APPENDIX B SEISMIC WALKDOWN CHECKLISTS (SWCs)

Paul C. Rizzo Assoc ENGINEERS & CONSULTANTS	ciates, Inc.					Sheet 1 of 4
Seismic Walkdown Checklist (S	SWC)		Status:	\heartsuit	N	U
Equipment ID No. <u>1CC-E-1A</u>	Equip. Class	21. Tanks and Heat Excha	ngers			
Equipment Description <u>P</u>	rimary Plant Comp	onent Cooling Water Heat ex	changer			
Location: Bldg. <u>AXLB</u>	Floor El.	735				
Manufacturer, Model, Etc.						
Instructions for Completing Ch This checklist may be used to do SWEL. The space below each of findings. Additional space is prov	cument the results o the following quest	tions may be used to record th	e results of judgm			
Anchorage			V	N		
1. Is the anchorage configuration			Y X	IN		
of the 50% of SWEL items req Long heat exchanger on two sadd anchored with 28-1 1/2" diam and diam amchors.	dles hung from the d	ceiling. Fixed support at ceili				
		h	Y	N	U	N/A
2. Is the anchorage free of bent, b	broken, missing or h	oose naroware?		<u> </u>		
			Y	N	U	N/A
3. Is the anchorage free of corros oxidation?	ion that is more tha	n mild surface	X		<u> </u>	
			Y	N	U	N/A
4. Is the anchorage free of visible	e cracks in the conc	rete near the anchors?	X			
			Y	<u>N</u>	U	<u>N/A</u>
5. Is the anchorage configuration (Note: This question only appl which an anchorage configur	ies if the item is on	e of the 50% for	X			
Anchorage configuration confirm						
6. Based on the above anchorage	evaluations is the	anchorage free of	Y	N	U	7
potentially adverse seismic co		anonorage nee 01			I	

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS				Sheet 2 of 439
Seismic Walkdown Checklist (SWC)	Status	(N	U
Equipment ID No. <u>1CC-E-1A</u> Equip. Class 21. Tanks and Heat Ex	changers			
Equipment Description Primary Plant Component Cooling Water Hea	t exchanger			
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,	Y	N	U	N/A
and masonry block walls not likely to collapse onto the equipment?				
9. Do attached lines have adequate flexibility to avoid damage?	Y X	N	U	N/A
	Y	<u>N</u>	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	Date: 10/1	/2012		
			-	

Adam L. Helffrich

Date:





Status: 🕲 N U

Seismic Walkdown Checklist (SWC) Equipment ID No. <u>1CC-E-1A</u>

Equip. Class 21. Tanks and Heat Exchangers

Equipment Description

Primary Plant Component Cooling Water Heat exchanger



File Name: 2-61-1-1-44.jpeg Description: Component Plate ID



File Name: 2-62-1-1-44.jpeg Description: General view of component

U

Y

N



Seismic Walkdown Checklist (SWC) Status:

Equipment ID No. 1CC-E-1A

Equip. Class 21. Tanks and Heat Exchangers

Equipment Description

Primary Plant Component Cooling Water Heat exchanger



File Name: 2-63-1-1-44.jpeg Description: View of anchorage for fixed support



File Name: 2-64-1-1-44.jpeg Description: View of anchorage for sliding support

Paul C. Rizzo A ENGINEERS & CONSULTA	Associates, Inc.					Sheet 5 of 439
Seismic Walkdown Checkli	st (SWC)		Status:	\odot	N	U
Equipment ID No. <u>1EE-EC</u>	<u>-1</u> Equip. Class	17. Engine Generators				
Equipment Description	Diesel Generator					
Location: Bldg. DGBX	Floor El.	735				
Manufacturer, Model, Etc.						
SWEL. The space below each	o document the results of h of the following question	the Seismic Walkdown of an i ons may be used to record the is checklist for documenting or	results of judgme			
Anchorage			Y	N		
1. Is the anchorage configura	-			1		
	m anchor bolts. 6 of 14 a 1/2" between floor and b that the skid has adequa	nchors are below the engine ase of DG skid. Other anchors te capacity for the demand loa	ds.			
2. Is the anchorage free of be	ent broken missing or lo	ose hardware?	Y X	N	U	N/A
3. Is the anchorage free of co oxidation?			Y	N	U	N/A
			Y	N	U	N/A
4. Is the anchorage free of vi	sible cracks in the concre	ete near the anchors?	X			
5. Is the anchorage configura	tion consistent with plan	t documentation?	Y	N	U	N/A
(Note: This question only which an anchorage conf <i>Calculation 52233-C-018, pa</i>	applies if the item is one iguration verification is r	of the 50% for equired.)			L	- d
 Based on the above ancho potentially adverse seismi 		nchorage free of	Y X	N	U	
	-	not to be grouted for their ent les justification for this finding				

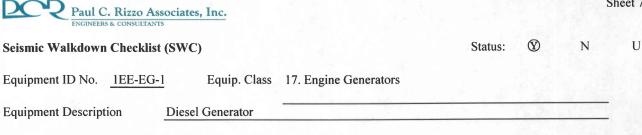
	C. Rizzo Associates, Inc.					Sheet 6 of 439
	n Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No.	<u>1EE-EG-1</u> Equip. Class 17. Engine Generators					
Equipment Descrip	ption Diesel Generator					
Interaction Effect	ts					
7. Are soft targets	free from impact by nearby equipment or structures?	E	Y X	N	<u> </u>	N/A
			Y	N	U	N/A
	uipment, distribution systems, ceiling tiles and lighting,		X			
and masonry blo	ck walls not likely to collapse onto the equipment?					
		-	Y	<u>N</u>	U	N/A
9. Do attached line	es have adequate flexibility to avoid damage?	L	Х			<u> </u>
		F	<u>Y</u>	N	U	
	bove seismic interaction evaluations, is equipment free dverse seismic interaction effects?	L	X			
Other Adverse C	onditions					
	ed for and found no other seismic conditions that could	г	$\frac{Y}{X}$	N	U	7
adversely affec	t the safety functions of the equipment?	L				
Comments (Addit	ional pages may be added as necessary)					
	atte Mahra It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012		
	a some					

Church Deller

Adam L. Helffrich

Date:

Sheet	7	of	439	





File Name: 2-61-8-1-20.jpeg Description: Component Plate ID



File Name: 2-62-8-1-20.jpeg Description: General view of component

U

 (\mathbf{Y})

N

Status:



Seismic Walkdown Checklist (SWC)

Equipment ID No. <u>1EE-EG-1</u> Equip. Class 17. Engine Generators

Equipment Description

Diesel Generator



File Name: 2-63-8-1-20.jpeg Description: View of marks surrounding DG exhaust pipe.



File Name: 2-64-8-1-20.jpeg Description: Partial view of anchorage configuration

U

1

N

Status:



Seismic Walkdown Checklist (SWC)

Equipment ID No. 1EE-EG-1

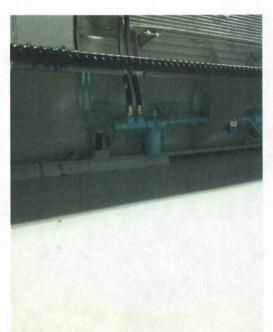
Equip. Class 17. Engine Generators

Equipment Description

Diesel Generator



File Name: 2-73-8-1-20.jpeg Description: View of base detail showing no grout below DG's middle section.



File Name: 2-94-8-1-20.jpeg Description: View of base anchors and grouted section for DG base.

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS			S	heet 10 of 4
Seismic Walkdown Checklist (SWC)	Status:	(Ν	U
Equipment ID No. <u>1EE-EG-2</u> Equip. Class 17. Engine Generators				
Equipment Description Diesel Generator				-
Location: Bldg. DGBX Floor El. 735				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an SWEL. The space below each of the following questions may be used to record the findings. Additional space is provided at the end of this checklist for documenting	results of judgme			
Anchorage		N		
1. Is the anchorage configuration verification required (i.e., is the item one	Y X	N		
of the 50% of SWEL items requiring such verification)? Anchored with 14-1 1/4" diam anchor bolts. 6 of 14 anchors are below the engine block and there is a gap of $\sim 1/2$ " between floor and base of DG skid. Other anchor have grout pads. It is judged that the skid has adequate capacity for the demand lo Also it is judged that bolt bending is not a concern due to gap of $\sim 1 1/2$ ". (see also calculation 52233-C-018).	ads.	N	ŦŢ	N//4
2. Is the anchorage free of bent, broken, missing or loose hardware?	Y X	N	U	N/A
	Y	N	U	N/A
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?	Y	N	U	N/A
4. Is the anchorage free of visible clacks in the concrete hear the anchors?	A			L
5. Is the anchorage configuration consistent with plant documentation?	Y	N	U	N/A
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Calculation 52233-C-018, page 4/17 confirms the anchorage configuration. 			L	
	Y	N	U	7
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	X]
The support beams for the EDG skids were identified not to be grouted for their en length. SQUG and design basis documentation provides justification for this finding				

Sheet 10 of 439

Paul ENGIN	I C. Rizzo Associates, Inc. EERS & CONSULTANTS				:	Sheet 11 of 439
Seismic Walkdov	wn Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No	Equip. Class 17. Engine Generators					
Equipment Descr	iption Diesel Generator					-
Interaction Effe	cts					
7. Are soft targets	s free from impact by nearby equipment or structures?		Y X	N	U	N/A
			Y	N	U	N/A
	equipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment?		X	1		
·						
9. Do attached lin	es have adequate flexibility to avoid damage?		Y X	N	U	N/A
			Y	N	U	
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?	<u> </u>	X]
	ked for and found no other seismic conditions that could		Y	N	U	7
adversely affe	ct the safety functions of the equipment?	L	X			
Comments (Add	itional pages may be added as necessary)					
	atter Mehren It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012		
	ze 1 10 Main					

Charge & officer

Adam L. Helffrich

Date:

U

N

(Y)

Status:



Seismic Walkdown Checklist (SWC)

Equip. Class 17. Engine Generators

Equipment ID No. 1EE-EG-2

Equipment Description

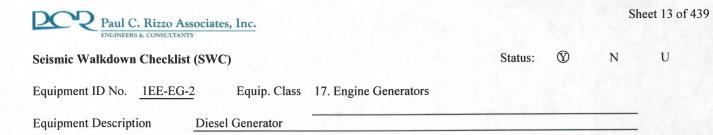
Diesel Generator



File Name: 2-61-3-1-21.jpeg Description: Component Plate ID



File Name: 2-62-3-1-21.jpeg Description: General view of component

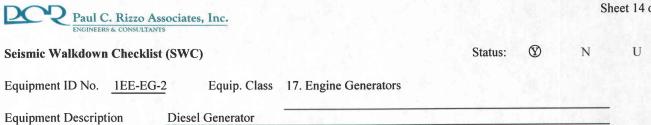




File Name: 2-63-3-1-21.jpeg Description: General view of DG exhaust pipe



File Name: 2-64-3-1-21.jpeg Description: Partial view of anchorage configuration





File Name: 2-73-3-1-21.jpeg Description: View of base detail showing no grout below DG's middle section.

Paul C. Rizzo Associates, Inc.			9	Sheet 15 of 439
Seismic Walkdown Checklist (SWC)	Status:	\odot	N	U
Equipment ID No. <u>1FC-E-1A</u> Equip. Class 21. Tanks and Heat Exchangers	5			
Equipment Description Fuel Pool Heat Exchanger 1A				_
Location: Bldg. <u>FULB</u> Floor El. <u>735</u>				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an iter SWEL. The space below each of the following questions may be used to record the res findings. Additional space is provided at the end of this checklist for documenting othe	ults of judgn	nents and		
Anchorage	V	N		
1. Is the anchorage configuration verification required (i.e., is the item one	Y	N X		
of the 50% of SWEL items requiring such verification)? Mounted on two saddles. Fixed saddle with $8-5/8''$ diam anchor bolts and sliding saddle with $4-5/8''$ diam anchors. Mounted on $\sim 3'-6''$ tall concrete pedestal. No edge distance issue found.		-		
	Y	<u>N</u>	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X	<u> </u>		
3. Is the anchorage free of corrosion that is more than mild surface	Y X	<u>N</u>	U	N/A
oxidation?				
	Y	N	U	N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X	.		
	Y	<u>N</u>	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.) 		I		X
	Y	N	U	_
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	X		<u></u>	

	C. Rizzo Associates, Inc.					Sheet 16 of 439
Seismic Walkdow	vn Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No	. <u>1FC-E-1A</u> Equip. Class 21. Tanks and Heat Ex	changers				
Equipment Descri	ption Fuel Pool Heat Exchanger 1A					
Interaction Effec	ts					
7. Are soft targets	free from impact by nearby equipment or structures?		Y X	N	U	N/A
			Y	N	U	N/A
	quipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment?		X			
			Y	N	U	N/A
	es have adequate flexibility to avoid damage? nd to be well supported.		X			
			Y X	N	U	
	above seismic interaction evaluations, is equipment free dverse seismic interaction effects?					
Other Adverse C	1					
11. Have you look	ted for and found no other seismic conditions that could tet the safety functions of the equipment?		Y X	N	U	-
Comments (Addi	tional pages may be added as necessary)					
	atter Mahrie It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20	012		
	Stand & Albun					
		Date:	10/1/2	012		



Status: 🕅 N U

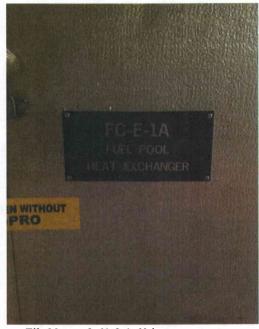
Equipment ID No. 1FC-E-1A

Seismic Walkdown Checklist (SWC)

Equip. Class 21. Tanks and Heat Exchangers

Equipment Description

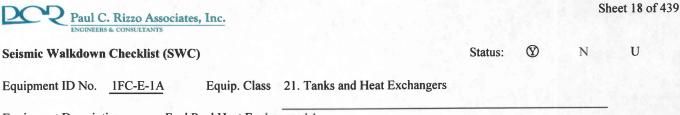
Fuel Pool Heat Exchanger 1A



File Name: 2-61-2-1-60.jpeg Description: Component Plate ID



File Name: 2-62-2-1-60.jpeg Description: General view of component



Equipment Description

Fuel Pool Heat Exchanger 1A



File Name: 2-63-2-1-60.jpeg Description: View of saddle outter anchorage configuration



File Name: 2-64-2-1-60.jpeg Description: View of saddle inside anchorage configuration

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS				Sheet 19 of 439
Seismic Walkdown Checklist (SWC)	Status:	(N	U
Equipment ID No. <u>IFC-P-1A</u> Equip. Class 5. Horizontal Pumps				
Equipment Description Fuel Pool Recirculation Pump				
Location: Bldg. FULB Floor El. 735				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an iter SWEL. The space below each of the following questions may be used to record the result findings. Additional space is provided at the end of this checklist for documenting othe	ults of judgme			
 Anchorage 1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Small pump on ~6" tall concrete pad. Anchored with 4-1/2" diam anchors. No edge distance issue found. 	Y	N X		
2. Is the anchorage free of bent, broken, missing or loose hardware?	Y X	N	U	N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Y X	<u>N</u>	<u>U</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>U</u>	N/A X
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Y X	<u>N</u>	U	

Paul Paul	C. Rizzo Associates, Inc.				5	Sheet 20 of 439
ENGINEE Seismic Walkdow	ns & consultants n Checklist (SWC)		Status:	${ m (Y)}$	N	U
Equipment ID No.						
Equipment Descrip	tion Fuel Pool Recirculation Pump					-
Interaction Effect	s		_		-	
7. Are soft targets	free from impact by nearby equipment or structures?		Y X	N	U	N/A
8. Are overhead eq	uipment, distribution systems, ceiling tiles and lighting,		Y	N	U	N/A
	ck walls not likely to collapse onto the equipment?					
9 Do attached line	s have adequate flexibility to avoid damage?		Y X	<u>N</u>	U	N/A
	d to be well supported.		LL		.	
	bove seismic interaction evaluations, is equipment free		Y X	N	U]
of potentially a	dverse seismic interaction effects?					
	onditions ed for and found no other seismic conditions that could t the safety functions of the equipment?		Y X	N	- U	
Comments (Addit	ional pages may be added as necessary)		<u> </u>		-	
	Etter Mahra It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012	_	
	Chury Deflore					
	Adam L. Helffrich	Date:	10/1/2	.012	_	



Status: 🕲 N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 1FC-P-1A

Equipment Description

Fuel Pool Recirculation Pump

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

Equip. Class 5. Horizontal Pumps



File Name: 2-61-3-1-60.jpeg Description: Component Plate ID



File Name: 2-62-3-1-60.jpeg Description: General view of component



Equipment ID No. <u>IFC-P-1A</u>

Equipment Description

Fuel Pool Recirculation Pump



File Name: 2-63-3-1-60.jpeg Description: View of anchorage base configuration



File Name: 2-64-3-1-60.jpeg Description: Flexible attached lines

Status: 🕅 N U

Equip. Class 5. Horizontal Pumps

Paul C. Rizzo Associates, Inc.					Sheet 23 of 439
Seismic Walkdown Checklist (SWC)		Status:	\odot	N	U
Equipment ID No. <u>1FW-PNL</u> -100B Equip	Class 20. Instrument and Control Pane	els			
Equipment Description <u>HYV-1FW-10</u>	00B Local Panel				
Location: Bldg. SFGB Floor	El. <u>735</u>				
Manufacturer, Model, Etc.					
Instructions for Completing Checklist This checklist may be used to document the re SWEL. The space below each of the following findings. Additional space is provided at the e	g questions may be used to record the rest	ults of judgm			
Anchorage		Y	N		
 Is the anchorage configuration verification of the 50% of SWEL items requiring such v Small panel (~30"x30"x10") mounted on HSS Rack has three posts and carries two other sin 4-5/8" diameter anchors. 	verification)? 4x4 rack with 4-1/2" diam. channel nuts.		X		
2. Is the anchorage free of bent, broken, missi	ng or loose hardware?	Y X	N	U	N/A
3. Is the anchorage free of corrosion that is mo oxidation?	ore than mild surface	Y X	N	U	N/A
4. Is the anchorage free of visible cracks in the	e concrete near the anchors?	Y X	<u>N</u>	U	N/A
 Is the anchorage configuration consistent w (Note: This question only applies if the iten 	n is one of the 50% for	Y	N	U	N/A X
which an anchorage configuration verifica6. Based on the above anchorage evaluations, potentially adverse seismic conditions?	• •	Y X	N	U	

	C. Rizzo Associates, Inc.					Sheet 24 of 439
Seismic Walkdow	n Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No.	<u>1FW-PNL-100B</u> Equip. Class 20. Instrument and C	Control Panel	s			
Equipment Descri	ption HYV-1FW-100B Local Panel					
Interaction Effect	ts					
7. Are soft targets	free from impact by nearby equipment or structures?		Y X	<u>N</u>	U	N/A
			Y	N	U	N/A
	quipment, distribution systems, ceiling tiles and lighting, ck walls not likely to collapse onto the equipment?	[X	IN		
	es have adequate flexibility to avoid damage?	[Y X	N	U	N/A
Attached top entry	e cables have adequate flexibility.		Y	N	U	
	bove seismic interaction evaluations, is equipment free dverse seismic interaction effects?		X			
Other Adverse C	onditions ed for and found no other seismic conditions that could		Y	N	U	
-	t the safety functions of the equipment?	[X			
Comments (Addit	tional pages may be added as necessary)	<u>.</u>				
	- the Mahma It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012		
	Stand & Allow					

Adam L. Helffrich

Date:



Status: 🕅 N U

Equipment ID No. 1FW-PNL-100B Equip. Class 20. Instrument and Control Panels

Equipment Description

HYV-1FW-100B Local Panel



File Name: 2-61-1-1-60.jpeg Description: Component Plate ID



File Name: 2-62-1-1-60.jpeg Description: General view of component



Status: 🕅 N U

Equipment ID No. 1FW-PNL-100B Equip. Class 20. Instrument and Control Panels

Equipment Description

HYV-1FW-100B Local Panel



File Name: 2-63-1-1-60.jpeg Description: View of panel anchorage



File Name: 2-64-1-1-60.jpeg Description: View of channel struts attached to posts



Status: 🕅 N U

Equipment ID No. <u>1FW-PNL-100B</u> Equip. Class 20. Instrument and Control Panels

Equipment Description

HYV-1FW-100B Local Panel



File Name: 2-73-1-1-60.jpeg Description: View of top entry conduits

Paul C. Rizzo Asso	ciates, Inc.				S	Sheet 28 of 439
Seismic Walkdown Checklist (SWC)				\heartsuit	N	U
Equipment ID No. <u>1PC-145</u>	Equip. Class	0D. Other-Check Valve or Mar	nual Valve			
Equipment Description <u>F</u>	Fuel Pool Clg Sys to I	RWST Recirc Sys Isol.				-
Location: Bldg. FULB	Floor El.	735				
Manufacturer, Model, Etc.						
Instructions for Completing Cl This checklist may be used to do SWEL. The space below each of findings. Additional space is pro	cument the results of the following question	ons may be used to record the res	sults of judgme			
Anchorage			X7	N		
1. Is the anchorage configuration	-		Y	N X		
of the 50% of SWEL items red Small manual value on $\sim 2 1/2$ " a						
			Y	N	U	N/A
2. Is the anchorage free of bent,	broken, missing or lo	ose hardware?				X
			Y	N	U	N/A
3. Is the anchorage free of corros oxidation?	sion that is more than	mild surface				<u> </u>
			<u>Y</u>	N	U	N/A
4. Is the anchorage free of visible	e cracks in the concre	ete near the anchors?		I.		X
			Y	N	U	N/A
5. Is the anchorage configuration (Note: This question only app which an anchorage configur	lies if the item is one	of the 50% for				X
6 Deced on the should enchanged	a combonation of is the a	nahamaa fraa af	Y	N	<u> </u>	г
6. Based on the above anchorage potentially adverse seismic co		nenorage free of				

Paul ENGINE	C. Rizzo Associates, Inc.					Sheet 29 of 439
Seismic Walkdov	N	U				
Equipment ID No	. <u>IPC-145</u> Equip. Class 0D. Other-Check Value	ve or Man	ual Valve			
Equipment Descri	ption Fuel Pool Clg Sys to RWST Recirc Sys Isol.					_
Interaction Effec	ts	<u> </u>				27/1
7. Are soft targets	free from impact by nearby equipment or structures?		Y X	N	U	N/A
8. Are overhead e	quipment, distribution systems, ceiling tiles and lighting,		Y	N	U	N/A
	bock walls not likely to collapse onto the equipment?		L			. I .
9. Do attached lin	es have adequate flexibility to avoid damage?		Y	N	U	N/A
				-		
	above seismic interaction evaluations, is equipment free diverse seismic interaction effects?		Y X	<u>N</u>	U	
Other Adverse C			1-1-1			
11. Have you look	ted for and found no other seismic conditions that could et the safety functions of the equipment?		Y X	N	U	
Comments (Addi	tional pages may be added as necessary)					
	atter Mehman It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20	012		
	11 Al D Mary					

(Shang) & effectiv

Adam L. Helffrich

Date:

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Status:

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Seismic Walkdown Checklist (SWC)

Equipment ID No. 1PC-145 Equip. Class 0D. Other-Check Valve or Manual Valve

Equipment Description

Fuel Pool Clg Sys to RWST Recirc Sys Isol.



File Name: 2-61-5-1-60.jpeg Description: Component Plate ID



File Name: 2-62-5-1-60.jpeg Description: General view of component

Paul C. Rizzo Associates, Inc.					Sł	neet 31 of 4	439	
Seismic Walkdown Checklist (SWC)				Status:	\heartsuit	N	U	
Equipment ID No. <u>1PC-1FC</u>	<u>C-</u> 102A	Equip. Class	18. Instrument (on) Racks					
Equipment Description	<u>(PS-F</u>	C-102A) ISOL	·····					
Location: Bldg. <u>FULB</u>		Floor El.	735					
Manufacturer, Model, Etc.								
		· · · · · · · · · · · · · · · · · · ·	<u> </u>					

Instructions for Completing Checklist

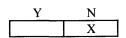
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other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

Anchorage

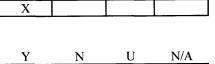
1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?

Rack consists of a 2 1/2" diam post (~5' tall) anchored with 4-3/8" diam anchor bolts. Instrument attached to face of the rack with 2-3/8" diam machine bolts. Intrument is very light (~1 lb).

- 2. Is the anchorage free of bent, broken, missing or loose hardware?
- 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
- 4. Is the anchorage free of visible cracks in the concrete near the anchors?
- 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?



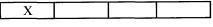
Y

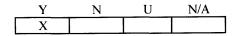


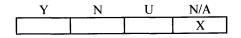
Ν

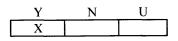
U

N/A









	C. Rizzo Associates, Inc.					Sheet 32 of 439
Seismic Walkdown Checklist (SWC)			Status:	(N	U
Equipment ID No	. <u>IPC-1FC-</u> 102A Equip. Class 18. Instrument (on) Ra	icks				
Equipment Descri	ption (PS-FC-102A) ISOL					
Interaction Effec	ts					
7. Are soft targets	free from impact by nearby equipment or structures?		Y X	N	U	N/A
			Y	N	U	N/A
	quipment, distribution systems, ceiling tiles and lighting, ck walls not likely to collapse onto the equipment?		X			
			Y	N	U	N/A
	es have adequate flexibility to avoid damage? nd with adequate flexibility.		X			
10. Based on the a	bove seismic interaction evaluations, is equipment free		Y	N	U	7
	dverse seismic interaction effects?		L			
Other Adverse C	onditions					
	ed for and found no other seismic conditions that could t the safety functions of the equipment?		Y X	N	U	
Comments (Addi	tional pages may be added as necessary)					
	- Allen It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20)12		
	Stand & Allow					

Adam L. Helffrich

Date:



Status: 🏵 N U

Equipment ID No. <u>1PC-1FC-102A</u> Equip. Class 18. Instrument (on) Racks

Equipment Description

(PS-FC-102A) ISOL



File Name: 2-61-4-1-60.jpeg Description: Component Plate ID



File Name: 2-62-4-1-60.jpeg Description: General view of component



Status: 🕲 N U

Equipment ID No. <u>1PC-1FC-102A</u> Equip. Class 18. Instrument (on) Racks

Equipment Description

(PS-FC-102A) ISOL



File Name: 2-63-4-1-60.jpeg Description: Anchorage detail for post base plate



File Name: 2-64-4-1-60.jpeg Description: View of intrument to steel plate connection

Paul C. Rizzo Ass ENGINEERS & CONSULTANTS		ان	
Seismic Walkdown Checklist	(SWC)	Status: 🕅 N	U
Equipment ID No. <u>1RW-189</u>	Equip. Class	0D. Other-Check Valve or Manual Valve	
Equipment Description	Primary CCW HX Ou	utlet Valve	
Location: Bldg. <u>AXLB</u>	Floor El.	735	
Manufacturer, Model, Etc.		<u></u>	

Instructions for Completing Checklist

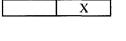
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other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

Anchorage

\r

 Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?
 Small manual valve on ~18" diam pipe line. No degraded condition identified.

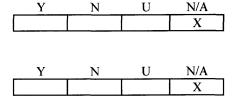
2. Is the anchorage free of bent, broken, missing or loose hardware?



Ν

Y

Y



U

U

N/A

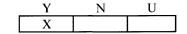
Х

N/A

Х

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

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



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	C. Rizzo Associates, Inc. RS & CONSULTANTS					Sheet 36 of 439
Seismic Walkdow	n Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No.	1RW-189 Equip. Class 0D. Other-Check Va	lve or Manı	al Valve			
Equipment Descrip	tion Primary CCW HX Outlet Valve					_
Interaction Effect	s					
7. Are soft targets t	free from impact by nearby equipment or structures?		Y X	<u>N</u>	U	N/A
			Y	N	U	N/A
	uipment, distribution systems, ceiling tiles and lighting, k walls not likely to collapse onto the equipment?		X			
			V	N	T	N1/A
9. Do attached line	s have adequate flexibility to avoid damage?		Y X	<u>N</u>	U	N/A
10 Based on the a	pove seismic interaction evaluations, is equipment free		Y X	N	U	-1
	lverse seismic interaction effects?				L 11 	
Other Adverse Co	onditions					
11. Have you looke	ed for and found no other seismic conditions that could the safety functions of the equipment?		Y X	N	U	
Comments (Additi	ional pages may be added as necessary)					
	Etter Mahne It					
Evaluated by:	Eddie M. Guerra	_Date:	10/1/2	012		
	21 1 10 Mars					

Cherry Dellaring

Adam L. Helffrich

Date:



Seismic Walkdown Checklist (SWC)

Equipment ID No. 1RW-189

Equip. Class 0D. Other-Check Valve or Manual Valve

Equipment Description

Primary CCW HX Outlet Valve



File Name: 2-61-2-1-47.jpeg Description: Component Plate ID



File Name: 2-62-2-1-47.jpeg Description: General view of component

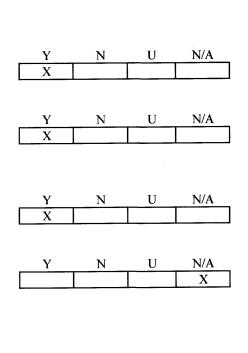
Status:	\heartsuit	N	U
ults of judgm			
ļ	n of equipme	n of equipment on the ults of judgments and	n of equipment on the ults of judgments and

Anchorage

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

2-1/2" diam plug welds at front of sections verified. Welds at back of SWGR not inspected since SWGR was energized and inaccessible.

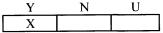
- 2. Is the anchorage free of bent, broken, missing or loose hardware?
- 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
- 4. Is the anchorage free of visible cracks in the concrete near the anchors?
- 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?



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x

Y



Paul ENGIN	C. Rizzo Associates, Inc.				1	Sheet 39 of 439
Seismic Walkdov	vn Checklist (SWC)		Status:	\heartsuit	Ν	U
Equipment ID No	. <u>480VUS-1</u> -8-N Equip. Class 2. Low Voltage Switch	gear				
Equipment Descr	iption 480V Bus					-
Interaction Effe	ets					N T()
7. Are soft targets	free from impact by nearby equipment or structures?	[Y X	N	U	N/A
	quipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment?	[Y X	N	U	N/A
9. Do attached lin	es have adequate flexibility to avoid damage?	[Y X	N	U	N/A
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?	[Y X	N	U]
	Conditions ked for and found no other seismic conditions that could ct the safety functions of the equipment?	[Y X	N	U]
Comments (Add	itional pages may be added as necessary)					
	atter Mahna It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012		
	11) 10 Maur					

Sherry & april

Adam L. Helffrich

Date:



Seismic Walkdown Checklist (SWC)

Equipment ID No. 480VUS-1-8-N Equip. Class 2. Low Voltage Switchgear

480V Bus

Equipment Description



File Name: 2-61-10-1-25.jpeg Description: Component Plate ID



File Name: 2-62-10-1-25.jpeg Description: General view of component

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS				Sheet 41 of 439
Seismic Walkdown Checklist (SWC)	Status:	(N	U
Equipment ID No. <u>480VUS-1</u> -9-P Equip. Class 2. Low Voltage Switchgear				
Equipment Description 480V Emergency Bus				
Location: Bldg. SRVB Floor El. 713				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an SWEL. The space below each of the following questions may be used to record the findings. Additional space is provided at the end of this checklist for documenting of the following the space of th	results of judgm			
Anchorage	Y	N		
1. Is the anchorage configuration verification required (i.e., is the item one		X		
of the 50% of SWEL items requiring such verification)? 2-1/2" diam plug welds at front of sections verified. Welds at back of SWGR not inspected since SWGR was energized and inaccessible.				
	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			
	V	N	U	N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
	V	N	 T 1	NI/A
5. Is the anchorage configuration consistent with plant documentation?	Y	<u>N</u>	U	
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	L			
	Y	N	U	
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	X			

DCR Paul	C. Rizzo Associates, Inc.			9	Sheet 42 of 439
Seismic Walkdov	vn Checklist (SWC)	Status:	\odot	N	U
Equipment ID No	. <u>480VUS-1</u> -9-P Equip. Class 2. Low Voltage Switchg	gear			
Equipment Descri	aption 480V Emergency Bus				-
Interaction Effec	ets		.		N 1/4
7. Are soft targets	free from impact by nearby equipment or structures?	Y X	<u>N</u>		N/A
		Y	N	U	N/A
	quipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment?	X			
		Y	N	U	N/A
9. Do attached lin	es have adequate flexibility to avoid damage?	X			
		Y	N	U	- ·
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?	X	L		
Other Adverse (
	ted for and found no other seismic conditions that could ct the safety functions of the equipment?	Y	N	U	٦
-	itional pages may be added as necessary)				_
Comments (Add	tuonal pages may be added as necessary)				
	- deter Michne It				
Evaluated by:	Eddie M. Guerra	Date: 10/1/2	012		
	21 1 10 Man				

Share & down

Adam L. Helffrich

Date:



Status: 🕅 N U

Equipment ID No. <u>480VUS-1-9-P</u> Equip. Class 2. Low Voltage Switchgear

Equipment Description

480V Emergency Bus



File Name: 2-61-4-1-26.jpeg Description: Component Plate ID



File Name: 2-62-4-1-26.jpeg Description: General view of component

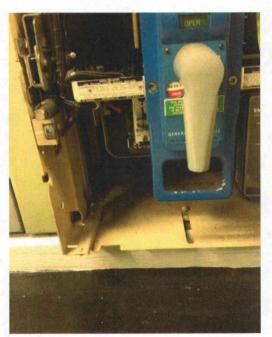


Status: 🕅 N U

Equipment ID No. <u>480VUS-1-9-P</u> Equip. Class 2. Low Voltage Switchgear

Equipment Description

480V Emergency Bus



File Name: 2-63-4-1-26.jpeg Description: Base detail from inside of component

			Sheet 45 of 439
Status:	(N	U
r			
		······································	
v	N		
	X		
Y X	N	U	N/A
Y	N	U	N/A
X			
Y X	N	U	N/A
Y	<u>N</u>	U	N/A
]		X
Y X	<u>N</u>	U]
	m of equipmer sults of judgme er comments. Y Y X Y Y X Y Y X Y Y X Y Y X Y Y X Y Y X Y Y X Y Y X Y Y X Y Y X Y Y Y Y Y Y Y Y	m of equipment on the sults of judgments and er comments. Y N	m of equipment on the sults of judgments and er comments. Y N

	I C. Rizzo Associates, Inc.					Sheet 46 of 439
Seismic Walkdo	wn Checklist (SWC)		Status:	\odot	N	U
Equipment ID No	D. <u>4KVS-1AE</u> Equip. Class 3. Medium Voltage Sv	witchgear				
Equipment Desci	iption 4160V Emergency Bus					
Interaction Effe	cts	· · · · · · · · · · · · · · · · · · ·				
7. Are soft target	s free from impact by nearby equipment or structures?		Y X	N	U	N/A
	equipment, distribution systems, ceiling tiles and lighting,		Y X	<u>N</u>	U	N/A
and masonry bl	ock walls not likely to collapse onto the equipment?					
9 Do attached lit	nes have adequate flexibility to avoid damage?		Y X	N	U	N/A
9. Do unached m	to a word damage.					
10. Based on the	above seismic interaction evaluations, is equipment free		Y X	N	U	7
of potentially	adverse seismic interaction effects?		<u> </u>			
Other Adverse						
	ked for and found no other seismic conditions that could ct the safety functions of the equipment?		Y X	N	U	
Comments (Add	itional pages may be added as necessary)	<u></u>				
	- dette Mahne It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012		
	(Bury) Deffine					
	Adam L. Helffrich	Date:	10/1/2	012		



Seismic Walkdown Checklist (SWC)

Equipment ID No. 4KVS-1AE Equip. Class 3. Medium Voltage Switchgear

Equipment Description

4160V Emergency Bus



File Name: 2-61-9-1-25.jpeg Description: General view inside of component



File Name: 2-62-9-1-25.jpeg Description: Inside view of component showing base detail



Seismic Walkdown Checklist (SWC)

Equipment ID No. 4KVS-1AE

Equip. Class 3. Medium Voltage Switchgear

Equipment Description

4160V Emergency Bus



File Name: 2-63-9-1-25.jpeg Description: Component Plate ID



File Name: 2-64-9-1-25.jpeg Description: General view of component



Seismic Walkdown Checklist (SWC)

Equipment ID No. 4KVS-1AE Equip. Class 3. Medium Voltage Switchgear

Equipment Description

4160V Emergency Bus



File Name: 2-73-9-1-25.jpeg Description: View of steel floor embeddment

Paul C ENCINEER	C. Rizzo As	sociates	, Inc.							Sheet 50 of 439
Seismic Walkdowr	n Checklist	(SWC)				Status:	\odot	N	U
Equipment ID No.	<u>4KVS-11</u>	<u>P</u> F	Equip. Class	3. Medium	Voltage Swite	chgear				
Equipment Descrip	tion	4160V	' Bus		·····					
Location: Bldg.	SRVB	_	Floor El.	713	-					
Manufacturer, Mod	el, Etc.									
Instructions for C This checklist may SWEL. The space t findings. Additiona	be used to opelow each	docume of the f	nt the results of ollowing question	ons may be u	sed to record t	he results	s of judgm			
Anchorage 1. Is the anchorage of the 50% of SV	VEL items	equirin	g such verificati	ion)?		Ē	Y	N X		
8 plug welds (1-1/4 back not verified as SWGR were verified	the panel	was ene	rgized. 3 rows o	of embed cha	nnels under th					
2. Is the anchorage	free of ben	t, broke	n, missing or loo	ose hardware	?		Y X	N	U	N/A
3. Is the anchorage oxidation?	free of corr	osion th	nat is more than	mild surface		Ľ	Y X	<u>N</u>	U	N/A
4. Is the anchorage	free of visi	ble crac	ks in the concre	te near the a	nchors?	E	Y X	N	U	N/A
5. Is the anchorage (Note: This quest which an ancho	tion only ap	plies if	the item is one	of the 50% f		C	Y	N	U	N/A X
 Based on the abo potentially advertially 				nchorage free	e of		Y X	<u>N</u>	U	

	I C. Rizzo Associates, Inc.				S	heet 51 of 439
	wn Checklist (SWC)		Status:	\odot	N	U
Equipment ID No	b. <u>4KVS-1DF</u> Equip. Class 3. Medium Voltage S	witchgear				
Equipment Descr	iption 4160V Bus					
Interaction Effe	cts			N	¥Т	N 7/A
7. Are soft targets	s free from impact by nearby equipment or structures?	[Y X	N	<u>U</u>	N/A
			Y	N	U	N/A
	equipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment?	l	X			
			Y	N	U	N/A
9. Do attached lin	es have adequate flexibility to avoid damage?	[X			
10. Based on the	above seismic interaction evaluations, is equipment free	. [Y X	<u>N</u>	U]
	adverse seismic interaction effects?					
Other Adverse (Conditions		·····-			
	ked for and found no other seismic conditions that could ct the safety functions of the equipment?	[Y X	N	U]
Comments (Add	itional pages may be added as necessary)					
	Etter Mahment					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20	012		
	alung Deffere					

.

Adam L. Helffrich

____Date:



Status: 🕅 N U

Equipment ID No. 4KVS-1DF Equip. Class 3. Medium Voltage Switchgear

4160V Bus

Equipment Description



File Name: 2-61-3-1-26.jpeg Description: Component Plate ID



File Name: 2-62-3-1-26.jpeg Description: General view of component



Status: (Y)N

U

Seismic Walkdown Checklist (SWC)

Equipment ID No. 4KVS-1DF Equip. Class 3. Medium Voltage Switchgear

4160V Bus

Equipment Description

File Name: 2-63-3-1-26.jpeg Description: General view inside of component



File Name: 2-64-3-1-26.jpeg Description: Inside view of component showing base detail

Paul C. Rizzo A ENCINEERS & CONSULTA	Associates, Inc.					Sheet 54 of 43
Seismic Walkdown Checkl	st (SWC)		Status:	\odot	N	U
Equipment ID No. <u>BAT-1</u>	-1 Equip. Class	15. Battery Racks				
Equipment Description	125V DC Battery/Ins	strument Control Power				<u> </u>
Location: Bldg. <u>SRVB</u>	Floor El.	713				
Manufacturer, Model, Etc.						
SWEL. The space below eac	o document the results o h of the following quest	f the Seismic Walkdown of an it ions may be used to record the re nis checklist for documenting oth	esults of judgm			
Anchorage			Y	N		
1. Is the anchorage configura of the 50% of SWEL item	-		X			
	ck composed of 6 bays. I	Each bay anchoraed with 6-1/2"				
2. Is the anchorage free of be	nt broken missing or k	nose hardware?	Y	<u>N</u>	U	N/A
	in, oroken, missing or k	ose naroware.		I		
			Y	N	U	N/A
3. Is the anchorage free of co oxidation?	prosion that is more than	n mild surface	X			
			Y	<u>N</u>	U	N/A
4. Is the anchorage free of vi	sible cracks in the concr	ete near the anchors?	X			
			Y	N	U	N/A
5. Is the anchorage configure	tion consistent with play	at documentation?				
(Note: This question only which an anchorage conf Anchorage configuration con	applies if the item is one iguration verification is	of the 50% for	<u>X</u>			
which an anchorage conf	applies if the item is one iguration verification is <i>nfirmed per drawing 870</i>	e of the 50% for required.) 00-1.24-1E and calcualtion 5223		N	U	

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	C. Rizzo Associates, Inc.					Sheet 55 of 439
Seismic Walkdow	n Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No.	BAT-1-1 Equip. Class 15. Battery Racks					
Equipment Descrip	Dition 125V DC Battery/Instrument Control Power	r				
Interaction Effect	'S					
7. Are soft targets	free from impact by nearby equipment or structures?		Y X	N	U	N/A
			Y	N	U	N/A
and masonry blo	uipment, distribution systems, ceiling tiles and lighting, ck walls not likely to collapse onto the equipment?		X			
Block walls SB-1-1 IE 80-11 review.	1, SB-1-12, SB-1-13, SB-1-14 and SB-1-15 have been qu	alified per	Y	N	U	N/A
9. Do attached line	s have adequate flexibility to avoid damage?		X			
			Y	<u>N</u>	U	
	bove seismic interaction evaluations, is equipment free dverse seismic interaction effects?		X			
Other Adverse Co	anditions			· • • • • • • • • • • • • • • • • • • •		
11. Have you look	ed for and found no other seismic conditions that could t the safety functions of the equipment?		Y X	<u>N</u>	U	
Commonte (Addit					-	
Comments (Addit	ional pages may be added as necessary)					
	the Mahrie It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012	-	
	Burg & Allow					

Adam L. Helffrich

Date:



Status: 🕅 N U

Equipment ID No. BAT-1-1

Equipment Description

125V DC Battery/Instrument Control Power

Equip. Class 15. Battery Racks



File Name: 2-73-1-1-11.jpeg Description: Component Plate ID



File Name: 2-61-1-11.jpeg Description: General view of component



Seismic Walkdown Checklist (SWC)

Equipment ID No. BAT-1-1

Equip. Class 15. Battery Racks

Equipment Description

125V DC Battery/Instrument Control Power



File Name: 2-62-1-1-11.jpeg Description: View of flexible attached lines



File Name: 2-63-1-1-11.jpeg Description: Typical frame anchorage configuration

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS				Sheet 58 of 439
Seismic Walkdown Checklist (SWC)	Status:	\odot	Ν	U
Equipment ID No. <u>BAT-1-2</u> Equip. Class 15. Battery Racks				
Equipment Description 125V DC Battery 2/Instrument Control Power				
Location: Bldg. <u>SRVB</u> Floor El. <u>713</u>				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an item SWEL. The space below each of the following questions may be used to record the result findings. Additional space is provided at the end of this checklist for documenting other	lts of judgm			
Anchorage	Y	N		
 Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Braced rack-double wide rack composed of 6 bays. Each bay anchoraed with 6-1/2" diam anchors. End restraints and spacers found in adequate condition. 	X			
	Y	<u>N</u>	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X	I.		
	Y	<u>N</u>	U	N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X	I		
	Y	<u>N</u>	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?	Y X	N	U	N/A
 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Anchorage configuration confirmed per drawing 8700-1.24-1E and calcualtion 52233- C-016 Anchorage Calc. 				
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Y X	N	<u> </u>	

	C. Rizzo Associates, Inc.			S	heet 59 of 439
Seismic Walkdov	vn Checklist (SWC)	Status:	(N	U
Equipment ID No	. <u>BAT-1-2</u> Equip. Class 15. Battery Racks				
Equipment Descri	ption 125V DC Battery 2/Instrument Control Power				-
Interaction Effec	ets				
		Y	N	U	N/A
7. Are soft targets	free from impact by nearby equipment or structures?	X			<u></u>
		Y	N	U	<u>N/A</u>
	quipment, distribution systems, ceiling tiles and lighting,	X			
	bock walls not likely to collapse onto the equipment? 11, SB-1-12, SB-1-13, SB-1-14 and SB-1-15 have been qualified	l per			
		Y	_ <u>N</u>	U	N/A
9. Do attached line	es have adequate flexibility to avoid damage?	X			
		Y	<u>N</u>	U	1
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?	X]
Other Adverse C	Tonditions				
11. Have you look	ted for and found no other seismic conditions that could to the safety functions of the equipment?	Y	N	U	1
			I		1
Comments (Addi	tional pages may be added as necessary)				
	the Man It				
Evaluated by:	Eddie M. Guerra Date	e: <u>10/1/2</u>	012		
	Stary Deffine				

Adam L. Helffrich

Date:



Status: 🕅 N U

Equipment ID No. BAT-1-2

Equipment Description

125V DC Battery 2/Instrument Control Power

Equip. Class 15. Battery Racks



File Name: 2-73-1-1-01.jpeg Description: Component Plate ID



File Name: 2-61-1-1-01.jpeg Description: General view of component



U

Status:

N

Seismic Walkdown Checklist (SWC)

Equipment ID No. BAT-1-2

Equipment Description

125V DC Battery 2/Instrument Control Power

Equip. Class 15. Battery Racks



File Name: 2-62-1-1-01.jpeg Description: Flexible attached lines



File Name: 2-63-1-1-01.jpeg Description: Typical frame anchorage configuration

Paul C. Rizzo Associates	s, Inc.						Sheet 62 of 439
Seismic Walkdown Checklist (SWC)			Status:	(N	U
Equipment ID No. <u>BAT-CHG</u> -1-1	Equip. Class	16. Battery Chargers ar	nd Inverters				
Equipment Description Station	n Battery Charg	er NO. 1					
Location: Bldg. SRVB	Floor El.	713					
Manufacturer, Model, Etc.	<u></u>						
Instructions for Completing Checkl This checklist may be used to docume SWEL. The space below each of the f findings. Additional space is provided	nt the results of ollowing question	ons may be used to record	d the results	of judgme			
Anchorage							
1. Is the anchorage configuration verif of the 50% of SWEL items requirin Charger anchored with 4-5/8" diam a concern.	g such verificat	ion)?	ged not a	Y X	<u>N</u>		
				Y	N	U	N/A
2. Is the anchorage free of bent, broke	n, missing or loo	ose hardware?		X			
3. Is the anchorage free of corrosion th oxidation?	nat is more than	mild surface		Y X	N	U	N/A
4. Is the anchorage free of visible crac	ks in the concre	te near the anchors?		Y X	<u>N</u>	U	N/A
				Y	N	U	N/A
5. Is the anchorage configuration cons (Note: This question only applies if which an anchorage configuration Anchorage configuration confirmed p	the item is one verification is r	of the 50% for equired.)		X			
 Based on the above anchorage evaluation potentially adverse seismic condition 		nchorage free of		Y X	N	U	

Paul ENGIN	C. Rizzo Associates, Inc. EERS & CONSULTANTS					Sheet 63 of 439
Seismic Walkdov	wn Checklist (SWC)		Status:	\heartsuit	Ν	U
Equipment ID No	BAT-CHG-1-1 Equip. Class 16. Battery Chargers	and Inverters				
Equipment Descr	iption Station Battery Charger NO. 1		·····			
Interaction Effe	ets		X.F	NT	* 1	27/4
7. Are soft targets	free from impact by nearby equipment or structures?	Ľ	Y X	N	U	N/A
			Y	N	U	N/A
	equipment, distribution systems, ceiling tiles and lighting, bock walls not likely to collapse onto the equipment?		X			
			Y	N	U	N/A
	es have adequate flexibility to avoid damage? is found with adequate flexibility.		X			
10 Deced on the	ahoun animula internation anglustions is a submert for	F	Y X	N	U	
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?	L]
Other Adverse (Sonditions		. <u> </u>			
11. Have you lool	ted for and found no other seismic conditions that could to the safety functions of the equipment?	Г	Y X	N	U	_
Comments (Addi	itional pages may be added as necessary)					
	atter Mahraft					
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012		
	11					

Jung b district

Adam L. Helffrich

Date:



Status: 🕲 N U

Equipment ID No. BAT-CHG-1-1 Equip. Class 16. Battery Chargers and Inverters

Equipment Description

Station Battery Charger NO. 1



File Name: 2-61-1-1-03.jpeg Description: Component Plate ID



File Name: 2-62-1-1-03.jpeg Description: General view of component



Seismic Walkdown Checklist (SWC)

Equipment ID No. BAT-CHG-1-1 Equip. Class 16. Battery Chargers and Inverters

Equipment Description

Station Battery Charger NO. 1



File Name: 2-63-1-1-03.jpeg Description: View of top entry conduits



File Name: 2-64-1-1-03.jpeg Description: View of component anchroage configuration

Paul C. Rizzo Associates, Inc.				Sheet 66 of 439
Seismic Walkdown Checklist (SWC)	Status:	Y	N	U
Equipment ID No. <u>BAT-CHG1-2-A</u> Equip. Class 16. Battery Chargers and Inverter	rs			
Equipment Description Battery Charger		······		
Location: Bldg. <u>SRVB</u> Floor El. <u>713</u>				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an item SWEL. The space below each of the following questions may be used to record the resul findings. Additional space is provided at the end of this checklist for documenting other	ts of judgm			
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)? Component identified as a compartment in BAT-CHG1-2. Battery charger is anchored with 4-5/8" diam anchors.		N X		
2. Is the anchorage free of bent, broken, missing or loose hardware?	Y X	N	U	N/A
	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			
5. Is the anchorage configuration consistent with plant documentation?	Y	<u>N</u>	U	N/A X
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)				
	Y X	N	U	

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Paul ENGINE	C. Rizzo Associates, Inc. ERS & CONSULTANTS				Sheet 67 of 439
Seismic Walkdow	vn Checklist (SWC)	Statu	s: Y	\mathbb{N}	U
Equipment ID No.	. <u>BAT-CHG</u> 1-2-A Equip. Class 16. Battery Chargers and Ir	nverters			
Equipment Descri	ption Battery Charger				_
Interaction Effec	ts	~~		-	27/4
7 Are coft torgets	free from import he northy equipment of structures?	Y			N/A
Battery charger B is 0" gap between	free from impact by nearby equipment or structures? V-BAT-CHG1-2 is adjacent to switchboard DC-SWBD1-2 and the the two panels. These panels are not connected to each other a Report CR-2012-14321 was issued to resolve this concern.			.1	
		Y	N	U	N/A
	quipment, distribution systems, ceiling tiles and lighting,	X			
and masonry blo	ock walls not likely to collapse onto the equipment?				
		Y	<u>N</u>	<u>U</u>	N/A
9. Do attached find	es have adequate flexibility to avoid damage?	<u> </u>	N	U	
10 Based on the a	bove seismic interaction evaluations, is equipment free				
	dverse seismic interaction effects?			.	
Other Adverse C				_	
	ed for and found no other seismic conditions that could	Y	<u>N</u>	<u>U</u>	
adversely affec	t the safety functions of the equipment?	X			
Comments (Addi	tional pages may be added as necessary)			-	
	atter Mahma It				
Evaluated by:	Eddie M. Guerra Date	e: <u>10/</u>	1/2012	-	
	Bland Dellan				
	Adam L. Helffrich Date	e: <u>10/</u>	1/2012		



Status: Y 🕅 U

Equipment ID No. <u>BAT-CHG1-2-A</u> Equip. Class 16. Battery Chargers and Inverters

Battery Charger

Equipment Description



File Name: 2-61-5-1-26.jpeg Description: Component Plate ID



File Name: 2-62-5-1-26.jpeg Description: General view of component



Status: Y 🕅 U

Seismic Walkdown Checklist (SWC)

Equipment ID No. <u>BAT-CHG1-2-A</u> Equip. Class 16. Battery Chargers and Inverters

Equipment Description

Battery Charger



File Name: 2-63-5-1-26.jpeg Description: View of component anchroage configuration



File Name: 2-64-5-1-26.jpeg Description: View of top entry conduits

	s, Inc.					S	Sheet 70 of 43
Seismic Walkdown Checklist (SWC)					\odot	Ν	U
Equipment ID No. <u>BAT-CHG</u> -1-3	Equip. Class	16. Battery Chargers	and Inverters				
Equipment Description Static	n Battery Charg	er NO. 3					- -
Location: Bldg. SRVB	Floor El.	713					
Manufacturer, Model, Etc.			_				
Instructions for Completing Check This checklist may be used to docume SWEL. The space below each of the findings. Additional space is provided	ent the results of following questi	ons may be used to rec	ord the results	of judgm			
Anchorage				Y	N		
1. Is the anchorage configuration veri of the 50% of SWEL items requirin <i>Charger anchored with 4-5/8" diam a</i> <i>concern.</i>	ng such verificat	ion)?	dged not a	I	X		
2. Is the anchorage free of bent, broke	en, missing or lo	ose hardware?		Y X	N	U	N/A
	1.4.4.4		F	Y	<u> </u>	U	N/A
3. Is the anchorage free of corrosion t oxidation?	hat is more than	mild surface	L	X			
4. Is the anchorage free of visible cra	cks in the concre	ete near the anchors?	Ľ	Y X	N	U	N/A
			C	Y X Y	N N	U U	N/A
 4. Is the anchorage free of visible cra 5. Is the anchorage configuration con (Note: This question only applies i which an anchorage configuration 	sistent with plan f the item is one	t documentation? of the 50% for			N 	U	

	C. Rizzo Associates, Inc. R5 & CONSULTANTS					Sheet 71 of 439
Seismic Walkdow	Status:	(N	U		
Equipment ID No.	BAT-CHG-1-3 Equip. Class 16. Battery Chargers	and Inverters				
Equipment Descrip	tion Station Battery Charger NO. 3					
Interaction Effect	s					/ .
7. Are soft targets f	ree from impact by nearby equipment or structures?	E	Y X	N	U	N/A
and masonry bloc	uipment, distribution systems, ceiling tiles and lighting, k walls not likely to collapse onto the equipment?		Y X	N	U	N/A
	i has been qualified per IE 80-11 review. s have adequate flexibility to avoid damage?	Г	Y X	<u>N</u>	U	N/A
Top entry conduits	found with adequate flexibility.		Y	N	U	
	oove seismic interaction evaluations, is equipment free verse seismic interaction effects?	L	X			
Other Adverse Co						
	d for and found no other seismic conditions that could the safety functions of the equipment?	Ľ	Y X	N	U	
Comments (Additi	onal pages may be added as necessary)	<u></u>				
	- deter Mahna It					
Evaluated by:	Eddie M. Guerra	_Date:	10/1/20	012		
	(Bang) & Allower					

Adam L. Helffrich

Date:



Status: 🕅 N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. <u>BAT-CHG-1-3</u> Equip. Class 16. Battery Chargers and Inverters

Equipment Description

Station Battery Charger NO. 3



File Name: 2-61-1-1-02.jpeg Description: Component Plate ID



File Name: 2-62-1-1-02.jpeg Description: General view of component



Status: 🕲 N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. BAT-CHG-1-3 Equip. Class 16. Battery Chargers and Inverters

Equipment Description

Station Battery Charger NO. 3



File Name: 2-63-1-1-02.jpeg Description: View of top entry conduits



File Name: 2-64-1-1-02.jpeg Description: View of component anchorage configuration



Seismic Walkdown Checklist (SWC)

Status: 🕅 N U

Equipment ID No. BAT-CHG-1-3 Equip. Class 16. Battery Chargers and Inverters

Equipment Description

Station Battery Charger NO. 3



File Name: 2-73-1-1-02.jpeg Description: Close up view of component anchorage

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS				Sheet 75 of 439
Seismic Walkdown Checklist (SWC)	Status:	\heartsuit	N	U
Equipment ID No. <u>BB-A1</u> Equip. Class 20. Instrument and Control	l Panels			
Equipment Description Control Room			· ·	_
Location: Bldg. SRVB Floor El. 735				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of a SWEL. The space below each of the following questions may be used to record th findings. Additional space is provided at the end of this checklist for documenting	ne results of judgm			
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		
Control room bench board. Anchorage is covered with mastic and cannot be inspected.				
2. Is the anchorage free of bent, broken, missing or loose hardware?	Y	N	U	N/A
				L J
3. Is the anchorage free of corrosion that is more than mild surface	Y X	N	U	N/A
oxidation?				
	Y	<u>N</u>	U	N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
5. In the anabarage configuration consistent with plant documentation?	Y	N	U	N/A X
 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.) 	L			
6. Based on the above anchorage evaluations, is the anchorage free of	Y	N	U	7
potentially adverse seismic conditions?		H _,		

Pau ENGIN	Il C. Rizzo Associates, Inc. NEERS & CONSULTANTS				Sheet 76 of 439
Seismic Walkdo	wn Checklist (SWC)	Status:	\heartsuit	N	U
Equipment ID No	o. <u>BB-A1</u> Equip. Class 20. Instrument and Control Pa	anels			
Equipment Desc	ription Control Room				
Interaction Effe	ects				
		<u>Y</u>	N	U	N/A
7. Are soft target	s free from impact by nearby equipment or structures?	X			
		Y	N	U	N/A
	equipment, distribution systems, ceiling tiles and lighting,	X			
Control room cen ceiling tile (i.e., e	lock walls not likely to collapse onto the equipment? iling's main runners are supported by wires at $\sim 4'$ spacing. Each ege grating) is tied to the main runners at each of its four corners wi	ith Y	N	U	NI/A
	e wraps. Judged no interaction concern. . Do attached lines have adequate flexibility to avoid damage?				<u>N/A</u>
10 Based on the	above seismic interaction evaluations, is equipment free	Y X	N	U	
	adverse seismic interaction effects?			L	
	Conditions ked for and found no other seismic conditions that could ect the safety functions of the equipment?	Y X	N	U	
Comments (Add	itional pages may be added as necessary)	- 20.000 (co. es.			
	Tothe Mahne It				
Evaluated by:	Eddie M. Guerra Date:	10/1/2	012		
	(item) & effine				
	Adam L. Helffrich Date:	10/1/2	012		

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Seismic Walkdown Checklist (SWC)

Control Room

Status:

N

Equipment ID No. BB-A1

Equip. Class 20. Instrument and Control Panels

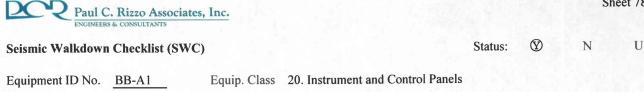
Equipment Description



File Name: 2-61-5-1-18.jpeg Description: General view of component



File Name: 2-62-5-1-18.jpeg Description: View of insulating material covering component anchorage



Equipment Description

Control Room



File Name: 2-63-5-1-18.jpeg Description: View of electrical instrumentation connected to panel

rismic Walkdown Checklist (SWC)					
isinit warkuowii Checklist (SWC)	Status:	\odot	Ν	U	
quipment ID No. <u>CC-TK-1</u> Equip. Class 21. Tanks and Heat Exchange	ers				
quipment Description Component Cooling Water Surge Tank	<u> </u>			- -	
ocation: Bldg. <u>AXLB</u> Floor El. <u>768</u>					
anufacturer, Model, Etc.					
astructions for Completing Checklist his checklist may be used to document the results of the Seismic Walkdown of an it WEL. The space below each of the following questions may be used to record the re- ndings. Additional space is provided at the end of this checklist for documenting oth	esults of judgmo				
nchorage	• 7				
Is the anchorage configuration verification required (i.e., is the item one	Y	N X			
of the 50% of SWEL items requiring such verification)? ank supported on 4 legs (L6 x 6 x $1/2$). Each leg anchored with 1-1" diam anchor.					
Is the anabarage free of bart burlier missing or large bardward?	Y	N	U	N/A	
Is the anchorage free of bent, broken, missing or loose hardware?					
	Y	N	U	N/A	
Is the anchorage free of corrosion that is more than mild surface oxidation?					
	Y	N	U	N/A	
Is the anchorage free of visible cracks in the concrete near the anchors?	X	ĺ		<u> </u>	
	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.)					
	Y	N	U		
Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	X			_	

Paul Paul	C. Rizzo Associates, Inc.				Sheet 80 of 439
	vn Checklist (SWC)	Status:	(N	U
Equipment ID No.	<u>CC-TK-1</u> Equip. Class 21. Tanks and Heat Exchan	gers			
Equipment Descri	ption Component Cooling Water Surge Tank			· · · · · · · · · · · · · · · · · · ·	
Interaction Effec	ts		λī	T	N 1/A
7. Are soft targets	free from impact by nearby equipment or structures?	Y X	<u>N</u>	U	N/A
		Y	N	U	N/A
8. Are overhead ea and masonry blo	X				
		V	N	T	N/A
9. Do attached line	Y X	N	U	N/A	
		Y	N	U	_
	bove seismic interaction evaluations, is equipment free dverse seismic interaction effects?	X			
-	ed for and found no other seismic conditions that could	Y	N	U	
adversely affec	t the safety functions of the equipment?	X			
Comments (Addi	tional pages may be added as necessary)				
	Total Mehne It				
Evaluated by:	Eddie M. Guerra Date	: 10/1/2	2012	-	
	11 al 10 Maur				

(Jung) & deput

Adam L. Helffrich

Date:

10/1/2012



Status: 🕅 N U

Equipment ID No. CC-TK-1

Seismic Walkdown Checklist (SWC)

Equip. Class 21. Tanks and Heat Exchangers

Equipment Description

Component Cooling Water Surge Tank



File Name: 2-61-1-1-15.jpeg Description: Component Plate ID



File Name: 2-63-1-1-15.jpeg Description: General view of component





U Status: N

Seismic Walkdown Checklist (SWC)

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

Component Cooling Water Surge Tank

Equipment Description



File Name: 2-62-1-1-15.jpeg Description: View of anchorage detail for a typical tank support

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS				Sheet	t 83 of 439
Seismic Walkdown Checklist (SWC)		Status:	\mathbf{v}	N	U
Equipment ID No. <u>CH-P-1C</u> Equip. Class 5	. Horizontal Pumps				
Equipment Description Charging High-Head Sat	fety Injection Pump				
Location: Bldg. <u>AXLB</u> Floor El. <u>7</u>	22				
Manufacturer, Model, Etc.					

N

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N/A

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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)? Pump anchored with 16-1" anchor bolts. Mounting base found in good condition.

- 2. Is the anchorage free of bent, broken, missing or loose hardware?
- 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
- 4. Is the anchorage free of visible cracks in the concrete near the anchors?
- 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Anchorage verified per calculations CH-P-1C and 52233-C-007.
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?

Paul ENGIN	11 C. Rizzo Associates, Inc. NEERS & CONSULTANTS					Sheet 84 of 439
Seismic Walkdo	wn Checklist (SWC)		Status:	\heartsuit	Ν	U
Equipment ID No	o. <u>CH-P-1C</u> Equip. Class 5. Horizontal Pumps					
Equipment Desc	ription Charging High-Head Safety Injection Pump					_
Interaction Effe	ects					
7. Are soft target	s free from impact by nearby equipment or structures?		Y X	N	U	N/A
	equipment, distribution systems, ceiling tiles and lighting, lock walls not likely to collapse onto the equipment?		Y X	N	U	N/A
9. Do attached lin	nes have adequate flexibility to avoid damage?		Y X	N	U	N/A
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?		Y X	N	U	
	Conditions ked for and found no other seismic conditions that could ect the safety functions of the equipment?		Y X	N	<u> U </u>]
Comments (Add	itional pages may be added as necessary)					
	The Minast					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20)12		
	11 .1 10 Mar					

Shan b dipan

Adam L. Helffrich

1

Date:

10/1/2012





Status: 🕅 N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. <u>CH-P-1C</u>

Equipment Description

Charging High-Head Safety Injection Pump

Equip. Class 5. Horizontal Pumps



File Name: 2-61-1-1-17.jpeg Description: Component Plate ID



File Name: 2-62-1-1-17.jpeg Description: General view of component





Status: 🕅 N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. <u>CH-P-1C</u>

Equipment Description

Charging High-Head Safety Injection Pump

Equip. Class 5. Horizontal Pumps



File Name: 2-63-1-1-17.jpeg Description: View of component anchorage configuration



File Name: 2-73-1-1-17.jpeg Description: View of flexible attached lines

Paul C. Rizzo Associa	ates, Inc.					Sheet 87 of 439
Seismic Walkdown Checklist (SW	VC)		Status:	\odot	N	U
Equipment ID No. <u>CH-BL-2</u>	Equip. Class	21. Tanks and Heat Exchangers				
Equipment Description Bo	ric Acid Blender					
Location: Bldg. <u>AXLB</u>	Floor El.	768				
Manufacturer, Model, Etc.						
Instructions for Completing Chec This checklist may be used to docu SWEL. The space below each of th findings. Additional space is provid	ment the results of e following questic	ons may be used to record the resu	ults of judgm			
Anchorage			V	ŊŢ		
1. Is the anchorage configuration ve		· ·	Y	N X		
of the 50% of SWEL items requi Small tank (~5' diam $x \sim 6'$ tall) sup stiffened ring support is attached to agitator is directly attached to top of flange connections. The braced stee to floor through two posts.	ported off of a stee steel platform by o of the tank with 8-5	l platform at its mid-height. The 8-1" diam machine bolts. The i/8" diam machine bolts with				
2. Is the anchorage free of bent, bro	ken, missing or loc	ose hardware?	Y X	N	U	N/A
			Y	<u>N</u>	U	N/A
3. Is the anchorage free of corrosion oxidation?	that is more than	mild surface	X	L		
1 Is the enchance free of with the		4	Y		U	N/A
4. Is the anchorage free of visible c	lacks in the concre	te near the anchors?		L		
			Y	N	U	N/A
5. Is the anchorage configuration cc (Note: This question only applies which an anchorage configuration	if the item is one of	of the 50% for	LL	1		<u>X</u>
			<u> </u>	N	U	
6. Based on the above anchorage expotentially adverse seismic cond		chorage free of	X			

	C. Rizzo Associates, Inc.					Sheet 88 of 439
Seismic Walkdov	vn Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No	Equipment ID No. <u>CH-BL-2</u> Equip. Class 21. Tanks and Heat Exchangers					
Equipment Descr	ption Boric Acid Blender				<u> </u>	
Interaction Effec	ets					
7. Are soft targets	. [Y X	N	U	N/A	
			Y	N	U	N/A
8. Are overhead e and masonry blo		X				
			Y	N	U	N/A
9. Do attached lin	es have adequate flexibility to avoid damage?	[X			
10. Based on the a	above seismic interaction evaluations, is equipment free	Г	Y X	N	U	
	dverse seismic interaction effects?	L	A			J
						v
	conditions ted for and found no other seismic conditions that could t the safety functions of the equipment?	Г	Y X	<u>N</u>	U	7
			ner) -			
Comments (Addi	tional pages may be added as necessary)					
	The My fine It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20)12		
	Sana) & Minur					

(Jung) to appeal

Adam L. Helffrich

____Date:

10/1/2012



Status: 🕲 N U

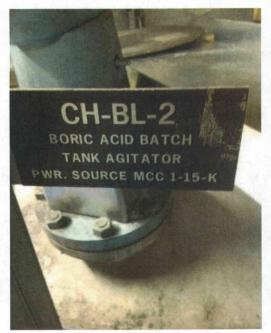
Equipment ID No. CH-BL-2

Seismic Walkdown Checklist (SWC)

Equip. Class 21. Tanks and Heat Exchangers

Equipment Description

Boric Acid Blender



File Name: 2-61-6-1-60.jpeg Description: Component Plate ID



File Name: 2-62-6-1-60.jpeg Description: General view of component





Seismic Walkdown Checklist (SWC)

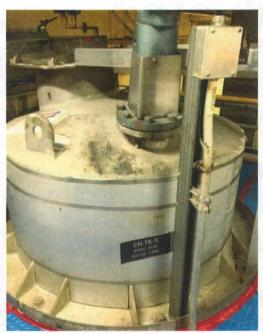
Status: 🕅 N U

Equipment ID No. CH-BL-2

Equip. Class 21. Tanks and Heat Exchangers

Equipment Description

Boric Acid Blender



File Name: 2-63-6-1-60.jpeg Description: View of agitator mounting on Boric Acid Batch Tank



File Name: 2-64-6-1-60.jpeg Description: View of platform surrounding Boric Acid Batch Tank

Paul C. Rizzo Ass ENGINEERS & CONSULTANT					Sh	eet 91 of 4	139
Seismic Walkdown Checklist	(SWC)		Status:	\heartsuit	Ν	U	
Equipment ID No. <u>CH-P-2A</u>	Equip. Clas	s 5. Horizontal Pumps					
Equipment Description	Boric Acid Transfe	r Pump					
Location: Bldg. <u>AXLB</u>	Floor El.	752					
Manufacturer, Model, Etc.							

Instructions for Completing Checklist

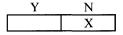
This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other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

Anchorage

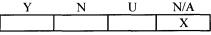
1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?

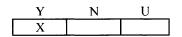
Only two out of 4 anchors visible (2 are below an insulated box over the pump portion). 2-5/8" anchors identified.

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



 Y	N	U	N/A
X			
			/ .
 Y	N	<u> </u>	N/A
Х			
Y	N	U	N/A
Х			
			/ .





- 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
- 4. Is the anchorage free of visible cracks in the concrete near the anchors?
- 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?

Par ENGIN	Il C. Rizzo Associates, Inc.					Sheet 92 of 439
Seismic Walkdo	wn Checklist (SWC)		Status:	(Y)	N	U
Equipment ID N	o. <u>CH-P-2A</u> Equip. Class 5. Horizontal Pumps					
Equipment Desc	ription Boric Acid Transfer Pump	·····				_
Interaction Effe	ects					
7. Are soft target	is free from impact by nearby equipment or structures?		Y X	N	U	N/A
	equipment, distribution systems, ceiling tiles and lighting,		Y X	N	U	N/A
and masonry b	lock walls not likely to collapse onto the equipment?					
	nes have adequate flexibility to avoid damage? tified to be well supported.		Y X	N	<u> </u>	N/A
	10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?			N	U	
	Conditions ked for and found no other seismic conditions that could ect the safety functions of the equipment?		Y X	N	U	
Comments (Add	litional pages may be added as necessary)					
	Total Mehren It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20	012		
	Itway & Marine					
	Adam L. Helffrich	Date:	10/1/20)12		



Status: 🕅 N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. CH-P-2A

Equipment Description

Boric Acid Transfer Pump

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

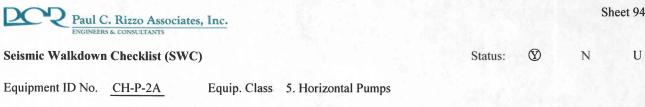
Equip. Class 5. Horizontal Pumps



File Name: 2-61-1-1-13.jpeg Description: Component Plate ID



File Name: 2-62-1-1-13.jpeg Description: General view of component



Equipment Description

Boric Acid Transfer Pump



File Name: 2-63-1-1-13.jpeg Description: View of component anchorage configuration

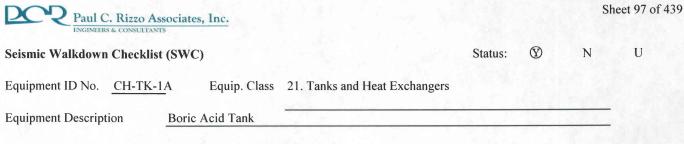
Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS								Sheet 95 of 43			
Seismic Walkdow	Seismic Walkdown Checklist (SWC)					\heartsuit	N	U			
Equipment ID No.	CH-TK-	A Equip. Cla	uss 21. Tanks and Heat	t Exchangers							
Equipment Descrip	tion	Boric Acid Tank									
Location: Bldg.	AXLB	Floor El.	752								
Manufacturer, Mod	lel, Etc.										
SWEL. The space b	be used to be low each	document the results of the following que	s of the Seismic Walkdor estions may be used to re f this checklist for docur	ecord the resul	ts of judgm						
Anchorage					Y	N					
			ired (i.e., is the item one	[X						
Tank supported on	4 legs. Eac		cation)? 2-1" diam anchor bolts. thread. Judged not a co.								
2 Is the anchorage	free of here	t, broken, missing o	n laana handuurun 9	г	Y X	<u>N</u>	<u>U</u>	N/A			
2. Is the unenotage		, broken, missing of		L	<u></u>	I					
3. Is the anchorage	free of corr	osion that is more th	an mild surface	Г	Y X	N	U	N/A			
oxidation?				L		I.					
				-	Y	N	U	N/A			
4. Is the anchorage	free of visi	ble cracks in the cor	crete near the anchors?	L	X						
5 1 1	<i>a</i>			F	Y	N	U	N/A			
(Note: This quest which an ancho	tion only ap rage config	on consistent with p plies if the item is o uration verification <i>C-031 confirms con</i>	is required.)	L	<u> </u>						
 Based on the abo potentially advertially 		ge evaluations, is the conditions?	e anchorage free of	C	Y X	N	<u>U</u>]			

Paul ENGINE	C. Rizzo Associates, Inc. ERS & CONSULTANTS					Sheet 96 of 439
Seismic Walkdov	vn Checklist (SWC)	Status:	\heartsuit	N	U	
Equipment ID No	. <u>CH-TK-1A</u> Equip. Class 21. Tanks and Heat E	Exchangers				
Equipment Descri	ption Boric Acid Tank					
Interaction Effec	its					
7. Are soft targets free from impact by nearby equipment or structures?				N	U	N/A
			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?						
9. Do attached lin	es have adequate flexibility to avoid damage?	Y X	N	U	N/A	
			Y	N	U	_
	bove seismic interaction evaluations, is equipment free dverse 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?				N	U	7
		•	X			
Comments (Addi	tional pages may be added as necessary)					
	atte Mehne It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20	012		
	Thurs & Allow					

Adam L. Helffrich

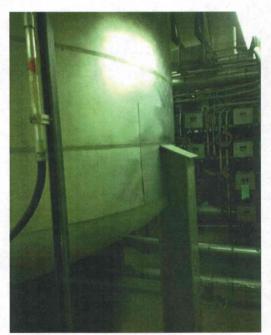
Date:

10/1/2012

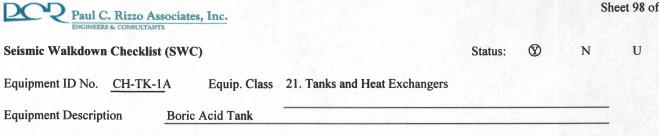




File Name: 2-61-1-1-14.jpeg Description: Component Plate ID



File Name: 2-62-1-1-14.jpeg Description: General view of component





File Name: 2-63-1-1-14.jpeg Description: View of anchorage detail for a typical tank support

Paul C. Rizzo A		s, Inc.					Sheet 99 of 439
Seismic Walkdown Checklis	Statu	s: 🕅	N	U			
Equipment ID No. DC-SWI	<u>BD</u> 1-1	Equip. Class	14. Distribution Panels				
Equipment Description	125V	DC Bus					
Location: Bldg. <u>SRVB</u>	_	Floor El.	713				
Manufacturer, Model, Etc.							
Instructions for Completing This checklist may be used to SWEL. The space below each findings. Additional space is p	docume of the fe	nt the results of ollowing questi	ons may be used to record the	results of jud	gments and		
Anchorage				Y	N		
1. Is the anchorage configurat				X		ĺ	
of the 50% of SWEL items The switchboard is attached to The sill channels are anchored at front, 2 at middle and 2 at b adjacent DC Battery SWGR N two panels, and therefore judg	o three s d to cond back). C lo.1 pane	ill channels at l crete floor with Component iden el. No essential	base with six 1/2" diameter bo six 1/2" diameter anchor boli tified not to be attached to	ts (2			
	-			Y	N	U	N/A
2. Is the anchorage free of ben	it, brokei	n, missing or lo	ose hardware?	X			
2. In the analysis of the second				Y	N	U	N/A
3. Is the anchorage free of cor oxidation?	rosion in	iat is more than	mild surface	X	<u> </u>		
				Y	N	U	N/A
4. Is the anchorage free of visi	ble crac	ks in the concre	ete near the anchors?	X			
				Y	N	U	N/A
5. Is the anchorage configuration		-		X			
(Note: This question only a which an anchorage config Both SEWS and calc. 52233-C switchboard. The referenced based on four bolt pattern.	guration C-014 ide calculati	verification is r entify four attac ion conservative	equired.) hment points for this ely shows anchor bolt adequa	· <u>Y</u>	N	U	
6. Based on the above anchora			nchorage free of	X		<u>.</u>	
potentially adverse seismic	conditio	5115 (

	C. Rizzo Associates, Inc.				Sh	eet 100 of 439
	n Checklist (SWC)	Status:	(N	U	
Equipment ID No.	DC-SWBD1-1 Equip. Class 14. Distribution Panels					
Equipment Descrip	Detion 125V DC Bus		· · · · · · · · · · · · · · · · · · ·			
Interaction Effect	S		¥7	N		N 1/A
7. Are soft targets	free from impact by nearby equipment or structures?		Y X	N	U	N/A
			Y	N	U	N/A
and masonry blo	uipment, distribution systems, ceiling tiles and lighting, ck walls not likely to collapse onto the equipment? 11, SB-1-12 and SB-1-13 have been qualified per IE 80-11 r	aviau	X			
Diock wans 5D-1-1	1, 5D-1-12 and 5D-1-15 have been qualified per 1E 80-11 f	eview.	Y	N	U	N/A
9. Do attached line	s have adequate flexibility to avoid damage?		X			
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?				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?				N	- U	
Comments (Addit	ional pages may be added as necessary)				-	
	- detre Mahrie It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20	012	-	
	Bury Delline					

Adam L. Helffrich

Date:

10/1/2012

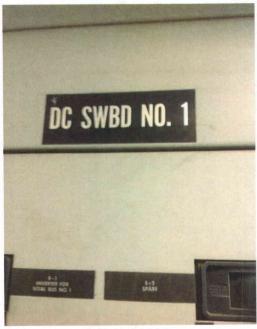


Seismic Walkdown Checklist (SWC)

Status: 🕅 N U

 Equipment ID No.
 DC-SWBD1-1
 Equip. Class
 14. Distribution Panels

 Equipment Description
 125V DC Bus



File Name: 2-61-11-1-25.jpeg Description: Component Plate ID



File Name: 2-62-11-1-25.jpeg Description: General view of component

U



Seismic Walkdown Checklist (SWC)

Status: 🕅 N

Equipment ID No. <u>DC-SWBD</u>1-1 Equip. Class 14. Distribution Panels

Equipment Description

File Name: 2-63-11-1-25.jpeg Description: View of channel mounting base



File Name: 2-64-11-1-25.jpeg Description: General view inside component



Seismic Walkdown Checklist (SWC)

Status: 🕅 N U

Equipment ID No. <u>DC-SWBD</u>1-1 Equip. Class 14. Distribution Panels

Equipment Description

125V DC Bus



File Name: 2-94-11-1-25.jpeg Description: Inside view of back of battery braker



File Name: 2-95-11-1-25.jpeg Description: One 1/2" diam anchor bolt identified at back of breaker.

U



Seismic Walkdown Checklist (SWC)

Status: 🕅 N

Equipment ID No. <u>DC-SWBD</u>1-1 Equip. Class 14. Distribution Panels

Equipment Description

125V DC Bus



File Name: 2-96-11-1-25.jpeg Description: Inside view from back of switch board



File Name: 2-97-11-1-25.jpeg Description: 2 bolts identified at back of switch board.

Paul C. Rizzo Associates, Inc.			She	eet 105 of 439
Seismic Walkdown Checklist (SWC)	Status:	Y	\mathbb{N}	U
Equipment ID No. <u>DC-SWBD</u> 1-2 Equip. Class 14. Distribution Panels				
Equipment Description 125V DC Bus				
Location: Bldg. <u>SRVB</u> Floor El. <u>713</u>				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an SWEL. The space below each of the following questions may be used to record the findings. Additional space is provided at the end of this checklist for documenting of the space document o	results of judgme			
Anchorage	Y	N		
 Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? The switchboard is attached to three sill channels at base with six 1/2" diameter base The sill channels are anchored to concrete floor with six 1/2" diameter anchor bolt at front, 2 at middle and 2 at back). 				
2. Is the anchorage free of bent, broken, missing or loose hardware?	Y X	N	U	N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Y X	<u>N</u>	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 analysis configuration consistent with plant decomponentation?	Y X	<u>N</u>	<u>U</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.) Both SEWS and calc. 52233-C-014 identify four attachment points for this 		I		LJ
switchboard. The referenced calculation conservatively shows anchor bolt adequa based on four bolt pattern.	<u> </u>	N	U	1
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	X		<u></u>	J

Paul O	C. Rizzo Ass	sociates, Inc.					She	eet 106 of 439
ENGINEERS & CONSULTANTS Seismic Walkdown Checklist (SWC)						Y	N	U
Equipment ID No.	DC-SWB	D1-2 Equip. Class	14. Distribution Pane	els				
Equipment Descrip	tion	125V DC Bus				18178 - Million -		
Interaction Effect	s							
					<u>Y</u>	N	U	N/A
There is a potentia	l for seismic ery Chargei	pact by nearby equipm interaction identified r BV-BAT-CHG1-2. Co	between switch board			X		
					Y	Ν	U	N/A
		stribution systems, ceil			X			
		likely to collapse onto <i>d SB-1-8 have been qu</i>		view.				
					Y	N	U	N/A
9. Do attached line	s have adeq	uate flexibility to avoid	l damage?		X			
					Y	N	U	
		c interaction evaluation ic interaction effects?	is, is equipment free			X		
Other Adverse Co					Y			
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment?						N	<u> </u>	1
adversely affect	the safety i	unctions of the equiph			X			1
Comments (Addit	ional pages	may be added as neces	sary)		<u>.</u>	<u></u>		
		the Mahrandt						
Evaluated by:	Eddie M.	Guerra		_Date:	10/1/2	012		
	(Dury)	Pelling						
		Helffrich		_Date:	10/1/2	012	-	



Seismic Walkdown Checklist (SWC)

Y N U Status:

Equipment ID No. DC-SWBD1-2 Equip. Class 14. Distribution Panels 125V DC Bus

Equipment Description



File Name: 2-61-6-1-26.jpeg Description: Component Plate ID



File Name: 2-62-6-1-26.jpeg Description: General view of component



Status: Y 🕲 U

Equipment ID No. DC-SWBD1-2 Equip. Class 14. Distribution Panels

Equipment Description



File Name: 2-64-6-1-26.jpeg Description: View of flexible lines going though switch board cabinet



File Name: 2-73-6-1-26.jpeg Description: Inside view from front of component



File Name: 2-94-6-1-26.jpeg Description: View of anchorage detail from front of component



File Name: 2-95-6-1-26.jpeg Description: General view from inside of battery braker taken from the back

Paul C. Rizzo					She	et 110 of	439
Seismic Walkdown Check			Status:	Y	\mathbb{N}	U	
Equipment ID No. DC-SV	VBD1-2 Equip. Class	14. Distribution Panels					
Equipment Description	125V DC Bus				13.57		



File Name: 2-96-6-1-26.jpeg Description: One 1/2" diam anchor bolt identified at back of breaker.



File Name: 2-97-6-1-26.jpeg Description: View of switchboard anchorage taken from back



Status: Y 🕲 U

Equipment ID No. DC-SWBD1-2 Equip. Class 14. Distribution Panels

Equipment Description



File Name: 2-98-6-1-26.jpeg Description: General view for inside of switch board taken from back

Paul C. Rizzo ENGINEERS & CONSULT		es, Inc.				She	et 112 of 4	139
Seismic Walkdown Checkl	ist (SWC	C)		Status:	(Ν	U	
Equipment ID No. DC-SV	/ <u>BD</u> 1-3	Equip. Class	14. Distribution Panels					
Equipment Description	<u>125V</u>	DC Bus 3		······································				
Location: Bldg. SRVB		Floor El.	713					
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

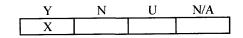
oxidation?

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? The switchboard is attached to three sill channels at base with six 1/2" diameter bolts. The sill channels are anchored to concrete floor with six 1/2" diameter anchor bolts (2 at front, 2 at middle and 2 at back). Component identified not to be attached to adjacent DC Battery SWGR No.3 panel. No essential relays identified therefore judged not a concern. DC Battery SWGR No.3 Panel identified to be anchored with 2-1/2" diam anchors at front and 1-1/2" diam anchor at back of panel. Typical configuration for all SWBD's.

N/A U Ν Y Х U N/A N Y Х

Y X

U N/A Y N Х



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.) Both SEWS and calc. 52233-C-014 identify four attachment points for this

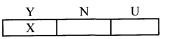
4. Is the anchorage free of visible cracks in the concrete near the anchors?

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

switchboard. The referenced calculation conservatively shows anchor bolt adequacy based on four bolt pattern.

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



Paul C ENGINEER	C. Rizzo Associates, Inc. RS & CONSULTANTS				She	eet 113 of 439
Seismic Walkdow	n Checklist (SWC)		Status:	\heartsuit	Ν	U
Equipment ID No.	DC-SWBD1-3 Equip. Class 14. Distribution Panel	s				
Equipment Descrip	tion 125V DC Bus 3			· · · · · · · · · · · · · · · · · · ·		
Interaction Effect	S			N	TT	NT/ A
7. Are soft targets f	free from impact by nearby equipment or structures?		Y X	<u>N</u>	U	N/A
			Y	N	U	N/A
and masonry bloc	uipment, distribution systems, ceiling tiles and lighting, ok walls not likely to collapse onto the equipment? Thas been qualified per IE 80-11 review.		X		<u> </u>	
9. Do attached line	s have adequate flexibility to avoid damage?		Y X	<u>N</u>	U	N/A
10 Decedor decel	the second se		Y	N	U	I
	bove seismic interaction evaluations, is equipment free lverse seismic interaction effects?					I
Other Adverse Co	onditions ed for and found no other seismic conditions that could		Y	N	- U	
	t the safety functions of the equipment?		X]
Comments (Addit	ional pages may be added as necessary)	<u>.</u>			-	
	the Myhne It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012	-	
	Mang) Dellarge					

Adam L. Helffrich

Date:

U



Seismic Walkdown Checklist (SWC)

Status: 🕅 N

 Equipment ID No.
 DC-SWBD1-3
 Equip. Class
 14. Distribution Panels

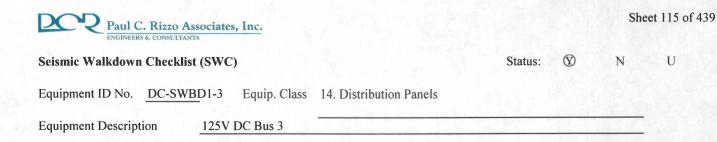
 Equipment Description
 125V DC Bus 3



File Name: 2-61-1-1-25.jpeg Description: Component Plate ID



File Name: 2-62-1-1-25.jpeg Description: General view of component





File Name: 2-63-1-1-25.jpeg Description: View of channel mounting base



File Name: 2-73-1-1-25.jpeg Description: View of flexible lines going though switch board cabinet



Status: 🕅 N U

Equipment ID No. <u>DC-SWBD1-3</u> Equip. Class 14. Distribution Panels

Equipment Description



File Name: 2-94-1-1-25.jpeg Description: General view from inside of component taken from the front



File Name: 2-95-1-1-25.jpeg Description: General view from inside of component taken from the back



Status: 🕲 N U

Equipment ID No. DC-SWBD1-3 Equip. Class 14. Distribution Panels

Equipment Description



File Name: 2-96-1-1-25.jpeg Description: General view from inside of braker taken from behind



File Name: 2-97-1-1-25.jpeg Description: One 1/2" diam anchor bolt identified at back of breaker.



Status: 🕅 N U

Equipment ID No. DC-SWBD1-3 Equip. Class 14. Distribution Panels

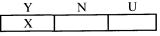
Equipment Description



File Name: 2-98-1-1-25.jpeg Description: Anchorage detail of braker taken from the front

Paul C. Rizzo Associates, Inc.			She	eet 119 of 439
Seismic Walkdown Checklist (SWC)	Status:	(N	U
Equipment ID No. <u>DC-SWBD</u> 1-4 Equip. Class 14. Distribution Panels				
Equipment Description 125V DC Bus 4				
Location: Bldg. SRVB Floor El. 713				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an iten SWEL. The space below each of the following questions may be used to record the resu findings. Additional space is provided at the end of this checklist for documenting othe	ults of judgm			
Anchorage	Y	N		
 Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? The switchboard is attached to three sill channels at base with six 1/2" diameter bolts. The sill channels are anchored to concrete floor with six 1/2" diameter anchor bolts (2 at front, 2 at middle and 2 at back). Component identified to be attached to adjacent 				
DC Battery SWGR No. 4.	Y	N	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X	I		
	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			
	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.) Both SEWS and only 52222 C 014 identify form attachment points for this 	X			
Both SEWS and calc. 52233-C-014 identify four attachment points for this switchboard. The referenced calculation conservatively shows anchor bolt adequacy	V 7	N	ΙT	
based on four bolt pattern.	Y	N	U	-

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



Paul C. Rizzo Associ ENGINEERS & CONSULTANTS	ates, Inc.					She	et 120 of 439
Seismic Walkdown Checklist (SV	WC)			Status:	\heartsuit	Ν	U
Equipment ID No. <u>DC-SWBD</u> 1-	4 Equip. Class 14	4. Distribution Panels	3				
Equipment Description 12	5V DC Bus 4	·····					
Interaction Effects	u						27/4
7. Are soft targets free from impac	t by nearby equipment	or structures?		Y X	<u>N</u>	U	N/A
				Y	N	U	N/A
8. Are overhead equipment, distrib	• •			X			
and masonry block walls not like Block wall SB-1-9 has been qualif	· ·						
				Y	N	U	N/A
9. Do attached lines have adequate	flexibility to avoid da	mage?		X			
10. Deced on the share existing int	anation avaluations i	a aquinment free		Y X	N	U	
10. Based on the above seismic int of potentially adverse seismic i		s equipment free					
Other Adverse Conditions		. <u> </u>				-	
11. Have you looked for and found				Y	N	U	I
adversely affect the safety func	tions of the equipment	?		X			
Comments (Additional pages may	be added as necessary	y)				-	
da	& Minast						
Evaluated by: Eddie M. Gu	erra		Date:	10/1/2	012	-	
Bury b) ffirm						

Adam L. Helffrich

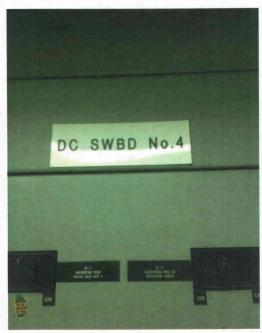
Date:



Status: 🕅 N U

 Equipment ID No.
 DC-SWBD1-4
 Equip. Class
 14. Distribution Panels

 Equipment Description
 125V DC Bus 4



File Name: 2-61-2-1-25.jpeg Description: Component Plate ID



File Name: 2-62-2-1-25.jpeg Description: General view of component



Status: 🕅 N U

Equipment ID No. <u>DC-SWBD1-4</u> Equip. Class 14. Distribution Panels

Equipment Description



File Name: 2-63-2-1-25.jpeg Description: View of channel mounting base



File Name: 2-64-2-1-25.jpeg Description: View of back entry conduit



Status: 🕅 N U

Equipment ID No. DC-SWBD1-4 Equip. Class 14. Distribution Panels

Equipment Description



File Name: 2-73-2-1-25.jpeg Description: General view of inside of component



File Name: 2-94-2-1-25.jpeg Description: View of anchorage detail taken from the back



Status: 🕅 N U

Equipment ID No. DC-SWBD1-4 Equip. Class 14. Distribution Panels

Equipment Description



File Name: 2-95-2-1-25.jpeg Description: View of base detail for braker section

Paul C. Rizzo	Associates, Inc.				She	eet 125 of 4	139
Seismic Walkdown Checkl	list (SWC)		Status:	(Ν	U	
Equipment ID No. <u>EE-P-1</u>	IA Equip. Clas	s 5. Horizontal Pumps					
Equipment Description	Diesel Generator Fu	uel Oil Transfer Pump	<u> </u>				
Location: Bldg. DGBX	Floor El.	735					
Manufacturer, Model, Etc.	<u></u>						
SWEL. The space below each	to document the results ch of the following ques	of the Seismic Walkdown of stions may be used to record this checklist for documenting	the results of judgme		-		

Anchorage

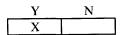
oxidation?

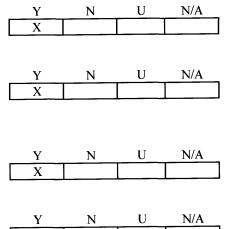
1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?

Small pump anchored to concrete pad with 4-1/2" diam anchor bolts with adequate edge distance.

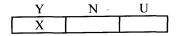
2. Is the anchorage free of bent, broken, missing or loose hardware?

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





X



4. Is the anchorage free of visible cracks in the concrete near the anchors? Some minor cracks noticed on concrete pad and judged acceptable.

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Anchorage verified per document 52233-C-007 Anchorage Calc

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

Paul ENGINE	C. Rizzo Associates, Inc. ERS & CONSULTANTS				Sh	eet 126 of 439
Seismic Walkdov	vn Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No	Equip. Class 5. Horizontal Pumps					
Equipment Descri	ption Diesel Generator Fuel Oil Transfer Pump			<u></u>		
Interaction Effec	ts	<u></u>			-	
7. Are soft targets	free from impact by nearby equipment or structures?		Y X	<u>N</u>	U	N/A
			Y	N	U	N/A
	quipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment?		X			
			V	N	TT	N/A
	es have adequate flexibility to avoid damage? fied to be well supported.		Y X	N	U	
			Y	N	U	
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?		X			
	xed for and found no other seismic conditions that could		Y	N	U	1
adversely affec	et the safety functions of the equipment?		X			J
Comments (Addi	tional pages may be added as necessary)				-	
	Etter Mehne It					
Evaluated by:	Eddie M. Guerra	_Date:	10/1/2	012	-	
	ze 110 Main					

Shared & allow

Adam L. Helffrich

Date:



Status: 🕅 N U

Seismic Walkdown Checklist (SWC)

Equip. Class 5. Horizontal Pumps

Equipment Description

Equipment ID No. EE-P-1A

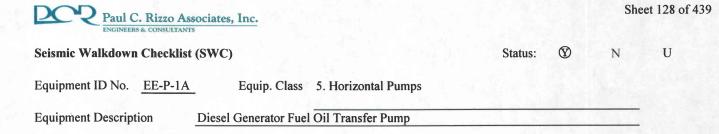
Diesel Generator Fuel Oil Transfer Pump



File Name: 2-61-1-1-20.jpeg Description: Component Plate ID



File Name: 2-62-1-1-20.jpeg Description: General view of component

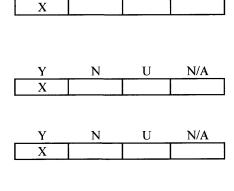




File Name: 2-63-1-1-20.jpeg Description: View of component anchroage configuration

Paul C. Rizzo As ENGINEERS & CONSULTAN					She	eet 129 of 439
Seismic Walkdown Checklis	t (SWC)		Status:	\heartsuit	Ν	U
Equipment ID No. <u>EE-TK-2</u>	A Equip. Class	21. Tanks and Heat Exchangers				
Equipment Description	EE-EG-1 Fuel Oil Da	y Tank				
Location: Bldg. DGBX	Floor El.	735				
Manufacturer, Model, Etc.		<u> </u>				
SWEL. The space below each	of the following question	the Seismic Walkdown of an item ons may be used to record the resul is checklist for documenting other	lts of judgm			
Anchorage			V	N		
1. Is the anchorage configurati of the 50% of SWEL items			Y X	N		
Tank is mounted on braced ste anchored with 4-1" diameter of		4). Each of four posts are				
2 Is the such areas for a fil	. 1 1		Y	<u>N</u>	U	N/A
2. Is the anchorage free of ben	t, broken, missing or lo	ose hardware?	X			

- 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 configuration confirmed by Drawing RS-0019Q
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?

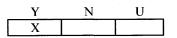


Ν

Y

U

N/A



Paul ENGINE	C. Rizzo Associates, Inc. ERS & CONSULTANTS				She	eet 130 of 439
Seismic Walkdow	yn Checklist (SWC)		Status:	\heartsuit	Ν	U
Equipment ID No.	EE-TK-2A Equip. Class 21. Tanks and Heat I	Exchangers				
Equipment Descri	ption EE-EG-1 Fuel Oil Day Tank					
Interaction Effec	ts				•	
7. Are soft targets	free from impact by nearby equipment or structures?		Y X	<u>N</u>	U	N/A
8 Are overhead e	quipment, distribution systems, ceiling tiles and lighting,		Y	N	<u>U</u>	N/A
	ck walls not likely to collapse onto the equipment?					
	es have adequate flexibility to avoid damage?		Y X	<u>N</u>	U	N/A
	re rigidly supported.		Y	N	U	1
	bove seismic interaction evaluations, is equipment free dverse seismic interaction effects?		X		<u> </u>	
Other Adverse C					-	
	ed for and found no other seismic conditions that could to the safety functions of the equipment?		Y X	<u>N</u>	U]
Comments (Addi	tional pages may be added as necessary)				-	
	the My It					
Evaluated by:	Eddie M. Guerra	_Date:	10/1/2	012	-	
	Stand & Allow					

Adam L. Helffrich

£

Date:



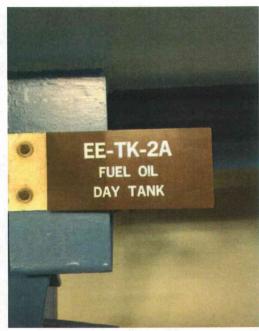
Status: 🕅 N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. EE-TK-2A Equip. Class 21. Tanks and Heat Exchangers

Equipment Description

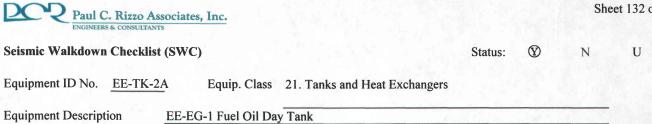
EE-EG-1 Fuel Oil Day Tank



File Name: 2-61-2-1-20.jpeg Description: Component Plate ID



File Name: 2-62-2-1-20.jpeg Description: General view of component





File Name: 2-63-2-1-20.jpeg Description: View of component anchorage

		Sh	eet 133 of 439
Status:	\heartsuit	N	U
•			
esults of judgm			
Y	N		
	X		
Y	N	U	N/A X
V	N	I	N/A
Y	1 N	0	
Y	N	U	N/A X
	tem of equipme results of judgm her comments.	tem of equipment on the results of judgments and her comments.	Status:

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Y

Y

X

N/A

Χ

5. Is the anchorage configuration consistent with plant documentation	1?
(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?

Paul ENGIN	C. Rizzo Associates, Inc.				Sh	eet 134 of 439
Seismic Walkdov	vn Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No	. <u>FCV-1CH</u> -113A Equip. Class 7. Pneumatic-Operated	Valve				
Equipment Descri	ption Boric Acid to Blender FCV				·····	
Interaction Effec	ets					
7. Are soft targets	free from impact by nearby equipment or structures?	E	Y X	<u>N</u>	U	N/A
			Y	N	U	N/A
	quipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment?	Ľ	x			
	es have adequate flexibility to avoid damage? and with adequate flexibility.	Ľ	Y X	<u>N</u>	U	N/A
machea mes jou	na win adequate fexionity.		Y	N	U	_
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?		X			
	Conditions ked for and found no other seismic conditions that could ct the safety functions of the equipment?		Y X	N	U]
Comments (Addi	tional pages may be added as necessary)					
	Etter Mehne It					
Evaluated by:	Eddie M. Guerra	Date: _	10/1/2	012		
	Munt 10 Mage					

Shand & efficie

Adam L. Helffrich

Date:



Status: 🕲 N U

Equipment ID No. FCV-1CH-113A Equip. Class 7. Pneumatic-Operated Valve

Equipment Description

Boric Acid to Blender FCV



File Name: 2-61-2-1-12.jpeg Description: Component Plate ID



File Name: 2-62-2-1-12.jpeg Description: General view of component

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS			She	et 136 of 4
Seismic Walkdown Checklist (SWC)	Status:	\odot	N	U
Equipment ID No. <u>FCV-1FW</u> -103B Equip. Class 7. Pneumatic-Operated Valv	ve			
Aquipment Description 3B AFW Pump Recirc Control Valve				
ocation: Bldg. SFGB Floor El. 735				
Ianufacturer, Model, Etc.				
nstructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an WEL. The space below each of the following questions may be used to record the indings. Additional space is provided at the end of this checklist for documenting of	results of judgme			
nchorage	Y	N		
. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?		X		
mall AOV on ~3" line well supported and found in good condition.				
. Is the anchorage free of bent, broken, missing or loose hardware?	Y	N	U	N/A X
. Is the anchorage free of corrosion that is more than mild surface oxidation?	Y	N	<u>U</u>	N/A X
	Y	<u>N</u>	U	N/A
. Is the anchorage free of visible cracks in the concrete near the anchors?		1	<u> </u>	X
	<u>Y</u>	<u>N</u>	U	N/A
. 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 X	N	U	1

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS			She	et 137 of 439
Seismic Walkdown Checklist (SWC)	Status:	\odot	Ν	U
Equipment ID No. <u>FCV-1FW</u> -103B Equip. Class 7. Pneumatic-Operated V	Valve			
Equipment Description 3B AFW Pump Recirc Control Valve				
Interaction Effects			-	
7. Are soft targets free from impact by nearby equipment or structures?	Y X	<u>N</u>	U	N/A
	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. Do attached lines have adapted flavikility to avoid damage?	Y	N	U	N/A
9. Do attached lines have adequate flexibility to avoid damage?		<u> </u>	l	
	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	l
adversely affect the safety functions of the equipment?	X	<u>-</u> .		
Comments (Additional pages may be added as necessary)		<u></u>	-	
atter Mehraft				
Evaluated by: Eddie M. Guerra D	pate: <u>10/1/2</u>	2012	-	
Man & Albert				

Adam L. Helffrich

Date:



Status: 🕅 N U

Equipment ID No. FCV-1FW-103B Equip. Class 7. Pneumatic-Operated Valve

Equipment Description

3B AFW Pump Recirc Control Valve



File Name: 2-61-1-1-50.jpeg Description: Component Plate ID



File Name: 2-62-1-1-50.jpeg Description: General view of component



Status: 🕅 N U

Equipment ID No. FCV-1FW-103B Equip. Class 7. Pneumatic-Operated Valve

Equipment Description

3B AFW Pump Recirc Control Valve



File Name: 2-63-1-1-50.jpeg Description: View of flexible attached lines

Paul C. Rizzo As ENGINEERS & CONSULTAN					She	et 140 of 4	139
Seismic Walkdown Checklis	t (SWC)		Status:	\heartsuit	N	U	
Equipment ID No. <u>FW-59</u>	Equip. Clas	s 0D. Other-Check Val	ve or Manual Valve				
Equipment Description	Common Lube Oil	Coolers 3-way Manual V	alve				
Location: Bldg. SFGB	Floor El.	735					
Manufacturer, Model, Etc.			-				

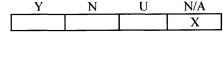
Instructions for Completing Checklist

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 a \sim 2 1/2" diam line with adequate support configuration.	

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



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Ν

Ν

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N/A

Х

N/A

Х

N/A

X

 $\frac{N}{X}$

Y

Y

Y

Y

- 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
- 4. Is the anchorage free of visible cracks in the concrete near the anchors?
- Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- Y N U
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?

Paul ENGIN	l C. Rizzo As	sociates, Inc.					Sh	eet 141 of 439
Seismic Walkdov	wn Checklist	(SWC)			Status:	(Y)	N	U
Equipment ID No	. <u>FW-59</u>	Equip. Class 0D. (Other-Check Val	ve or Man	ual Valve			
Equipment Descr	iption	Common Lube Oil Coolers	3-way Manual V	alve	······			
Interaction Effe	ets							
7. Are soft targets	free from in	pact by nearby equipment or	structures?		Y X	N	U	N/A
					Y	N	U	N/A
and masonry blo	ock walls not	stribution systems, ceiling tile likely to collapse onto the eq ntified to be well restrained.			X			
9. Do attached lin	es have adeq	uate flexibility to avoid dama	ge?		Y X	N	U	N/A
		e interaction evaluations, is ea ic interaction effects?	quipment free		Y X	N	U	
	ked for and fo	ound no other seismic condition inctions of the equipment?	ons that could		Y X	N	U	
Comments (Add	itional pages	may be added as necessary)						
		the Mehraft						
Evaluated by:	Eddie M	Guerra		Date:	10/1/2	012		
	(Itury)	10 effine						
					10/1/0	010		

Date:



Status: Ø

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Equipment ID No. FW-59

Common Lube Oil Coolers 3-way Manual Valve

Equip. Class 0D. Other-Check Valve or Manual Valve

Equipment Description



File Name: 2-61-8-1-50.jpeg Description: Component Plate ID



File Name: 2-62-8-1-50.jpeg Description: General view of component

Paul C. F	Rizzo Associa	tes, Inc.				She	et 143 of	439
ENGINEERS & C	CONSULTANTS							
Seismic Walkdown C	hecklist (SW	′C)		Status:	(I)	N	U	
Equipment ID No. <u>F</u>	W-P-2	Equip. Class	5. Horizontal Pumps					
Equipment Description	n <u>Tur</u>	bine Driven Pump)					
Location: Bldg. S	FGB	Floor El.	735					
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 skid and anchored with 8-3/4" diam anchor bolts. 	Y X	N]	
2. Is the anchorage free of bent, broken, missing or loose hardware?	Y X	N	U	N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Y X	N	U	N/A

N/A

N/A

U

U

U

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Y

Х

Y X

Y Χ

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 verified per drawing 08700-02.040-0005, Rev. E.

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

Paul ENCINE	C. Rizzo Associates, Inc.				Sh	eet 144 of 439
Seismic Walkdov	vn Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No	. <u>FW-P-2</u> Equip. Class 5. Horizontal Pumps					
Equipment Descri	ption Turbine Driven Pump					
Interaction Effec	ts				* 1	21/4
7. Are soft targets	free from impact by nearby equipment or structures?		Y X	N	U	N/A
			Y	N	U	N/A
	quipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment?		X			
			Y	N	U	N/A
	es have adequate flexibility to avoid damage? are adequately supported.		X			
			Y	N	U	1
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?				,,]
					-	
	Conditions ked for and found no other seismic conditions that could ct the safety functions of the equipment?		Y X	N	U	1
		<u></u>			-	-
Comments (Addi	tional pages may be added as necessary)					
	- detter Mehne It					
Evaluated by:	Eddie M. Guerra	_Date:	10/1/2	012	-	
	21 A 10 Marine					

Show & Span

Adam L. Helffrich

Date:



Status: 🕅

N U

Equipment ID No. FW-P-2

Equipment Description

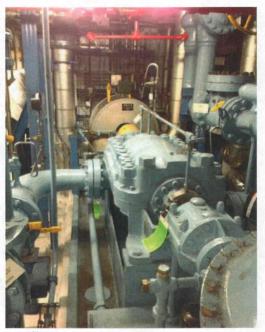
Turbine Driven Pump

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

Equip. Class 5. Horizontal Pumps



File Name: 2-61-3-1-50.jpeg Description: Component Plate ID



File Name: 2-62-3-1-50.jpeg Description: General view of component



Status: 🕅 N U

Equipment ID No. <u>FW-P-2</u> Equip. Class 5. Horizontal Pumps

Equipment Description

Turbine Driven Pump



File Name: 2-64-3-1-50.jpeg Description: View of component anchorage configuration



File Name: 2-73-3-1-50.jpeg Description: View of attached pipe lines

	C. Rizzo Ass		lnc.				Sh	eet 147 of 439
Seismic Walkdown					Status:	Ŷ	N	U
Equipment ID No.	FW-P-3A		Equip. Class	5. Horizontal Pumps				
Equipment Descript	ion	<u>NO. 3</u> A	Motor Driven	Auxiliary Feedwater Pump	 			-
Location: Bldg.	SFGB	-	Floor El.	735				
Manufacturer, Mod	el, Etc.			<u></u>				

_ _

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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]	
Mounted on skid and anchored with 8-3/4" diam anchor bolts.				
	Y	N	<u> </u>	N/
2. Is the anchorage free of bent, broken, missing or loose hardware?	X	I		
	Y	N	U	N/
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X			
4 Is the analysis free of visible grades in the concrete man the analysis?	Y	N	<u>U</u>	N/
4. Is the anchorage free of visible cracks in the concrete near the anchors?		I	L	L
	Y	N	U	N/
5. Is the anchorage configuration consistent with plant documentation?	X			1

 (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
 Anchorage verified per drawing 02.040-0011B and 8700-RC-21M. (see also calc. 52233-C-007).

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

	C. Rizzo Associates, Inc.				She	eet 148 of 439
Seismic Walkdow	n Checklist (SWC)		Status:	\odot	N	U
Equipment ID No.	<u>FW-P-3A</u> Equip. Class 5. Horizontal Pumps					
Equipment Descrip	NO. 3A Motor Driven Auxiliary Feedwater P	ump				
Interaction Effect	ts					
7. Are soft targets	free from impact by nearby equipment or structures?	[Y X	N	U	N/A
			Y	N	U	N/A
	uipment, distribution systems, ceiling tiles and lighting, ck walls not likely to collapse onto the equipment?	[X			
			Y	N	U	N/A
9. Do attached line	es have adequate flexibility to avoid damage?	[X			
		г	Y	N	U	
	bove seismic interaction evaluations, is equipment free dverse seismic interaction effects?	L	X	<u></u>	<u> </u>	
	onditions ed for and found no other seismic conditions that could t the safety functions of the equipment?	ſ	Y X	N	U	
		L				
Comments (Addit	ional pages may be added as necessary)					
	atter Mahne It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20	012		
	(Inn) & Allow					

Date:





Status: 🕅 N U

Seismic Walkdown Checklist (SWC)

 Equipment ID No.
 FW-P-3A
 Equip. Class
 5. Horizontal Pumps

 Equipment Description
 NO. 3A Motor Driven
 Auxiliary Feedwater Pump



File Name: 2-61-4-1-50.jpeg Description: Component Plate ID



File Name: 2-62-4-1-50.jpeg Description: General view of component



Status: 🕅 N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. FW-P-3A

Equip. Class 5. Horizontal Pumps NO. 3A Motor Driven Auxiliary Feedwater Pump

Equipment Description



File Name: 2-63-4-1-50.jpeg Description: View of component anchorage configuration

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS			Sneet	151 01 4
Seismic Walkdown Checklist (SWC)	Status:	\odot	N	U
Equipment ID No. <u>FW-T-2</u> Equip. Class 5. Horizontal Pumps				
Equipment Description Aux Feed Pump Steam Terry Turbine				
Location: Bldg. SFGB Floor El. 735				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an item of SWEL. The space below each of the following questions may be used to record the result				

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 same skid as FW-P-2 pump. Skid anchored with 8-3/4" diam anchor bolts.

findings. Additional space is provided at the end of this checklist for documenting other comments.

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

Y

Х

Y

X

X

Ν

Ν

Ν

N

Y	Ν	U	N/A
X			

U

U

U

N/A

N/A

N/A

Х

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

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



Paul ENGIN	1 C. Rizzo Associates, Inc.				Sh	eet 152 of 439
Seismic Walkdov	wn Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No	b. <u>FW-T-2</u> Equip. Class 5. Horizontal Pumps					
Equipment Descr	iption Aux Feed Pump Steam Terry Turbine	····				-
Interaction Effe	cts					
7. Are soft targets	s free from impact by nearby equipment or structures?		Y X	N	U	N/A
	equipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment?		Y X	N	U	N/A
9. Do attached lin	nes have adequate flexibility to avoid damage?		Y X	N	U	N/A
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?		Y X	N	U]
	Conditions ked for and found no other seismic conditions that could ct the safety functions of the equipment?		Y X	N	U]
Comments (Add	itional pages may be added as necessary)		<u></u>			
	adde Mahma It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20	012		
	21 1 10 Man					

Bury Deffer

Adam L. Helffrich

Date:





Status: 🕅 N U

Seismic Walkdown Checklist (SWC)

 Equipment ID No.
 FW-T-2
 Equip. Class
 5. Horizontal Pumps

 Equipment Description
 Aux Feed Pump Steam Terry Turbine



File Name: 2-61-5-1-50.jpeg Description: Component Plate ID



File Name: 2-62-5-1-50.jpeg Description: General view of component

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS			She	et 154 of 439
Seismic Walkdown Checklist (SWC)	Status:	\odot	N	U
Equipment ID No. <u>HCV-1CH</u> -186 Equip. Class 7. Pneumatic-Operated Valve				
Equipment Description RCP Seal SUP Hand CONT				
Location: Bldg. <u>AXLB</u> Floor El. <u>722</u>				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an item SWEL. The space below each of the following questions may be used to record the resu findings. Additional space is provided at the end of this checklist for documenting other	ilts of judgme			
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		
Valve mounted on well supported 4" diam line. Yoke supported to wall and piping is supported back to same wall.				
	<u>Y</u>	<u>N</u>	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?		L		X
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	Y	N	U	N/A X
Oxidation :				
	Y	<u>N</u>	U	N/A X
4. Is the anchorage free of visible cracks in the concrete near the anchors?		<u> </u>		X
	Y	<u>N</u>	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
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Y X	N	U	

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS			Sh	eet 155 of 439
Seismic Walkdown Checklist (SWC)	Status:	\odot	N	U
Equipment ID No. <u>HCV-1CH</u> -186 Equip. Class 7. Pneumatic-Operated Val	ve			
Equipment Description RCP Seal SUP Hand CONT				
Interaction Effects			-	
7. Are soft targets free from impact by nearby equipment or structures?	Y X	<u>N</u>	U	N/A
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?			L	
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	<u>N</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)			-	
atter Mehren It				
Evaluated by: Eddie M. Guerra Date	: 10/1/2	012	-	
Stary Deffine				

Date:



Status: 🕅 N U

Equipment ID No. HCV-1CH-186 Equip. Class 7. Pneumatic-Operated Valve

Equipment Description

RCP Seal SUP Hand CONT



File Name: 2-61-1-1-12.jpeg Description: Component Plate ID



File Name: 2-62-1-1-12.jpeg Description: General view of component

Paul C. Rizzo Asso ENGINEERS & CONSULTANTS	ociates, Inc.				She	et 157 of 439
Seismic Walkdown Checklist ((SWC)		Status:	$(\ \)$	N	U
Equipment ID No. <u>INV-VITE</u>	BUS1-1 Equip. Class	16. Battery Chargers and Inverte	ers			
Equipment Description	Vital Bus I Inverter					
Location: Bldg. <u>SRVB</u>	Floor El.	713				
Manufacturer, Model, Etc.						
SWEL. The space below each o	ocument the results of f the following questic	the Seismic Walkdown of an item ons may be used to record the resu is checklist for documenting other	ılts of judgm			
Anchorage			Y	N		
 Is the anchorage configuration of the 50% of SWEL items re 6-5/8" diam anchors identified ji identified between adjacent panel 	equiring such verificati	ion)?	X			
			<u>Y</u>	N	U	N/A
2. Is the anchorage free of bent,	broken, missing or loc	ose hardware?	X			
3. Is the anchorage free of corro	osion that is more than	mild surface	Y	N	U	N/A
oxidation?					.	
			<u>Y</u>	<u>N</u>	<u> </u>	N/A
4. Is the anchorage free of visib	le cracks in the concre	te near the anchors?	X			
5. Is the anchorage configuratio	n consistent with plan	t documentation?	Y X	N	U	N/A
(Note: This question only app which an anchorage configu Drawing RE-0038D confirms a	ration verification is r					
6. Based on the above anchorag potentially adverse seismic c		nchorage free of	Y X	N]	<u>U</u>	

Paul Paul	C. Rizzo Associates, Inc. R8 & CONSULTANTS				Sh	eet 158 of 439
Seismic Walkdow	n Checklist (SWC)		Status:	(Ν	U
Equipment ID No.	INV-VITBUS1-1 Equip. Class 16. Battery Chargers	and Inverter	rs			
Equipment Descrip	otion Vital Bus I Inverter					
Interaction Effect	'S					/ .
7. Are soft targets	free from impact by nearby equipment or structures?	[Y X	<u>N</u>	U	N/A
		r	Y	N	<u> </u>	N/A
	uipment, distribution systems, ceiling tiles and lighting, ck walls not likely to collapse onto the equipment?	l	X	<u></u>		
		_	Y	N	U	N/A
	s have adequate flexibility to avoid damage? identified with adequate flexibility.	l	X			
	bove seismic interaction evaluations, is equipment free	[Y X	N	U	
of potentially ac	dverse seismic interaction effects?					
Other Adverse Co	onditions ed for and found no other seismic conditions that could		Y	N	U	
	t the safety functions of the equipment?	[X			
Comments (Addit	ional pages may be added as necessary)	<u></u>			-	
	atter Mehre It					
Evaluated by:	Eddie M. Guerra	_Date:	10/1/2	012	-	
	(Ibury) Defling					

Date:

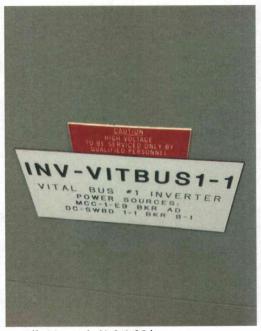


Status: 🕅 N U

Equipment ID No. INV-VITBUS1-1 Equip. Class 16. Battery Chargers and Inverters

Equipment Description

Vital Bus I Inverter



File Name: 2-61-8-1-25.jpeg Description: Component Plate ID



File Name: 2-62-8-1-25.jpeg Description: General view of component



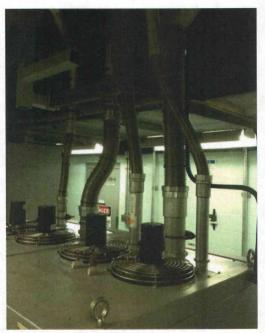
Status: 🕲 N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. INV-VITBUS1-1 Equip. Class 16. Battery Chargers and Inverters

Equipment Description

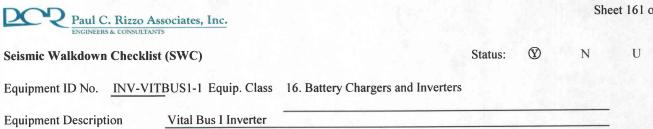
Vital Bus I Inverter



File Name: 2-63-8-1-25.jpeg Description: View of top entry conduits



File Name: 2-64-8-1-25.jpeg Description: View of anchorage configuration





File Name: 2-73-8-1-25.jpeg Description: Front view of base anchorage configuration

Paul C. Rizzo A ENGINEERS & CONSULTAN	ssociates, Inc.					She	et 162 of 4
Seismic Walkdown Checklis	st (SWC)			Status:	\heartsuit	Ν	U
Equipment ID No. <u>INV-VI</u>	TBUS1-3 Equip. Class	16. Battery Chargers and	Inverters				
Equipment Description	Vital Bus III Inverter			. <u>-</u>			
Location: Bldg. SRVB	Floor El.	713					
Manufacturer, Model, Etc.							
Instructions for Completing This checklist may be used to SWEL. The space below each findings. Additional space is	document the results of n of the following questi	ons may be used to record t	he results o	of judgm			
Anchorage				Y	N		
1. Is the anchorage configura of the 50% of SWEL items	-			X			
Attached to support base with concrete with 8-3/4" anchors							
2. Is the anchorage free of be	nt broken missing or lo	ose hardware?		Y X	N	U	N/A
2. Is the anonotage free of be	in, broken, missing of ic		L	<u> </u>	L.		
3. Is the anchorage free of co	rrosion that is more than	mild surface	[Y X	N	U	N/A
oxidation?			L	<u> </u>	 _		
				Y	N	U	N/A
							I
4. Is the anchorage free of vis	sible cracks in the concr	ete near the anchors?		X			
4. Is the anchorage free of vis	sible cracks in the concr	ete near the anchors?		Y	N	U	N/A
 4. Is the anchorage free of vis 5. Is the anchorage configura (Note: This question only a which an anchorage conf <i>Drawing RE-0038B confirms</i> 	tion consistent with plar applies if the item is one iguration verification is	nt documentation? e of the 50% for required.)	.017).		N	U	N/A
5. Is the anchorage configura (Note: This question only a which an anchorage conf	tion consistent with plar applies if the item is one iguration verification is	nt documentation? e of the 50% for required.)	-017).	Y	N N N	U	N/A

	C. Rizzo Associates, Inc.				Sh	eet 163 of 439
Seismic Walkdow	n Checklist (SWC)		Status:	Ŷ	N	U
Equipment ID No.	INV-VITBUS1-3 Equip. Class 16. Battery Chargers	s and Inverters				
Equipment Descrip	otion Vital Bus III Inverter					
Interaction Effect	s	<i></i> ,			-	
7 Are soft torgets	free from impact by nearby equipment or structures?	Г	Y X	<u>N</u>	<u>U</u>	N/A
7. Ale solt targets	the nom impact by hearby equipment of structures?	L_	Λ		1	J
			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?		Х				
	5 has been qualified per IE 80-11 review.					
			Y	N	U	N/A
9. Do attached line	s have adequate flexibility to avoid damage?		X			
			Y	N	U	
	bove seismic interaction evaluations, is equipment free		X			
of potentially ac	lverse seismic interaction effects?					
Other Adverse Co			V			
	ed for and found no other seismic conditions that could the safety functions of the equipment?	Г	Y X	N	U	
-						
Comments (Addit	ional pages may be added as necessary)				-	
	the Marine It					
Evaluated by:	Eddie M. Guerra	_Date:	10/1/2	012	- ·	
	Share Dellan					

Date:



Status: 🕅 N U

Equipment ID No. <u>INV-VITBUS1-3</u> Equip. Class 16. Battery Chargers and Inverters

Equipment Description

Vital Bus III Inverter



File Name: 2-61-6-1-25.jpeg Description: Component Plate ID



File Name: 2-62-6-1-25.jpeg Description: General view of component



Sheet 165 of 439

Seismic Walkdown Checklist (SWC)

Status: 🕅 N U

Equipment ID No. <u>INV-VITBUS1-3</u> Equip. Class 16. Battery Chargers and Inverters

Equipment Description

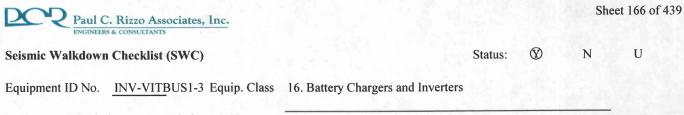
Vital Bus III Inverter



File Name: 2-63-6-1-25.jpeg Description: Front view of base anchorage configuration

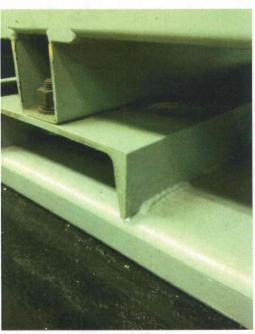


File Name: 2-64-6-1-25.jpeg Description: Close up view of anchorage detail



Equipment Description

Vital Bus III Inverter



File Name: 2-73-6-1-25.jpeg Description: View of weld detail on channel mounting base



File Name: 2-94-6-1-25.jpeg Description: General view of base configuration

Paul C. Rizzo As Engineers & consultant	sociates, Inc.					She	et 167 of 43
Seismic Walkdown Checklist	t (SWC)			Status:	(N	U
Equipment ID No. <u>INV-VIT</u>	BUS1-4 Equip. Class	16. Battery Chargers	and Inverters				
Equipment Description	Vital Bus I'VE Invert	er			······		
Location: Bldg. SRVB	Floor El.	713					
Manufacturer, Model, Etc.			_				
Instructions for Completing This checklist may be used to o SWEL. The space below each findings. Additional space is p	document the results of of the following questi	ons may be used to rec	ord the results	of judgm			
Anchorage				Y	N		
1. Is the anchorage configurati of the 50% of SWEL items				X			
Attached to support base with concrete with 8-3/4" anchors.							
2. Is the anchorage free of ben	t, broken, missing or lo	ose hardware?		Y X	N	U	N/A
3. Is the anchorage free of corroxidation?	rosion that is more than	mild surface	Ľ	Y X	N	U	N/A
4. Is the anchorage free of visi	ble cracks in the concr	ete near the anchors?	Ľ	Y X	N	U	N/A
5. Is the anchorage configurati	on consistent with plar	t documentation?	Г	Y X	<u>N</u>	U	N/A
(Note: This question only ap which an anchorage config Drawing RE-0038B confirms of	oplies if the item is one guration verification is	of the 50% for required.)	B3-C-017).				
				Y	N	U	

	1 C. Rizzo Associates, Inc. FERS & CONSULTANTS				She	eet 168 of 4
Seismic Walkdov	wn Checklist (SWC)		Status:	\odot	N	U
Equipment ID No	b. <u>INV-VITB</u> US1-4 Equip. Class 16. Battery Chargers	s and Invert	ers			
Equipment Descr	iption Vital Bus I'VE Inverter					
Interaction Effe	cts			NT	ŤŤ	NT/A
7. Are soft targets	s free from impact by nearby equipment or structures?		Y X	<u>N</u>	U	N/A
8 Are overhead a	equipment, distribution systems, ceiling tiles and lighting,		Y	N	U	N/A
and masonry bl	ock walls not likely to collapse onto the equipment? 9 has been qualified per IE 80-11 review.				1	
9. Do attached lir	nes have adequate flexibility to avoid damage?		Y X	N	U	N/A
			V	N	TI	
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?			<u>N</u>		
•	Conditions ked for and found no other seismic conditions that could ect the safety functions of the equipment?		Y X	N	- U	
Comments (Add	litional pages may be added as necessary)				-	
	the Mhraft					
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012	-	
	Stund Dellan					
	Adam L. Helffrich	Date:	10/1/2	2012	_	



Status: 🕲 N U

Equipment ID No. INV-VITBUS1-4 Equip. Class 16. Battery Chargers and Inverters

Equipment Description

Vital Bus I'VE Inverter



File Name: 2-61-2-1-26.jpeg Description: Component Plate ID



File Name: 2-62-2-1-26.jpeg Description: General view of component



Status: 🕅 N U

Equipment ID No. INV-VITBUS1-4 Equip. Class 16. Battery Chargers and Inverters

Equipment Description

Vital Bus I'VE Inverter



File Name: 2-63-2-1-26.jpeg Description: View of top entry conduits



File Name: 2-64-2-1-26.jpeg Description: Front view of base anchorage configuration



Status: 🕅 N U

Equipment ID No. INV-VITBUS1-4 Equip. Class 16. Battery Chargers and Inverters

Equipment Description

Vital Bus I'VE Inverter



File Name: 2-73-2-1-26.jpeg Description: Close up view of anchorage detail



File Name: 2-94-2-1-26.jpeg Description: View of weld detail on channel mounting base

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS			Shee	et 172 of 439
Seismic Walkdown Checklist (SWC)	Status:	\odot	N	U
Equipment ID No. <u>LS-1-EE-201-1</u> Equip. Class 18. Instrument (on) Racks				
Equipment Description EE-EG-1 Day Tank Level (Pump CTRL) Level Switch				
Location: Bldg. DGBX Floor El. 735				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an item of SWEL. The space below each of the following questions may be used to record the result findings. Additional space is provided at the end of this checklist for documenting other of the space space is provided at the end of the space space.	s of judgme			
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)? <i>Rigidly attached to top of EE-TK-2A tank.</i>		X		

N/A

N/A

N/A

N/A

X

U

U

U

U

U

Ν

Ν

Ν

Ν

Ν

Y

X

 $\frac{Y}{X}$

 $\frac{Y}{X}$

Y

 $\frac{Y}{X}$

- 2. Is the anchorage free of bent, broken, missing or loose hardware?
- 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
- 4. Is the anchorage free of visible cracks in the concrete near the anchors?
- 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?

Paul ENGINE	C. Rizzo Associates, Inc. ERS & CONSULTANTS				She	eet 173 of 439
Seismic Walkdow	n Checklist (SWC)	Sta	tus: (Ý	Ν	U
Equipment ID No.	LS-1-EE-201-1 Equip. Class 18. Instrument (on) Rack	(S				
Equipment Descrip	ption EE-EG-1 Day Tank Level (Pump CTRL) Level	Switch				
Interaction Effect	ts					
7. Are soft targets	free from impact by nearby equipment or structures?	Y X		N	<u> </u>	N/A
7. The solt algeb	nee nom impact by nearby equipment of structures.	<u></u>				
		Y		N	U	N/A
	quipment, distribution systems, ceiling tiles and lighting, ck walls not likely to collapse onto the equipment?	X				
		Y		<u>N</u>	U	N/A
	es have adequate flexibility to avoid damage? <i>nd with adequate flexibility</i> .	X				
, ,		V		N	U	
10. Based on the a	bove seismic interaction evaluations, is equipment free	Y X		IN		
of potentially a	dverse seismic interaction effects?					
	· · · · · · · · · · · · · · · · · · ·					
Other Adverse C 11. Have you look	onditions ed for and found no other seismic conditions that could	Y		N	U	
adversely affec	t the safety functions of the equipment?	X				
Comments (Addit	tional pages may be added as necessary)					
	- deter Mehme It					
Evaluated by:	Eddie M. GuerraD	ate:1	0/1/201	2		
	21 1 10 Man					

(Share) & elfore

Adam L. Helffrich

Date:



Status: 🕅 N U

Equipment ID No. LS-1-EE-201-1 Equip. Class 18. Instrument (on) Racks

Equipment Description

EE-EG-1 Day Tank Level (Pump CTRL) Level Switch



File Name: 2-61-3-1-20.jpeg Description: Component Plate ID



File Name: 2-62-3-1-20.jpeg Description: General view of component

Paul C. Rizzo As ENGINEERS & CONSULTAN					She	et 175 of 43
Seismic Walkdown Checklis	t (SWC)		Status:	(N	U
Equipment ID No. <u>LT-1QS-</u>	-100A Equip. Class	18. Instrument (on) Racks				
Equipment Description	RWST Level Transm	itter		· · · · · ·		
Location: Bldg. <u>YARD</u>	Floor El.	735				
Manufacturer, Model, Etc.						
SWEL. The space below each	document the results of of the following question	the Seismic Walkdown of an iter ons may be used to record the res is checklist for documenting othe	ults of judgm			

Anchorage

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

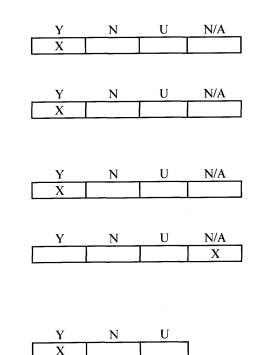
Mounted on short cantilever support (~12") made of HSS 2 1/2" x 3" x 1/4". Support is attached to concrete wall surounding the tank with 4-1/2" diam anchor bolts. Equipment brackets are welded to the support structure.

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?

Some signs of of rust visible on brackets. Judged not a concern.

- 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

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Sheet 175 of 439

	C. Rizzo Associates, Inc. ERS & CONSULTANTS				She	et 176 of 439
Seismic Walkdov	vn Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No	. <u>LT-1QS-1</u> 00A Equip. Class 18. Instrument (on) Ra	cks				
Equipment Descri	ption RWST Level Transmitter				- 18 <u></u> - 18	
Interaction Effec	ts					
7. Are soft targets	free from impact by nearby equipment or structures?	Γ	Y X	N	U	N/A
8. Are overhead e	quipment, distribution systems, ceiling tiles and lighting,	Г	Y X	N	U	N/A
	ock walls not likely to collapse onto the equipment?	L				
			Y	N	U	N/A
9. Do attached lin	es have adequate flexibility to avoid damage?		X			
			Y	N	U	
	above seismic interaction evaluations, is equipment free deverse seismic interaction effects?	L	X			
Other Adverse C	Conditions		<u></u>			
	xed for and found no other seismic conditions that could of the safety functions of the equipment?		Y X	<u>N</u>	U	
Comments (Addi	tional pages may be added as necessary)			0 		
	the Mehme It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012		
	Thurs & Marin					

Date:



Status: 🕅 N U

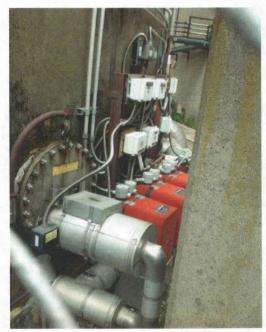
Equipment ID No. LT-1QS-100A Equip. Class 18. Instrument (on) Racks

Equipment Description

RWST Level Transmitter



File Name: 2-61-1-1-09.jpeg Description: Component Plate ID



File Name: 2-62-1-1-09.jpeg Description: General view of component

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS			She	et 178 of 439
Seismic Walkdown Checklist (SWC)	Status:	\heartsuit	N	U
Equipment ID No. MCC-1-E1 Equip. Class 1. Motor Control Center				
Equipment Description 480V Motor Comtrol Center Fed From 480V Substat	ion 1-8 Emerge	ncy Bus v	via 1NBK	R 8N7
Location: Bldg. INTS Floor El. 705				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an it SWEL. The space below each of the following questions may be used to record the re findings. Additional space is provided at the end of this checklist for documenting ot	esults of judgmo			
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			
3 Section MCC, each section's base channel is welded to embed steel with at least ar average of 5 1/2" of 1/4" welds.	1			
2. Is the anchorage free of bent, broken, missing or loose hardware?	Y	N	<u> </u>	N/A
2. Is the unchorage free of bent, broken, missing of loose hardware.				
	Y	<u>N</u>	U	N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation?				
	<u> </u>	N	U	N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors? Portion of concrete cover on the embed steel is exposed but judged adequate as the load path of the embed steel does not require this cover to be effective.	X	1		
	Y	<u>N</u>	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.) Base weld detail in MCC-1-E1 verified per Calculation 52233-C-001 Anchorage Calculation 	LC X			_
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Y X	<u>N</u>	U	

	C. Rizzo Associates, Inc.				She	eet 179 of 439
	n Checklist (SWC)		Status:	\odot	N	U
Equipment ID No.	MCC-1-E1 Equip. Class 1. Motor Control Cer	nter				
Equipment Descrip	otion 480V Motor Comtrol Center Fed From 480V	/ Substatior	1-8 Emerge	ncy Bus	via 1NBk	KR 8N7
Interaction Effect	5		V	NI	T	NI/ 4
7. Are soft targets	free from impact by nearby equipment or structures?			N	U	N/A
8. Are overhead eq	uipment, distribution systems, ceiling tiles and lighting,		Y	N	U	N/A
and masonry blo	ck walls not likely to collapse onto the equipment?					
	es have adequate flexibility to avoid damage? A provided by top entry conduit.		Y X	N	U	N/A
10. Based on the a	bove seismic interaction evaluations, is equipment free dverse seismic interaction effects?		Y X	N	U	
Other Adverse Co		<u> </u>	Y	 N	- U	
-	t the safety functions of the equipment?					
Comments (Addit	ional pages may be added as necessary)				-	
	the Mahne It					
Evaluated by:	Eddie M. Guerra	_Date:	10/1/2	012	-	
	Bury Dellan					

Date:

10/1/2012

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Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS

Status: 🕲 N U

Seismic Walkdown Checklist (SWC)

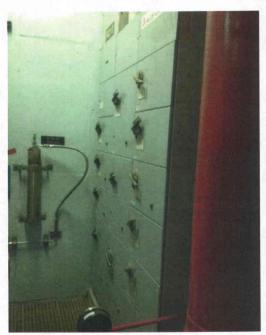
Equipment ID No. MCC-1-E1 Equip. Class 1. Motor Control Center

Equipment Description

480V Motor Comtrol Center Fed From 480V Substation 1-8 Emergency Bus via 1NBKR 8N7



File Name: 2-61-1-1-27.jpeg Description: Component Plate ID



File Name: 2-62-1-1-27.jpeg Description: General view of component



Status: N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. MCC-1-E1 Equip. Class 1. Motor Control Center

Equipment Description

480V Motor Comtrol Center Fed From 480V Substation 1-8 Emergency Bus via 1NBKR 8N7



File Name: 2-63-1-1-27.jpeg Description: View of spalled concrete at base of MCC



File Name: 2-64-1-1-27.jpeg Description: View of top entry conduits

Paul C. Rizzo Associates, Inc.			Sh	eet 182 of 439
Seismic Walkdown Checklist (SWC)	Status:	\odot	N	U
Equipment ID No. MCC-1-E12 Equip. Class 1. Motor Control Center				
Equipment Description Motor Control Center				
Location: Bldg. SFGB Floor El. 735				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an item SWEL. The space below each of the following questions may be used to record the result findings. Additional space is provided at the end of this checklist for documenting othe	ults of judgm			
Anchorage	Y	N		
 Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? MCC composed of 4 sections. Each section welded to embed with an average of 4 1/2" of 1/4" fillet welds, front and back. 	X]		
	Y	<u>N</u>	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?	X	1		J
	Y	<u>N</u>	U	N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation?	X			
	<u>Y</u>	<u>N</u>	U	N/A
4. Is the anchorage free of visible cracks in the concrete near the anchors?	X			
	Y	<u>N</u>	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	·		
Base weld detail in MCC-1-E12 verified per Calculation 52233-C-001 Anchorage Calc	Y	N	U	
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?			<u> </u>	

Paul ENGIN	I C. Rizzo Associates, Inc.			Sh	eet 183 of 439
Seismic Walkdov	wn Checklist (SWC)	Status:	(N	U
Equipment ID No	b. MCC-1-E12 Equip. Class 1. Motor Control Center				
Equipment Descr	iption Motor Control Center	· · · · · · · · · · · · · · · · · · ·			-
Interaction Effe	cts			-	
7. Are soft targets	s free from impact by nearby equipment or structures?	Y X	<u>N</u>	U	N/A
	ent Description Motor Control Center				
9 Are overhead e	aninment distribution systems, soiling tiles and lighting	Y	N	U	N/A
and masonry bl A mostly rod hung MCC-1-E6 and M	ock walls not likely to collapse onto the equipment? g cable tray (with minimal lateral supports) has a gap of about 4" in ACC-1-E12. Conservative displacement calculation showed that the	to		1	LJ
			N	<u> </u>	N/A
9. Do attached lin	nes have adequate flexibility to avoid damage?	X			
10 Deced on the	above solution interaction evaluations is solving and face	Y	N	U.	1
				I	ſ
Other Adverse (Conditions			-	
•		Y X	N	U]
Comments (Add	itional pages may be added as necessary)			-	
	atter Mahra It				
Evaluated by:	Eddie M. Guerra Date:	10/1/2	012	-	
	Block Delland				
	Adam L. Helffrich Date:	10/1/2	012	-	



Seismic Walkdown Checklist (SWC)

Status: 🕅 N U

Equipment ID No. MCC-1-E12 Equip. Class 1. Motor Control Center

Equipment Description

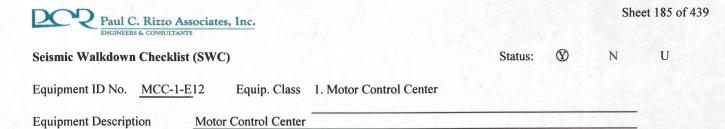
Motor Control Center



File Name: 2-61-3-1-23.jpeg Description: Component Plate ID



File Name: 2-62-3-1-23.jpeg Description: General view of component





File Name: 2-63-3-1-23.jpeg Description: View of top entry conduits



File Name: 2-64-3-1-23.jpeg Description: View of MCC embeddment and stitch weld detail

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS				eet 186 c
eismic Walkdown Checklist (SWC)	Status:	\heartsuit	Ν	U
quipment ID No. MCC-1-E13 Equip. Class 1. Motor Control Center				
quipment Description 480V Motor Control Center Fed From 480V Substation	1 1-8 Bus 1N			
ocation: Bldg. SFGB Floor El. 756				
lanufacturer, Model, Etc.				
nstructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an iter WEL. The space below each of the following questions may be used to record the result andings. Additional space is provided at the end of this checklist for documenting othe	ults of judgm			
nchorage	Y	N		
. Is the anchorage configuration verification required (i.e., is the item one	X			
of the 50% of SWEL items requiring such verification)? MCC composed of 3 sections. Sill channel welded to HSS 4x6 which in turn is welded to embed steel. Each section of MCC has an average of 4" of 1/4" welds at front and ack. The HSS 4x6 is welded to embed with ~3" @ 7" stitch of 1/4" fillet welds, front nd back.				
	Y	N	U	N/A
Is the anchorage free of bent, broken, missing or loose hardware?	X			
	Y	<u>N</u>	U	N/A
Is the anchorage free of corrosion that is more than mild surface oxidation?	X			L
	Y	N	U	N/A
. 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?	X			
(Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) ase weld detail in MCC-1-E13 verified per Calculation 52233-C-002 Anchorage				
	Y	Ν	U	1
<i>Calc</i> . . Based on the above anchorage evaluations, is the anchorage free of	X			

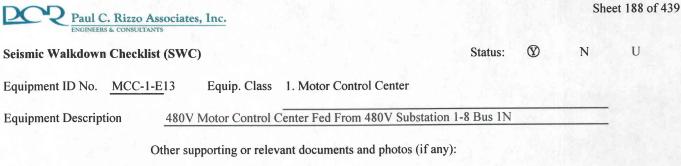
	I C. Rizzo Associates, Inc. EERS & CONSULTANTS				Sh	eet 187 of 439
Seismic Walkdov	wn Checklist (SWC)		Status:	(N	U
Equipment ID No	b. <u>MCC-1-E</u> 13 Equip. Class 1. Motor Control Cent	er				
Equipment Descr	iption 480V Motor Control Center Fed From 480V S	Substation	1-8 Bus 1N			
Interaction Effe	cts					
7. Are soft targets	s free from impact by nearby equipment or structures?		Y X	N	U	N/A
			Y	N	U	N/A
	equipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment?		X			
	· · · · · · · · · · · · · · · · · · ·					
	nes have adequate flexibility to avoid damage?		Y X	N	U	N/A
Top entry conduit	t found with adequate flexibility.					
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?		Y X	<u>N</u>	U	
of potentially a						
Other Adverse C						
-	ked for and found no other seismic conditions that could ct the safety functions of the equipment?		Y X	N	U	
Comments (Add	itional pages may be added as necessary)	·· <u>··</u>				
	- ddie Michine It					
Evaluated by:	Eddie M. Guerra	Date:	10/1/20	012		
	· · · · · · · ·					

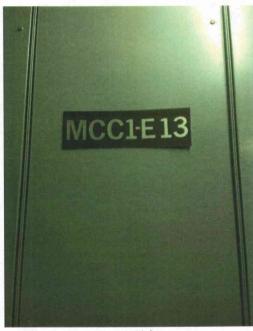
Shary & Mary

Adam L. Helffrich

Date:

10/1/2012

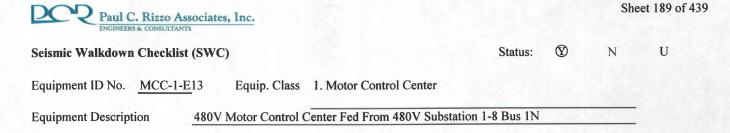




File Name: 2-61-9-1-32.jpeg Description: Component Plate ID



File Name: 2-62-9-1-32.jpeg Description: General view of component

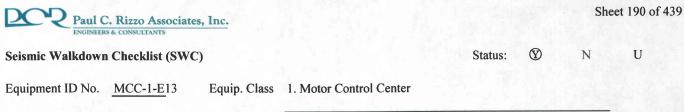




File Name: 2-63-9-1-32.jpeg Description: View of MCC base stitch weld detail



File Name: 2-64-9-1-32.jpeg Description: General view of tube section member used for MCC base



Equipment Description 480V Motor Control Center Fed From 480V Substation 1-8 Bus 1N



File Name: 2-73-9-1-32.jpeg Description: General view of MCC base configuration



File Name: 2-94-9-1-32.jpeg Description: View of flexible attached lines

Paul C. Rizzo As ENGINEERS & CONSULTANT					She	et 191 of 439
Seismic Walkdown Checklist	(SWC)		Status:	\heartsuit	Ν	U
Equipment ID No. MCC-1-E	E4 Equip. Class	s 1. Motor Control Center				
Equipment Description	480V Motor Contro	Center Fed From 480V Substat	ion 1-9 Bus 1P ((9P9)		
Location: Bldg. <u>AXLB</u>	Floor El.	735				
Manufacturer, Model, Etc.						

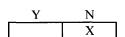
Instructions for Completing Checklist

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)?

MCC composed of 5 sections. MCC base channel is welded to embed steel with an average of \sim 5" of 1/4" weld at front of each MCC section. The weld on the back cannot be verified since MCC is too close to wall. Typically MCCs that are too close to a wall have their rear mounting channels welded to embed steel by welding the channel flange that is inside the MCC (as opposed to the flange outside of the MCC and closer to the wall). For this MCC the base of the unit could not be accessed and presense o the back welds was not verified.

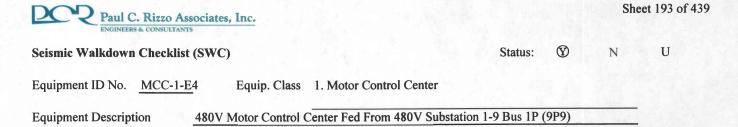


Y	N	U	N/A
X			
Y	Ν	U	N/A
X			
Y	N	U	N/A
X			
<u>Y</u>	N	U	N/A
			X
Y	Ν	U	_
X			

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

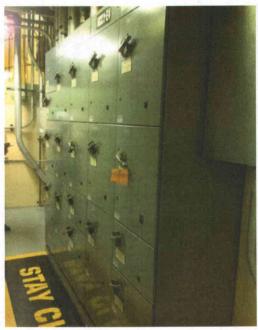
- 3. Is the anchorage free of corrosion that is more than mild surface oxidation?
- 4. Is the anchorage free of visible cracks in the concrete near the anchors?
- Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)
- 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?

Pau ENGIN	l C. Rizzo Associates, Inc.				Sh	eet 192 of 43	
Seismic Walkdo	Walkdown Checklist (SWC) ent ID No. MCC-1-E4 Equip. Class 1. Motor Control Center			(Ν	U	
Equipment ID No	D. <u>MCC-1-E4</u> Equip. Class 1. Motor Control Cer	nter					
Equipment Descr	iption 480V Motor Control Center Fed From 480V	/ Substation	1-9 Bus 1P	(9P9)			
Interaction Effe	cts					NT/A	
7. Are soft targets	s free from impact by nearby equipment or structures?		Y X	<u>N</u>	U	N/A	
	oft targets free from impact by nearby equipment or structures? overhead equipment, distribution systems, ceiling tiles and lighting, asonry block walls not likely to collapse onto the equipment?			Y X	N	U	N/A
-	2" tray rod hung is far enough not to interact with top entry conduit.				U	N/A	
Many 4" diam co	onduits at top are braced back to the wall behind which wo	uld	X		<u>l</u>		
			Y X	<u>N</u>	U		
11. Have you loo	Conditions ked for and found no other seismic conditions that could ect the safety functions of the equipment?		Y X	N	- U		
Comments (Add	litional pages may be added as necessary)	<u> </u>			-		
	- detter Mahma It						
Evaluated by:	Eddie M. Guerra	Date:	10/1/2	012	-		
	Stand Dellan						
	Adam L. Helffrich	Date:	10/1/2	.012	-		

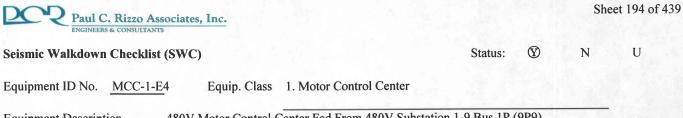




File Name: 2-61-1-1-47.jpeg Description: Component Plate ID



File Name: 2-62-1-1-47.jpeg Description: General view of component



Equipment Description

480V Motor Control Center Fed From 480V Substation 1-9 Bus 1P (9P9)



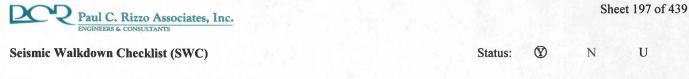
File Name: 2-63-1-1-47.jpeg Description: View of top entry conduits



File Name: 2-64-1-1-47.jpeg Description: View of MCC embeddment and stitch weld detail

Paul C. Rizzo Associates, Inc.				eet 195 of 439
Seismic Walkdown Checklist (SWC)	Status:	\heartsuit	N	U
Equipment ID No. MCC-1-E6 Equip. Class 1. Motor Control Center				
Equipment Description 480V Motor Control Center Fed From 480V Substation	1-9 Bus 1P(9P14)	••••	
Location: Bldg. SFGB Floor El. 735				
Manufacturer, Model, Etc.				
Instructions for Completing Checklist This checklist may be used to document the results of the Seismic Walkdown of an item SWEL. The space below each of the following questions may be used to record the result findings. Additional space is provided at the end of this checklist for documenting othe	ults of judgm			
Anchorage	Y	N		
 Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? MCC composed of 17 sections. Each section welded to embed with an average of 4.5" of 1/4" fillet welds, front and back. 	X			
	Y	<u>N</u>	U	N/A
2. Is the anchorage free of bent, broken, missing or loose hardware?		1		LI
2. To the enchances free of comparison that is more than mild surface	Y X	<u>N</u>	U	N/A
3. Is the anchorage free of corrosion that is more than mild surface oxidation?		I		
	Y	<u>N</u>	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.) Base weld detail in MCC-1-E6 verified per Calculation 52233-C-001 Anchorage Calc 	<u> </u>			J
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Y	N	U]

Pau ENGIN	1 C. Rizzo Associates, Inc.				She	et 196 of 439
Seismic Walkdov	wn Checklist (SWC)		Status:	\heartsuit	N	U
Equipment ID No	D. MCC-1-E6 Equip. Class 1. Motor Control Center					
Equipment Descr	iption 480V Motor Control Center Fed From 480V Sub	ostation 1-	9 Bus 1P(9P14)		
		<u></u>				
Interaction Effe	cts		Y	N	U	N/A
7. Are soft targets	s free from impact by nearby equipment or structures?		X			
		-	Y	N	U	<u>N/A</u>
and masonry bl A mostly rod hun MCC-1-E6 and M	equipment, distribution systems, ceiling tiles and lighting, ock walls not likely to collapse onto the equipment? g cable tray (with minimal lateral supports) has a gap of about ACC-1-E12. Conservative displacement calculation showed that		X			
available gap is adequate to preclude interaction of the tray with these MCC's.			Y	N	U	N/A
	nes have adequate flexibility to avoid damage? t found to be braced back to the wall.		X			
			Y	N	U	
	above seismic interaction evaluations, is equipment free adverse seismic interaction effects?	L	X			
Other Adverse (Conditions ked for and found no other seismic conditions that could		Y	N	U	
	ct the safety functions of the equipment?		X			
Comments (Add	itional pages may be added as necessary)					
	Tetter Mahma It					
Evaluated by:	Eddie M. Guerra Da	ate:	10/1/2	012		
	(Itary) Deflere					
	Adam L. Helffrich Da	ate:	10/1/2	012		



Equipment ID No. MCC-1-E6 Equip. Class 1. Motor Control Center

Equipment Description

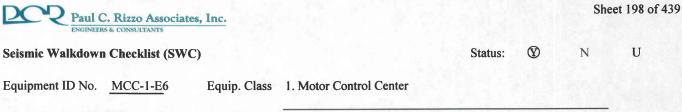
480V Motor Control Center Fed From 480V Substation 1-9 Bus 1P(9P14)



File Name: 2-61-2-1-23.jpeg Description: Component Plate ID



File Name: 2-62-2-1-23.jpeg Description: General view of component



Equipment Description

480V Motor Control Center Fed From 480V Substation 1-9 Bus 1P(9P14)



File Name: 2-63-2-1-23.jpeg Description: View of MCC embeddment and stitch weld detail



File Name: 2-64-2-1-23.jpeg Description: View of top entry conduits



Status: 🕅 N U

Seismic Walkdown Checklist (SWC)

Equipment ID No. MCC-1-E6 Equip. Class 1. Motor Control Center

Equipment Description 480V Motor Control Center Fed From 480V Substation 1-9 Bus 1P(9P14)



File Name: 2-73-2-1-23.jpeg Description: View of openned cabinet section



File Name: 2-94-2-1-23.jpeg Description: Welded detail taken from front of MCC

Paul C. Rizzo Associates, Inc. ENGINEERS & CONSULTANTS			She	eet 200 of 4	439
Seismic Walkdown Checklist (SWC)	Status:	\odot	Ν	U	
Equipment ID No. MCC-1-E6 Equip. Class 1. Motor Control Center					
Equipment Description 480V Motor Control Center Fed From 480V Substati	ion 1-9 Bus 1P(9P14)			

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File Name: 2-95-2-1-23.jpeg Description: Welded detail taken from back of MCC