. Class 8A. Motor-Operated Valves

Equipment Description MOV DH 9B

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Attached lines found with adequate flexibility.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E1 Equip. Class 2. Low Voltage Switchgear

Equipment Description BUS E1, Low Voltage Switchgear

Location: Bldg. AUXB Floor El. 603 Room 429

Manufacturer, Model, Etc. _____

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

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

Component composed of 7 sections. End panels were opened and verified plug welds at front (2~1/4"diam at 18"oc).

	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X			
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
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.)				X

Anchorage not vissible thus verification based on adequacy per SQUG calc C-CSS-E1.
SQUG calculations show anchorage to be adequate from previous outlier resolution.

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

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E1 Equip. Class 2. Low Voltage Switchgear

Equipment Description BUS E1, Low Voltage Switchgear

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Top entry conduit rigidly supported.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

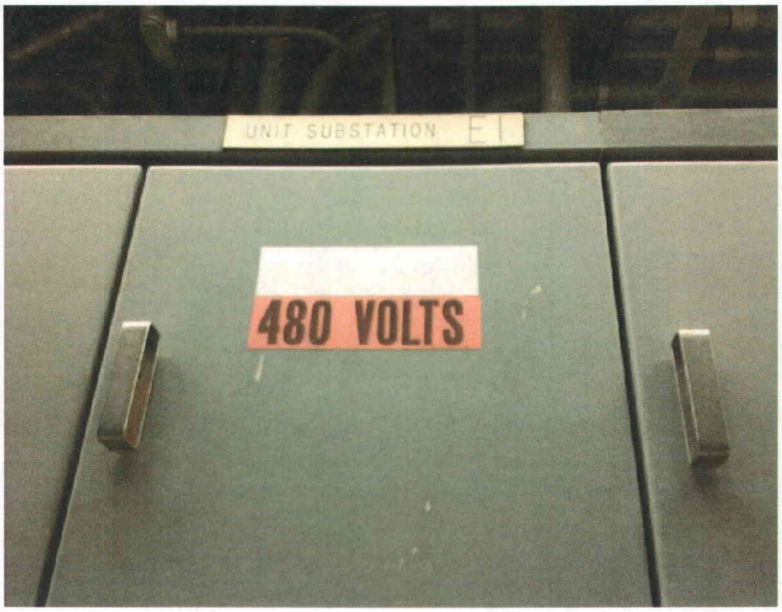
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E1 Equip. Class 2. Low Voltage Switchgear

Equipment Description BUS E1, Low Voltage Switchgear

Other supporting or relevant documents and photos (if any):



E1 plate
ID Plate of component

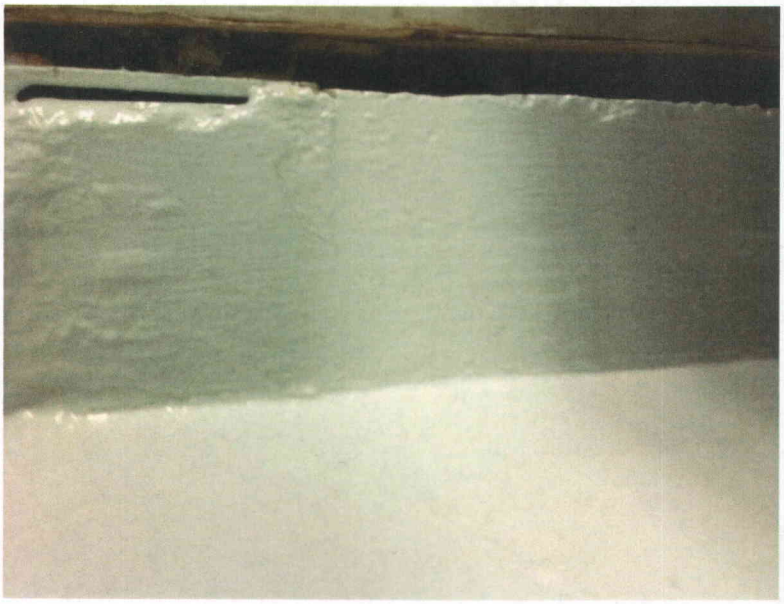
E1 general
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E1 Equip. Class 2. Low Voltage Switchgear

Equipment Description BUS E1, Low Voltage Switchgear



E1 anchorage inaccessible
Anchorage is not visible

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E11B Equip. Class 1. Motor Control Centers

Equipment Description MCC E11B

Location: Bldg. AUXB Floor El. 585 Room 304

Manufacturer, Model, Etc.

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

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

This is a 10 sections MCC. Each section is welded to embedded channel with an average of 6" long, 3/16" welds. Top bracing provided per drawing C-0233.

	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X			
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
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.)	X			

Top bracing of this MCC verified against Drawing C-0233. SQUG calculation C-CSS-E11B provides qualification calculations for the base welds and the top bracing.

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

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E11B Equip. Class 1. Motor Control Centers

Equipment Description MCC E11B

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E11B Equip. Class 1. Motor Control Centers

Equipment Description MCC E11B

Other supporting or relevant documents and photos (if any):

E11B plate
ID Plate of component

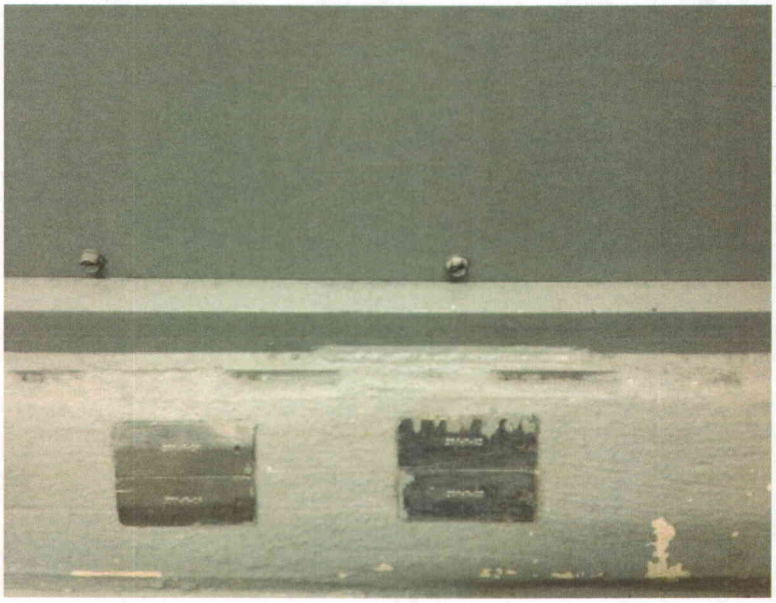
E11B general
General view of component

Status (Y) N U

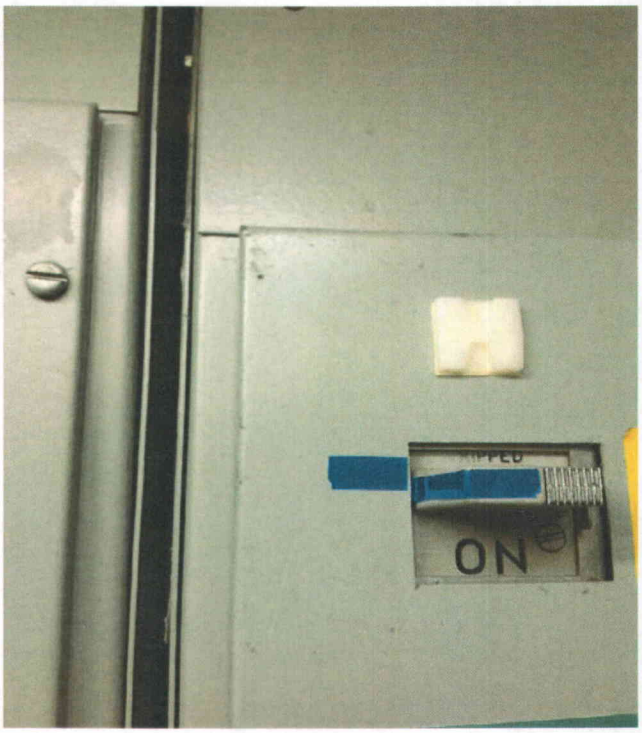
Seismic Walkdown Checklist (SWC)

Equipment ID No. E11B Equip. Class 1. Motor Control Centers

Equipment Description MCC E11B



E11B stitch weld
Partial view of anchorage, view is typical of all anchors



E11B is bolted between E11C
Units are bolted together to prevent pounding

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E12B Equip. Class 1. Motor Control Centers

Equipment Description MCC E12B

Location: Bldg. AUXB Floor El. 585 Room 318

Manufacturer, Model, Etc.

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

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

This is a 4 section MCC (including panel YE1), welded to embed channels with an average of 6" long 3/16" fillet welds per section.

	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X			
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
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.)	X			

Top bracing provided by several top entry conduit. SQUG calculation C-CSS-E12B provides qualification calculations for the base welds.

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

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E12B Equip. Class 1. Motor Control Centers

Equipment Description MCC E12B

Interaction Effects

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

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

Scafolding found near equipment properly braced. No interaction concern.

	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?	X			

Attached lines rigidly connected to cabinet.

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

~1/2" gap found between back of cabinet and water line.
Interaction judged not to be a problem due to rigidity of cabinet and provided top bracing.

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E12C Equip. Class 1. Motor Control Centers

Equipment Description MCC E12C

Location: Bldg. INTK Floor El. 576 Room 51

Manufacturer, Model, Etc.

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

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

This is a 4 section MCC, welded to embed channels with an average of at least 5" long, 3/16" fillet welds per section (front and back).

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

No degraded conditions found for base stitch welds.

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

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

No cracks identified in grout at mounting base.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

Top bracing of this MCC verified against Drawing C-0233. SQUG calculation C-CSS-E12B provides qualification calculations for the base welds and the top bracing. Base welds verified against drawing C-0412B, section L.

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

No significant degraded condition identified during inspection. Anchorage configuration capacity is provided in C-CSS-E12C and VF12/800-008 shown to be adequate.

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E12C Equip. Class 1. Motor Control Centers

Equipment Description MCC E12C

Interaction Effects

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

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

Scafolding found near component adequately braced.
No interaction concern.

	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?	X			

Attached lines rigidly connected to cabinet.

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

1/2 gap found between back of cabinet and water line.
No interaction concern due to overall rigidity of cabinet and provided top bracing.

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)
Missing grout at lower right of component is cosmetic and judged not to be an adverse seismic condition.

Evaluated by: Eddie M. Guerra Date: 7/25/2012

Adam L. Helffrich Date: 7/25/2012

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E12C Equip. Class 1. Motor Control Centers

Equipment Description MCC E12C

Other supporting or relevant documents and photos (if any):

E12C plate
ID Plate of component

E12C general
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E12C Equip. Class 1. Motor Control Centers

Equipment Description MCC E12C

E12C grout missing
View of mounting base showing stitch weld detail and grout

E12C gap conduit and cabinet
Close up view of gap identified between back of cabinet and conduit.

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E12C Equip. Class 1. Motor Control Centers

Equipment Description MCC E12C

E12C Scaffold
View of scafolding near component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E22-1 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description CCW HEAT EXCHANGER 1-1 AT DISCHARGE OF CCW PUMP 43-1

Location: Bldg. AUXB Floor El. 585 Room 328

Manufacturer, Model, Etc. _____

Instructions for Completing Checklist

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

Anchorage

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

Y	N
X	

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

Y	N	U	N/A
X			

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

Y	N	U	N/A
X			

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

Y	N	U	N/A
X			

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Y	N	U	N/A
X			

Nozzle load issue identified and documented in PCAQ98-1945, and subsequently resolved by MOD 98-0058. SQUG calculation C-CSS-E22-1 shows seismic adequacy of the as-installed design.

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

Y	N	U
X		

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E22-1 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description CCW HEAT EXCHANGER 1-1 AT DISCHARGE OF CCW PUMP 43-1

Interaction Effects

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

Seismic capacity of block walls in the area verified.
Block walls 3307, 3397 and 3407 verified to be to be seismically adequate based on ref. VBW17-B001-088, Rev 6 (6/21/89), VBW19-B001-094, Rev 5 (6/3/06) and VBW19-B001-095, Rev 10 (7/5/06).

Flexibility of drain piping judged acceptable to accommodate thermal growth of the heat exchanger.

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

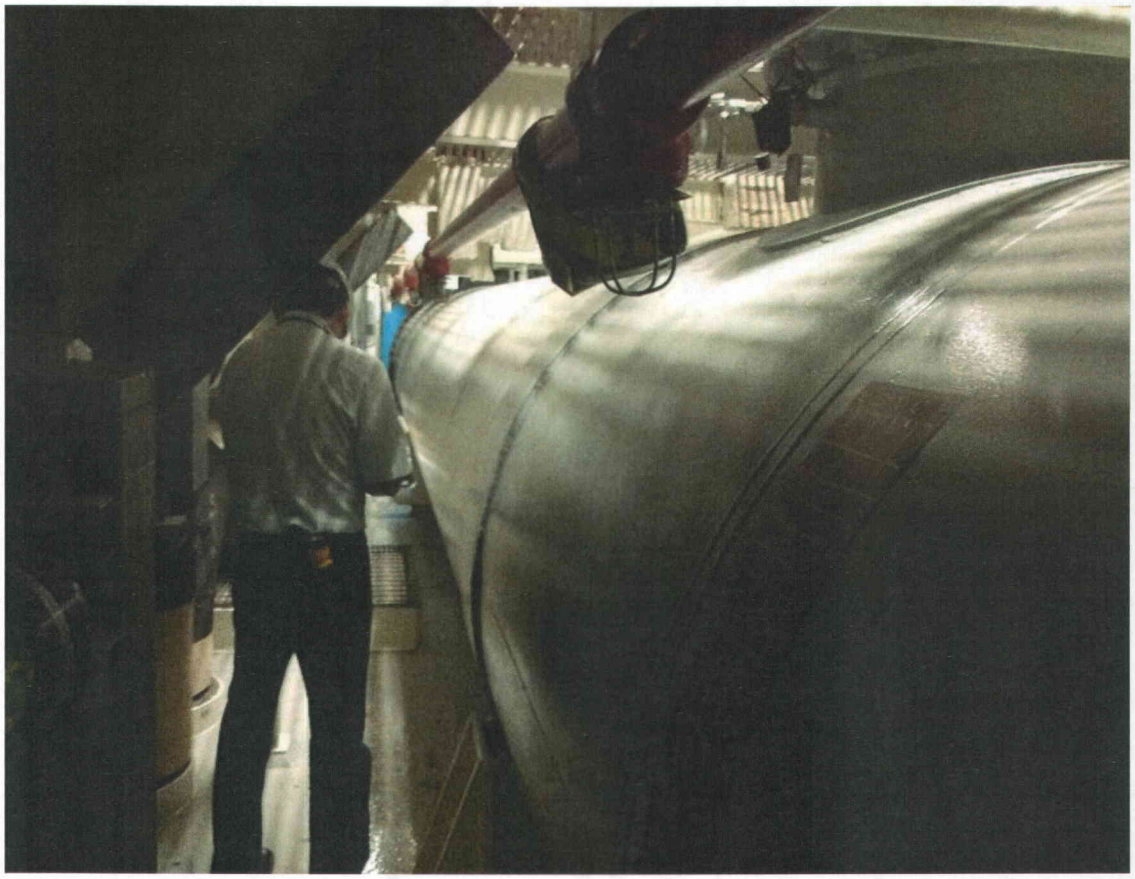
Seismic Walkdown Checklist (SWC)

Equipment ID No. E22-1 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description CCW HEAT EXCHANGER 1-1 AT DISCHARGE OF CCW PUMP 43-1

Other supporting or relevant documents and photos (if any):

E22-1 plate
ID Plate of component



E22-1 general
General view of component

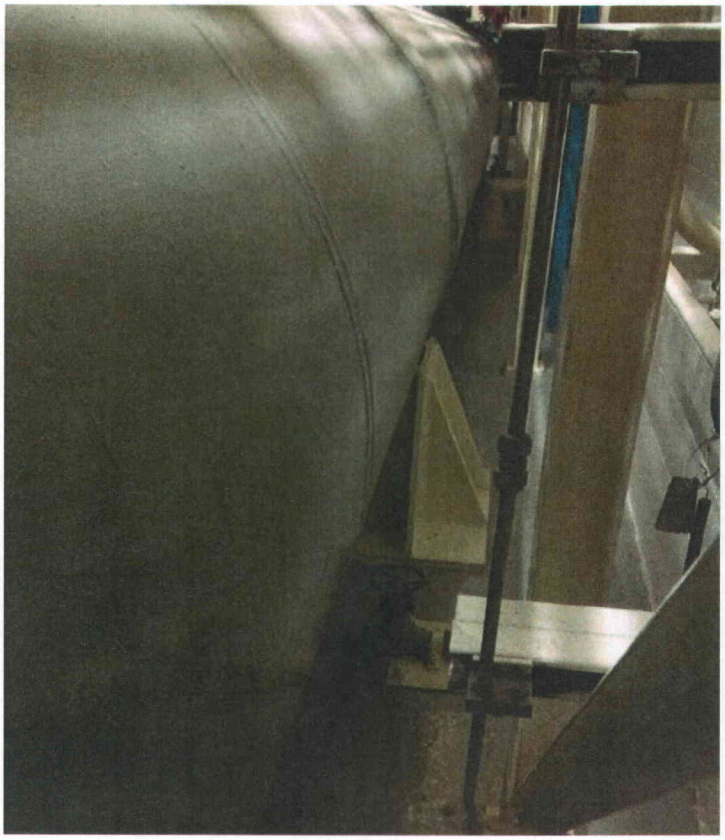
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E22-1 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description CCW HEAT EXCHANGER 1-1 AT DISCHARGE OF CCW PUMP 43-1

E22-1 anchorage left
Partial view of anchorage, view is typical of all anchors



E22-1 Welded Anchor
Configuration of the Welded Anchor Plate

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E22-2 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description CCW HEAT EXCHANGER 1-2 AT DISCHARGE OF CCW PUMP 43-2

Location: Bldg. AUXB Floor El. 585 Room 328

Manufacturer, Model, Etc. _____

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

	Y	N	U	N/A
1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?	X			
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X			
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
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.)	X			

Nozzle load issue identified and documented in PCAQ98-1945, and subsequently resolved by MOD 98-0058. SQUG calculation C-CSS-E22-1 shows seismic adequacy of the as-installed design.

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

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E22-2 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description CCW HEAT EXCHANGER 1-2 AT DISCHARGE OF CCW PUMP 43-2

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Flexibility of drain piping judged acceptable to accommodate thermal growth of the heat exchanger.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

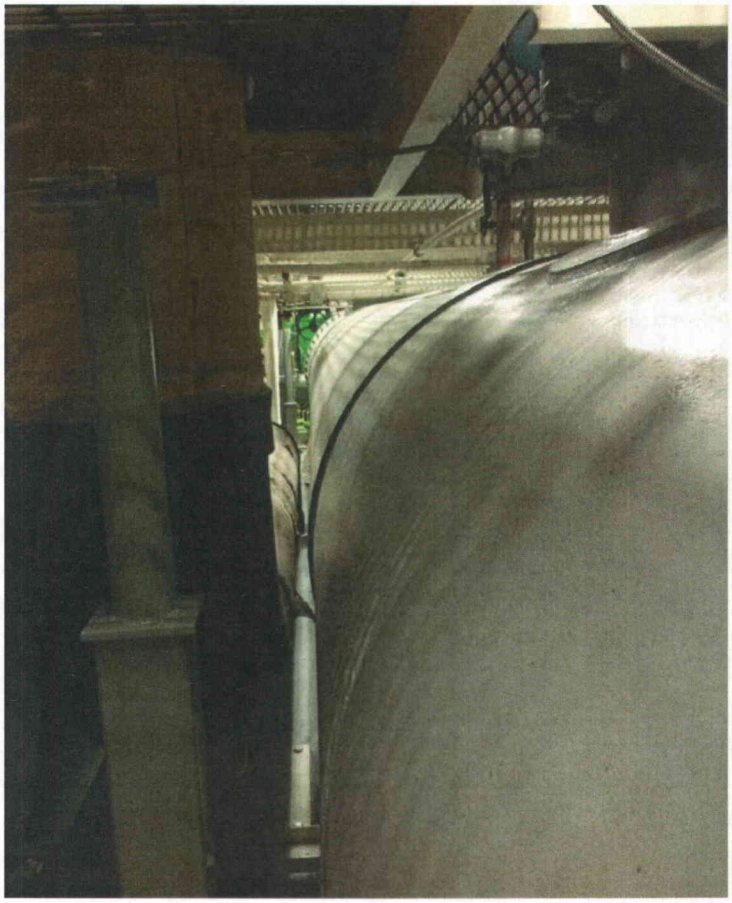
Seismic Walkdown Checklist (SWC)

Equipment ID No. E22-2 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description CCW HEAT EXCHANGER 1-2 AT DISCHARGE OF CCW PUMP 43-2

Other supporting or relevant documents and photos (if any):

E22-2 plate
ID Plate of component



E22-2 general
General view of component

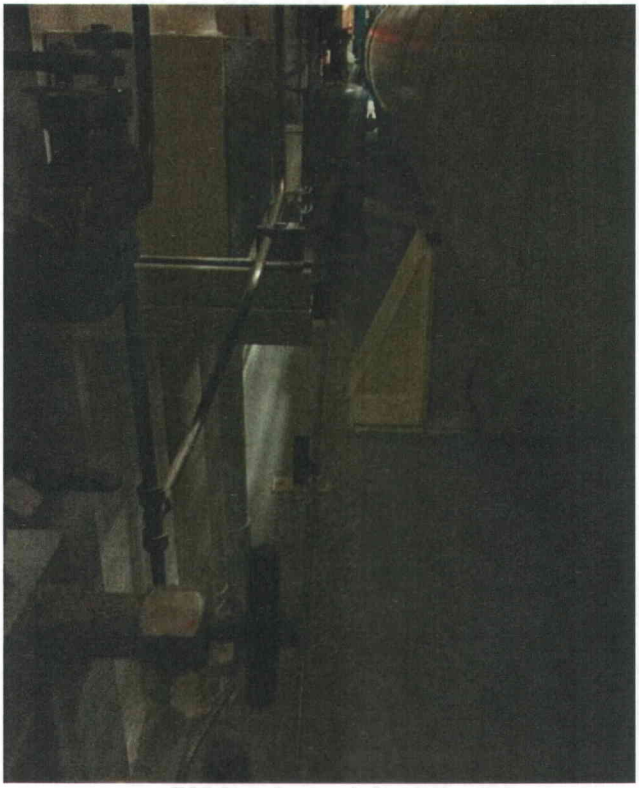
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E22-2 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description CCW HEAT EXCHANGER 1-2 AT DISCHARGE OF CCW PUMP 43-2

E22-2 anchorage right side
Partial view of anchorage, view is typical of all anchors



E22-2 anchorage left side
Anchorage at left side of the saddle at fixed end

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E27-1 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description DECAY HEAT REMOVAL COOLER 1-1, E27-1

Location: Bldg. AUXB Floor El. 545 Room 113

Manufacturer, Model, Etc. _____

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

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

Tank mounted on two saddles, each anchored with 4-1" bolts.

	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X			
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
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.)	X			

Nozzle load identified and documented in PCAQ97-0068, subsequently resolved by MOD97-0068. SQUG Calculation C-CSS-E27-001 shows seismic adequacy of the as-installed configuration.

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

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E27-1 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description DECAY HEAT REMOVAL COOLER 1-1, E27-1

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

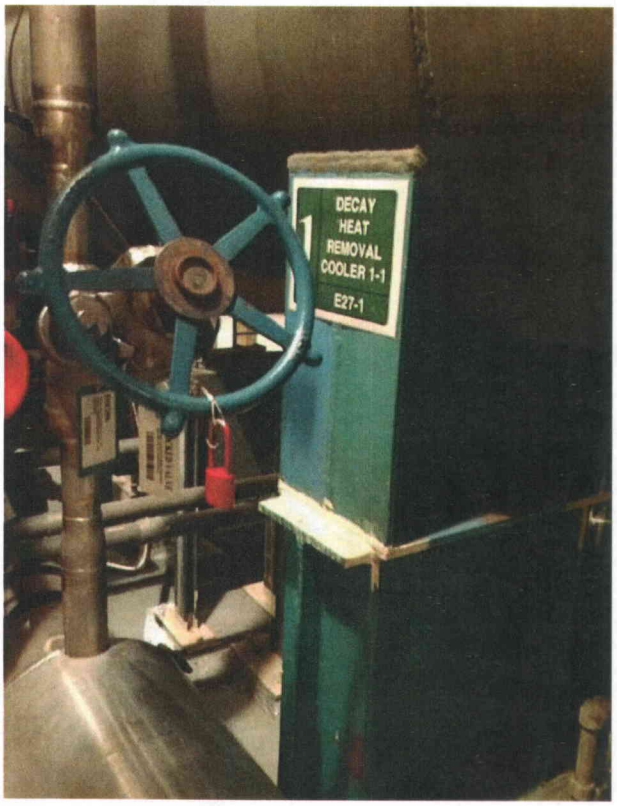
Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E27-1 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description DECAY HEAT REMOVAL COOLER 1-1, E27-1

Other supporting or relevant documents and photos (if any):



E27-1 plate
ID Plate of component

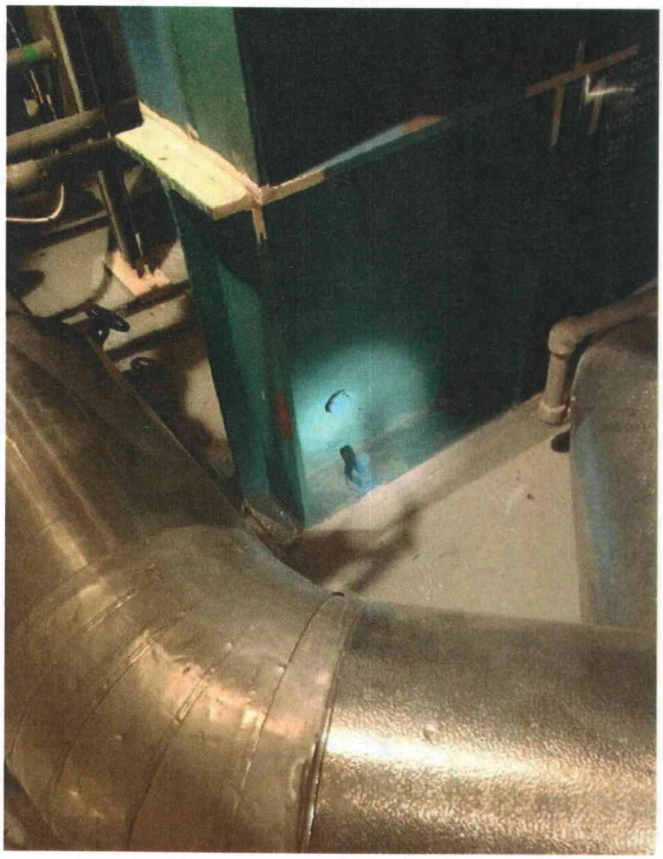
E27-1 general2
General view of component

Status: (Y) N U

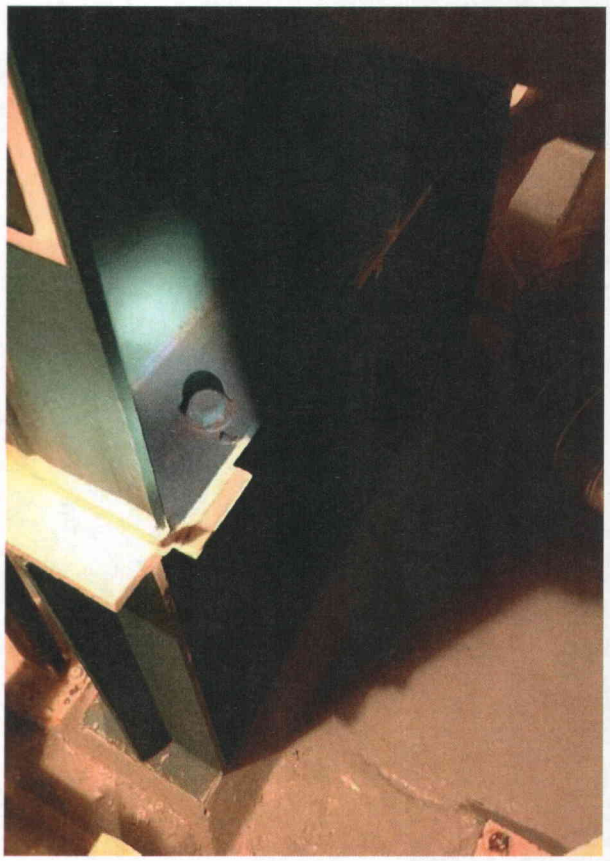
Seismic Walkdown Checklist (SWC)

Equipment ID No. E27-1 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description DECAY HEAT REMOVAL COOLER 1-1, E27-1



E27-1 anchorage
Partial view of anchorage, view is typical of all anchors



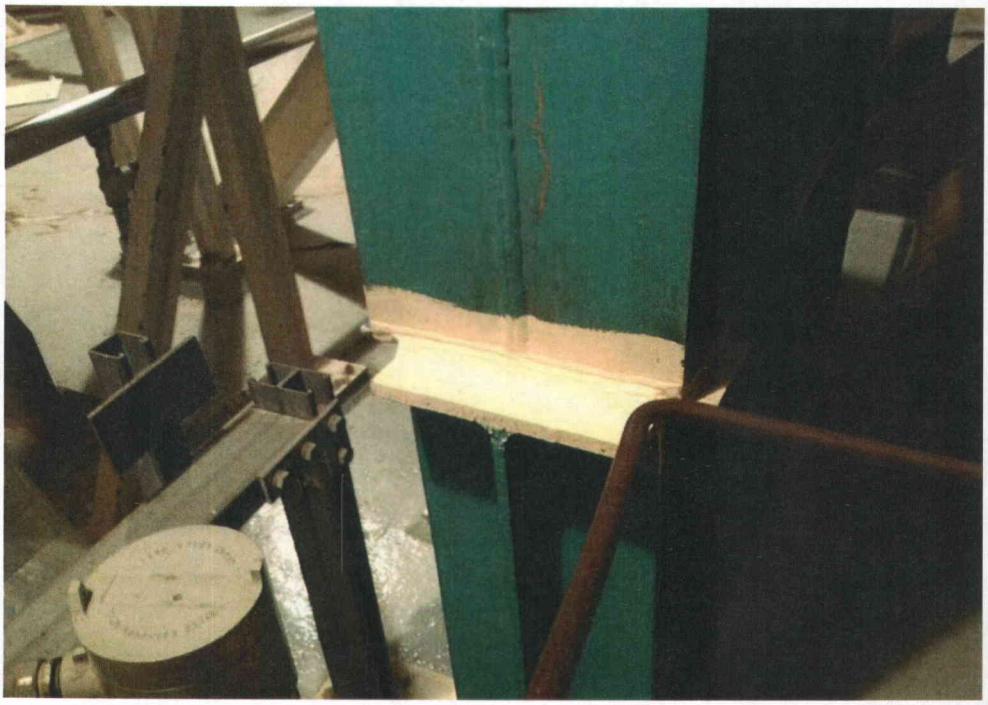
E27-1 Slotted hole to allow for expansion
Slotted hole between saddle and component

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E27-1 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description DECAY HEAT REMOVAL COOLER 1-1, E27-1



E27-1 welded joint
Joint welded as specified in MOD 97-0068

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E27-2 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description DECAY HEAT REMOVAL COOLER 1-2, E27-2

Location: Bldg. AUXB Floor El. 545 Room 113

Manufacturer, Model, Etc. _____

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

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

Tank mounted on two saddles, each anchored with 4-1" bolts.

	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X			
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
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.)	X			

Nozzle load identified and documented in PCAQ97-0068, subsequently resolved by MOD97-0068. SQUG Calculation C-CSS-E27-001 shows seismic adequacy of the as-installed configuration.

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E27-2 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description DECAY HEAT REMOVAL COOLER 1-2, E27-2

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

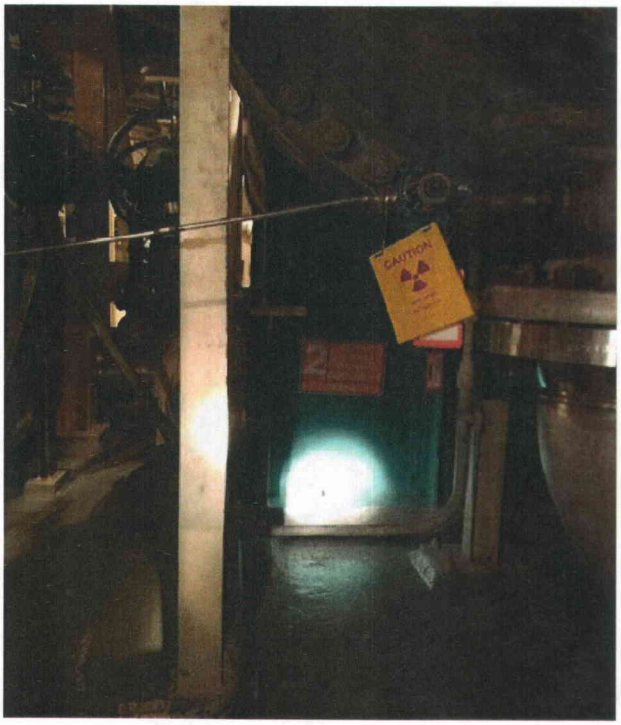
Status: (Y) N U

Seismic Walkdown Checklist (SWC)

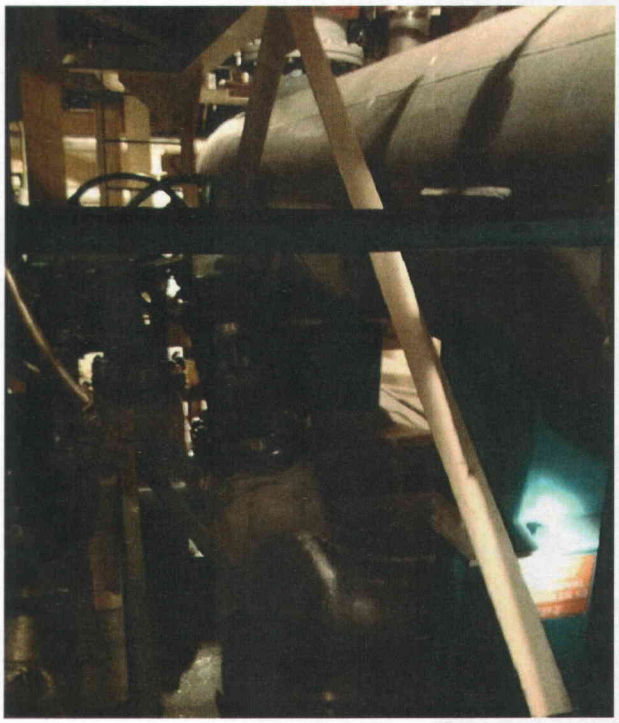
Equipment ID No. E27-2 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description DECAY HEAT REMOVAL COOLER 1-2, E27-2

Other supporting or relevant documents and photos (if any):



E27-2 plate
ID Plate of component



E27-2 general
General view of component

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. E27-2 Equip. Class 21. Tanks and Heat Exchangers

Equipment Description DECAY HEAT REMOVAL COOLER 1-2, E27-2

E27-2 anchorage
Partial view of anchorage, view is typical of all anchors

E27-2 weld
Joint welded as specified in MOD 97-0068

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. EF12C Equip. Class 1. Motor Control Centers

Equipment Description MCC EF12C

Location: Bldg. INTK Floor El. 576 Room 52

Manufacturer, Model, Etc.

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

	Y	N	U	N/A
1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?		X		
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X			
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
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.)				X

This is a 4 section MCC, welded to embed channels with an average of at least 5" long, 3/16" fillet welds per section (front and back). Top bracing provided per drawing C-0233.

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

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. EF12C Equip. Class 1. Motor Control Centers

Equipment Description MCC EF12C

Interaction Effects

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

Seismic capacity of block walls in the area verified
Block wall 2371 verified to be to be seismically adequate
based on ref. VBW10-B001-055, Rev 14 (2/10/87).

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. EF12C Equip. Class 1. Motor Control Centers

Equipment Description MCC EF12C

Other supporting or relevant documents and photos (if any):

EF12C plate
ID Plate of component

EF12C general
General view of component

Status Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. EF12C Equip. Class 1. Motor Control Centers

Equipment Description MCC EF12C

EF12C anchorage hidden
View of mounting base showing stitch weld detail

EF12C brace left
View of channel section used to restrain front-to-back motion. Same detail at opposite side.

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F1 Equip. Class 2. Low Voltage Switchgear

Equipment Description BUS F1, Low Voltage Switchgear

Location: Bldg. AUXB Floor El. 603 Room 428

Manufacturer, Model, Etc. _____

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

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

Component composed of 7 sections. Inspected two end sections at front and verified two plug welds ~3/4" diameter.

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

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

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

Base grout found in good condition.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				X

Verification based on adequacy per SQUG calc C-CSS-F1.
SQUG calculations show anchorage to be adequate from previous outlier resolution, page 9 of 28.

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

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F1 Equip. Class 2. Low Voltage Switchgear

Equipment Description BUS F1, Low Voltage Switchgear

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

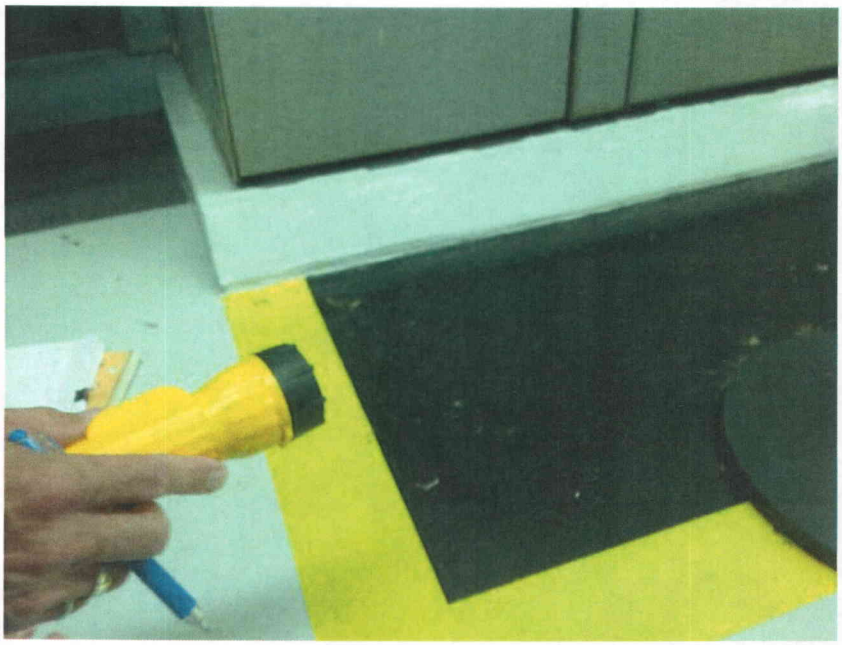
Seismic Walkdown Checklist (SWC)

Equipment ID No. F1 Equip. Class 2. Low Voltage Switchgear

Equipment Description BUS F1, Low Voltage Switchgear

Other supporting or relevant documents and photos (if any):

F1 general (plate inaccessible)
General view of component



F1 anchorage inaccessible

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F108-1 Equip. Class 0c. Other - sub-component

Equipment Description EDG 1-1 INTAKE FILTER

Location: Bldg. AUXB Floor El. 585 Room 318

Manufacturer, Model, Etc. _____

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

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

Anchorage could not be verified since it was fully covered by roof cover.
SQUG Calc C-CSS-F108 taken as reference for anchorage condition.

	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?				X
3. Is the anchorage free of corrosion that is more than mild surface oxidation?				X
4. Is the anchorage free of visible cracks in the concrete near the anchors?				X
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.)				X

No detail provided in calc. Unable to view during inspection.

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

Outlier specified in calculation C-CSS-F108 with respect to anchorage capacity
Calculation provides an outliner close out note specifying a modification (#MOD 95-0029) for additional anchors.

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F108-1 Equip. Class 0c. Other - sub-component

Equipment Description EDG 1-1 INTAKE FILTER

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures? *Filter cover deemed to be capable of resisting external hazards.*	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status Y N U

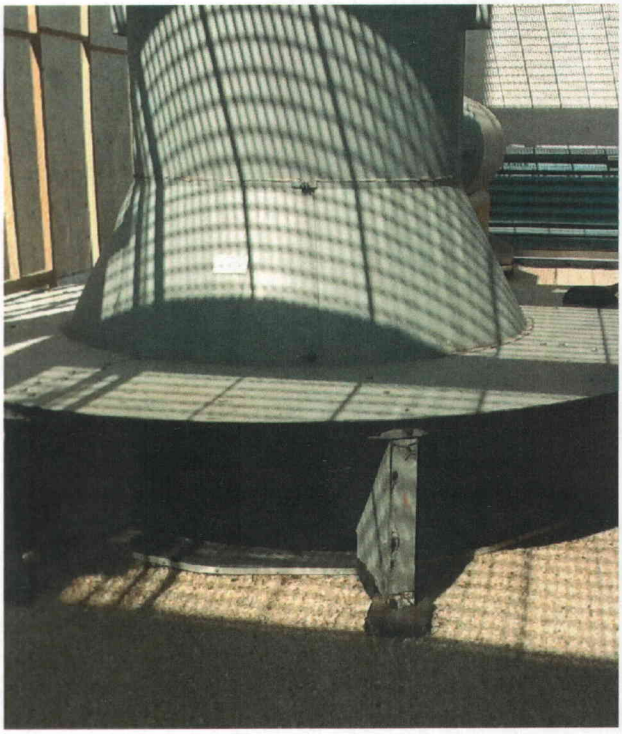
Seismic Walkdown Checklist (SWC)

Equipment ID No. F108-1 Equip. Class 0c. Other - sub-component

Equipment Description EDG 1-1 INTAKE FILTER

Other supporting or relevant documents and photos (if any):

F108-1 plate ID
ID Plate of component



F108-1 general
General view of component

F108-1 Encasing Anchroage
View of Intake encasing anchroage condition.

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F11A Equip. Class 1. Motor Control Centers

Equipment Description MCC F11A

Location: Bldg. AUXB Floor El. 603 Room 427

Manufacturer, Model, Etc.

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

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

This is an 11 section MCC, welded to embed channels with an average of at least 5" long, 3/16" fillet welds per section (front and back).

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

No degraded conditions found for base stitch welds.

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

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

Separation found on base grout at end of cabinet.
Identified as an aestetic concern, therefore no significant adverse effect.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

Stitch weld detail verified in detail 15 of drawing C-0233 and confirmed to be consistent with walkdown inspection (drawing 1/4" weld 3-6oc). SQUG Calculation C-CSS-F11A provides qualification of as-installed welded anchorage.

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

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F11A Equip. Class 1. Motor Control Centers

Equipment Description MCC F11A

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures? *Nearby ladder found with poor tie-off, but judged not a potential hazard to this MCC.*	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Attached top conduits provide adequate top bracing to MCC.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? *Adjacent panels CDF11A-1 and CDF11A-2 have a gap of ~1/4" to this MCC, but the top connection of these panels to the MCC negates any interaction potential.*	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F11A Equip. Class 1. Motor Control Centers

Equipment Description MCC F11A

Other supporting or relevant documents and photos (if any):

F11A plate
ID Plate of component

F11A general
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F11A Equip. Class 1. Motor Control Centers

Equipment Description MCC F11A

F11A stitch weld
Partial view of anchorage, view is typical of all anchors

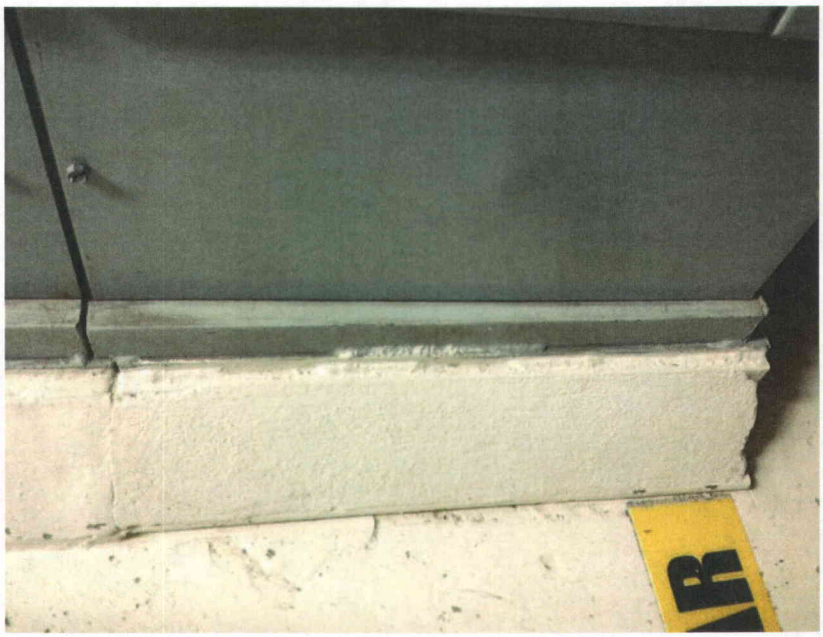
F11A rigid connection to adjoining conduit and MCC
A rigid connection is used to fasten the unit to adjoining conduit

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F11A Equip. Class 1. Motor Control Centers

Equipment Description MCC F11A



F11A crack in base of grout on corner
Separation in base grout. Appears to be aestetic grout only.

F11A poorly secured ladder in area of MCC
Ladder loosely tied off.

Status: Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F1-2 Equip. Class 0. Other

Equipment Description Traveling water screen F1-2

Location: Bldg. INTK Floor El. 585 Room 50

Manufacturer, Model, Etc. _____

Instructions for Completing Checklist

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

Anchorage

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

Y	N
	X

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

Y	N	U	N/A
X			

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

Y	N	U	N/A
X			

Slight corrosion identified in bolts due to humid environment.

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

Y	N	U	N/A
X			

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Y	N	U	N/A
			X

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

Y	N	U
X		

Although slight corrosion found on screen mounting base, no significant degraded condition was identified during inspection.

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F1-2 Equip. Class 0. Other

Equipment Description Traveling water screen F1-2

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Rigidly attached lines, no concern of differential displacement.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)
Inside of screen housing was accessible and no degraded condition was identified.
Motor located on top of screen housing found in adequate condition.

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F1-2 Equip. Class 0. Other

Equipment Description Traveling water screen F1-2

Other supporting or relevant documents and photos (if any):

F1-2 plate
ID Plate of component

F1-2 general
General view of component

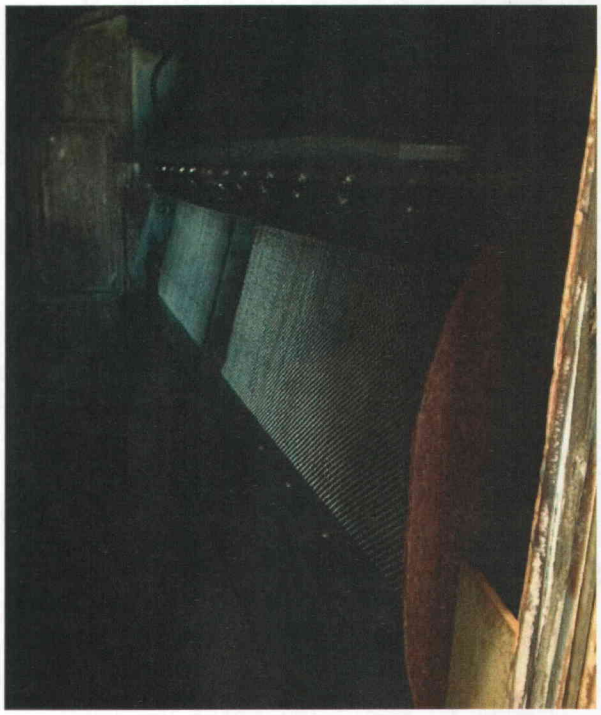
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F1-2 Equip. Class 0. Other

Equipment Description Traveling water screen F1-2

F1-2 anchorage
Partial view of anchorage, view is typical of all anchors



F1-1 inside
F1-1 is opened for inspection because it is more visible than F1-2

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F12A Equip. Class 1. Motor Control Centers

Equipment Description MCC F12A

Location: Bldg. AUXB Floor El. 603 Room 428

Manufacturer, Model, Etc.

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

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

This is an 8 section MCC, but it is in-line with two other MCC sections (MCC F14 and MCC F15). It was verified that all adjacent sections are bolted together. Each section of MCC is welded to embed channels at front and back with an average of at least 5" long, 3/16" fillet welds.

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

No degraded conditions found for base stitch welds.

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

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

No cracks identified in sloped grout at mounting base.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

SQUG Calculation C-CSS-F12A provides qualification of as-installed welded anchorage.

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

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F12A Equip. Class 1. Motor Control Centers

Equipment Description MCC F12A

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Top entry conduit rigidly supported to back wall.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

This 8 section MCC is adjacent to MCC F14 and MCC F15. These MCCs were opened and inspected. It was verified that these MCCs are bolted together. At the south end of this MCC, there is a 1.5" gap to panel CDF12A-1, which is judged acceptable to preclude pounding.

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

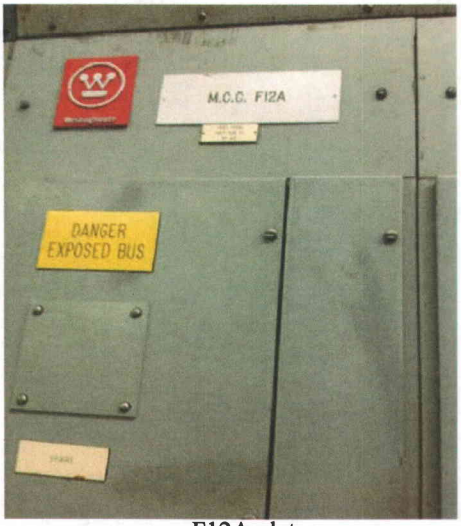
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F12A Equip. Class 1. Motor Control Centers

Equipment Description MCC F12A

Other supporting or relevant documents and photos (if any):



F12A plate
ID Plate of component

F12A general
General view of component

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F12A Equip. Class 1. Motor Control Centers

Equipment Description MCC F12A

F12A stitch weld
Partial view of anchorage, view is typical of all anchors

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F12D Equip. Class 1. Motor Control Centers

Equipment Description MCC F12D

Location: Bldg. INTK Floor El. 576 Room 52

Manufacturer, Model, Etc.

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

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

This a single section MCC welded to embed with an average of 9" of 3/16" fillet welds at front and back. No degraded condition found around cabinet base.

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

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

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

No significant cracks identified around cabinet mounting base.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	X			

Since cabinet could not be opened, configuration is verified based on SQUG calculation C-CSS-F12D. This calculation evaluates anchorage based on calculation C-CSS-E12C which conlcudes anchorage configuration is adequate.

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

Outlier close out note (C-CSS-F12D, page 7 of 7) indicates comparison w/ E12C has shown anchorage is adequate. Anchorage is also checked with section L of drawing C-0412B and confirmed to be consistent with walkdown inspection.

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F12D Equip. Class 1. Motor Control Centers

Equipment Description MCC F12D

Interaction Effects

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

Potential interaction hazard due to near by fire extinguishers without adequate wall fixity. It was agreed that no significant effect expected during seismic event.

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

	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

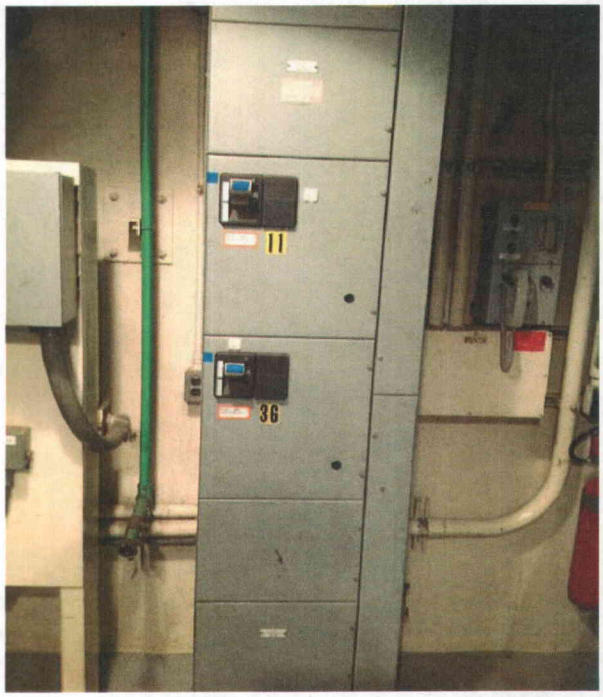
Seismic Walkdown Checklist (SWC)

Equipment ID No. F12D Equip. Class 1. Motor Control Centers

Equipment Description MCC F12D

Other supporting or relevant documents and photos (if any):

F12D plate
ID Plate of component



F12D general
General view of component

F12D anchorage
Mounting base detail with embedded channel

F12D fire ext to right
Potential interaction hazard from fire extinguisher in the vicinity of component.

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FD1062 Equip. Class 0. Other

Equipment Description FIRE DAMPER FD 1062

Location: Bldg. AUXB Floor El. 603 Room 428

Manufacturer, Model, Etc.

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

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

Component attached to ceiling and braced to wall with HSS sections.

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

Damper vertical supports connected to upper floor decking between ribs.

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

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

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				X

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

Damper found adequately supported against lateral movement. HSS sections found in adequate condition. No signs of corrosion observed on support members.

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FD1062 Equip. Class 0. Other

Equipment Description FIRE DAMPER FD 1062

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Electric line connected with adequate flexibility.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: Eddie M. Guerra Date: 7/25/2012

Adam L. Helffrich Date: 7/25/2012

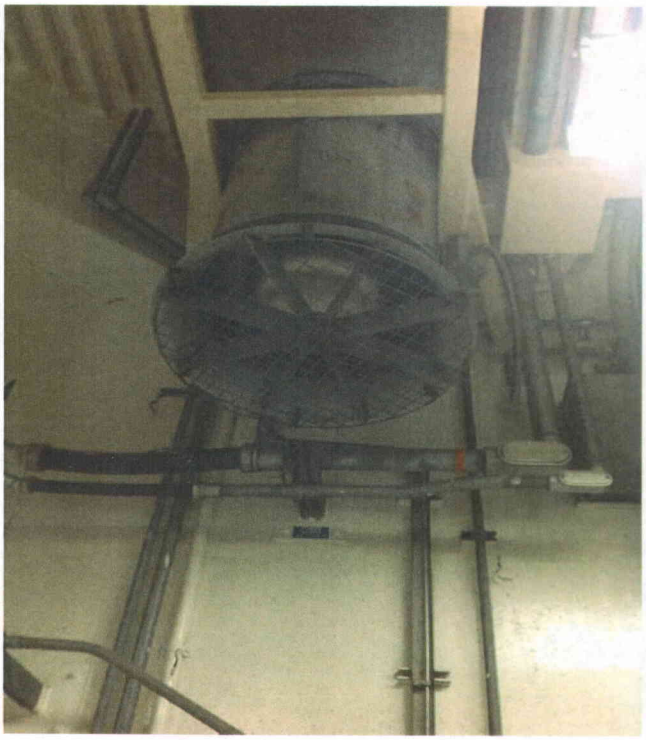
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FD1062 Equip. Class 0. Other

Equipment Description FIRE DAMPER FD 1062

Other supporting or relevant documents and photos (if any):



FD1062
General view of component

FD1062 anchorage
View of anchorage

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FIS 1612 Equip. Class 20. Instrument and Control Panels

Equipment Description SFP HX 1 FIS-1612 Cool Water Outlet Flow Indicating Switch

Location: Bldg. AUXB Floor El. 590'6" Room 312

Manufacturer, Model, Etc. _____

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

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

Floor mounted rack found in adequate condition anchored with 4~1/2" diam bolts.

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

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

No signs of corrosion found on anchor bolts and bottom~1/2" plate.

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

No visible cracks on grout for bottom plate anchorage.

	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				X

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

Anchor spacing to adjacent floor mounted rack is judged adequate.

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FIS 1612 Equip. Class 20. Instrument and Control Panels

Equipment Description SFP HX 1 FIS-1612 Cool Water Outlet Flow Indicating Switch

Interaction Effects

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

Seismic capacity of block walls in the area verified.
Block walls 3257 and 3267 verified to be to be seismically adequate based on ref. VBW16-B001-083, Rev 2 (4/27/88) and VBW16-B001-084, Rev 5 (4/27/88).

Flexible line and small piping were identified with adequate flexibility.

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

Status (Y) N U

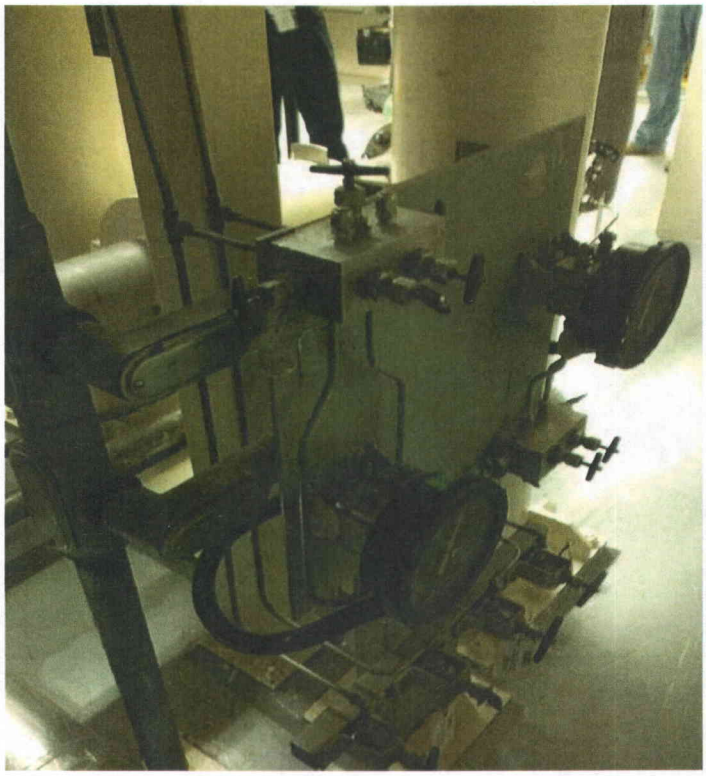
Seismic Walkdown Checklist (SWC)

Equipment ID No. FIS 1612 Equip. Class 20. Instrument and Control Panels

Equipment Description SFP HX 1 FIS-1612 Cool Water Outlet Flow Indicating Switch

Other supporting or relevant documents and photos (if any):

FIS1612 plate
ID Plate of component



FIS1612 general
General view of component

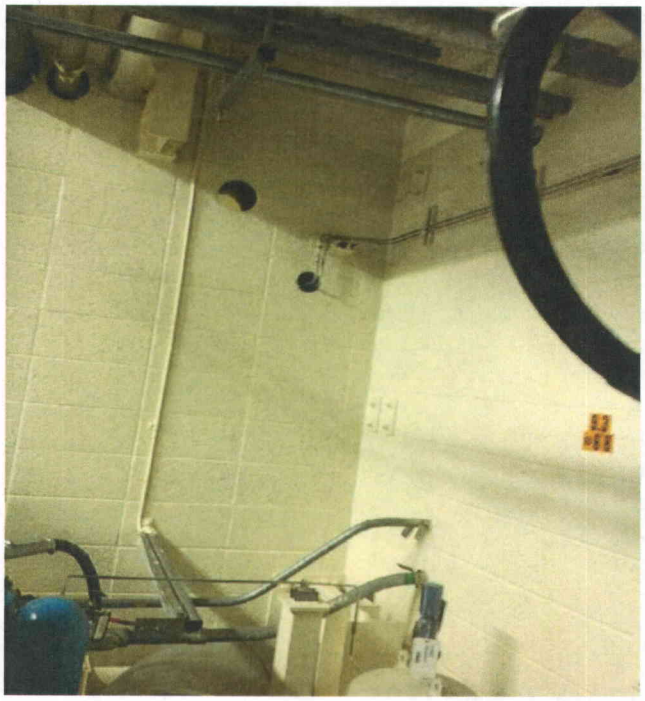
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FIS 1612 Equip. Class 20. Instrument and Control Panels

Equipment Description SFP HX 1 FIS-1612 Cool Water Outlet Flow Indicating Switch

FIS1612 anchorage
View of anchorage



FIS1612 adjacent masonry wall
Potential interaction hazard from masonry wall near unit

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FTHP3C Equip. Class 18. Instrument (on) Racks

Equipment Description FLOW TRANSMITTER FT HP3C

Location: Bldg. AUXB Floor El. 565 Room 208

Manufacturer, Model, Etc.

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

Y	N
	X

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

Mounted on tube section 6x6 which is attached to concrete wall with four 1/2" diameter anchors. The lightweight transmitter (<~20 lbs) is attached to the rack with four 3/8" diameter machine bolts. OK.

Y	N	U	N/A
X			

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

Supporting wall tubes found in good condition.

Y	N	U	N/A
X			

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

No signs of corrosion found on mounting support and piping

Y	N	U	N/A
X			

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

No cracks identified on wall near flow transmitter.

Y	N	U	N/A
			X

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Y	N	U
X		

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FTHP3C Equip. Class 18. Instrument (on) Racks

Equipment Description FLOW TRANSMITTER FT HP3C

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Small piping connected to transmitter found with adequate flexibility.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? *No potential interaction identified on the vicinity of component.*	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)
Pipe lines rigidly attached to containment wall. No adverse effects due to differential motion are expected.

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

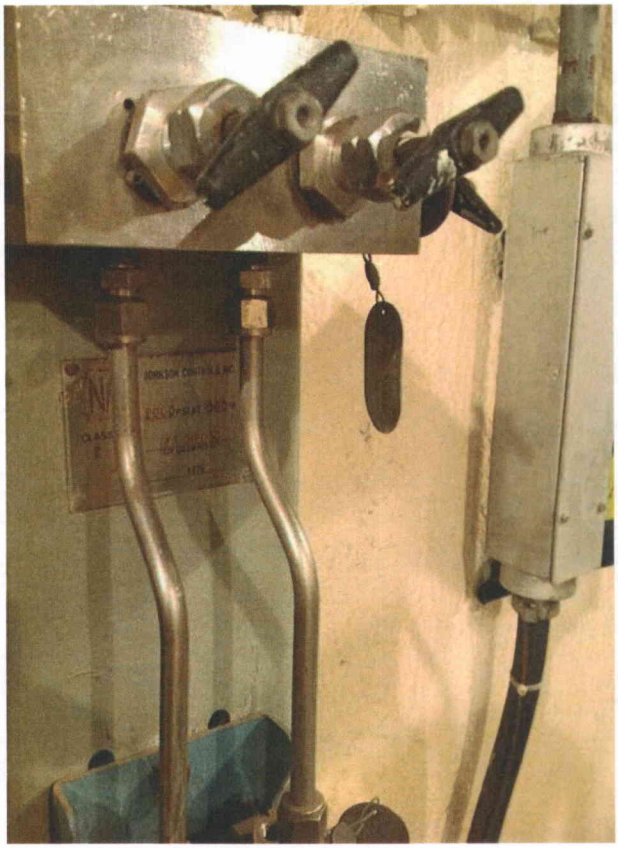
Status (Y) N U

Seismic Walkdown Checklist (SWC)

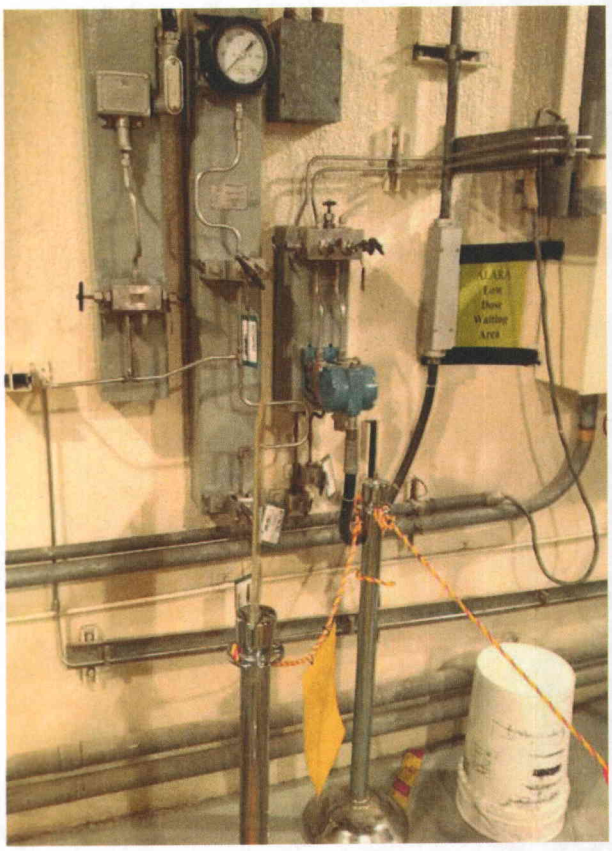
Equipment ID No. FTHP3C Equip. Class 18. Instrument (on) Racks

Equipment Description FLOW TRANSMITTER FT HP3C

Other supporting or relevant documents and photos (if any):



FTHP3C
ID Plate of component



FTHP3C General
General view of component

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Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FV6451 Equip. Class 8B. Solenoid Valves

Equipment Description SOLENOID VALVE AF6451

Location: Bldg. AUXB Floor El. 565 Room 238

Manufacturer, Model, Etc.

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

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

Installed on a 4" diameter pipe line.

	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?				X
3. Is the anchorage free of corrosion that is more than mild surface oxidation?				X

Valve and main pipe line found with no signs of corrosion.

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

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

Main pipe line adequatelly supported. No excessive unsupported lengths identified.

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FV6451 Equip. Class 8B. Solenoid Valves

Equipment Description SOLENOID VALVE AF6451

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? *No block walls or potential interaction hazard identified in the area.*	X			
9. Do attached lines have adequate flexibility to avoid damage? *Lines connected with adequate flexibility.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

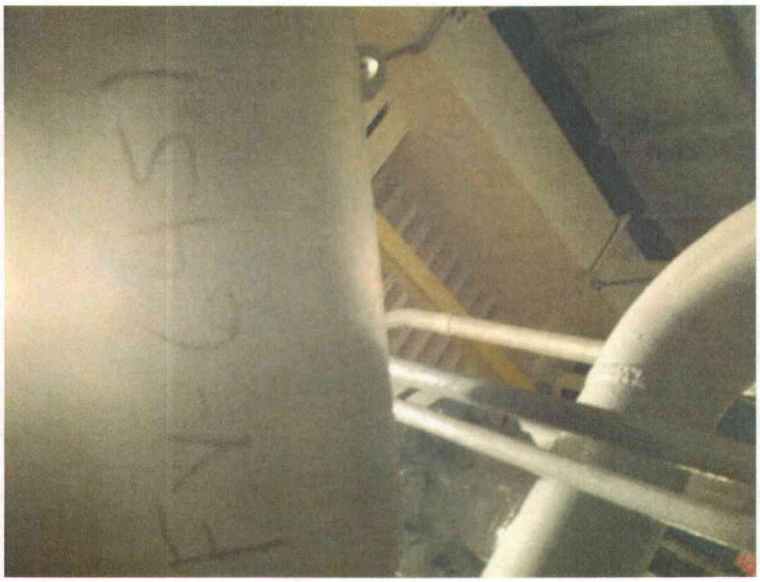
Status (Y) N U

Seismic Walkdown Checklist (SWC)

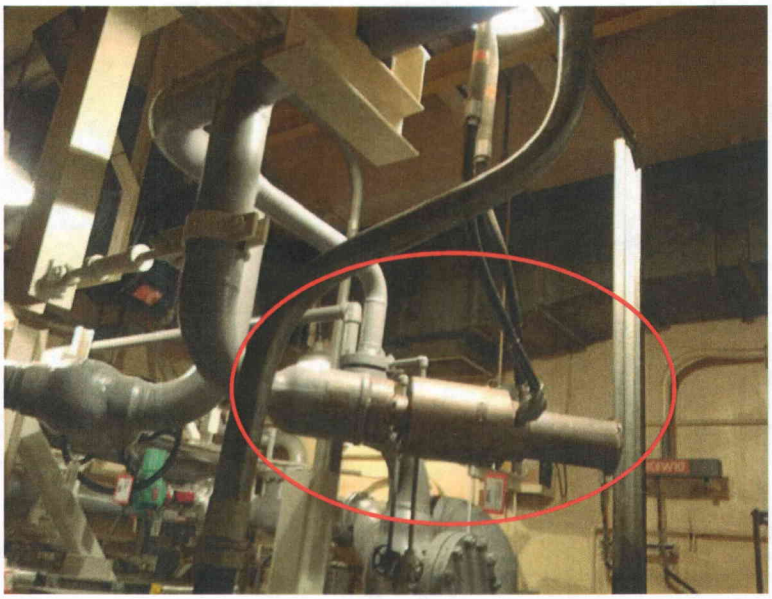
Equipment ID No. FV6451 Equip. Class 8B. Solenoid Valves

Equipment Description SOLENOID VALVE AF6451

Other supporting or relevant documents and photos (if any):



FV-6451 Plate
ID Plate of component



FV-6451 General2
General view of component

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ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FV6452 Equip. Class 8B. Solenoid Valves

Equipment Description SOLENOID VALVE AF6452

Location: Bldg. AUXB Floor El. 565 Room 237

Manufacturer, Model, Etc. _____

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

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

Mounted on pipe line spannig around 10ft.

	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?				X
3. Is the anchorage free of corrosion that is more than mild surface oxidation?				X

Valve and pipe line found with good surface condition and no signs of corrosion.

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

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

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FV6452 Equip. Class 8B. Solenoid Valves

Equipment Description SOLENOID VALVE AF6452

Interaction Effects

	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	X			
9. Do attached lines have adequate flexibility to avoid damage? *Attached lines found with adequate flexibiliy.*	X			

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich

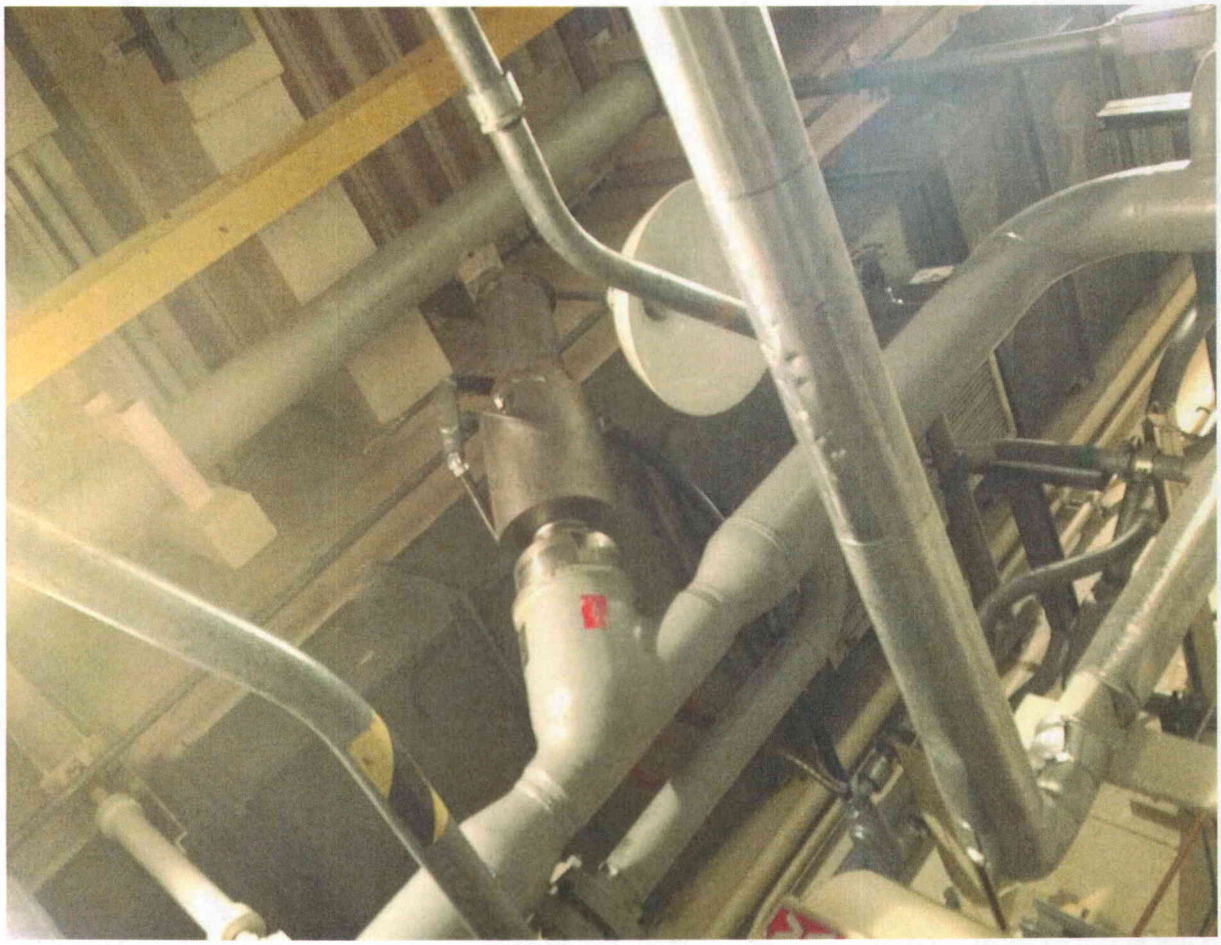
Status (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FV6452 Equip. Class 8B. Solenoid Valves

Equipment Description SOLENOID VALVE AF6452

Other supporting or relevant documents and photos (if any):



FV6452 general
General view of component

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. HIS 5889A Equip. Class 20. Instrument and Control Panels

Equipment Description AFP TURB 1-1 STEAM INLET VALVE inside PNL C5709

Location: Bldg. AUXB Floor El. 623 Room 505

Manufacturer, Model, Etc.

Instructions for Completing Checklist

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

Anchorage

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

Y	N
	X

Inside Panel C5709, which has similar anchorage to Panel C5702. Back panel doors are adequately attached to panel structure with 4-1/2" screws.

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

Y	N	U	N/A
X			

None observed.

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

Y	N	U	N/A
X			

None observed.

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

Y	N	U	N/A
X			

None observed.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)

Y	N	U	N/A
			X

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

Y	N	U
X		

Paul C. Rizzo Associates, Inc.
ENGINEERS & CONSULTANTS

Status: (Y) N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. HIS 5889A Equip. Class 20. Instrument and Control Panels

Equipment Description AFP TURB 1-1 STEAM INLET VALVE inside PNL C5709

Interaction Effects

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

	Y	N	U
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X		

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: _____ Date: 7/25/2012
Eddie M. Guerra

_____ Date: 7/25/2012
Adam L. Helffrich