Status Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.	<u>F1</u>	Equip. Class	2. Low Voltage Switchgear				
Equipment Description		BUS F1, Low Voltage	Switchgear				-
Location: Bldg.	AUXB	Floor El.	603	Room	428	_	
Manufacturer, Mod	el, 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

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. Inspected two end sections at front and verified two plug welds $\sim 3/4''$ 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		<u> </u>	
	Y	N	U	N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X		1	
Base grout found in good condition.				
	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation?				X
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				
Verification based on adequacy per SOUG calc C-CSS-F1.				
	<i></i>			

SQUG calculations show anchorage to be adequate from previous outlier resolution, page 9 of 28.

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



Paul C. Rizzo Associates, Inc.			She	eet 163 of 379
ENGINEERS & CONSULTANTS Seismic Walkdown Checklist (SWC)		Status	N U	
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	1		
	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			
0. De attached lines have adagusta flavibility to avoid demons?	Y	N	U	N/A
9. Do attached files have adequate nextoring to avoid damage?	Λ	1		
10 Based on the above seismic interaction evaluations is equipment free	Y	N	U	1
of potentially adverse seismic interaction effects?	A			J
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 X	N	U]
Comments (Additional pages may be added as necessary)				

Evaluated by:

Eddie M. Guerra

Adam L. Helffrich

7/25/2012

Date:

Date:

7/25/2012





 Equipment ID No.
 F1
 Equip. Class
 2. Low Voltage Switchgear

 Equipment Description
 BUS F1, Low Voltage Switchgear



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 FIL	LTER	
Location: Bldg. <u>AUXB</u>	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	Ν		
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.				
SQ 00 Cale C-CSS-1100 latert as reference for another age containen.	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? No detail provided in calc. Unable to view during inspection.				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	X]

potentially adverse seismic conditions? 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.

ENGINEERS & CONSULTANTS		~					
		Status	NU				
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						
	Y	N	U	N/A			
and masonry block walls not likely to collapse onto the equipment?			L	L			
	Y	N	U	N/A			
9. Do attached lines have adequate flexibility to avoid damage?	<u>X</u>		1				
10. Deced on the characteristic interaction evolutions, is equipment free	Y	N	U	1			
of potentially adverse seismic interaction effects?			1]			
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 X	N	U]			
			-				
Comments (Additional pages may be added as necessary)							

Evaluated by:

-

Eddie M. Guerra

Date: 7/25/2012

7/25/2012

Date:

Sheet 166 of 379

The White St

Adam L. Helffrich



Status YN U

Seismic Walkdown Checklist (SWC)

Equipment ID No. F108-1 Equip. Class 0c. Other - sub-component

Equipment Description

EDG 1-1 INTAKE FILTER



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 Con	trol Centers		
Equipment Description	MCC F11A				
Location: Bldg. <u>AUXB</u>	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	1	
1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?			J	
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).	v	N	П	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
No degraded conditions found for base stitch welds.				
	Y	Ν	U	N/A
3. Is the anchorage free of corrosion that is more than mild surface	X			
	Y	N	U	N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X	14		
Separation found on base grout at end of cabinet.				
Identified as an aestetic concern, therefore no significant adverse effect.	N	N	11	N1/A
5. Is the anchorage configuration consistent with plant documentation?	Y X	N		N/A
(Note: This question only applies if the item is one of the 50% for	A			
which an anchorage configuration verification is required.)				
Stitch weld detail verified in detail 15 of drawing C-0233 and confirmed to be consistent with walkdown inspection (drawing 1/4" weld 3-60c). SOUG 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	X]
potentially adverse seismic conditions?				

トイ	Paul C. Rizzo Associates,	Inc.
	ENGINEERS & CONSULTANTS	

Seismic Walkdown Checklist (SWC)	Status: Y	NU		
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	X			
8. Are overhead equipment, distribution systems, ceiling tiles and lighting,	Y	N	U	N/A
and masonry block walls not likely to collapse onto the equipment?				
	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage? Attached top conduits provide adequate top bracing to MCC.	X		1	
	Y	N	U	
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X]
Adjacent panels CDF11A-1 and CDF11A-2 have a gap of $\sim 1/4"$ to this MCC, but				
the top connection of these panels to the MCC negates any interaction potential.				
Other Adverse Conditions			-	
11. Have you looked for and found no other seismic conditions that could	Y	N	U	1
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

Adam L. Helffrich

7/25/2012

Date:





Equipment ID No. F11A E

Equip. Class 1. Motor Control Centers

Equipment Description

MCC F11A





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





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



Equipment ID No. F11A Equip. Class 1. Motor Control Centers

MCC F11A

Equipment Description



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.



PCR Pa ENG	ul C. Rizzo	O Associates, Inc		
Seismic Walkdown	Checklist (S	SWC)		Status
Equipment ID No.	<u>F1-2</u>	Equip. Class	0. Other	

U

Equipment ID No.	F1-2	Equip. Class	0. Other			
Equipment Description	on	Traveling water screen	n 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)?
- 2. Is the anchorage free of bent, broken, missing or loose hardware?
- 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
- Slight corrosion identified in bolts due to humid environment.
- 4. Is the anchorage free of visible cracks in the concrete near the anchors?
- Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?

Although slight corrosion found on screen mounting base, no significant degraded condition was identified during inspection.











Paul C. Rizzo Associates, Inc.			She	et 174 of 379
Seismic Walkdown Checklist (SWC)		Status	N U	
Equipment ID No. F1-2 Equip. Class 0. Other				
Equipment Description Traveling water screen F1-2		-		•
Interaction Effects 7. Are soft targets free from impact by nearby equipment or structures?	Y X	N	U	N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	Y X	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage? Rigidly attached lines, no concern of differential displacement.	Y X	N	U	N/A
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Y X	N	U]
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	Y X	N	- U]
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:	7/25/201	2		

Adam L. Helffrich

7/25/2012 Date:





Equipment ID No. F1-2

Equip. Class 0. Other

Equipment Description

Traveling water screen F1-2



F1-2 plate ID Plate of component



F1-2 general General view of component





 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	l Centers		
Equipment Description	MCC F12A				
Location: Bldg. <u>AUXB</u>	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	5).		
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 w	elds.			
	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware? <i>No degraded conditions found for base stitch welds.</i>	X			
	Y	Ν	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? <i>No cracks identified in sloped grout at mounting base.</i>	X			
	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation?	X			
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) SQUG Calculation C-CSS-F12A provides qualification of as-installed welded anch	orage.			

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



Paul C. Rizzo Associates, Inc.		Sheet 178 of 3				
Engineers & CONSULTANTS		Status YN U				
Equipment ID No. F12A Equip. Class 1. Motor Control Centers						
Equipment Description MCC F12A		-				
Interaction Effects 7. Are soft targets free from impact by nearby equipment or structures?	Y X	N	U	N/A		
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	Y X	N	U	N/A		
9. Do attached lines have adequate flexibility to avoid damage? Top entry conduit rigidly supported to back wall.	Y	N	U	N/A		
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Y X	N	U]		
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	Y X	N	- U]		

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

erra Illum Dellum

Date: 7/25/2012

Adam L. Helffrich

Eddie M. Guerra





Equipment ID No. F12A

MCC F12A

Equip. Class 1. Motor Control Centers

Equipment Description



F12A plate ID Plate of component



F12A general General view of component





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

Sheet	181	of 3	379

EN	GINEERS & C	ONSULTANTS						
Seismic Walkdow	n Checkli	ist (SWC)				Status	Y N U	
Equipment ID No.	F12D	Equip. Class	1. Motor Co	ontrol Centers				
Equipment Descrip	otion	MCC F12D						
Location: Bldg.	INTK	Floor El.	576	Room	52			
Manufacturer, Moc	lel, Etc.							
Instructions for C This checklist may SWEL. The space I findings. Additiona	ompleting be used to below each Il space is	g Checklist o document the results of h of the following question provided at the end of th	The Seismic Yons may be us is checklist for	Walkdown of ar sed to record the or documenting	i item of ec e results of other com	quipment or judgments nents.	n the and	
Anchorage								
Le the anchorage	aanfigura	tion varification required	l(i.a. iathait	am and	Y	N	_	
of the 50% of SV This a single sectio	VEL items n MCC we	s requiring such verificat elded to embed with an a	ion)? werage of 9"	of 3/16" fillet we	elds at from	nt and back.		
Vo degraded condi	tion found	around cabinet base.			v	N	II	NI/A
2. Is the anchorage	free of be	nt, broken, missing or lo	ose hardware	?	X	IN		IN/A
8		,				l		
					v			21/4
3. Is the anchorage	free of co	rrosion that is more than	mild surface		Y	N	U	N/A
oxidation?			inite surface					
					v	N	П	N/A
I. Is the anchorage	free of vis	sible cracks in the concre	te near the an	chors?	X			
No significant crac	ks identifi	ed around cabinet mount	ting base.					
					Y	N	U	N/A
5. Is the anchorage	configura	tion consistent with plan	t documentati	on?	X	l		
(Note: This quest which an ancho Since cabinet coula on SQUG calculation calculation C-CSS-	tion only a rage confi l not be op on C-CSS E12C whi	applies if the item is one guration verification is rened, configuration is verification is verified. This calculation is characteristic concludes anchorage	of the 50% fo equired.) erified based evaluates and configuration	or horage based o n is adequate.	n			
					Y	N	U	
5. Based on the abo	ve anchor	age evaluations, is the ar	nchorage free	of	X]
potentially adver	SC SCISIIII	e conditions?						

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.

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS			Sheet 182 of				
Seismic Walkdov		Status)N U				
Equipment ID No	Equip. Class 1. Motor Control Centers						
Equipment Descri	iption MCC F12D				-		
Interaction Effect 7. Are soft targets	e ts free from impact by nearby equipment or structures?	Y	N	- U	N/A		
Potential interaction adequate wall fixi	ion hazard due to near by fire extinguishers without ity. It was agreed that no significant effect expected during seismi	ic event.					
8. Are overhead e and masonry blo	quipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment?	X Y	N	T			
9. Do attached lin	es have adequate flexibility to avoid damage?	Y X	N	U	N/A		
10. Based on the a of potentially a	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?	Y X	N	U]		
Other Adverse C 11. Have you look adversely affect	Conditions ked for and found no other seismic conditions that could st the safety functions of the equipment?	Y	N	- U	1		
Comments (Addi	tional pages may be added as necessary)			-	-		
Evaluated by:	Eddie M. Guerre	_7/25/20	12	-			
	Adam I. Halffrich	7/25/20	12				





Equipment ID No. F12D Equip. Class 1. Motor Control Centers

Equipment Description

MCC F12D



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.

Paul C. Rizzo Associates, Inc.				Sheet 184 of 379
ENGINEERS & CONSULTA	NTS			Status Y N U
Seismic Walkdown Checklist (SW	C)			
Equipment ID No. FD1062	Equip. Class 0. Other			
Equipment Description FIRI	E DAMPER FD 1062			
Location: Bldg. <u>AUXB</u>	Floor El. <u>603</u>	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

 Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Component attached to ceiling and braced to wall with HSS sections 	Y	N X]	
 Is the anchorage free of bent, broken, missing or loose hardware? Damper vertical supports connected to upper floor decking between ribs. 	Y X	N	U	N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Ý X	N	U	N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors?	Y X	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	Y	N	U	N/A X
6. Based on the above anchorage evaluations, is the anchorage free of	Y X	N	U]

potentially adverse seismic conditions? 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		_	Shee	t 185 of 3
Seismic Walkdown Checklist (SWC)		Status)N U	
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			
	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? Electric line connected with adequate flexibility.	X	<u> </u>		
	Y	N	U	1
of potentially adverse seismic interaction effects?	<u> </u>			J
 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	1
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	Y X	N	U]

Comments (Additional pages may be added as necessary)

Evaluated by:

Date: 7/25/2012

Date:

7/25/2012

Sheet 185 of 379

Eddie M. Guerra Adam L. Helffrich





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

Shee	et 13	87 c	of 37	79

N/A

N/A

N/A

X

Seismic Walkdown Checklist (SWC)

Equipment ID No. FIS 1	612 Equip. Class	20. Instrumen	t and Control P	anels	
Equipment Description	SFP HX 1 FIS-1612	Cool Water Out	let Flow Indicat	ting Switch	
Location: Bldg. <u>AUX</u>	B 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

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

Floor mounted rack found in adequate condition anchored with 4~1/2" diam bolts.

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

N

N

X

X

X

X

Status Y N U

Y	N	U	N/A
X			

U

U

U

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

No signs of corrosion found on anchor bolts and bottom~1/2" plate.

4. Is the anchorage free of visible cracks in the concrete near the anchors? *No visible cracks on grout for bottom plate anchorage.*

- Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?

Anchor spacing to adjacent floor mounted rack is judged adequate.

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS			She	et 188 of 37
Seismic Walkdown Checklist (SWC)		Status	NU	
Equipment ID No. FIS 1612 Equip. Class 20. Instrument and Control	ol Panels			
Equipment Description SFP HX 1 FIS-1612 Cool Water Outlet Flow Ind	icating Switch	_		
Interaction Effects	Y	N	- U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X	L		
	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	1		
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).	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage? Flexible line and small piping were identified with adequate flexibility.	X		I	
10. Based on the above seismic interaction evaluations, is equipment free	Y	N	U	1
of potentially adverse seismic interaction effects?	<u> </u>	1	1	J
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	1
adversely affect the safety functions of the equipment?		1	1]
Comments (Additional pages may be added as necessary)			-	
- in An				
Evaluated by: Date	: 7/25/2012	2	-	
Eddie M. Guerra				

Date:

7/25/2012

Chund Dellen

Adam L. Helffrich





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 plate ID Plate of component



FIS1612 general General view of component





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	s 18. Instrum	ent (on) Racks		
Equipment Description	FLOW TRANSMIT	TER FT HP3C	2		
Location: Bldg. <u>AUXB</u>	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

 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.

2. Is the anchorage free of bent, broken, missing or loose hardware? *Supporting wall tubes found in good condition.*

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

No signs of corrosion found on mounting support and piping

4. Is the anchorage free of visible cracks in the concrete near the anchors? *No cracks identified on wall near flow transmitter.*

- 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?



Y	N	U	N/A
Х			









Seismic Walkdown Checklist (SWC)		Status		
Equipment ID No. <u>FTHP3C</u> 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			
	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? 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.				
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could	Y	N	U	
adversely affect the safety functions of the equipment?	X		1]

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:

Jerra Ulum) & ellow Eddie M. Guerra

Date: 7/25/2012

Date:

7/25/2012

Sheet 192 of 379

Adam L. Helffrich





Equipment ID No. FTHP3C Equip. Class 18. Instrument (on) Racks

Equipment Description

FLOW TRANSMITTER FT HP3C



FTHP3C ID Plate of component



FTHP3C General General view of component

Paul C. Rizzo Associates, Inc.						Sheet 194 of 3	79
Seismic Walkdow	ngineers & consu n Checklist (S	ITANTS				Status: YN U	
Equipment ID No.	FV6451	Equip. Clas	s 8B. Solenoi	d Valves			
Equipment Descrip	ption <u>S</u>	OLENOID VALV	E AF6451				
Location: Bldg.	AUXB	Floor El.	565	Room	238	_	
Manufacturer, Mo	del, 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]	
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
	Y	N	U	N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation?			1	
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
	Y	N	U	N/A
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				
	Y	N	U	
6. Based on the above anchorage evaluations, is the anchorage free of	X		T	1

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

Main pipe line adequatelly supported. No excessive unsupported lengths identified.

Paul C. Rizzo Associates, Inc.		She	eet 195 of	
Seismic Walkdown Checklist (SWC)			ט א	
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			
	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? No block walls or potential interaction hazard identified in the area.	X			
	Y	N	U	N/A
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				
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	Y X	N	U]

Comments (Additional pages may be added as necessary)

Evaluated by:

Eddie M. Guerra

7/25/2012

Adam L. Helffrich

7/25/2012

Date:

Date:





Equipment ID No. FV6451

Equip. Class 8B. Solenoid Valves

Equipment Description

SOLENOID VALVE AF6451



FV-6451 Plate ID Plate of component



FV-6451 General2 General view of component

Status: YN U

N

 $\frac{Y}{X}$

U

Seismic Walkdown Checklist (SWC)

Equipment ID No.	FV6452	Equip. Class	8B. Soleno	id Valves			
Equipment Descripti	ion	SOLENOID VALVE	AF6452				
Location: Bldg.	AUXB	Floor El.	565	Room	237	_	
Manufacturer, Mode	el, 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

 Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Mounted on pipe line spannig around 10ft. 	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?Valve and pipe line found with good surface condition and no signs of corrosion.	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?
| Paul C. Rizzo Associates, Inc. | | | She | eet 198 of 379 |
|---|---|--------|-----|----------------|
| ENGINEERS & CONSULTANTS | | Status | NU | |
| Seismic Walkdown Checklist (SWC) | | | · | |
| Equipment ID No. <u>FV6452</u> 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 | | L | |
| | Y | N | U | N/A |
| and masonry block walls not likely to collapse onto the equipment? | | | | |
| | Y | N | U | N/A |
| Attached lines found with adequate flexibiliy. | | | | <u></u>] |
| | Y | N | U | 1 |
| 10. Based on the above seismic interaction evaluations, is equipment free
of potentially adverse seismic interaction effects? | | | L |] |
| Other Adverse Conditions | | | _ | |
| 11. Have you looked for and found no other seismic conditions that could
adversely affect the safety functions of the equipment? | Y | N | U |] |
| Comments (Additional pages may be added as necessary) | | | - | |

Evaluated by:

Date: 7/25/2012

Eddie M. Guerra

Adam L. Helffrich

7/25/2012

Date:





Equipment ID No.	FV6452	Equip. Class	8B. Solenoid Valves	
Equipment Descript	ion	SOLENOID VALVE	AF6452	

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



FV6452 general General view of component

Status: N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. HIS 5889A	Equip. Class	20. Instrument and C	Control Panel	ls
Equipment Description AFP T	URB 1-1 STEA	M INLET VALVE in	nside PNL C	5709
Location: Bldg. <u>AUXB</u>	Floor El.	623	Room 5	05
Manufacturer, Model, Etc.			-	

Instructions for Completing Checklist

potentially adverse seismic conditions?

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 X of the 50% of SWEL items requiring such verification)? Inside Panel C5709, which has similar anchorage to Panel C5702. Back panel doors are adequately attached to panel structure with 4-1/2" screws. Y N U N/A 2. Is the anchorage free of bent, broken, missing or loose hardware? X None observed. N U N/A 3. Is the anchorage free of corrosion that is more than mild surface oxidation? None observed. Y N U N/A X 4. Is the anchorage free of visible cracks in the concrete near the anchors? None observed. U N/A N 5. Is the anchorage configuration consistent with plant documentation? X (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y N Х 6. Based on the above anchorage evaluations, is the anchorage free of

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	ENGINEERS & CONSULTANTS	

Status: YN 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 F	NL C5709	-		-
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			
0. De attached lines have adapted flavikility to avaid damage?	Y	N	U	N/A
9. Do attached thes have adequate nexionity to avoid damage?			1	
	Y	N	U	
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	X]
Other Adverse Conditions	6		-	
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	Y X	N	U]

Comments (Additional pages may be added as necessary)

Evaluated by:

Eddie M. Guerra

7/25/2012

Date:

Date:

Adam L. Helffrich

7/25/2012

Sheet	202	of 3	79

Status: YN U

Seismic Walkdown Checklist (SWC)

Equipment ID No. HIS 7528	Equip. Class	20. Instru	nent and Control Pa	inels	
Equipment Description	SFAS CHANNEL 1 E	BLOCK SW	inside PNL C5705		 -
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	11		
	X]	
Y	Ν	U	N/A
X			
Y	N	<u> </u>	N/A
X			
Y	N	U	N/A
X		Γ	
Y	N	U	N/A
		Γ	X
Y	N	U	
X			
	$\begin{array}{c} Y \\ X \\ Y \\ X \\ Y \\ X \\ Y \\ X \\ Y \\ Y \\$	$\begin{array}{c c} Y & N \\ \hline X \\ \hline Y \\ \hline X \\ \hline \end{array}$	$\begin{array}{c c} Y \\ \hline X \\ \hline Y \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ \hline X \\ X \\ \hline X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ X \\ $

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

Paul C. Rizzo Associates, Inc.			Sh	eet 203 of 379
Seismic Walkdown Checklist (SWC)		Status:)N U	
Equipment ID No. HIS 7528 Equip. Class 20. Instrument and Control	ol Panels			
Equipment Description SFAS CHANNEL 1 BLOCK SW inside PNL C5	705			-
Interaction Effects 7 Are soft targets free from impact by nearby equipment or structures?	Y	N	- U	N/A
			1	
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	Y X	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?	Y X	N	U I	N/A
10 Deceden the characteristic interaction and heating is a minute for	Y	N	U	1
of potentially adverse seismic interaction effects?				J
Other Adverse Conditions				
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	Y	N	U]
Comments (Additional pages may be added as necessary)				

Evaluated by:

Eddie M. Guerra

erra Unum & Mary

Adam L. Helffrich

Date:

Date:

7/25/2012

7/25/2012

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Status YN U

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Seismic	waikdown	C necklist (SWUI
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Equipment ID No. hp2b	_ Equip. Class	8A. Motor-Operated Valves	
Equipment Description	MOTOR OPERATED	VALVE HP-2B	
Location: Bldg. AUXB	- Floor El.	565 Room	236
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 on	ie
of the 50% of SWEL items requiring such verification)?	

Valve is horizontally mounted on the pipe. There is an anchor right below the valve.

- 2. Is the anchorage free of bent, broken, missing or loose hardware?
- 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
- MOV found with good surface finish and no signs of corrosion.
- 4. Is the anchorage free of visible cracks in the concrete near the anchors?
- 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?



Y	N	U	N/A X
Y	N	U	N/A
			X







ヒイ	Paul C. Rizzo Associates,	Inc.
	ENGINEERS & CONSULTANTS	

Status Y N U

a • •	**/ ** *	CI 111 4	(OIII)O
Seismic	Walkdown	Checklist	(SWC)

Equipment ID No. hp2b Equip. Class 8A. Motor-Operated Valves

Equipment Description MOTOR OPERATED VALVE HP-2B		-		-
Interaction Effects	Y	N	- U	N/A
7. Are soft targets free from impact by nearby equipment or structures? No potential interaction hazards identified from nearby equipment.	X			
	Y	N	U	N/A
 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 as walls 2337 and 2347. Block wall hazard identified as Non-Credible. 	<u> </u>		<u> </u>	
	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage? Flexible lines inspected and 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			-	
adversely affect the safety functions of the equipment?	Y X	N	U]

Comments (Additional pages may be added as necessary)

Pipe enters containment penetration P-20 from Aux. Building. The pipe is judged adequate for Seismic Anchor Motion loads (~15' of flex. Length)

Evaluated by:

Eddie M. Guerra

Date: 7/25/2012

a a dum) Dellour

Date: 7/25/2012

Adam L. Helffrich





Equipment ID No. <u>hp2b</u> Equip. Class 8A. Motor-Operated Valves
Equipment Description
MOTOR OPERATED VALVE HP-2B
Other supporting or relevant documents and photos (if any):

HP2B Plate ID Plate of component



HP2B General General view of component

Sheet	207	of 3	79

Status YN U

Seismic Walkdown Checklist (SWC)

Equipment ID No. hp2c	Equip. Class	8A. Motor-	-Operated Valves		
Equipment Description	MOTOR OPERATEI	VALVE H	P-2C		
Location: Bldg. <u>AUXI</u>	B 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	_	
1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?		Х]	
Pipe is adequately supported at $\sim 24''$ on either side of the valve.				
	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
	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 varification is required.)				X
mien an anenerage comparation refineation is required.)				
	v	N	II	

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

Paul C. Rizzo Associates, Inc.			She	eet 208 of 379
Seismic Walkdown Checklist (SWC)		Status	N U	
Equipment ID No. <u>hp2c</u> Equip. Class 8A. Motor-Operated Valves				
Equipment Description MOTOR OPERATED VALVE HP-2C		-		-
Interaction Effects	Y	N	U	N/A
7. Are soft targets free from impact by hearby equipment or structures?				
	Y	N	U	N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?				
	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage? Attached lines were found with adequate flexibility.	X	I		
	Y	N	U	1
of potentially adverse seismic interaction effects?		I]
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 X	N	U]
Comments (Additional pages may be added as necessary)			•	

Evaluated by:

Date: 7/25/2012

Date:

Eddie M. Guerra

7/25/2012

01

.

Adam L. Helffrich





Equipment ID No. hp2c

Equip. Class 8A. Motor-Operated Valves

Equipment Description

MOTOR OPERATED VALVE HP-2C Other supporting or relevant documents and photos (if any):



HP2C General General view of component

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS Seismic Walkdown Checklist (SWC)

Equipment ID No.	HV5314	Equip. Class	0. Other				
Equipment Descrip	otion	MOTOR-OPERATED	DAMPER	HV 5314			
Location: Bldg.	AUXB	Floor El.	623	Room	515	_	
Manufacturer, Moo	lel, 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	Y	N X	1	
of the 50% of SWEL items requiring such verification)?	Language		1	
HSS 6x6 rack anchored to floor and wall found in adequate condition.				
Damper attached to rack with four 1/2" diameter bolts.				
	Y	Ν	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
	Y	Ν	U	N/A
3. Is the anchorage free of corrosion that is more than mild surface	X			
oxidation?				
	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?				X
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				
	Y	N	U	

Х

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

Status YN U

Paul C. Rizzo Associates, Inc.		She	eet 211 of	
Seismic Walkdown Checklist (SWC)	Status	ט א		
Equipment ID No. <u>HV5314</u> Equip. Class 0. Other				
Equipment Description MOTOR-OPERATED DAMPER HV 5314				-
Interaction Effects	Y	N	U	N/A
7. Are soft targets free from impact by nearby equipment or structures?	X		1	L
	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?			1	
	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage? Flexible lines attached to component found in good condition.				
10. Based on the above seismic interaction evaluations, is equipment free	Y	N	U	1
of potentially adverse seismic interaction effects?		1	1	1
Other Adverse Conditions	v	N	- 11	
adversely affect the safety functions of the equipment?	X]

Date:

Date:

7/25/2012

7/25/2012

Sheet 211 of 379

Comments (Additional pages may be added as necessary)

Evaluated by:

Eddie M. Guerra

Adam L. Helffrich





Equip. Class 0. Other Equipment ID No. HV5314

Equipment Description

MOTOR-OPERATED DAMPER HV 5314 Other supporting or relevant documents and photos (if any):



HV5314 Plate ID Plate of component



HV5314 General General view of component



Status YN U

Seismic Walkdown Checklist (SWC)

Equipment ID No. HV5314 Equip. Class 0. Other

Equipment Description

MOTOR-OPERATED DAMPER HV 5314



HV5314 anchorage View of anchorage

Status YN U

Seismic	Walkdown	Checklist	(SWC)	

Equipment ID No.	IA-636	Equip. Class	7. Pneumatio	c-Operated Valves	3	
Equipment Descript	ion	IA PCV FOR MU66A				
Location: Bldg.	AUXB	Floor El.	565	Room	208	
Manufacturer, Mode	el, 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

 Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Small solenoid value on strut channel, which is attached to concrete wall. 	Y	X]	
	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
	Y	N	U	N/A
 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

X

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



Seismic Walkdown Checklist (SWC)		Status	N U	
Equipment ID No. <u>IA-636</u> Equip. Class 7. Pneumatic-Operated Valv	ves			
Equipment Description IA PCV FOR MU66A				•
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?				
	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage? Attached lines were 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			•	
11. Have you looked for and found no other seismic conditions that could	Y	N	U	
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





Equipment ID No. IA-636

Equip. Class 7. Pneumatic-Operated Valves

Equipment Description

IA PCV FOR MU66A

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



IA-636 Plate and General General view of component

Status Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. ICS11A	Equip. Class	7. Pneumati	ic-Operated Valves	
Equipment Description	ICS11A Atmosphere	vent valve		
Location: Bldg. <u>AUXB</u>	Floor El.	643	Room <u>602</u>	
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]	
Y	N	U	N/A
X			
Y	N	U	N/A
X			
Y	N	U	N/A
X			
Y	N	U	N/A
			X
	Y X Y X Y X	Y N X Y N X Y N X Y N X Y N	$\begin{array}{c c c} Y & N \\ \hline X \\ \hline \end{array} \\ \hline Y \\ \hline X \\ \hline \end{array} \\ \hline Y \\ \hline X \\ \hline \end{array} \\ \hline \\ Y \\ \hline Y \\ \hline \end{array} \\ \hline \\ Y \\ \hline \end{array} \\ \hline \\ Y \\ \hline \end{array} \\ \hline \\ \hline \\ Y \\ \hline \end{array} \\ \hline \\ \hline \\ Y \\ \hline \end{array} \\ \hline \\ \hline \\ Y \\ \hline \end{array} \\ \hline \\$

Y

Х

N

U

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

		Sh	eet 218 of 37
	Status	N U	
Valves			
	_		-
Y X	N	U	N/A
Y X	N	U	N/A
Y X	N	U	N/A
Y X	N	U]
Y	N	- U	7
	Valves Y X Y X Y X Y X Y X	Valves Valves Y N	Status Y N Valves Y N Y N Y N Y N Y N Y N Y N Y N Y N Y N Y N Y N Y N Y N Y N Y N Y N Y N Y N

Evaluated by:

Eddie M. Guerra

Date: 7/25/2012

7/25/2012 Date:

Adam L. Helffrich





Equipment ID No. ICS11A Equip. Class 7. Pneumatic-Operated Valves

Equipment Description

ICS11A Atmosphere vent valve

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



ICS11A Plate ID Plate of component



ICS11A General General view of component





Equipment ID No. <u>ICS11A</u> Equip. Class 7. Pneumatic-Operated Valves

Equipment Description

ICS11A Atmosphere vent valve



ICS11A brace2 Brace support for component



ICS11A brace Brace support for component





Equipment ID No. <u>ICS11A</u> Equip. Class 7. Pneumatic-Operated Valves

Equipment Description

ICS11A Atmosphere vent valve



ICS11A anchor View of anchorage

U

Seismic Walkdown Checklist (SWC)

Equipment ID No. <u>K5-1</u>	Equip. Class	17. Engine Generators	
Equipment Description	Diesel Generator		
Location: Bldg. <u>AUXI</u>	B Floor El.	<u>585</u> Roo	m <u>318</u>
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)?

2. Is the anchorage free of bent, broken, missing or loose hardware? *Equipment found to be stitch welded to base.*

- 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
- 4. Is the anchorage free of visible cracks in the concrete near the anchors?
- 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
 Anchorage detail found to be consistent with the presented in SQUG calc C-CSS-K5-1. 16 - 1 1/4" cast-in place bolts spaced around 5ft each.
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?



Status Y







Paul C. Rizzo Associates, Inc.			She	Sheet 223 of 379		
ENGINEERS & CONSULTANTS		Status	N U			
Seismic Walkdown Checklist (SWC)						
Equipment ID No. <u>K5-1</u> Equip. Class 17. Engine Generators						
Equipment Description Diesel Generator		-		•		
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. Associated block walls identified as: 308D, 309D, 310D, 311D, 338D See Appendix C from report for references. Identified as seismically adeauate.						
	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	<u> </u>]		
Other Adverse Conditions			•			
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	Y X	N	U]		
Comments (Additional pages may be added as necessary)						

Evaluated by:

Eddie M. Guerra

Date: 7/25/2012

Date: 7/25/2012

Adam L. Helffrich

Status: Y

Y

N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. <u>K5-2</u>	Equip. Class	17. Engine Generato	ors		
Equipment Description	Diesel Generator				
Location: Bldg. <u>AUXI</u>	B 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

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

2. Is the anchorage free of bent, broken, missing or loose hardware? *Equipment found to be stitch welded to base.*

- 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
- 4. Is the anchorage free of visible cracks in the concrete near the anchors?
- 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
 Anchorage detail found to be consistent with the presented in SQUG calc C-CSS-K5-2. 16 - 1 1/4" cast-in place bolts spaced around 5ft each.
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?





ヒィ	Paul C. Rizzo Associates,	Inc.
_	ENGINEERS & CONSULTANTS	

N/A

N/A

N/A

U

U

N

N

Seismic Walkdown Checklist (SWC)			
Equipment ID No. <u>K5-2</u> Equip. Class 17. Engine Generators			
Equipment Description Diesel Generator		•	
Interaction Effects	Y	N	U
7. Are soft targets free from impact by nearby equipment or structures?			1
	Y	N	U
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.	X		
Block wall 304D verified to be to be seismically adequate based on ref. VBW12-B001-064, Rev 8 (8/26/87).	Y	N	U

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

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

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by:

erra Iduni) & elliniu

7/25/2012

7/25/2012

Date:

Date:

Х

Y

X

Y

X

Eddie M. Guerra

Adam L. Helffrich





Equipment ID No. K5-2

Equip. Class 17. Engine Generators

Equipment Description

Diesel Generator

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



K5-2 plate ID Plate of component



K5-2 general General view of component



Status Y N U

Seismic Walkdown Checklist (SWC)

Equipment ID No.	K5-2	Equip. Class	17. Engine Generators	
Equipment Descript	ion	Diesel Generator		



K5-2 anchor bolt Partial view of anchorage, view is typical of all anchors

Status: YN U

Seismic Walkdown Checklist (SWC)

Equipment ID No. <u>L311</u>	Equip. Class	20a. Inst. in control panel/cabinet			
Equipment Description	LOGIC CHANNEL 1	MODULE	L311		
Location: Bldg. <u>AUXB</u>	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	Ν		
1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?		Х]	
<i>Inside of panel C5762C. While anchorage of the panel is external to the panel, they are covered by a trip protection covering that could not be removed.</i>				
Anchorage condition based on SQUG calc C-CSS-C5762C.	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
	v	N	II	NI/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation?		1		
	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
 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]

C-CSS-C5762C calculations indicate that MOD95-0032 resolves anchorage concerns and cabinet bolting issues. It was verified that the adjacent panels are connected at the top. Anchorage adequacy deemed seismically adequate.

Based on good condition of panel and SQUG SEWS, anchorage is judged to be in adequate condition.

Paul C. Rizzo Associates, Inc.			She	et 229 of 379
Seismic Walkdown Checklist (SWC)		Status	N U	
Equipment ID No. <u>L311</u> Equip. Class 20a. Inst. in control panel	/cabinet			
Equipment Description LOGIC CHANNEL 1 MODULE L311				-
Interaction Effects 7. Are soft targets free from impact by nearby equipment or structures?	Y X	N	U	N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	Y X	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?	Y X	N	U	N/A
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Y X	N	U]
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	Y X	N	- U]
Comments (Additional pages may be added as necessary)				

Date:

Date:

7/25/2012

7/25/2012

Evaluated by:

Eddie M. Guerra

Adam L. Helffrich





Equipment ID No.	L311	Equip. Class	20a. Inst. in control panel/cabinet	
Equipment Descript	ion	LOGIC CHANNEL 1	MODULE L311	



L311 General view of component





Equipment ID No.	L311	Equip. Class 20a.	Inst. in control panel/cabinet	
Equipment Descript	ion	LOGIC CHANNEL 1 MOI	DULE L311	



L311-511 cabinet General View of Cabinet housing components



L311-511 cabinets bolted together inbetween Cabinets are bolted together in the middle





Equipment ID No.	L311	Equip. Class	20a. Inst. in control	panel/cabinet

Equipment Description

LOGIC CHANNEL 1 MODULE L311



L311-511 cabinets welded together on left Cabinets are welded together on the left side



L311-511 cabinets welded together on right Cabinets are welded together on the right side

Status YN U

Seismic Walkdown Checklist (SWC)

Equipment ID No. <u>L511</u>	Equip. Class	20a. Inst. in control panel/cabinet		
Equipment Description	LOGIC CHANNEL 1	MODULE	L511	
Location: Bldg. <u>AUX</u>	B Floor El.	623	Room <u>502</u>	
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]	
Inside of panel C5762C. While anchorage of the panel is external to the panel, the	ey			
are covered by a trip protection covering that could not be removed. Anchorage c	ondition			
based on SQUG calc C-CSS-C5762C.	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X			
	N	NT		21/4
	Y	N		
oxidation?				<u> </u>
	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?				X
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				
	Y	N	U	
6. Based on the above anchorage evaluations, is the anchorage free of	X]
and a construction of the second s				

potentially adverse seismic conditions? C-CSS-C5762C calculations indicate that MOD95-0032 resolves anchorage concerns and cabinet bolting

issues. It was verified that the adjacent panels are connected at the top.

Anchorage adequacy deemed seismically adequate.

Based on good condition of panel and SQUG SEWS, anchorage is judged to be in adequate condition.
Paul C. Rizzo Associates, Inc.			She	et 234 of 379
Seismic Walkdown Checklist (SWC)		Status	N U	
Equipment ID No. <u>L511</u> Equip. Class 20a. Inst. in control pane	l/cabinet			
Equipment Description LOGIC CHANNEL 1 MODULE L511				
Interaction Effects 7. Are soft targets free from impact by nearby equipment or structures?	Y X	N	U	N/A
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	Y X	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?	Y X	N	U	N/A
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Y X	N	U]
Other Adverse Conditions 11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?	Y X	N	U	I
Comments (Additional pages may be added as necessary)			•	

Evaluated by:

7/25/2012 Date:

Eddie M. Guerra

erra Ulum) & elleme

Adam L. Helffrich

Date: 7/25/2012





Equipment ID No.	L511	Equip. Class	20a. Inst. in control panel/cabinet	

Equipment Description

LOGIC CHANNEL 1 MODULE L511

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



L511 General view of component





Equipment ID No.	L511	Equip. Class 20a. Inst. in control panel/cabinet
Equipment Description	on	LOGIC CHANNEL 1 MODULE L511



L311-511 cabinet General View of Cabinet housing components



L311-511 cabinets bolted together inbetween Cabinets are bolted together in the middle





Equipment ID No. L511

Equip. Class 20a. Inst. in control panel/cabinet

LOGIC CHANNEL 1 MODULE L511

Equipment Description



L311-511 cabinets welded together on left Cabinets are welded together on the left side



L311-511 cabinets welded together on right Cabinets are welded together on the right side

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS

Status: Y

NU

Seismic Walkdown Checklist (SWC)

Equipment ID No. <u>LI-1525A</u>	Equip. Class	20. Instru	ment and Control Pa	anels		
Equipment Description	BWST LEVEL INDIC	CATOR IN	SIDE PNL C5716			-
Location: Bldg. <u>AUXB</u>	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		Х]	
of the 50% of SWEL items requiring such verification)?				
Anchorage could not be verified due to mastic covering bottom of panel.				
	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	X			
oxidation?				
	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?				X
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				

Х

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

L'Y	Paul C. Rizzo Associates,	Inc.
	ENGINEERS & CONSULTANTS	

Status YN U

Seismic Walkdown Checklist (SWC)

Equipment ID No. LI-1525A Equip. Class 20. Instrument and Control Panels

	BWST LEVEL INDICATOR INSIDE PNL C5/16				
Interaction Effec	ts	Y	N	U	N/A
7. Are soft targets	free from impact by nearby equipment or structures?	X		1	
		Y	N	U	N/A
8. Are overhead ea and masonry blo Seismic capacity of	quipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment? of block walls in the area verified	<u> </u>			
Block walls in roo Refer to Appendix	om 502 found to be seismically adequate per 80-11 documentation. C for list of walls associated to component.				
		Y	N	U	N/A
9. Do attached line	es have adequate flexibility to avoid damage?	X			
		Y	N	U	
10. Based on the a	bove seismic interaction evaluations, is equipment free	X			1
Other Adverse C 11. Have you look adversely affec	Conditions and found no other seismic conditions that could bet the safety functions of the equipment?	Y X	N	- U I]
Comments (Addi	tional pages may be added as necessary)				
Evaluated by:	- detie White At Data	7/25/2012			
	Date.				
	Eddie M. Guerra				
	Eddie M. Guerra	7/25/2012			





Equipment ID No. LI-1525A

Equip. Class 20. Instrument and Control Panels

Equipment Description

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

BWST LEVEL INDICATOR INSIDE PNL C5716



L11525A Plate and General Overall view of component and anchorage