11.0 ATTACHMENTS

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Attachment A

"IPEEE Vulnerabilities Table"

ATTACHMENT 9.3 **IPEEE VULNERABILITIES TABLE FORM**

#	IPEEE VULNERABILITY	COMMITMENT	RESOLUTION	CMP	RESOLVED
V-01	Seismic-induced station blackout sequences are controlled by seismic-induced failures of emergency diesel generator building (EGB) and electric bay (EB) block walls: HCLPF – High Confidence Low Probability Failure EGB-272-6,7,9 and IO (HCLPF = 0.17g) EB-272-15 (HCLPF = 0.22g) EB-286-2 (HCLPF = 0.23g)	Strengthen high risk emergency diesel generator building (EGB) block walls EGB-272-6, 7, 9 and 10. The seismic-induced station blackout sequences responsible for the 0.17g pga overall plant HCLPF capacity for JAF are controlled by seismic-induced failures of these block walls. A modification (MOD# D1 -96-011) is being planned to accomplish this strengthening	Design change DC#D1-96-011, Rev.0, and calculation JAF-CALC-EDG-02153, Rev.0, implemented and evaluated the proposed modification which reinforced the block wall to a higher frequency range, and the corresponding structural capacity of block walls increased to 0.26 g. The existing steel structures are capable to resist the additional load due to modification. This is based on the existing concrete structure is capable to resist all of the seismic loads. Calculation 93C2803-C012, “HCLPF for Block Walls EB-272-1,2”, Rev. 0, evaluated Electrical Bay block walls and the block walls were found acceptable.	Y	12/19/1997

Prepared by: Yaroslav Losev / Date: 11/12/2012

Attachment B

"Seismic Walkdown Equipment Lists"

Table 9.4.1 – Base List 1 (BL 1)

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**08A - Motor-Operated Valves**	**01-125MOV-14A**	**01-125MOV-14A**	**SGT FILTER TRAIN A INLE ISOLATION VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**					**X**
1	20 - Instrument and Control Panels	02-3LI-85A	02-3LI-85A	REACTOR VESSEL LEVEL INDICATION	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	02-3LI-85B (02-3LR-85B)	02-3LI-85B (02-3LR-85B)	DIV I RX WATER LEVEL RECORDER	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	02-3LT-85A	02-3LT-85A	REACTOR VESSEL WIDE RANGER LEVEL XMITTER EQ	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	02-3LT-85B	02-3LT-85B	REACTOR VESSEL WIDE RANGER LEVEL XMITTER EQ	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	02AOV-17	02AOV-17	ADS REACTOR HEAD VENT INBD ARE OPER VALVE	YES	NO	YES	NO	N/A	I		NO		X			
1	07 - Pneumatic-Operated Valves	02AOV-18	02AOV-18	ADS REACTOR HEAD VENT OUTBD AIR OPER VALVE	YES	NO	YES	NO	N/A	I		NO		X			
1	07 - Pneumatic-Operated Valves	02RV-71A	02RV-71A	ADS MAIN STEAM LINE A SAFETY/RELIEF VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	02RV-71B	02RV-71B	ADS MAIN STEAM LINE A SAFETY/RELIEF VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	07 - Pneumatic-Operated Valves	02RV-71C	02RV-71C	ADS MAIN STEAM LINE B SAFETY/RELIEF VALVE	YES	NO	YES	YES	N/A	I		NO		X	X	X	
1	**07 - Pneumatic-Operated Valves**	**02RV-71D**	**02RV-71D**	**ADS MAIN STEAM LINE B SAFETY/RELIEF VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**		**X**	**X**	**X**	
1	**07 - Pneumatic-Operated Valves**	**02RV-71E**	**02RV-71E**	**ADS MAIN STEAM LINE C SAFETY/RELIEF VALVE**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**T**	**NO**		**X**	**X**	**X**	
1	07 - Pneumatic-Operated Valves	02RV-71F	02RV-71F	ADS MAIN STEAM LINE C SAFETY/RELIEF VALVE	YES	NO	YES	YES	N/A	I		NO		X	X	X	
1	07 - Pneumatic-Operated Valves	02RV-71G	02RV-71G	ADS MAIN STEAM LINE C SAFETY/RELIEF VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	07 - Pneumatic-Operated Valves	02RV-71H	02RV-71H	ADS MAIN STEAM LINE D SAFETY/RELIEF VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	07 - Pneumatic-Operated Valves	02RV-71J	02RV-71J	ADS MAIN STEAM LINE D SAFETY/RELIEF VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	07 - Pneumatic-Operated Valves	02RV-71K	02RV-71K	ADS MAIN STEAM LINE A SAFETY/RELIEF VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	02RV-71L	02RV-71L	ADS MAIN STEAM LINE D SAFETY/RELIEF VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08B - Solenoid-Operated Valves	02SOV-17	02SOV-17	ADS REACTOR HEAD VENT VALVE PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X			
1	08B - Solenoid-Operated Valves	02SOV-18	02SOV-18	ADS REACTOR HEAD VENT VALVE PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X			
1	08B - Solenoid-Operated Valves	02SOV-71A2	02SOV-71A2	ADS/MST A 02RV-71A REMOTE MANUAL PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08B - Solenoid-Operated Valves	02SOV-71B2	02SOV-71B2	ADS/MST A 02RV-71B REMOTE MANUAL PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08B - Solenoid-Operated Valves	02SOV-71C2	02SOV-71C2	ADS/MST B 02RV-71C REMOTE MANUAL PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08B - Solenoid-Operated Valves	02SOV-71D2	02SOV-71D2	ADS/MST B 02RV-71D REMOTE MANUAL PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08B - Solenoid-Operated Valves	02SOV-71E2	02SOV-71E2	ADS/MST C 02RV-71E REMOTE MANUAL PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08B - Solenoid-Operated Valves	02SOV-71F2	02SOV-71F2	ADS/MST C 02RV-71F REMOTE MANUAL PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	08B - Solenoid-Operated Valves	02SOV-71G2	02SOV-71G2	ADS/MST C 02RV-71G REMOTE MANUAL PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08B - Solenoid-Operated Valves	02SOV-71H2	02SOV-71H2	ADS/MST D 02RV-71H REMOTE MANUAL PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08B - Solenoid-Operated Valves	02SOV-71J2	02SOV-71J2	ADS/MST D 02RV-71J REMOTE MANUAL PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08B - Solenoid-Operated Valves	02SOV-71K2	02SOV-71K2	ADS/MST A 02RV-71K REMOTE MANUAL PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08B - Solenoid-Operated Valves	02SOV-71L2	02SOV-71L2	ADS/MST D 02RV-71L REMOTE MANUAL PILOT SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**07 - Pneumatic-Operated Valves**	**03AOV-126(HCU-02-19)**	**03AOV-126(HCU-02-19)**	**HCU INLET SCRAM AIR OPER VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**	**X**				
1	**07 - Pneumatic-Operated Valves**	**03AOV-127(HCU-02-19)**	**03AOV-127(HCU-02-19)**	**HCU OUTLET SCRAM AIR OPER VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**	**X**				
1	08B - Solenoid-Operated Valves	03SOV-117(HCU-02-19)	03SOV-117(HCU-02-19)	HCU-02-19 SCRAM PILOT AIR SOLENOID OPER VALVE	YES	NO	YES	NO	N/A	I		NO	X				
1	08B - Solenoid-Operated Valves	03SOV-118(HCU-02-19)	03SOV-118(HCU-02-19)	HCU-02-19 SCRAM PILOT AIR SOLENOID OPER VALVE	YES	NO	YES	NO	N/A	I		NO	X				

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	08B - Solenoid-Operated Valves	03SOV-120(HCU-02-19)	03SOV-120(HCU-02-19)	HCU-02-19 WITHDRAW SETTLE SOLENOID OPER VALVE	YES	NO	YES	NO	N/A	I		NO	X				
1	08B - Solenoid-Operated Valves	03SOV-121(HCU-02-19)	03SOV-121(HCU-02-19)	HCU-02-19 INSERT EXHAUST WATER SOLENOID OPER VALVE	YES	NO	YES	NO	N/A	I		NO	X				
1	08B - Solenoid-Operated Valves	03SOV-122(HCU-02-19)	03SOV-122(HCU-02-19)	HCU-02-19 WITHDRAW DRIVE WATER SOLENOID OPER VALVE	YES	NO	YES	NO	N/A	I		NO	X				
1	08B - Solenoid-Operated Valves	03SOV-123(HCU-02-19)	03SOV-123(HCU-02-19)	HCU-02-19 INSERT DRIVE WATER SOLENOID OPER VALVE	YES	NO	YES	NO	N/A	I		NO	X				
1	08B - Solenoid-Operated Valves	03SOV-29	03SOV-29	SDIV ISOL TEST SOLENOID VALVE	YES	NO	YES	NO	N/A	I		NO	X				
1	08B - Solenoid-Operated Valves	03SOV-31A	03SOV-31A	SDIV A AOV INSTRUMENT AIR SUPPLY SOLENOID VALVE EQ	YES	NO	YES	NO	N/A	I		NO	X				
1	08B - Solenoid-Operated Valves	03SOV-31B	03SOV-31B	SDIV B AOV INSTRUMENT AIR SUPPLY SOLENOID VALVE B EQ	YES	NO	YES	NO	N/A	I		NO	X				
1	**00 - Other**	**03TK-125(HCU-02-19)**	**03TK-125(HCU-02-19)**	**WATER ACCUMULATOR**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**	**X**				
1	**00 - Other**	**03TK-128(HCU-02-19)**	**03TK-128(HCU-02-19)**	**NITROGEN ACCUMULATOR**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**	**X**				
1	21 - Tanks and Heat Exchangers	03TK-1A	03TK-1A	CRD A SDIV SCRAM DISCH INSTRUMENT AIR VOLUME TANK	YES	NO	YES	NO	N/A	I		NO	X				

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	21 - Tanks and Heat Exchangers	03TK-1B	03TK-1B	CRD B SDIV SCRAM DISCH INSTRUMENT AIR VOLUME TANK	YES	NO	YES	NO	N/A	I		NO	X				
1	20 - Instrument and Control Panels	06PI-61A	06PI-61A	REACTOR VESSEL PRESS INDIC	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	06PI-61B	06PI-61B	REACTOR VESSEL PRESS INDIC	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	06PT-61A	06PT-61A	ECCS LOOP A FEEDWATER CONTROL REACTOR PRESS XMITTER EQ	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	06PT-61B	06PT-61B	ECCS LOOP B FEEDWATER CONTROL REACTOR PRESS XMITTER EQ	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	09-21	09-21	NUCLEAR STEAM TEMP RECORD PANEL	YES	NO	NO	NO	N/A	I		NO					
1	**20 - Instrument and Control Panels**	**09-3**	**09-3**	**NUCLEAR STATION MAIN CONTROL BOARD**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**20 - Instrument and Control Panels**	**09-32**	**09-32**	**CHANNEL "A" RHR/RCIC RELAY PANEL**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	20 - Instrument and Control Panels	09-33	09-33	CHANNEL "B" RHR/RCIC RELAY PANEL	YES	NO	YES	NO	N/A	I		NO		X	X	X	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	20 - Instrument and Control Panels	09-39	09-39	HPCI RELAY PANEL	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**20 - Instrument and Control Panels**	**09-45**	**09-45**	**AUTO BLOWDOWN RELAY CABINET**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	20 - Instrument and Control Panels	09-46	09-46	CORE SPRAY CHANNEL "A" RELAY CABINET	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	20 - Instrument and Control Panels	09-47	09-47	CORE SPRAY CHANNEL "B" RELAY CABINET	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	20 - Instrument and Control Panels	09-5	09-5	REACTOR CONTROL MAIN CONTROL BOARD	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	
1	20 - Instrument and Control Panels	09-6	09-6	BALANCE OF PLANT (MECH) MAIN CONTROL BOARD	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	09-95	09-95	EMERGENCY CORE COOLING SYSTEM DIV 1 A/C TRIP CABINET	YES	NO	NO	YES	N/A	I		NO					
1	20 - Instrument and Control Panels	09-96	09-96	EMERGENCY CORE COOLING SYSTEM DIV 2 B/D TRIP CABINET	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	09AR-5A	09AR-5A	(RED) A AUXILIARY RELAY CABINET	YES	NO	YES	NO	N/A	I		NO	X				

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	20 - Instrument and Control Panels	09AR-5B	09AR-5B	(BLUE) B AUXILIARY RELAY CABINET	YES	NO	YES	NO	N/A	I		NO	X				
1	**07 - Pneumatic-Operated Valves**	**10AOV-68A**	**10AOV-68A**	**RHR A LPCI TESTABLE CHECK VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**			**X**		
1	07 - Pneumatic-Operated Valves	10AOV-68B	10AOV-68B	RHR B LPCI TESTABLE CHECK VALVE	YES	NO	YES	NO	N/A	I		NO			X		
1	07 - Pneumatic-Operated Valves	10AOV-71A	10AOV-71A	RHR HEAT EXCHANGER A OUTLET TO TORUS OR RCIC ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	07 - Pneumatic-Operated Valves	10AOV-71B	10AOV-71B	RHR HEAT EXCHANGER B OUTLET TO TORUS OR RCIC ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	**21 - Tanks and Heat Exchangers**	**10E-2A**	**10E-2A**	**RESIDUAL HEAT REMOVAL SYSTEM HEAT EXCHANGER A**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**				**X**	
1	21 - Tanks and Heat Exchangers	10E-2B	10E-2B	RESIDUAL HEAT REMOVAL SYSTEM HEAT EXCHANGER B	YES	NO	YES	NO	N/A	I		NO				X	
1	20 - Instrument and Control Panels	10FI-132A	10FI-132A	RHRSW PUMPS A&C DISCH FLOW INDIC	YES	NO	YES	NO	N/A	I		NO			X	X	
1	20 - Instrument and Control Panels	10FI-132B	10FI-132B	RHRSW PUMPS B&D DISCH FLOW INDIC	YES	NO	YES	NO	N/A	I		NO			X	X	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	20 - Instrument and Control Panels	10FI-133A	10FI-133A	A REACTOR AND CONTAINMENT SPRAY LOOP FLOW INDIC	YES	NO	YES	NO	N/A	I		NO				X	
1	20 - Instrument and Control Panels	10FI-133B	10FI-133B	B REACTOR AND CONTAINMENT SPRAY LOOP FLOW INDIC	YES	NO	YES	NO	N/A	I		NO				X	
1	18 - Instrument Racks	10FT-109A	10FT-109A	RHR LOOP A FLOW XMITTER EQ	YES	NO	YES	NO	N/A	I		NO			X	X	
1	18 - Instrument Racks	10FT-109B	10FT-109B	RHR B DISCH HDR FLOW XMITTER	YES	NO	YES	NO	N/A	I		NO			X	X	
1	18 - Instrument Racks	10FT-97A	10FT-97A	RHRSW A DISCH HDR FLOW XMITTER	YES	NO	YES	NO	N/A	I		NO			X	X	
1	18 - Instrument Racks	10FT-97B	10FT-97B	RHRSW LOOP B FLOW XMITTER EQ	YES	NO	YES	NO	N/A	I		NO			X	X	
1	**08A - Motor-Operated Valves**	**10MOV-12A**	**10MOV-12A**	**RHR HEAT EXCH A OUTLET ISOL VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**			**X**	**X**	
1	08A - Motor-Operated Valves	10MOV-12B	10MOV-12B	RHR HEAT EXCH B OUTLET ISOL VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	
1	08A - Motor-Operated Valves	10MOV-13A	10MOV-13A	RHR PUMP A SUCT TORUS ISOL VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	
1	08A - Motor-Operated Valves	10MOV-13B	10MOV-13B	RHR PUMP B SUCT TORUS ISOL VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	
1	08A - Motor-Operated Valves	10MOV-13C	10MOV-13C	RHR PUMP C SUCT TORUS ISOL VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	08A - Motor-Operated Valves	10MOV-13D	10MOV-13D	RHR PUMP D SUCT TORUS ISOL VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	
1	08A - Motor-Operated Valves	10MOV-148A	10MOV-148A	RHRSW A TO RHR CROSS TIE UPSTR ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-148B	10MOV-148B	RHRSW B TO RHR CROSS TIE UPSTR ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-151A	10MOV-151A	RHR PUMPS A&C SUCT SUPPR POOL ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-151B	10MOV-151B	RHR PUMPS B&D SUCT SUPPR POOL ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-15A	10MOV-15A	RHR PUMP A SUCT SHUTDOWN COOLING ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-15B	10MOV-15B	RHR PUMP B SUCT SHUTDOWN COOLING ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-15C	10MOV-15C	RHR PUMP C SUCT SHUTDOWN COOLING ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-15D	10MOV-15D	RHR PUMP D SUCT SHUTDOWN COOLING ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-166A	10MOV-166A	RHR HEAT EXCH A UPSTR VENT TO TORUS ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	08A - Motor-Operated Valves	10MOV-166B	10MOV-166B	RHR HEAT EXCH B UPSTR VENT TO TORUS ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-16A	10MOV-16A	RHR A MIN FLOW ISOL VALVE	YES	NO	YES	YES	N/A	I		NO			X	X	
1	08A - Motor-Operated Valves	10MOV-16B	10MOV-16B	RHR B MIN FLOW ISOL VALVE	YES	NO	YES	YES	N/A	I		NO			X	X	
1	08A - Motor-Operated Valves	10MOV-21A	10MOV-21A	RHR HEAT EXCH A DISCH TO TORUS ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-21B	10MOV-21B	RHR HEAT EXCH B DISCH TO TORUS ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-25A	10MOV-25A	RHR A LPCI INBD INJ VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	
1	08A - Motor-Operated Valves	10MOV-25B	10MOV-25B	RHR B LPCI INBD INJ VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	
1	08A - Motor-Operated Valves	10MOV-26A	10MOV-26A	RHR A CONT SPRAY OUTBD ISOL VALVE	YES	NO	YES	YES	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-26B	10MOV-26B	RHR B CONT SPRAY OUTBD ISOL VALVE	YES	NO	YES	YES	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-27A	10MOV-27A	RHR A LPCI OUTBD INJ VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	
1	08A - Motor-Operated Valves	10MOV-27B	10MOV-27B	RHR B LPCI OUTBD INJ VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	08A - Motor-Operated Valves	10MOV-34A	10MOV-34A	RHR A TORUS COOLING SUPPLY VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-34B	10MOV-34B	RHR B TORUS COOLING SUPPLY VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-38A	10MOV-38A	RHR A TO TORUS SPRAY ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-38B	10MOV-38B	RHR B TO TORUS SPRAY ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-39A	10MOV-39A	RHR A TORUS COOLING ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-39B	10MOV-39B	RHR B TORUS COOLING ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-65A	10MOV-65A	RHR HEAT EXCH A SHELL INLET ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-65B	10MOV-65B	RHR HEAT EXCH B SHELL INLET ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-66A	10MOV-66A	RHR HEAT EXCH A BYPASS VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-66B	10MOV-66B	RHR HEAT EXCH B BYPASS VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-70A	10MOV-70A	RHR HEAT EXCH A STEAM INLET ISOL VALVE	YES	NO	NO	NO	N/A	I		NO				X	

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	08A - Motor-Operated Valves	10MOV-70B	10MOV-70B	RHR HEAT EXCH B STEAM INLET ISOL VALVE	YES	NO	NO	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-89A	10MOV-89A	RHR HEAT EXCH A SERV WATER OUTLET ISOL VALVE	YES	NO	YES	YES	N/A	I		NO				X	
1	08A - Motor-Operated Valves	10MOV-89B	10MOV-89B	RHR HEAT EXCH B SERV WATER OUTLET ISOL VALVE	YES	NO	YES	YES	N/A	I		NO				X	
1	**06 - Vertical Pumps**	**10P-1A**	**10P-1A**	**RHR SERVICE WATER PUMP A**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**T**	**NO**			**X**	**X**	
1	06 - Vertical Pumps	10P-1B	10P-1B	RHR SERVICE WATER PUMP B	YES	NO	YES	YES	N/A	I		NO			X	X	
1	06 - Vertical Pumps	10P-1C	10P-1C	RHR SERVICE WATER PUMP C	YES	NO	YES	YES	N/A	I		NO			X	X	
1	06 - Vertical Pumps	10P-1D	10P-1D	RHR SERVICE WATER PUMP D	YES	NO	YES	YES	N/A	I		NO			X	X	
1	**06 - Vertical Pumps**	**10P-3A**	**10P-3A**	**RESIDUAL HEAT REMOVAL PUMP A**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**			**X**	**X**	
1	**06 - Vertical Pumps**	**10P-3B**	**10P-3B**	**RESIDUAL HEAT REMOVAL PUMP B**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**			**X**	**X**	
1	06 - Vertical Pumps	10P-3C	10P-3C	RESIDUAL HEAT REMOVAL PUMP C	YES	NO	YES	NO	N/A	I		NO			X	X	
1	06 - Vertical Pumps	10P-3D	10P-3D	RESIDUAL HEAT REMOVAL PUMP D	YES	NO	YES	NO	N/A	I		NO			X	X	
1	00 - Other	10RHR-260	10RHR-260	RHR LOOP B REACTOR HEAD SPRAY KEEP-FULL 10PCV-266 BYPASS VALVE	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	00 - Other	10RHR-274	10RHR-274	RHR LOOP A CONTAINMENT SPRAY KEEP-FULL COND XFER CONNECTION VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	10RV-41A	10RV-41A	RHR PUMP A SHUTDOWN COOLING SUCT RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	10RV-41B	10RV-41B	RHR PUMP B SHUTDOWN COOLING SUCT RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	10RV-41C	10RV-41C	RHR PUMP C SHUTDOWN COOLING SUCT RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	10RV-41D	10RV-41D	RHR PUMP D SHUTDOWN COOLING SUCT RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	10RV-43A	10RV-43A	RHR HEAT EXCHANGER A TUBE SIDE RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	10RV-43B	10RV-43B	RHR HEAT EXCHANGER B TUBE SIDE RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	10RV-46A	10RV-46A	RHR HEAT EXCHANGE A SHELL SIDE RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	10RV-46B	10RV-46B	RHR HEAT EXCHANGER B SHELL SIDE RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	**00 - Other**	**10S-5A1**	**10S-5A1**	**RESIDUAL HEAT REMOVAL SERVICE WATER STRAINER**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**T**	**NO**				**X**	
1	08B - Solenoid-Operated Valves	10SOV-101A	10SOV-101A	RHRSW PUMP A MOTOR COOLING WATER RETURN SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	10SOV-101B	10SOV-101B	RHRSW PUMP B MOTOR COOLING WATER RETURN SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	10SOV-101C	10SOV-101C	RHRSW PUMP C MOTOR COOLING WATER RETURN SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	10SOV-101D	10SOV-101D	RHRSW PUMP D MOTOR COOLING WATER RETURN SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	10SOV-263A	10SOV-263A	RHR HEAT EXCHANGER A OUTLET INNER SAMPLE SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	10SOV-263B	10SOV-263B	RHR HEAT EXCHANGER B OUTLET INNER SAMPLE SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	08B - Solenoid-Operated Valves	10SOV-68A	10SOV-68A	RHR A TESTABLE CHECK AIR SUPPLY ISOL SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	10SOV-68B	10SOV-68B	RHR B TESTABLE CHECK AIR SUPPLY ISOL SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	10SOV-71A	10SOV-71A	RHR HEAT EXCHANGER A TO TORUS OR RCIC ISOL VALVE 10AOV-71A SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	10SOV-71B	10SOV-71B	RHR HEAT EXCHANGER B TO TORUS OR RCIC ISOL VALVE 10AOV-71B SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	10SV-35A	10SV-35A	RHR LOOP A SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	10SV-35B	10SV-35B	RHR LOOP B SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	10SV-44	10SV-44	REACTOR HEAD SPRAY LINE SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	10SV-74A	10SV-74A	RHR HEAT EXCHANGER A STEAM INLET SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	10SV-74B	10SV-74B	RHR HEAT EXCHANGER B STEAM INLET SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	11ACC-2A	11ACC-2A	STANDBY LIQUID CONTROL PUMP 2A SUCTION PULSATION DAMPENER	YES	NO	YES	NO	N/A	I		NO	X		X		
1	21 - Tanks and Heat Exchangers	11ACC-2B	11ACC-2B	STANDBY LIQUID CONTROL PUMP 2B SUCTION PULSATION DAMPENER	YES	NO	YES	NO	N/A	I		NO	X		X		
1	**00 - Other**	**11EV-14A**	**11EV-14A**	**SLC A DOUBLE SQUIB ACTIVATED SHEAR EXPLOSIVE VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**		**X**		
1	00 - Other	11EV-14B	11EV-14B	SLC B DOUBLE SQUIB ACTIVATED SHEAR EXPLOSIVE VALVE	YES	NO	YES	NO	N/A	I		NO	X		X		
1	**05 - Horizontal Pumps**	**11P-2A**	**11P-2A**	**STANDBY LIQUID CONTROL A PUMP**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**		**X**		
1	05 - Horizontal Pumps	11P-2B	11P-2B	STANDBY LIQUID CONTROL B PUMP	YES	NO	YES	NO	N/A	I		NO	X		X		
1	07 - Pneumatic-Operated Valves	11SV-39A	11SV-39A	SLC PUMP 2A DISCH SAFETY VALVE	YES	NO	YES	NO	N/A	I		NO	X		X		
1	07 - Pneumatic-Operated Valves	11SV-39B	11SV-39B	SLC PUMP 2B DISCH SAFETY VALVE	YES	NO	YES	NO	N/A	I		NO	X		X		

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**21 - Tanks and Heat Exchangers**	**11TK-1**	**11TK-1**	**STANDBY LIQUID CONTROL TANK**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**		**X**		
1	08A - Motor-Operated Valves	12MOV-15	12MOV-15	RWCU SUPPLY INBD ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	X
1	08A - Motor-Operated Valves	12MOV-18	12MOV-18	RWCU SUPPLY OUTBD ISOL VALVE	YES	NO	YES	NO	N/A	I	NO	NO				X	X
1	**08A - Motor-Operated Valves**	**13MOV-15**	**13MOV-15**	**RCIC STEAM SUPPLY INBD ISOL VALVE**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**T**	**NO**		**X**	**X**	**X**	**X**
1	**08A - Motor-Operated Valves**	**13MOV-16**	**13MOV-16**	**RCIC TURBINE STEAM SUPPLY OUTBD ISOL VALVE**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**T**	**NO**		**X**	**X**	**X**	**X**
1	**05 - Horizontal Pumps**	**13P-1**	**13P-1**	**RCIC PUMP**	**NO**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**			**X**		
1	07 - Pneumatic-Operated Valves	14AOV-13A	14AOV-13A	CSP A REACTOR ISOL TESTABLE CHECK VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	
1	07 - Pneumatic-Operated Valves	14AOV-13B	14AOV-13B	CSP B REACTOR ISOL TESTABLE CHECK VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	
1	**08A - Motor-Operated Valves**	**14MOV-12A**	**14MOV-12A**	**CORE SPRAY LOOP A INBD ISOL VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**			**X**	**X**	
1	08A - Motor-Operated Valves	14MOV-12B	14MOV-12B	CORE SPRAY LOOP B INBD ISOL VALVE	YES	NO	YES	NO	N/A	I		NO			X	X	
1	**05 - Horizontal Pumps**	**14P-1A**	**14P-1A**	**CORE SPRAY PUMP**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**			**X**	**X**	

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**19 - Temperature Sensors**	**16-1RTD-131A**	**16-1RTD-131A**	**TORUS BULK TEMP MONITOR 0 AZIMUTH BAY L X-232 RESIST TEMP DETECTOR EQ**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**				**X**	
1	19 - Temperature Sensors	16-1RTD-131B	16-1RTD-131B	TORUS BULK TEMP MONITOR 0 AZIMUTH BAY L X-232 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-132A	16-1RTD-132A	TORUS BULK TEMP MONITOR 22.5 AZIMUTH BAY K X-233 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-132B	16-1RTD-132B	TORUS BULK TEMP MONITOR 22.5 AZIMUTH BAY K X-233 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-133A	16-1RTD-133A	TORUS BULK TEMP MONITOR 45 AZIMUTH BAY J X-234 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-133B	16-1RTD-133B	TORUS BULK TEMP MONITOR 45 AZIMUTH BAY J X-234 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-134A	16-1RTD-134A	TORUS BULK TEMP MONITOR 67.5 AZIMUTH BAY I X-235 RESIST THERMAL DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	19 - Temperature Sensors	16-1RTD-134B	16-1RTD-134B	TORUS BULK TEMP MONITOR 67.5 AZIMUTH BAY I X-235 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-135A	16-1RTD-135A	TORUS BULK TEMP MONITOR 90 AZIMUTH BAY H X-236 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-135B	16-1RTD-135B	TORUS BULK TEMP MONITOR 90 AZIMUTH BAY H X-236 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-136A	16-1RTD-136A	TORUS BULK TEMP MONITOR 112.5 AZIMUTH BAY G X-237 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-136B	16-1RTD-136B	TORUS BULK TEMP MONITOR 112.5 AZIMUTH BAY G X-237 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-137A	16-1RTD-137A	TORUS BULK TEMP MONITOR 135 AZIMUTH BAY F X-238 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-137B	16-1RTD-137B	TORUS BULK TEMP MONITOR 135 AZIMUTH BAY F X-238 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	19 - Temperature Sensors	16-1RTD-138A	16-1RTD-138A	TORUS BULK TEMP MONITOR 157.5 AZIMUTH BAY E X-239 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-138B	16-1RTD-138B	TORUS BULK TEMP MONITOR 157.5 AZIMUTH BAY E X-239 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-139A	16-1RTD-139A	TORUS BULK TEMP MONITOR 180 AZIMUTH BAY D X-240 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-139B	16-1RTD-139B	TORUS BULK TEMP MONITOR 180 AZIMUTH BAY D X-240 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-140A	16-1RTD-140A	TORUS BULK TEMP MONITOR 202.5 AZIMUTH BAY C X-241 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-140B	16-1RTD-140B	TORUS BULK TEMP MONITOR 202.5 AZIMUTH BAY C X-241 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-141A	16-1RTD-141A	TORUS BULK TEMP MONITOR 22.5 AZIMUTH BAY B X-242 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	19 - Temperature Sensors	16-1RTD-141B	16-1RTD-141B	TORUS BULK TEMP MONITOR 22.5 AZIMUTH BAY B X-242 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-142A	16-1RTD-142A	TORUS BULK TEMP MONITOR 247.5 AZIMUTH BAY A X-243 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-142B	16-1RTD-142B	TORUS BULK TEMP MONITOR 247.5 AZIMUTH BAY A X-243 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-143A	16-1RTD-143A	TORUS BULK TEMP MONITOR 270 AZIMUTH BAY P X-244 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-143B	16-1RTD-143B	TORUS BULK TEMP MONITOR 270 AZIMUTH BAY P X-244 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-144A	16-1RTD-144A	TORUS BULK TEMP MONITOR 292.5 AZIMUTH BAY O X-245 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-144B	16-1RTD-144B	TORUS BULK TEMP MONITOR 292.5 AZIMUTH BAY O X-245 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	19 - Temperature Sensors	16-1RTD-145A	16-1RTD-145A	TORUS BULK TEMP MONITOR 315 AZIMUTH BAY N X-246 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-145B	16-1RTD-145B	TORUS BULK TEMP MONITOR 315 AZIMUTH BAY N X-246 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-146A	16-1RTD-146A	TORUS BULK TEMP MONITOR 337.5 AZIMUTH BAY M X-247 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	16-1RTD-146B	16-1RTD-146B	TORUS BULK TEMP MONITOR 337.5 AZIMUTH BAY M X-247 RESIST TEMP DETECTOR EQ	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	16-1TI-131A	16-1TI-131A	SUPPRESSION CHAMBER A TEMP INDIC	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	16-1TI-131B	16-1TI-131B	SUPPRESSION CHAMBER B TEMP INDIC	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	16-1TR-131A	16-1TR-131A	TORUS BULK TEMP MON AVERAGE TEMP RECORDER	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	16-1TR-131B	16-1TR-131B	TORUS BULK TEMP MON AVERAGE TEMP RECORDER	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	23AOV-42	23AOV-42	HPCI TURBINE STEAM SUPPLY UPSTR DRAIN ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	**07 - Pneumatic-Operated Valves**	**23AOV-53**	**23AOV-53**	**HPCI TURBINE STEAM SUPPLY DRAIN TRAP T-3 BYPASS VALVE**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**T**	**NO**			**X**		
1	**21 - Tanks and Heat Exchangers**	**23E-2**	**23E-2**	**HPCI LUBE OIL COOLER**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**		**X**	**X**	**X**	
1	20 - Instrument and Control Panels	23FI-108-1	23FI-108-1	HPCI PUMP DISCHARGE FLOW INDICATOR	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	23FT-82	23FT-82	HPCI MAIN PUMP P-1M DISCH FLOW XMITTER EQ	YES	NO	NO	NO	N/A	I		NO					
1	**07 - Pneumatic-Operated Valves**	**23HOV-1**	**23HOV-1**	**HPCI TURBINE STOP VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**		**X**	**X**	**X**	
1	07 - Pneumatic-Operated Valves	23HOV-2	23HOV-2	HPCI TURBINE CONTROL VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	20 - Instrument and Control Panels	23LI-202A	23LI-202A	SUPPRESSION CHAMBER WATER LEVEL INDIC	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	23LI-202B	23LI-202B	SUPPRESSION CHAMBER WATER LEVEL INDIC	YES	NO	NO	NO	N/A	I		NO					

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**18 - Instrument Racks**	**23LT-202A**	**23LT-202A**	**SUPPRESSION POOL HPCI LOGIC LEVEL XMITTER EQ**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**			**X**		
1	18 - Instrument Racks	23LT-202B	23LT-202B	SUPPRESSION POOL HPCI LOGIC LEVEL XMITTER EQ	YES	NO	NO	NO	N/A	I		NO					
1	**08A - Motor-Operated Valves**	**23MOV-14**	**23MOV-14**	**HPCI TURBINE STEAM SUPPLY ISOL VALVE**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**T**	**NO**		**X**	**X**	**X**	**X**
1	08A - Motor-Operated Valves	23MOV-15	23MOV-15	HPCI STEAM SUPPLY INBD ISOL VALVE	YES	NO	YES	YES	N/A	I		NO		X	X	X	X
1	08A - Motor-Operated Valves	23MOV-16	23MOV-16	HPCI TURBINE STEAM SUPPLY OUTBD ISOL VALVE	YES	NO	YES	YES	N/A	I		NO		X	X	X	X
1	08A - Motor-Operated Valves	23MOV-17	23MOV-17	HPCI BOOSTER PUMP P-1B SUCT FROM 33TK-1A & B ISOL VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08A - Motor-Operated Valves	23MOV-19	23MOV-19	HPCI PUMP DISCH TO REACTOR INBD ISOL VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08A - Motor-Operated Valves	23MOV-20	23MOV-20	HPCI PUMP DISCH TO REACTOR OUTBD ISOL VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08A - Motor-Operated Valves	23MOV-21	23MOV-21	HPCI FULL FLOW TEST RETURN TO CST 33TK-1A & B UPSTR ISOL VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08A - Motor-Operated Valves	23MOV-24	23MOV-24	HPCI FULL FLOW TEST RETURN TO CST 33TK-1A & B DNSTR ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	08A - Motor-Operated Valves	23MOV-25	23MOV-25	HPCI MAIN PUMP P-1M MIN FLOW ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08A - Motor-Operated Valves	23MOV-57	23MOV-57	HPCI BOOSTER PUMP P-1B SUCT FROM SUPPRESSION POOL DNSTR ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08A - Motor-Operated Valves	23MOV-58	23MOV-58	HPCI BOOSTER PUMP P-1B SUCT FROM SUPPRESSION POOL UPSTR ISOL VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08A - Motor-Operated Valves	23MOV-59	23MOV-59	HPCI TURB EXH LINE VAC BREAKER VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	08A - Motor-Operated Valves	23MOV-60	23MOV-60	HPCI TURBINE STEAM SUPPLY OUTBD ISOL VALVE 23MOV-16 BYPASS VALVE	YES	NO	NO	YES	N/A	I		NO					
1	**05 - Horizontal Pumps**	**23P-150**	**23P-150**	**HPCI TURBINE AUX LUBE OIL PUMP**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**					**X**
1	05 - Horizontal Pumps	23P-1B	23P-1B	HPCI BOOSTER PUMP	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**05 - Horizontal Pumps**	**23P-1M**	**23P-1M**	**HPCI MAIN PUMP**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**		**X**	**X**	**X**	
1	05 - Horizontal Pumps	23P-1MO	23P-1MO	HPCI MAIN LUBE OIL PUMP	YES	NO	YES	NO	N/A	I		NO		X	X	X	

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	23RV-106	23RV-106	HPCI AUX OIL PUMP P-150 DISCH RELIEF VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	07 - Pneumatic-Operated Valves	23RV-107	23RV-107	HPCI MAIN LUBE OIL PUMP P-1MO DISCH RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	23SOV-42	23SOV-42	HPCI TURBINE STEAM SUPPLY UPSTR DRAIN ISOL VALVE SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	23SOV-53	23SOV-53	HPCI TURBINE STEAM SUPPLY DRAIN TRAP T-3 BYPASS SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	23SPI-161	23SPI-161	HPCI TURBINE SPEED INDIC	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	23SV-34	23SV-34	HPCI BOOSTER PUMP P-1B SUCT SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	23SV-66	23SV-66	HPCI BOOSTER PUMP P-1B RECIRC SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	**21 - Tanks and Heat Exchangers**	**23TK-1**	**23TK-1**	**HPCI LUBE OIL SUMP**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**		**X**	**X**	**X**	
1	05 - Horizontal Pumps	23TU-2	23TU-2	HPCI PUMP DRIVE TURBINE	YES	NO	YES	NO	N/A	I		NO		X	X	X	

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	27AOV-126A	27AOV-126A	AMBIENT VAPORIZER A INLET VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27AOV-126B	27AOV-126B	AMBIENT VAPORIZER B INLET VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27AOV-127A	27AOV-127A	STEAM VAPORIZER NV-8 LIQUID NITROGEN SUPPLY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27AOV-127B	27AOV-127B	STEAM VAPORIZER NV-8 LIQUID NITROGEN SUPPLY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27AOV-128A	27AOV-128A	CAD TRAIN A NITROGEN MAKE-UP SUPPLY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27AOV-129A	27AOV-129A	DRYWELL PCV AND INSTR CAD TRAIN A BACKUP VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27AOV-129B	27AOV-129B	DRYWELL PCV AND INSTR CAD TRAIN B BACKUP VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27AOV-131A	27AOV-131A	CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27AOV-131B	27AOV-131B	CAD TRAIN B NITROGEN MAKE-UP ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	27AOV-132A	27AOV-132A	CAD TRAIN A TORUS NITROGEN MAKE-UP ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27AOV-132B	27AOV-132B	CAD TRAIN B TORUS NITROGEN MAKE-UP ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	27CAD	27CAD	CONTAINMENT AIR DILUTION PANEL	YES	NO	NO	YES	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	27E-1A	27E-1A	CAD A VALVE OPERATING NITROGEN AMBIENT HEAT EXCHANGER	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	27E-1B	27E-1B	CAD B VALVE OPERATING NITROGEN AMBIENT HEAT EXCHANGER	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	27EH-10A	27EH-10A	CAD A AMBIENT VAPORIZER ELECTRIC HEATER	YES	NO	NO	YES	N/A	I		NO					
1	18 - Instrument Racks	27EH-10B	27EH-10B	CAD B AMBIENT VAPORIZER ELECTRIC HEATER	YES	NO	NO	YES	N/A	I		NO					
1	20 - Instrument and Control Panels	27MAP	27MAP	MONITORING ANALYSIS PANEL	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	27NS-CA	27NS-CA	CAD A NITROGEN SUPPLY INSTR CABINET	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	18 - Instrument Racks	27NS-CB	27NS-CB	CAD B NITROGEN SUPPLY INSTR CABINET	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	27NV-9A	27NV-9A	CAD TRAIN A AMBIENT VAPORIZER	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	27NV-9B	27NV-9B	CAD TRAIN B AMBIENT VAPORIZER	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-101A	27PCV-101A	27PC-101A NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-101B	27PCV-101B	27PC-101B NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-102A	27PCV-102A	27FCV-111 POSITIONER NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-102B	27PCV-102B	27FCV-111 SIGNAL CONVERTER NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-114	27PCV-114	27PCV-120 NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	27PCV-116A	27PCV-116A	27FCV-103A SIGNAL CONVERTER NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
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1	18 - Instrument Racks	27PCV-116B	27PCV-116B	27FCV-103B SIGNAL CONVERTER NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-120	27PCV-120	DRYWELL PCV AND INSTR NITROGEN BACKUP SUPPLY PRESS CONTROL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-121A	27PCV-121A	27PCV-122A POSITIONER NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-121B	27PCV-121B	27PCV-122B POSITIONER NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-122A	27PCV-122A	PRESS BUILDING COIL A INLET PRESS CONTROL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-122B	27PCV-122B	PRESS BUILDING COIL B INLET PRESS CONTROL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-124A1	27PCV-124A1	27AOV-131A NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-124A2	27PCV-124A2	27AOV-132A NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	27PCV-124B1	27PCV-124B1	27AOV-131B NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-124B2	27PCV-124B2	27AOV-132B NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-125A	27PCV-125A	27TCV-124 POSITIONER NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-125B	27PCV-125B	27TCV-124 CNTRLR NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-126A	27PCV-126A	27AOV-126A NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-126B	27PCV-126B	27AOV-126B NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-127A	27PCV-127A	27AOV-127A NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-127B	27PCV-127B	27AOV-127B NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-128A	27PCV-128A	27AOV-128A NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	27PCV-128B	27PCV-128B	27AOV-128B NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-129A	27PCV-129A	27AOV-129A NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-129B	27PCV-129B	27AOV-129B NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-130	27PCV-130	CAD PC-120 PRESSURE REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-132A	27PCV-132A	27PC-122A NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-132B	27PCV-132B	27PC-122B NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-133A	27PCV-133A	27RV-101A POSITIONER NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-133B	27PCV-133B	27RV-101B POSITIONER NITROGEN SUPPLY PRESS REGULATOR	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-134A	27PCV-134A	CAD TRAIN A VALVE OPERATING NITROGEN PRESS CONTROL VALVE	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	27PCV-134B	27PCV-134B	CAD TRAIN B VALVE OPERATING NITROGEN PRESS CONTROL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27PCV-140	27PCV-140	DRYWELL PCV AND INSTR NITROGEN BACKUP SUPPLY PRESS CONTROL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	27PI-115A2	27PI-115A2	CAD DRYWELL DIV I PRESS INDIC	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	27PI-115B2	27PI-115B2	CAD DRYWELL DIV II PRESS INDIC	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	27PT-115A2	27PT-115A2	DRYWELL DIV I WIDE RANGE PRESS XMITTER EQ	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	27PT-115B2	27PT-115B2	DRYWELL DIV II WIDE RANGE PRESS XMITTER EQ	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27RV-101A	27RV-101A	LIQUID NITROGEN TANK A RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27RV-101B	27RV-101B	LIQUID NITROGEN TANK B RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	27SOV-126A	27SOV-126A	AMBIENT VAPORIZER A INLET VALVE SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	08B - Solenoid-Operated Valves	27SOV-126B	27SOV-126B	AMBIENT VAPORIZER B INLET VALVE SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	27SOV-127A	27SOV-127A	STEAM VAPORIZER NV-8 LIQUID NITROGEN SUPPLY VALVE SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	27SOV-127B	27SOV-127B	STEAM VAPORIZER NV-8 LIQUID NITROGEN SUPPLY VALVE SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	27SOV-128A	27SOV-128A	CAD TRAIN A NITROGEN MAKE-UP SUPPLY VALVE SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	27SOV-128B	27SOV-128B	CAD TRAIN B NITROGEN MAKE-UP SUPPLY VALVE SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	27SOV-129A	27SOV-129A	DRYWELL PCV AND INSTR CAD TRAIN A BACKUP ISOL VALVE SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	27SOV-129B	27SOV-129B	DRYWELL PCV AND INSTR CAD TRAIN B BACKUP ISOL VALVE SOLENOID VALVE	YES	NO	NO	NO	N/A	I		NO					
1	**08B - Solenoid-Operated Valves**	**27SOV-131A**	**27SOV-131A**	**CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**		**X**	**X**	**X**	

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	08B - Solenoid-Operated Valves	27SOV-131B	27SOV-131B	CAD TRAIN B NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	27SOV-132A	27SOV-132A	CAD TRAIN A TORUS N2 MAKE-UP ISOL VALVE SOLENOID VALVE EQ	YES	NO	NO	NO	N/A	I		NO					
1	08B - Solenoid-Operated Valves	27SOV-132B	27SOV-132B	CAD TRAIN B TORUS N2 MAKE-UP ISOL VALVE SOLENOID VALVE EQ	YES	NO	NO	YES	N/A	I		NO					
1	08B - Solenoid-Operated Valves	27SOV-141	27SOV-141	DRYWELL PCV AND INSTR INSTR AIR OR NORMAL N2 CROSS TIE VALVE EQ	YES	NO	NO	NO	N/A	I		NO					
1	**08B - Solenoid-Operated Valves**	**27SOV-145**	**27SOV-145**	**CAD DRYWELL INSTR NITROGEN BACKUP SUPPLY ISOL VALVE**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	07 - Pneumatic-Operated Valves	27SV-114A	27SV-114A	CAD TRAIN A VALVE OPERATING SUPPLY SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27SV-114B	27SV-114B	CAD TRAIN B VALVE OPERATING SUPPLY SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27SV-115A	27SV-115A	AMBIENT VAPORIZER A OUTLET SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27SV-115B	27SV-115B	AMBIENT VAPORIZER B OUTLET SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	27SV-118A	27SV-118A	LIQUID NITROGEN TANK A OUTLET SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27SV-118B	27SV-118B	LIQUID NITROGEN TANK B OUTLET SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27SV-119A	27SV-119A	PRESS BUILDING COIL A INLET SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27SV-119B	27SV-119B	PRESS BUILDING COIL B INLET SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27SV-121	27SV-121	DRYWELL PCV AND INSTR NORMAL SUPPLY 27PCV-120 BYPASS SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27SV-122	27SV-122	STEAM VAPORIZER NV-8 CAD TRAINS A & B INLET CROSS-TIE SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27SV-201A	27SV-201A	DRYWELL PCV AND INSTR NORMAL SUPPLY SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	27SV-201B	27SV-201B	DRYWELL PCV AND INSTR NORMAL SUPPLY SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	27SV-202	27SV-202	DRYWELL PCV AND INSTR BACKUP SUPPLY SAFETY VALVE	YES	NO	NO	NO	N/A	I		NO					
1	**21 - Tanks and Heat Exchangers**	**27TK-7A**	**27TK-7A**	**CAD A LIQUID NITROGEN TANK**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	21 - Tanks and Heat Exchangers	27TK-7B	27TK-7B	CAD B LIQUID NITROGEN TANK	YES	NO	NO	NO	N/A	I		NO					
1	**21 - Tanks and Heat Exchangers**	**29AC-1A**	**29AC-1A**	**MST D OUTBD MSIV AIR ACCUMULATOR**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**					**X**
1	**21 - Tanks and Heat Exchangers**	**29AC-1B**	**29AC-1B**	**MST A INBD MSIV N2/AIR ACCUMULATOR**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**					**X**
1	21 - Tanks and Heat Exchangers	29AC-1C	29AC-1C	MST D INBD MSIV N2/AIR ACCUMULATOR	YES	NO	YES	NO	N/A	I		NO					X
1	21 - Tanks and Heat Exchangers	29AC-1D	29AC-1D	MST B OUTBD MSIV AIR ACCUMULATOR	YES	NO	YES	NO	N/A	I		NO					X
1	21 - Tanks and Heat Exchangers	29AC-1E	29AC-1E	MST C OUTBD MSIV AIR ACCUMULATOR	YES	NO	YES	NO	N/A	I		NO					X
1	21 - Tanks and Heat Exchangers	29AC-1F	29AC-1F	MST B INBD MSIV N2/AIR ACCUMULATOR	YES	NO	YES	NO	N/A	I		NO					X
1	21 - Tanks and Heat Exchangers	29AC-1G	29AC-1G	MST A OUTBD MSIV AIR ACCUMULATOR	YES	NO	YES	NO	N/A	I		NO					X
1	21 - Tanks and Heat Exchangers	29AC-1H	29AC-1H	MST C INBD MSIV N2/AIR ACCUMULATOR	YES	NO	YES	NO	N/A	I		NO					X

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**07 - Pneumatic-Operated Valves**	**29AOV-80A**	**29AOV-80A**	**MST A INBD MAIN STEAM ISOL VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**					**X**
1	07 - Pneumatic-Operated Valves	29AOV-80B	29AOV-80B	MST B INBD MAIN STEAM ISOL VALVE	YES	NO	YES	NO	N/A	I		NO					X
1	07 - Pneumatic-Operated Valves	29AOV-80C	29AOV-80C	MST C INBD MAIN STEAM ISOL VALVE	YES	NO	YES	NO	N/A	I		NO					X
1	07 - Pneumatic-Operated Valves	29AOV-80D	29AOV-80D	MST D INBD MAIN STEAM ISOL VALVE	YES	NO	YES	NO	N/A	I		NO					X
1	**07 - Pneumatic-Operated Valves**	**29AOV-86A**	**29AOV-86A**	**MST A OUTBD MAIN STEAM ISOL VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**					**X**
1	07 - Pneumatic-Operated Valves	29AOV-86B	29AOV-86B	MST B OUTBD MAIN STEAM ISOL VALVE	YES	NO	YES	NO	N/A	I		NO					X
1	07 - Pneumatic-Operated Valves	29AOV-86C	29AOV-86C	MST C OUTBD MAIN STEAM ISOL VALVE	YES	NO	YES	NO	N/A	I		NO					X
1	07 - Pneumatic-Operated Valves	29AOV-86D	29AOV-86D	MST D INBD MAIN STEAM ISOL VALVE	YES	NO	YES	NO	N/A	I		NO					X
1	08A - Motor-Operated Valves	29MOV-74	29MOV-74	MST INBD LINE DRAIN INBD ISOL VALVE	YES	NO	YES	YES	N/A	I		NO					X

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	20 - Instrument and Control Panels	33LI-101A	33LI-101A	CND STORAGE TK-12A & B LEVEL INDIC	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	33LT-101	33LT-101	CST LEVEL TRANSMITTER	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	33TK-12A	33TK-12A	CONDENSATE STORAGE TANK A	YES	NO	YES	NO	N/A	I		NO			X	X	
1	21 - Tanks and Heat Exchangers	33TK-12B	33TK-12B	CONDENSATE STORAGE TANK B	YES	NO	YES	NO	N/A	I		NO			X	X	
1	10 - Air Handlers	46(70)ESW-101	46(70)ESW-101	CR/RR VENT 70AHU-3A & 12A ESW SUPPLY ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	46(70)ESW-102	46(70)ESW-102	CR/RR VENT 70AHU-3B & 12B ESW SUPPLY ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	46(70)ESW-103	46(70)ESW-103	CR/RR VENT 70AHU-3A & 12A ESW RETURN ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	46(70)ESW-104	46(70)ESW-104	CR/RR VENT 70AHU-3B & 12B ESW RETURN ISOL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	**08A - Motor-Operated Valves**	**46MOV-101A**	**46MOV-101A**	**EMERGENCY SERVICE WATER LOOP A SUPPLY HEADER ISOL VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**				**X**	
1	08A - Motor-Operated Valves	46MOV-101B	46MOV-101B	EMERGENCY SERVICE WATER LOOP B SUPPLY HEADER ISOL VALVE	YES	NO	YES	NO	N/A	I		NO				X	

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	08A - Motor-Operated Valves	46MOV-102A	46MOV-102A	EMERGENCY SERVICE WATER PUMP A TEST VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	08A - Motor-Operated Valves	46MOV-102B	46MOV-102B	EMERGENCY SERVICE WATER PUMP B TEST VALVE	YES	NO	YES	NO	N/A	I		NO				X	
1	**06 - Vertical Pumps**	**46P-2A**	**46P-2A**	**EMERGENCY SERVICE WATER PUMP A**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**				**X**	
1	06 - Vertical Pumps	46P-2B	46P-2B	EMERGENCY SERVICE WATER PUMP B	YES	NO	YES	YES	N/A	I		NO				X	
1	**00 - Other**	**46STR-5A1**	**46STR-5A1**	**EMERG SERVICE WATER PUMP A DISCH SOUTH BASKET STRAINER**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**				**X**	
1	**00 - Other**	**46STR-5A2**	**46STR-5A2**	**EMERG SERVICE WATER PUMP A DISCH NORTH BASKET STRAINER**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**				**X**	
1	00 - Other	46STR-5B1	46STR-5B1	EMERG SERVICE WATER PUMP B DISCH NORTH BASKET STRAINER	YES	NO	YES	NO	N/A	I		NO				X	
1	00 - Other	46STR-5B2	46STR-5B2	EMERG SERVICE WATER PUMP B DISCH SOUTH BASKET STRAINER	YES	NO	YES	NO	N/A	I		NO				X	
1	07 - Pneumatic-Operated Valves	66PCV-101	66PCV-101	RB UNIT COOLERS SWS RETURN HEADER PRESS CONTROL VALVE	YES	NO	YES	NO	N/A	I		NO		X	X	X	

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**07 - Pneumatic-Operated Valves**	**66TCV-107E**	**66TCV-107E**	**EAST CRESCENT AREA UC-22E SWS INLET TEMP CONTROL VALVE**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**10 - Air Handlers**	**66UC-22A**	**66UC-22A**	**WEST CRESCENT AREA UNIT COOLER 22A**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**10 - Air Handlers**	**66UC-22B**	**66UC-22B**	**EAST CRESCENT AREA UNIT COOLER 22B**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	10 - Air Handlers	66UC-22C	66UC-22C	WEST CRESCENT AREA UNIT COOLER 22C	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	10 - Air Handlers	66UC-22D	66UC-22D	EAST CRESCENT AREA UNIT COOLER 22D	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	10 - Air Handlers	66UC-22E	66UC-22E	WEST CRESCENT AREA UNIT COOLER 22E	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	10 - Air Handlers	66UC-22F	66UC-22F	EAST CRESCENT AREA UNIT COOLER 22F	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	10 - Air Handlers	66UC-22G	66UC-22G	WEST CRESCENT AREA UNIT COOLER 22G	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	10 - Air Handlers	66UC-22H	66UC-22H	EAST CRESCENT AREA UNIT COOLER 22H	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	10 - Air Handlers	66UC-22J	66UC-22J	WEST CRESCENT AREA UNIT COOLER 22J	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	10 - Air Handlers	66UC-22K	66UC-22K	HPCI ROOM UNIT COOLER 22K	YES	NO	YES	NO	N/A	I		NO		X	X	X	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	10 - Air Handlers	67E-11	67E-11	WEST CABLE TUNNEL VENT SUPPLY COOLING COIL	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	67E-14	67E-14	EAST CABLE TUNNEL VENT SUPPLY COOLING COIL	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	67MOD-16A1	67MOD-16A1	WEST ELECTRIC BAY UC-16A DISCH ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	67MOD-16A2	67MOD-16A2	WEST ELECTRIC BAY UC-16A DISCH ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	67MOD-16B1	67MOD-16B1	EAST ELECTRIC BAY UC-16B DISCH ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	67MOD-16B2	67MOD-16B2	EAST ELECTRIC BAY UC-16B DISCH ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	67PCV-101	67PCV-101	ELECTRIC BAY UC-16A & B SERVICE WATER RETURN PRESS CONTROL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	67UC-16A	67UC-16A	WEST ELECTRIC BAY UNIT COOLER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	67UC-16B	67UC-16B	EAST ELECTRIC BAY UNIT COOLER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70AHU-12A	70AHU-12A	RELAY ROOM VENT AIR HANDLING UNIT A	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70AHU-12B	70AHU-12B	RELAY ROOM VENT AIR HANDLING UNIT B	YES	NO	NO	NO	N/A	I		NO					

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	10 - Air Handlers	70AHU-19A	70AHU-19A	CHILLER ROOM VENT AIR HANDLING UNIT A	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70AHU-19B	70AHU-19B	CHILLER ROOM VENT AIR HANDLING UNIT B	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70AHU-3A	70AHU-3A	CONTROL ROOM VENT AIR HANDLING UNIT A	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70AHU-3B	70AHU-3B	CONTROL ROOM VENT AIR HANDLING UNIT B	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70FD-1	70FD-1	RELAY ROOM INLET VENT FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70FD-10	70FD-10	SOUTH/NORTH CABLE ROOMS FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70FD-2	70FD-2	RELAY ROOM VENT EXHAUST FANS INLET FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70FD-4	70FD-4	RELAY ROOM VENT EXHAUST FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70FD-5	70FD-5	RELAY ROOM VENT EXHAUST FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70FD-6	70FD-6	RELAY ROOM VENT SUPPLY FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70FD-7	70FD-7	RELAY ROOM VENT EXHAUST FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	09 - Fans	70FN-13A	70FN-13A	RELAY ROOM VENT EXHAUST FAN A	YES	NO	NO	NO	N/A	I		NO					

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	09 - Fans	70FN-13B	70FN-13B	RELAY ROOM VENT EXHAUST FAN B	YES	NO	NO	NO	N/A	I		NO					
1	**09 - Fans**	**70FN-4A**	**70FN-4A**	**CONTROL ROOM VENT EXHAUST FAN A**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**				**X**	
1	09 - Fans	70FN-4B	70FN-4B	CONTROL ROOM VENT EXHAUST FAN B	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70MOD-101A	70MOD-101A	RELAY ROOM VENT AHU-12A OUTLET ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70MOD-101B	70MOD-101B	RELAY ROOM VENT AHU-12B OUTLET ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70MOD-102A	70MOD-102A	RELAY ROOM VENT EXHAUST FAN 13A OUTLET ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70MOD-102B	70MOD-102B	RELAY ROOM VENT EXHAUST FAN 13B OUTLET ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70MOD-104A	70MOD-104A	RELAY ROOM VENT RECIRC ISOL DAMPER A	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70MOD-104B	70MOD-104B	RELAY ROOM VENT RECIRC ISOL DAMPER B	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70MOD-106A	70MOD-106A	CONTROL ROOM VENT AHU-3A OUTLET ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	10 - Air Handlers	70MOD-106B	70MOD-106B	CONTROL ROOM VENT AHU-3B OUTLET ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70MOD-108A	70MOD-108A	CONTROL ROOM VENT EXHAUST FAN 4A OUTLET ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70MOD-108B	70MOD-108B	CONTROL ROOM VENT EXHAUST FAN 4B OUTLET ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70MOD-110A	70MOD-110A	CONTROL ROOM VENT RECIRC ISOL DAMPER A	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	70MOD-110B	70MOD-110B	CONTROL ROOM VENT RECIRC ISOL DAMPER B	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	70PCV-100A1	70PCV-100A1	CR/RR CHILLER CONDENSER A SWS PRESS CONTROL VALVE 1	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	70PCV-100A2	70PCV-100A2	CR/RR CHILLER CONDENSER B SWS PRESS CONTROL VALVE 2	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	70PCV-100B1	70PCV-100B1	CR/RR CHILLER CONDENSER A SWS PRESS CONTROL VALVE 1	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	70PCV-100B2	70PCV-100B2	CR/RR CHILLER CONDENSER B SWS PRESS CONTROL VALVE 2	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	07 - Pneumatic-Operated Valves	70RV-101A	70RV-101A	CR/RR CHILLER A CONDENSER SERVICE WATER RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	70RV-101B	70RV-101B	CR/RR CHILLER B CONDENSER SERVICE WATER RELIEF VALVE	YES	NO	NO	NO	N/A	I		NO					
1	**11 - Chillers**	**70RWC-2A(CND)**	**70RWC-2A(CND)**	**CONTROL ROOM CHILLER A CONDENSER**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**				**X**	
1	11 - Chillers	70RWC-2B(CND)	70RWC-2B(CND)	CONTROL ROOM CHILLER B CONDENSER	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	70TCV-123A	70TCV-123A	CR/RR CHILLER ROOM AHU-19A CHILLED WATER OUTLET TEMP CONTROL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	07 - Pneumatic-Operated Valves	70TCV-123B	70TCV-123B	CR/RR CHILLER ROOM AHU-19B CHILLED WATER OUTLET TEMP CONTROL VALVE	YES	NO	NO	NO	N/A	I		NO					
1	**03 - Medium Voltage, Metal-Clad Switchgear**	**71-10502**	**71-10502**	**416OV SWITCHGEAR DISTRIBUTION (BUS 10500)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**		**X**	**X**	**X**	
1	03 - Medium Voltage, Metal-Clad Switchgear	71-10512	71-10512	EMERG DIESEL GENERATOR C FEED TO EMERG 4KV BUS 10500	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	03 - Medium Voltage, Metal-Clad Switchgear	71-10514	71-10514	416OV SWITCHGEAR DISTRIBUTION (BUS 10500)	YES	NO	YES	NO	N/A	I		NO		X	X	X	

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**03 - Medium Voltage, Metal-Clad Switchgear**	**71-10560**	**71-10560**	**416OV SWITCHGEAR DISTRIBUTION (BUS 10500)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**03 - Medium Voltage, Metal-Clad Switchgear**	**71-10602**	**71-10602**	**416OV SWITCHGEAR DISTRIBUTION (BUS 10600)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	03 - Medium Voltage, Metal-Clad Switchgear	71-10612	71-10612	416OV SWITCHGEAR DISTRIBUTION (BUS 10600)	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**03 - Medium Voltage, Metal-Clad Switchgear**	**71-10614**	**71-10614**	**416OV SWITCHGEAR DISTRIBUTION (BUS 10600)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**03 - Medium Voltage, Metal-Clad Switchgear**	**71-10660**	**71-10660**	**416OV SWITCHGEAR DISTRIBUTION (BUS 10600)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**02 - Low Voltage Switchgear and Breaker Panels**	**71-11502**	**71-11502**	**600V SWITCHGEAR DISTRIBUTION (BUS 11500) BKR 02**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**02 - Low Voltage Switchgear and Breaker Panels**	**71-11602**	**71-11602**	**600V SWITCHGEAR DISTRIBUTION (BUS 11600) BKR 02**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	02 - Low Voltage Switchgear and Breaker Panels	71-12502	71-12502	600V EMERG BUS FEED BREAKER	YES	NO	YES	NO	N/A	I		NO		X	X	X	

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	02 - Low Voltage Switchgear and Breaker Panels	71-12602	71-12602	600V EMERG BUS 12600 FEED BREAKER	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	14 - Distribution Panels and Automatic Transfer Switches	71ACA2	71ACA2	RELAY ROOM EMERGENCY PANEL DISTRIBUTION PANEL	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	14 - Distribution Panels and Automatic Transfer Switches	71ACA4	71ACA4	DISTRIBUTION PANEL 71ACA4 EMERGENCY CONTROL & INST POWER A	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**14 - Distribution Panels and Automatic Transfer Switches**	**71ACB4**	**71ACB4**	**DISTRIBUTION PANEL 71ACB4 EMERGENCY CONTROL & INST POWER B**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**14 - Distribution Panels and Automatic Transfer Switches**	**71ACUPS**	**71ACUPS**	**RELAY ROOM UNINTERRUPTABLE BUS DISTRIBUTION PANEL**	**NO**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**15 - Battery Racks**	**71BAT-3A**	**71BAT-3A**	**LPCI INVERTER BATTERY**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	15 - Battery Racks	71BAT-3B	71BAT-3B	LPCI INVERTER BATTERY	YES	NO	YES	NO	N/A	I		NO		X	X	X	

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**16 - Battery Chargers and Inverters**	**71BC-1A**	**71BC-1A**	**125 VDC STATION BATTERY CHARGER**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	16 - Battery Chargers and Inverters	71BC-1B	71BC-1B	125 VDC STATION BATTERY CHARGER	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**14 - Distribution Panels and Automatic Transfer Switches**	**71BCB-2A**	**71BCB-2A**	**BATTERY A CONTROL BOARD**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	14 - Distribution Panels and Automatic Transfer Switches	71BCB-2B	71BCB-2B	BATTERY B CONTROL BOARD	YES	NO	YES	YES	N/A	I		NO		X	X	X	
1	**01 - Motor Control Centers and Wall-Mounted Contactors**	**71BMCC-1**	**71BMCC-1**	**RB WEST CRESCENT DC MOTOR CONTROL CENTER**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	01 - Motor Control Centers and Wall-Mounted Contactors	71BMCC-2	71BMCC-2	RB EAST CRESCENT DC MOTOR CONTROL CENTER	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	01 - Motor Control Centers and Wall-Mounted Contactors	71BMCC-3	71BMCC-3	RB WEST CRESCENT DC MOTOR CONTROL CENTER	YES	NO	YES	NO	N/A	I		NO		X	X	X	

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71BMCC-4	71BMCC-4	RB EAST CRESCENT DC MOTOR CONTROL CENTER	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**01 - Motor Control Centers and Wall-Mounted Contactors**	**71BMCC-6**	**71BMCC-6**	**RB DC MOTOR CONTROL CENTER**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**14 - Distribution Panels and Automatic Transfer Switches**	**71DC-A2**	**71DC-A2**	**DISTRIBUTION PANEL 71DC-A2 DC CONTROL POWER A**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	
1	14 - Distribution Panels and Automatic Transfer Switches	71DC-A2-4	71DC-A2-4	DISTRIBUTION PANEL 71DC-A2 (BRK 4)	NO	NO	NO	NO	N/A	I		NO					
1	14 - Distribution Panels and Automatic Transfer Switches	71DC-A5	71DC-A5	DISTRIBUTION PANEL 71DC-A5 DC CONTROL POWER A	YES	NO	NO	NO	N/A	I		NO					
1	14 - Distribution Panels and Automatic Transfer Switches	71DC-B2	71DC-B2	DISTRIBUTION PANEL 71DC-B2 DC CONTROL POWER B	YES	NO	NO	NO	N/A	I		NO					

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	14 - Distribution Panels and Automatic Transfer Switches	71DC-B4	71DC-B4	DISTRIBUTION PANEL 71DC-B4 DC CONTROL POWER B	YES	NO	NO	YES	N/A	I		NO					
1	**03 - Medium Voltage, Metal-Clad Switchgear**	**71DSC-11561**	**71DSC-11561**	**L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**T**	**NO**			**X**	**X**	
1	03 - Medium Voltage, Metal-Clad Switchgear	71DSC-11661	71DSC-11661	L16 UNIT SUBSTATION TRANSF T-14 HIGH SIDE DISC SW	YES	NO	NO	NO	N/A	I		NO					
1	03 - Medium Voltage, Metal-Clad Switchgear	71DSC-12561	71DSC-12561	L25 UNIT SUBSTATION TRANSF T-15 HIGH SIDE DISC SWITCH	YES	NO	NO	NO	N/A	I		NO					
1	03 - Medium Voltage, Metal-Clad Switchgear	71DSC-12661	71DSC-12661	L26 UNIT SUBSTATION TRANSF T-16 HIGH SIDE DISC SWITCH	YES	NO	NO	NO	N/A	I		NO					
1	14 - Distribution Panels and Automatic Transfer Switches	71ESSA1	71ESSA1	SAFEGUARD CONTROL & INST POWER A DISTRIBUTION PANEL	YES	NO	NO	NO	N/A	I		NO					
1	14 - Distribution Panels and Automatic Transfer Switches	71ESSB1	71ESSB1	SAFEGUARD CONTROL & INST POWER B DISTRIBUTION PANEL	YES	NO	NO	NO	N/A	I		NO					

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	03 - Medium Voltage, Metal-Clad Switchgear	71H05	71H05	416OV SWITCHGEAR DISTRIBUTION (BUS 10500)	YES	NO	NO	NO	N/A	I		NO					
1	03 - Medium Voltage, Metal-Clad Switchgear	71H06	71H06	416OV SWITCHGEAR DISTRIBUTION (BUS 10600)	YES	NO	NO	NO	N/A	I		NO					
1	**16 - Battery Chargers and Inverters**	**71INV-3A**	**71INV-3A**	**LPCI MOV INDEP POWER SUPPLY A INVERTER**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**T**	**NO**			**X**	**X**	
1	16 - Battery Chargers and Inverters	71INV-3B	71INV-3B	LPCI MOV INDEP POWER SUPPLY B INVERTER	YES	NO	NO	NO	N/A	I		NO					
1	02 - Low Voltage Switchgear and Breaker Panels	71L15	71L15	600V SWITCHGEAR DISTRIBUTION (BUS 11500)	YES	NO	NO	NO	N/A	I		NO					
1	02 - Low Voltage Switchgear and Breaker Panels	71L16	71L16	600V SWITCHGEAR DISTRIBUTION (BUS 11600)	YES	NO	NO	NO	N/A	I		NO					
1	**02 - Low Voltage Switchgear and Breaker Panels**	**71L25**	**71L25**	**600V SWITCHGEAR DISTRIBUTION (BUS 12500)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**			**X**	**X**	
1	**02 - Low Voltage Switchgear and Breaker Panels**	**71L26**	**71L26**	**600V SWITCHGEAR DISTRIBUTION (BUS 12600)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**			**X**	**X**	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-151	71MCC-151	600V MOTOR CONTROL CENTER (BUS 115100)	YES	NO	NO	NO	N/A	I		NO					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-152	71MCC-152	600V MOTOR CONTROL CENTER (BUS 144200)	YES	NO	NO	NO	N/A	I		NO					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-153	71MCC-153	600V MOTOR CONTROL CENTER (BUS 115300)	YES	NO	NO	NO	N/A	I		NO					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-155	71MCC-155	600V MOTOR CONTROL CENTER (BUS 115500)	YES	NO	NO	NO	N/A	I		NO					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-156	71MCC-156	600V MOTOR CONTROL CENTER (BUS 115600)	YES	NO	NO	NO	N/A	I		NO					
1	**01 - Motor Control Centers and Wall-Mounted Contactors**	**71MCC-161**	**71MCC-161**	**600V MOTOR CONTROL CENTER (BUS 116100)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**		**X**	**X**	

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-162	71MCC-162	600V MOTOR CONTROL CENTER (BUS 116200)	YES	NO	NO	NO	N/A	I		NO					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-163	71MCC-163	600V MOTOR CONTROL CENTER (BUS 116300)	YES	NO	NO	NO	N/A	I		NO					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-165	71MCC-165	600V MOTOR CONTROL CENTER (BUS 116500)	YES	NO	NO	NO	N/A	I		NO					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-166	71MCC-166	600V MOTOR CONTROL CENTER (BUS 116600)	YES	NO	NO	NO	N/A	I		NO					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-251	71MCC-251	600V MOTOR CONTROL CENTER (BUS 125100)	YES	NO	NO	NO	N/A	I		NO					
1	**01 - Motor Control Centers and Wall-Mounted Contactors**	**71MCC-252**	**71MCC-252**	**600V MOTOR CONTROL CENTER (BUS 125200)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**			**X**	**X**	

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-253	71MCC-253	600V MOTOR CONTROL CENTER (BUS 125300)	YES	NO	NO	NO	N/A	I		NO					
1	**01 - Motor Control Centers and Wall-Mounted Contactors**	**71MCC-254**	**71MCC-254**	**600V MOTOR CONTROL CENTER (BUS 125400)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**			**X**	**X**	
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-261	71MCC-261	600V MOTOR CONTROL CENTER (BUS 126100)	YES	NO	NO	NO	N/A	I		NO					
1	**01 - Motor Control Centers and Wall-Mounted Contactors**	**71MCC-262**	**71MCC-262**	**600V MOTOR CONTROL CENTER (BUS 126200)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**			**X**	**X**	
1	01 - Motor Control Centers and Wall-Mounted Contactors	71MCC-263	71MCC-263	600V MOTOR CONTROL CENTER (BUS 126300)	YES	NO	NO	NO	N/A	I		NO					
1	**01 - Motor Control Centers and Wall-Mounted Contactors**	**71MCC-264**	**71MCC-264**	**600V MOTOR CONTROL CENTER (BUS 126400)**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**			**X**	**X**	

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**04 - Transformers**	**71PT-71ACA2**	**71PT-71ACA2**	**EMERGENCY DISTRIBUTION TRANSFORMER 71MCC-253-OD3**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**					**X**
1	**04 - Transformers**	**71PT-71ACA4**	**71PT-71ACA4**	**EMERGENCY DISTRIBUTION TRANSFORMER 71MCC-254-A3A**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**			**X**	**X**	
1	04 - Transformers	71PT-71ACB2	71PT-71ACB2	EMERGENCY DISTRIBUTION TRANSFORMER 71MCC-263-OE3	YES	NO	NO	NO	N/A	I		NO					
1	04 - Transformers	71PT-71ACB4	71PT-71ACB4	EMERGENCY DISTRIBUTION TRANSFORMER 71MCC-264-A3A	YES	NO	NO	YES	N/A	I		NO					
1	**04 - Transformers**	**71PT-71ACUPS**	**71PT-71ACUPS**	**UNINTERRUPTIBLE BUS 37.5 KVA TRANSFORMER 71MCC-252-OD2**	**NO**	**NO**	**YES**	**NO**	**N/A**	**I**		**NO**			**X**		
1	04 - Transformers	71PT-71ESSA1	71PT-71ESSA1	SAFEGUARD BUS A DISTRIBUTION TRANSFORMER 71MCC-252-OC2	YES	NO	NO	NO	N/A	I		NO					
1	04 - Transformers	71PT-71ESSB1	71PT-71ESSB1	SAFEGUARD BUS B DISTRIBUTION 15KVA TRANSFORMER 71MCC-252-OB3	YES	NO	NO	NO	N/A	I		NO					
1	**15 - Battery Racks**	**71SB-1**	**71SB-1**	**125 VOLT STATION BATTERY A**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	**15 - Battery Racks**	**71SB-2**	**71SB-2**	**125 VOLT STATION BATTERY B**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	04 - Transformers	71T-13	71T-13	600V UNIT SUBSTATION L15 TRANSFORMER	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	04 - Transformers	71T-14	71T-14	600V UNIT SUBSTATION L16 TRANSFORMER	YES	NO	NO	NO	N/A	I		NO					
1	04 - Transformers	71T-15	71T-15	SWITCHGEAR L25 100KVA TRANSFORMER 71-10560	YES	NO	NO	NO	N/A	I		NO					
1	04 - Transformers	71T-16	71T-16	600V UNIT SUBSTATION L26 TRANSFORMER	YES	NO	NO	NO	N/A	I		NO					
1	13 - Motor Generators	71UPS-1(MTR)	71UPS-1(MTR)		YES	NO	NO	NO	N/A	I		NO					
1	**10 - Air Handlers**	**72AHU-30A**	**72AHU-30A**	**BATTERY ROOM A AIR HANDLING UNIT**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**		**NO**	**X**	**X**	**X**	**X**	
1	10 - Air Handlers	72AHU-30B	72AHU-30B	BATTERY ROOM B AIR HANDLING UNIT	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72FD-13	72FD-13	BATTERY ROOM A VENT EXHAUST FANS A & C SUCT FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72FD-14	72FD-14	BATTERY ROOM B VENT EXHAUST FANS B & D SUCT FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72FD-3	72FD-3	BATTERY ROOM A VENT EXHAUST FANS A & C DISCH FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72FD-4	72FD-4	BATTERY ROOM A RECIRC FAN A EXHAUST FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	10 - Air Handlers	72FD-5	72FD-5	BATTERY ROOM VENT AHU-30B SUPPLY FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72FD-6	72FD-6	BATTERY ROOM A AHU-30A INLET FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	**09 - Fans**	**72FN-31A**	**72FN-31A**	**BATTERY ROOM A RECIRC FAN**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	
1	09 - Fans	72FN-31B	72FN-31B	BATTERY ROOM B RECIRC FAN	YES	NO	NO	NO	N/A	I		NO					
1	**09 - Fans**	**72FN-46A**	**72FN-46A**	**BATTERY ROOM A EXHAUST FAN**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	
1	**09 - Fans**	**72FN-46B**	**72FN-46B**	**BATTERY ROOM B EXHAUST FAN**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	
1	09 - Fans	72FN-46C	72FN-46C	BATTERY ROOM A EXHAUST FAN	YES	NO	NO	NO	N/A	I		NO					
1	09 - Fans	72FN-46D	72FN-46D	BATTERY ROOM D EXHAUST FAN	YES	NO	NO	NO	N/A	I		NO					
1	**20 - Instrument and Control Panels**	**72HV-7A**	**72HV-7A**	**ADMIN BUILDING VENTILATION CONTROL PANEL**	**YES**	**NO**	**NO**	**NO**	**N/A**	**I**	**NO**	**NO**					
1	10 - Air Handlers	72MOD-100A	72MOD-100A	BATTERY ROOM A AHU-30A FRESH AIR SUPPLY ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72MOD-100B	72MOD-100B	BATTERY ROOM B AHU-30B FRESH AIR SUPPLY ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72MOD-101A	72MOD-101A	BATTERY ROOM A AHU-30A RECIRC ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	10 - Air Handlers	72MOD-101B	72MOD-101B	BATTERY ROOM B AHU-30B RECIRC ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72MOD-102A	72MOD-102A	BATTERY ROOM A RECIRC FAN A DISCH ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72MOD-102B	72MOD-102B	BATTERY ROOM B RECIRC FAN B DISCH ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72MOD-103A	72MOD-103A	BATTERY ROOM A EXHAUST FAN A DISCH ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72MOD-103B	72MOD-103B	BATTERY ROOM B EXHAUST FAN B DISCH ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72MOD-103C	72MOD-103C	BATTERY ROOM A EXHAUST FAN C DISCH ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72MOD-103D	72MOD-103D	BATTERY ROOM B EXHAUST FAN D DISCH ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72MOD-104A	72MOD-104A	BATTERY ROOM A VENT RECIRC FAN A EXHAUST DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	72MOD-104B	72MOD-104B	BATTERY ROOM B VENT RECIRC FAN B EXHAUST DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	73FD-1A	73FD-1A	ESW/RHRSW PUMP ROOM A FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	73FD-1B	73FD-1B	ESW/RHRSW PUMP ROOM B FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	10 - Air Handlers	73FD-1C	73FD-1C	ESW/RHRSW PUMP ROOM B FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	73FD-1D	73FD-1D	WEST DIESEL FIRE PUMP ROOM FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	09 - Fans	73FN-3A	73FN-3A	ESW/RHRSW PUMP ROOM EXHAUST FAN A	YES	NO	NO	NO	N/A	I		NO					
1	09 - Fans	73FN-3B	73FN-3B	ESW/RHRSW PUMP ROOM EXHAUST FAN B	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92CD-1	92CD-1	EDG A SWITCHGEAR AREA VENT CO2 ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92CD-2	92CD-2	EDG B SWITCHGEAR AREA VENT CO2 ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92CD-3	92CD-3	EDG C SWITCHGEAR AREA VENT CO2 ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92CD-4	92CD-4	EDG D SWITCHGEAR AREA VENT CO2 ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92FD-01	92FD-01	EMERG DIESEL GEN VENT SUPPLY FANS A & C FRESH AIR SUCT FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92FD-02	92FD-02	EMERG DIESEL GEN VENT SUPPLY FAN A RECIRC SUCT FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92FD-03	92FD-03	EMERG DIESEL GEN VENT SUPPLY FAN A DISCH FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	10 - Air Handlers	92FD-04	92FD-04	EMERG DIESEL GEN VENT SUPPLY FAN C RECIRC SUCT FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92FD-05	92FD-05	EMERG DIESEL GEN VENT SUPPLY FAN C DISCH FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92FD-06	92FD-06	EMERG DIESEL GEN VENT SUPPLY FAN B DISCH FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92FD-07	92FD-07	EMERG DIESEL GEN VENT SUPPLY FAN B RECIRC SUCT FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92FD-08	92FD-08	EMERG DIESEL GEN VENT SUPPLY FAN D DISCH FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92FD-09	92FD-09	EMERG DIESEL GEN VENT SUPPLY FAN D RECIRC SUCT FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92FD-10	92FD-10	EMERG DIESEL GEN VENT SUPPLY FANS B & D FRESH AIR SUCT FIRE DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	**09 - Fans**	**92FN-1A**	**92FN-1A**	**EMERG DIESEL GEN A VENT SUPPLY FAN**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	
1	09 - Fans	92FN-1B	92FN-1B	EMERG DIESEL GEN B VENT SUPPLY FAN	YES	NO	NO	NO	N/A	I		NO					
1	09 - Fans	92FN-1C	92FN-1C	EMERG DIESEL GEN C VENT SUPPLY FAN	YES	NO	NO	NO	N/A	I		NO					
1	09 - Fans	92FN-1D	92FN-1D	EMERG DIESEL GEN D VENT SUPPLY FAN	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	20 - Instrument and Control Panels	92HV-9A	92HV-9A	EDG VENT A & C HEATING/VENT LOCAL CONTROL PANEL	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	92HV-9B	92HV-9B	EDG VENT B & D HEATING/VENT LOCAL CONTROL PANEL	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-143A	92MOD-143A	EMERG DIESEL GEN A VENT EXHAUST ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-143B	92MOD-143B	EMERG DIESEL GEN B VENT EXHAUST ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-143C	92MOD-143C	EMERG DIESEL GEN C VENT EXHAUST ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-143D	92MOD-143D	EMERG DIESEL GEN D VENT EXHAUST ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-148A	92MOD-148A	EMERG DIESEL GEN VENT SUPPLY FAN A RECIRC SUCT ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-148B	92MOD-148B	EMERG DIESEL GEN VENT SUPPLY FAN B RECIRC SUCT ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-148C	92MOD-148C	EMERG DIESEL GEN VENT SUPPLY FAN C RECIRC SUCT ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	10 - Air Handlers	92MOD-148D	92MOD-148D	EMERG DIESEL GEN VENT SUPPLY FAN D RECIRC SUCT ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-149A	92MOD-149A	EMERG DIESEL GEN VENT SUPPLY FAN A FRESH AIR SUCT ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-149B	92MOD-149B	EMERG DIESEL GEN VENT SUPPLY FAN B FRESH AIR SUCT ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-149C	92MOD-149C	EMERG DIESEL GEN VENT SUPPLY FAN C FRESH AIR SUCT ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-149D	92MOD-149D	EMERG DIESEL GEN VENT SUPPLY FAN D FRESH AIR SUCT ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-150A	92MOD-150A	EMERG DIESEL GEN VENT SUPPLY FANS A & C FRESH AIR WEST SUPPLY ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-150B	92MOD-150B	EMERG DIESEL GEN VENT SUPPLY FANS B & D FRESH AIR WEST SUPPLY ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	10 - Air Handlers	92MOD-150C	92MOD-150C	EMERG DIESEL GEN VENT SUPPLY FANS A & C FRESH AIR EAST SUPPLY ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	10 - Air Handlers	92MOD-150D	92MOD-150D	EMERG DIESEL GEN VENT SUPPLY FANS B & D FRESH AIR EAST SUPPLY ISOL DAMPER	YES	NO	NO	NO	N/A	I		NO					
1	**19 - Temperature Sensors**	**92RTD-101A**	**92RTD-101A**	**EMERG DIESEL GEN A ROOM SOUTH SIDE RESIST TEMP DETECTOR**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	
1	**19 - Temperature Sensors**	**92RTD-101B**	**92RTD-101B**	**EMERG DIESEL GEN B ROOM SOUTH SIDE RESIST TEMP DETECTOR**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	
1	19 - Temperature Sensors	92RTD-101C	92RTD-101C	EMERG DIESEL GEN C ROOM NORTH SIDE RESIST TEMP DETECTOR	YES	NO	NO	NO	N/A	I		NO					
1	19 - Temperature Sensors	92RTD-101D	92RTD-101D	EMERG DIESEL GEN D ROOM NORTH SIDE RESIST TEMP DETECTOR	YES	NO	NO	NO	N/A	I		NO					
1	**12 – Air Compressor**	**93AC-A1**	**93AC-A1**	**EMERGENCY DIESEL GENERATOR A AIR START COMPRESSOR A1**	**NO**	**NO**	**NO**	**NO**	**N/A**	**I**	**NO**	**NO**					
1	**21 - Tanks and Heat Exchangers**	**93AR-A1**	**93AR-A1**	**EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A1**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	
1	21 - Tanks and Heat Exchangers	93AR-A10	93AR-A10	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A10	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-A2	93AR-A2	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A2	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	21 - Tanks and Heat Exchangers	93AR-A3	93AR-A3	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A3	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-A4	93AR-A4	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A4	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-A5	93AR-A5	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A5	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-A6	93AR-A6	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A6	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-A7	93AR-A7	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A7	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-A8	93AR-A8	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A8	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-A9	93AR-A9	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A9	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-B1	93AR-B1	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B1	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-B10	93AR-B10	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B10	YES	NO	NO	NO	N/A	I		NO					
1	**21 - Tanks and Heat Exchangers**	**93AR-B2**	**93AR-B2**	**EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B2**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	21 - Tanks and Heat Exchangers	93AR-B3	93AR-B3	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B3	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	21 - Tanks and Heat Exchangers	93AR-B4	93AR-B4	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B4	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-B5	93AR-B5	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B5	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-B6	93AR-B6	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B6	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-B7	93AR-B7	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B7	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-B8	93AR-B8	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B8	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-B9	93AR-B9	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B9	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-C1	93AR-C1	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C1	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-C10	93AR-C10	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C10	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-C2	93AR-C2	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C2	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-C3	93AR-C3	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C3	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-C4	93AR-C4	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C4	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	21 - Tanks and Heat Exchangers	93AR-C5	93AR-C5	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C5	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-C6	93AR-C6	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C6	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-C7	93AR-C7	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C7	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-C8	93AR-C8	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C8	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-C9	93AR-C9	EMERGENCY DIESEL GENERATOR C AIR START RECEIVER C9	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-D1	93AR-D1	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D1	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-D10	93AR-D10	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D10	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-D2	93AR-D2	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D2	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-D3	93AR-D3	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D3	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-D4	93AR-D4	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D4	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-D5	93AR-D5	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D5	YES	NO	NO	NO	N/A	I		NO					

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	21 - Tanks and Heat Exchangers	93AR-D6	93AR-D6	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D6	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-D7	93AR-D7	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D7	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-D8	93AR-D8	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D8	YES	NO	NO	NO	N/A	I		NO					
1	21 - Tanks and Heat Exchangers	93AR-D9	93AR-D9	EMERGENCY DIESEL GENERATOR D AIR START RECEIVER D9	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	93AURP-01	93AURP-01	EDG A & C AUX UNDERVOLTAGE RELAY PANEL	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	93AURP-02	93AURP-02	EDG B & D AUX UNDERVOLTAGE RELAY PANEL	YES	NO	NO	NO	N/A	I		NO					
1	**20 - Instrument and Control Panels**	**93ECP-A**	**93ECP-A**	**EDG A ENGINE CONTROL PANEL**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	**20 - Instrument and Control Panels**	**93ECP-B**	**93ECP-B**	**EDG B ENGINE CONTROL PANEL**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	20 - Instrument and Control Panels	93ECP-C	93ECP-C	EDG C ENGINE CONTROL PANEL	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	20 - Instrument and Control Panels	93ECP-D	93ECP-D	EDG D ENGINE CONTROL PANEL	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	**20 - Instrument and Control Panels**	**93ECSP-A**	**93ECSP-A**	**EDG A ENGINE CONTROL SUB PANEL**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	**20 - Instrument and Control Panels**	**93ECSP-B**	**93ECSP-B**	**EDG B ENGINE CONTROL SUB PANEL**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	20 - Instrument and Control Panels	93ECSP-C	93ECSP-C	EDG C ENGINE CONTROL SUB PANEL	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	20 - Instrument and Control Panels	93ECSP-D	93ECSP-D	EDG C ENGINE CONTROL SUB PANEL	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	17 - Engine Generators	93EDG-A	93EDG-A	EMERGENCY DIESEL GENERATOR A	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	17 - Engine Generators	93EDG-B	93EDG-B	EMERGENCY DIESEL GENERATOR B	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	**17 - Engine Generators**	**93EDG-C**	**93EDG-C**	**EMERGENCY DIESEL GENERATOR C**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	**17 - Engine Generators**	**93EDG-D**	**93EDG-D**	**EMERGENCY DIESEL GENERATOR D**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	**20 - Instrument and Control Panels**	**93EGP-A**	**93EGP-A**	**EDG C GENERATOR CONTROL PANEL**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**20 - Instrument and Control Panels**	**93EGP-B**	**93EGP-B**	**EDG B GENERATOR CONTROL PANEL**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	20 - Instrument and Control Panels	93EGP-C	93EGP-C	EDG C GENERATOR CONTROL PANEL	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	20 - Instrument and Control Panels	93EGP-D	93EGP-D	EDG D GENERATOR CONTROL PANEL	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	**20 - Instrument and Control Panels**	**93FPAC**	**93FPAC**	**EDG A & C FORCED PARALLELING PANEL**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	20 - Instrument and Control Panels	93FPBD	93FPBD	EDG B & D FORCED PARALLELING PANEL	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	**18 - Instrument Racks**	**93LI-102A**	**93LI-102A**	**EDG A FUEL OIL DAY TANK 7A LEVEL INDIC**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	**18 - Instrument Racks**	**93LI-102B**	**93LI-102B**	**EDG B FUEL OIL DAY TANK 7B LEVEL INDIC**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	18 - Instrument Racks	93LI-102C	93LI-102C	EDG C FUEL OIL DAY TANK 7C LEVEL INDIC	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	18 - Instrument Racks	93LI-102D	93LI-102D	EDG D FUEL OIL DAY TANK 7D LEVEL INDIC	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	**21 - Tanks and Heat Exchangers**	**93LOE-1A**	**93LOE-1A**	**EMERGENCY DIESEL GENERATOR A LUBE OIL COOLER**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**

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										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**21 - Tanks and Heat Exchangers**	**93LOE-1B**	**93LOE-1B**	**EMERGENCY DIESEL GENERATOR B LUBE OIL COOLER**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**	**X**	**X**	**X**	**X**	**X**
1	21 - Tanks and Heat Exchangers	93LOE-1C	93LOE-1C	EMERGENCY DIESEL GENERATOR C LUBE OIL COOLER	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	21 - Tanks and Heat Exchangers	93LOE-1D	93LOE-1D	EMERGENCY DIESEL GENERATOR D LUBE OIL COOLER	YES	NO	YES	NO	N/A	I		NO	X	X	X	X	X
1	18 - Instrument Racks	93LT-102A	93LT-102A	EDG A FUEL OIL DAY TANK 7A LEVEL XMITTER	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	93LT-102B	93LT-102B	EDG B FUEL OIL DAY TANK 7B LEVEL XMITTER	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	93LT-102C	93LT-102C	EDG C FUEL OIL DAY TANK 7C LEVEL XMITTER	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	93LT-102D	93LT-102D	EDG D FUEL OIL DAY TANK 7D LEVEL XMITTER	YES	NO	NO	NO	N/A	I		NO					
1	05 - Horizontal Pumps	93P1-A1	93P1-A1	EMERGENCY DIESEL GENERATOR A FUEL OIL TRANSFER PUMP A1	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	05 - Horizontal Pumps	93P1-A2	93P1-A2	EMERGENCY DIESEL GENERATOR A FUEL OIL TRANSFER PUMP A2	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	05 - Horizontal Pumps	93P1-B1	93P1-B1	EMERGENCY DIESEL GENERATOR B FUEL OIL TRANSFER PUMP B1	YES	NO	YES	NO	N/A	I		NO		X	X	X	

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					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	05 - Horizontal Pumps	93P1-B2	93P1-B2	EMERGENCY DIESEL GENERATOR B FUEL OIL TRANSFER PUMP B2	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**05 - Horizontal Pumps**	**93P1-C1**	**93P1-C1**	**EMERGENCY DIESEL GENERATOR C FUEL OIL TRANSFER PUMP C1**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	05 - Horizontal Pumps	93P1-C2	93P1-C2	EMERGENCY DIESEL GENERATOR C FUEL OIL TRANSFER PUMP C2	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**05 - Horizontal Pumps**	**93P1-D1**	**93P1-D1**	**EMERGENCY DIESEL GENERATOR D FUEL OIL TRANSFER PUMP D1**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	05 - Horizontal Pumps	93P1-D2	93P1-D2	EMERGENCY DIESEL GENERATOR D FUEL OIL TRANSFER PUMP D2	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**06 - Vertical Pumps**	**93P-2A**	**93P-2A**	**EMERGENCY DIESEL GENERATOR A CIRCULATING LUBE OIL PUMP**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**06 - Vertical Pumps**	**93P-2B**	**93P-2B**	**EMERGENCY DIESEL GENERATOR B CIRCULATING LUBE OIL PUMP**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	06 - Vertical Pumps	93P-2C	93P-2C	EMERGENCY DIESEL GENERATOR C CIRCULATING LUBE OIL PUMP	YES	NO	YES	YES	N/A	I		NO		X	X	X	
1	06 - Vertical Pumps	93P-2D	93P-2D	EMERGENCY DIESEL GENERATOR D CIRCULATING LUBE OIL PUMP	YES	NO	YES	YES	N/A	I		NO		X	X	X	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**06 - Vertical Pumps**	**93P-3A**	**93P-3A**	**EMERGENCY DIESEL GENERATOR A TURBOCHARGER LUBE OIL PUMP**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**06 - Vertical Pumps**	**93P-3B**	**93P-3B**	**EMERGENCY DIESEL GENERATOR B TURBOCHARGER LUBE OIL PUMP**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	06 - Vertical Pumps	93P-3C	93P-3C	EMERGENCY DIESEL GENERATOR C TURBOCHARGER LUBE OIL PUMP	YES	NO	YES	YES	N/A	I		NO		X	X	X	
1	06 - Vertical Pumps	93P-3D	93P-3D	EMERGENCY DIESEL GENERATOR D TURBOCHARGER LUBE OIL PUMP	YES	NO	YES	YES	N/A	I		NO		X	X	X	
1	05 - Horizontal Pumps	93P-4A	93P-4A	EMERGENCY DIESEL GENERATOR A FUEL OIL PUMP	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	05 - Horizontal Pumps	93P-4B	93P-4B	EMERGENCY DIESEL GENERATOR B FUEL OIL PUMP	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	05 - Horizontal Pumps	93P-4C	93P-4C	EMERGENCY DIESEL GENERATOR C FUEL OIL PUMP	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	05 - Horizontal Pumps	93P-4D	93P-4D	EMERGENCY DIESEL GENERATOR D FUEL OIL PUMP	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**21 - Tanks and Heat Exchangers**	**93TK-1A**	**93TK-1A**	**EMERGENCY DIESEL GENERATOR A JACKET WATER EXPANSION TANK**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	**21 - Tanks and Heat Exchangers**	**93TK-1B**	**93TK-1B**	**EMERGENCY DIESEL GENERATOR B JACKET WATER EXPANSION TANK**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	21 - Tanks and Heat Exchangers	93TK-1C	93TK-1C	EMERGENCY DIESEL GENERATOR C JACKET WATER EXPANSION TANK	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	21 - Tanks and Heat Exchangers	93TK-1D	93TK-1D	EMERGENCY DIESEL GENERATOR D JACKET WATER EXPANSION TANK	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	21 - Tanks and Heat Exchangers	93TK-6A	93TK-6A	EMERGENCY DIESEL GENERATOR A FUEL OIL STORAGE TANK	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	21 - Tanks and Heat Exchangers	93TK-6B	93TK-6B	EMERGENCY DIESEL GENERATOR B FUEL OIL STORAGE TANK	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	21 - Tanks and Heat Exchangers	93TK-6C	93TK-6C	EMERGENCY DIESEL GENERATOR C FUEL OIL STORAGE TANK	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	21 - Tanks and Heat Exchangers	93TK-6D	93TK-6D	EMERGENCY DIESEL GENERATOR D FUEL OIL STORAGE TANK	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	**21 - Tanks and Heat Exchangers**	**93TK-7A**	**93TK-7A**	**EMERGENCY DIESEL GENERATOR A FUEL OIL DAY TANK**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**21 - Tanks and Heat Exchangers**	**93TK-7B**	**93TK-7B**	**EMERGENCY DIESEL GENERATOR B FUEL OIL DAY TANK**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	21 - Tanks and Heat Exchangers	93TK-7C	93TK-7C	EMERGENCY DIESEL GENERATOR C FUEL OIL DAY TANK	YES	NO	YES	NO	N/A	I		NO		X	X	X	

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	21 - Tanks and Heat Exchangers	93TK-7D	93TK-7D	EMERGENCY DIESEL GENERATOR D FUEL OIL DAY TANK	YES	NO	YES	NO	N/A	I		NO		X	X	X	
1	21 - Tanks and Heat Exchangers	93WE-1A	93WE-1A	EMERGENCY DIESEL GENERATOR A JACKET WATER HEAT EXCHANGER	YES	NO	YES	YES	N/A	I		NO		X	X	X	
1	21 - Tanks and Heat Exchangers	93WE-1B	93WE-1B	EMERGENCY DIESEL GENERATOR B JACKET WATER HEAT EXCHANGER	YES	NO	YES	YES	N/A	I		NO		X	X	X	
1	**21 - Tanks and Heat Exchangers**	**93WE-1C**	**93WE-1C**	**EMERGENCY DIESEL GENERATOR C JACKET WATER HEAT EXCHANGER**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**21 - Tanks and Heat Exchangers**	**93WE-1D**	**93WE-1D**	**EMERGENCY DIESEL GENERATOR D JACKET WATER HEAT EXCHANGER**	**YES**	**NO**	**YES**	**YES**	**N/A**	**I**	**NO**	**NO**		**X**	**X**	**X**	
1	**18 - Instrument Racks**	**IR-25-01**	**IR-25-01**	**CORE SPRAY CHANNEL "A" INST RACK**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**				**X**	
1	18 - Instrument Racks	IR-25-05	IR-25-05	REACTOR PROTECTION AND NSSS SYSTEM RACK	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	IR-25-06	IR-25-06	REACTOR PROTECTION AND NSSS SYSTEM RACK	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	IR-25-50	IR-25-50	HPCI INST RACK	YES	NO	NO	NO	N/A	I		NO					
1	18 - Instrument Racks	IR-25-59	IR-25-59	RHR CHANNEL "A" INST RACK	YES	NO	NO	NO	N/A	I		NO					

UNIT	SQUG EQUIP CLASS	CURRENT EQUIPMENT ID	SSEL EQUIPMENT ID	EQUIPMENT DESCRIPTION	SCREEN 1	SCREEN 2	SCREEN 3	SCREEN 4					Five Safety Functions				
					Seismic 1?	Undergo Regular Configuration Inspections?	Maintains at least one of the 5 Safety Functions	Replaced	IPEEE	Environment?			Reactivity Control	Pressure Control	Inventory Control	Decay Heat Removal	Containment
										Inside/Outside (I / O)	High Temp/ Humidity? (T / H)	Borated System					
1	18 - Instrument Racks	IR-25-60	IR-25-60	CORE SPRAY CHANNEL "B" INST RACK	YES	NO	NO	NO	N/A	I		NO					
1	**18 - Instrument Racks**	**IR-25-62**	**IR-25-62**	**RHR CHANNEL "B" INST RACK**	**YES**	**NO**	**YES**	**NO**	**N/A**	**I**	**NO**	**NO**			**X**	**X**	
1	08A - Motor-Operated Valves	01-125MOV-14A	01-125MOV-14A	SGT FILTER TRAIN A INLE ISOLATION VALVE	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	02-3LI-85A	02-3LI-85A	REACTOR VESSEL LEVEL INDICATION	YES	NO	NO	NO	N/A	I		NO					
1	20 - Instrument and Control Panels	02-3LI-85B (02-3LR-85B)	02-3LI-85B (02-3LR-85B)	DIV I RX WATER LEVEL RECORDER	YES	NO	NO	NO	N/A	I		NO					

Table 9.4.2 – Seismic Walkdown Equipment List 1 (SWEL 1)

SWEL1#	EQUIPMENT ID	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	ANC	DWG
1-001	01-125MOV-14B	SGT FILTER TRAIN B INLE ISOLATION VALVE	SG	272	1D	B	Containment	8A	I	N	N/A
1-011	02RV-71D	ADS MAIN STEAM LINE B SAFETY/RELIEF VALVE	PC	295	4.5R	B	Automatic Depressurization	7	I,T	N	N/A
1-012	02RV-71E	ADS MAIN STEAM LINE C SAFETY/RELIEF VALVE	PC	295	5W	C	Automatic Depressurization	7	I,T	N	N/A
1-032	03AOV-126(HCU-02-19)	HCU INLET SCRAM AIR OPER VALVE	RB	272	5Y		Control Rod Drive Injection	7	I,T	N	N/A
1-033	03AOV-127(HCU-02-19)	HCU OUTLET SCRAM AIR OPER VALVE	RB	272	5Y		Control Rod Drive Injection	7	I,T	N	N/A
1-043	03TK-125(HCU-02-19)	WATER ACCUMULATOR	RB	272	5Y		Control Rod Drive Injection	0	I,T	Y	SEWS,11825-FC-22P
1-044	03TK-128(HCU-02-19)	NITROGEN ACCUMULATOR	RB	272	5Y		Control Rod Drive Injection	0	I,T	Y	SEWS,11825-FC-22P
1-052	09-3	NUCLEAR STATION MAIN CONTROL BOARD	CR	300	10F		Low Pressure Coolant Injection	20	I	Y	1.51-272, DSK-9A, DSK-9B, FE-38AB, Calculation JAF-CALC-MISC-00285
1-053	09-32	CHANNEL "A" RHR/RCIC RELAY PANEL	RR	285	9.5F	A	Low Pressure Coolant Injection	20	I	N	N/A
1-056	09-45	AUTO BLOWDOWN RELAY CABINET	RR	285	9.5FG		Automatic Depressurization	20	I	Y	1.83-10 (OUTLINE), FE-38AC, Calculation JAF-CALC-MISC-00285
1-065	10AOV-68A	RHR A LPCI TESTABLE CHECK VALVE	PC	284	5R	A	Low Pressure Coolant Injection	7	I,T	N	N/A
1-069	10E-2A	RESIDUAL HEAT REMOVAL SYSTEM HEAT EXCHANGER A	RB	272	2.5A	A	Suppression Pool Cooling	21	I	Y	4.12-2 (OUTLINE)
1-079	10MOV-12A	RHR HEAT EXCH A OUTLET ISOL VALVE	RB	272	2A	A	Suppression Pool Cooling	8A	I	N	N/A
1-119	10P-1A	RHR SERVICE WATER PUMP A	SP	255	26B	A	Suppression Pool Cooling	6	I,T	Y	2.28-2 (OUTLINE), FP-37A (PIPING), FP-37B (PIPING)
1-123	10P-3A	RESIDUAL HEAT REMOVAL PUMP A	RB	227	3A	A	Low Pressure Coolant Injection	6	I,T	Y	2.11-5 (OUTLINE), FC-20B, FC-20D
1-124	10P-3B	RESIDUAL HEAT REMOVAL PUMP B	RB	227	3D	B	Low Pressure Coolant Injection	6	I,T	Y	2.11-5 (OUTLINE)
1-137	10S-5A1	RESIDUAL HEAT REMOVAL SERVICE WATER STRAINER	SP	255	26		Suppression Pool Cooling		I,T	N	N/A
1-155	11EV-14A	SLC A DOUBLE SQUIB ACTIVATED SHEAR EXPLOSIVE VALVE	RB	326	6R	A	Standby liquid Control System	0	I	N	N/A

SWEL1#	EQUIPMENT ID	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	ANC	DWG
1-157	11P-2A	STANDBY LIQUID CONTROL A PUMP	RB	326	6P	A	Standby liquid Control System	5	I	Y	2.16-1 (OUTLINE), FC-25D, 2.16-1B
1-161	11TK-1	STANDBY LIQUID CONTROL TANK	RB	326	6P		Standby liquid Control System	21	I	Y	FC-25D, 3.37-3
1-164	13MOV-15	RCIC STEAM SUPPLY INBD ISOL VALVE	PC	291	4R	B	Steam Condensing Mode of RHR	8A	I,T	N	N/A
1-165	13MOV-16	RCIC TURBINE STEAM SUPPLY OUTBD ISOL VALVE	RB	24	3R	A	Steam Condensing Mode of RHR	8A	I,T	N	N/A
1-166	13P-1	RCIC PUMP	RB	227.5	3P		Steam Condensing Mode of RHR	5	I,T	Y	11825-FC-20D, 2.12-3
1-169	14MOV-12A	CORE SPRAY LOOP A INBD ISOL VALVE	RB	300	4.5R	A	High Pressure Core Spray System	8A	I	N	N/A
1-171	14P-1A	CORE SPRAY PUMP	RB	226	4	A	High Pressure Core Spray System	5	I	Y	PFSK-2343 SH1, PFSK-2343 SH2
1-172	16-1RTD-131A	TORUS BULK TEMP MONITOR 0 AZIMUTH BAY L X-232 RESIST TEMP DETECTOR EQ	SU	227	4P	A	Suppression Pool Cooling	19	I,T	Y	7.48-13
1-209	23AOV-53	HPCI TURBINE STEAM SUPPLY DRAIN TRAP T-3 BYPASS VALVE	RB	227	1T		High Pressure Coolant Injection	7	I,T	N	N/A
1-210	23E-2	HPCI LUBE OIL COOLER	RB	227	1T		High Pressure Coolant Injection	21	I,T	N	2.03-02
1-213	23HOV-1	HPCI TURBINE STOP VALVE	RB	227	1T		High Pressure Coolant Injection	7	I,T	N	N/A
1-217	23LT-202A	SUPPRESSION POOL HPCI LOGIC LEVEL XMITTER EQ	RB	227	4.5A	A	High Pressure Coolant Injection	18	I	Y	7.31-19B
1-219	23MOV-14	HPCI TURBINE STEAM SUPPLY ISOL VALVE	RB	227	1T		High Pressure Coolant Injection	8A	I,T	N	N/A
1-232	23P-150	HPCI TURBINE AUX LUBE OIL PUMP	RB	227	1T		High Pressure Coolant Injection	5	I,T	Y	FC-20A, FC-20D, 2.03-2
1-234	23P-1M	HPCI MAIN PUMP	RB	227	1T		High Pressure Coolant Injection	5	I,T	Y	FC-20B, FC-20D,
1-243	23TK-1	HPCI LUBE OIL SUMP	RB	227	1T		High Pressure Coolant Injection	21	I,T	Y	2.03-02
1-314	27SOV-131A	CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ	SU	260	2T	A	Automatic Depressurization	8B	I,T	N	N/A
1-319	27SOV-145	CAD DRYWELL INSTR NITROGEN BACKUP SUPPLY ISOL VALVE	RB	295	3RT	A	Automatic Depressurization	8B	I	N	N/A
1-333	27TK-7A	CAD A LIQUID NITROGEN TANK	CB	271	0.5RP	A	Automatic Depressurization	21	I	Y	FC-22Q, 6.29-25, 6.29-26
1-335	29AC-1A	MST D OUTBD MSIV AIR ACCUMULATOR	ST	272	6.5T	A	Containment	21	I,T	Y	6.35-39
1-336	29AC-1B	MST A INBD MSIV N2/AIR ACCUMULATOR	PC	276	5.5T	B	Containment	21	I,T	Y	SEWS
1-343	29AOV-80A	MST A INBD MAIN STEAM ISOL VALVE	PC	276	5.5T	A	Main Steam Line Isolation Valves	7	I,T	N	N/A
1-347	29AOV-86A	MST A OUTBD MAIN STEAM ISOL VALVE	ST	272	6.5T	A	Main Steam Line Isolation Valves	7	I,T	N	N/A
1-360	46MOV-101A	EMERGENCY SERVICE WATER LOOP A SUPPLY HEADER ISOL VALVE	SP	255	26B	A	Equipment Cooling	8A	I	N	N/A
1-364	46P-2A	EMERGENCY SERVICE WATER PUMP A	SP	255	26B	A	Equipment Cooling	6	I	Y	Vendor 71452-D

SWEL1#	EQUIPMENT ID	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	ANC	DWG
1-366	46STR-5A1	EMERG SERVICE WATER PUMP A DISCH SOUTH BASKET STRAINER	SP	255	26B	A	Equipment Cooling	0	I	Y	6.60-2
1-367	46STR-5A2	EMERG SERVICE WATER PUMP A DISCH NORTH BASKET STRAINER	SP	255	26B	A	Equipment Cooling	0	I	Y	6.60-2
1-371	66TCV-107E	EAST CRESCENT AREA UC-22E SWS INLET TEMP CONTROL VALVE	RB	242	3A	A	Equipment Cooling	7	I	N	N/A
1-372	66UC-22A	WEST CRESCENT AREA UNIT COOLER 22A	RB	242	3D	A	Equipment Cooling	10	I	Y	10.00-113
1-373	66UC-22B	EAST CRESCENT AREA UNIT COOLER 22B	RB	242	4D	B	Equipment Cooling	10	I	Y	10.00-113
1-406	70FN-4A	CONTROL ROOM VENT EXHAUST FAN A	AD	300	9.5V	A	Control Room Cooling	9	I	Y	SEWS, SFSK-41
1-426	70RWC-2A(CND)	CONTROL ROOM CHILLER A CONDENSER	AD	300	10.5S	A	Control Room Cooling	11	I	Y	FC-32C
1-430	71-10502	416OV SWITCHGEAR DISTRIBUTION (BUS 10500)	EG	272	24A1	A	Vital Bus Power	3	I	Y	Vender drawing 0673D0515
1-433	71-10560	416OV SWITCHGEAR DISTRIBUTION (BUS 10500)	EG	272	26A1	A	Vital Bus Power	3	I	Y	Vender drawing 0673D0515
1-434	71-10602	416OV SWITCHGEAR DISTRIBUTION (BUS 10600)	EG	272	26A1	B	Vital Bus Power	3	I	Y	vender drawing 0673D0516
1-436	71-10614	416OV SWITCHGEAR DISTRIBUTION (BUS 10600)	EG	272	26A1	B	Vital Bus Power	3	I	Y	vender drawing 0673D0517
1-437	71-10660	416OV SWITCHGEAR DISTRIBUTION (BUS 10600)	EG	272	26A1	B	Vital Bus Power	3	I	Y	vender drawing 0673D0518
1-438	71-11502	600V SWITCHGEAR DISTRIBUTION (BUS 11500) BKR 02	RB	300	2R		Vital Bus Power	2	I,T	Y	DSK-71S
1-439	71-11602	600V SWITCHGEAR DISTRIBUTION (BUS 11600) BKR 02	RB	300	6R	B	Vital Bus Power	2	I	Y	DSK-71S
1-444	71ACB4	DISTRIBUTION PANEL 71ACB4 EMERGENCY CONTROL & INST POWER B	EG	272	26A	B	Vital Bus Power	14	I	Y	SEWS
1-445	71ACUPS	RELAY ROOM UNINTERRUPTABLE BUS DISTRIBUTION PANEL	RR	284.8	11F		Vital Bus Power	14	I	Y	SEWS
1-446	71BAT-3A	LPCI INVERTER BATTERY	RB	344.6	5.5	A	Vital Bus Power	15	I	Y	SEWS
1-448	71BC-1A	125 VDC STATION BATTERY CHARGER	BR	272	12.5E	A	Vital Bus Power	16	I	Y	SEWS
1-450	71BCB-2A	BATTERY A CONTROL BOARD	BR	272	13C	A	Vital Bus Power	14	I	Y	1.52-11, DSK-71U
1-452	71BMCC-1	RB WEST CRESCENT DC MOTOR CONTROL CENTER	RB	242	1R		Vital Bus Power	1	I	Y	FE-38N, 1.43-16
1-456	71BMCC-6	RB DC MOTOR CONTROL CENTER	RB	272	8Y		Vital Bus Power	1	I	Y	SEWS
1-457	71DC-A2	DISTRIBUTION PANEL 71DC-A2 DC CONTROL POWER A	RR	284.4	10F	A	Vital Bus Power	14	I	Y	SEWS
1-462	71DSC-11561	L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW	RB	300	2R	A	Vital Bus Power	3	I,T	Y	FE-38P, DSK-71S, 1.42-3
1-470	71INV-3A	LPCI MOV INDEP POWER SUPPLY A INVERTER	RB	344.6	5.5	A	Vital Bus Power	16	I	Y	1.26-2, 1.26-102
1-474	71L25	600V SWITCHGEAR DISTRIBUTION (BUS 12500)	EB	272	18.5A1		Vital Bus Power	2	I	N	N/A
1-475	71L26	600V SWITCHGEAR DISTRIBUTION (BUS 12600)	EB	272	18.5B		Vital Bus Power	2	I	Y	SEWS

SWEL1#	EQUIPMENT ID	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	ANC	DWG
1-481	71MCC-161	600V MOTOR CONTROL CENTER (BUS 116100)	RB	272	1.5W		Vital Bus Power	1	I	N	N/A
1-487	71MCC-252	600V MOTOR CONTROL CENTER (BUS 125200)	EB	272	18A		Vital Bus Power	1	I	N	FE-38F, FE-38G, FA-2A, 1.43-87
1-489	71MCC-254	600V MOTOR CONTROL CENTER (BUS 125400)	EG	272	23A1		Vital Bus Power	1	I	N	FE-38AH, FC-38A, 1.43-96
1-491	71MCC-262	600V MOTOR CONTROL CENTER (BUS 126200)	EB	272	18B		Vital Bus Power	1	I	Y	FE-38F, FE-38G, FA-2A, 1.43-88
1-493	71MCC-264	600V MOTOR CONTROL CENTER (BUS 126400)	EG	272	25.5A1		Vital Bus Power	1	I	Y	FE-38AH, FC-38A, 1.43-98
1-494	71PT-71ACA2	EMERGENCY DISTRIBUTION TRANSFORMER 71MCC-253-OD3	CS	272	11C	A	Vital Bus Power	4	I	Y	SEWS
1-495	71PT-71ACA4	EMERGENCY DISTRIBUTION TRANSFORMER 71MCC-254-A3A	EG	272	24A	A	Vital Bus Power	4	I	Y	SEWS
1-498	71PT-71ACUPS	UNINTERRUPTIBLE BUS 37.5 KVA TRANSFORMER 71MCC-252-OD2	EB	272	14A		Vital Bus Power	4	I	Y	Stone & Webster calculation 12966-S-82-6
1-501	71SB-1	125 VOLT STATION BATTERY A	BR	272	14E	A	Vital Bus Power	15	I	Y	1.20-3, 1.20-8
1-502	71SB-2	125 VOLT STATION BATTERY B	BR	272	12F	B	Vital Bus Power	15	I	Y	1.20-3, 1.20-8
1-508	72AHU-30A	BATTERY ROOM A AIR HANDLING UNIT	BR	272	12E	A	Vital Bus Power	10	I	N	N/A
1-516	72FN-31A	BATTERY ROOM A RECIRC FAN	BR	282	12E	A	Vital Bus Power	9	I	Y	SEWS
1-518	72FN-46A	BATTERY ROOM A EXHAUST FAN	BR	282	12E	A	Vital Bus Power	9	I	Y	1.79-474, SEWS
1-519	72FN-46B	BATTERY ROOM B EXHAUST FAN	BR	282	12F	B	Vital Bus Power	9	I	Y	1.79-474, SEWS
1-522	72HV-7A	ADMIN BUILDING VENTILATION CONTROL PANEL	BR	272	11.5C	A	Control Room Cooling	20	I	Y	1.79-131
1-555	92FN-1A	EMERG DIESEL GEN A VENT SUPPLY FAN	EG	272	24A1	A	Vital Bus Power	9	I	Y	10.00-194
1-577	92RTD-101A	EMERG DIESEL GEN A ROOM SOUTH SIDE RESIST TEMP DETECTOR	EG	300	23A2	A	Vital Bus Power	19	I	N	N/A
1-578	92RTD-101B	EMERG DIESEL GEN B ROOM SOUTH SIDE RESIST TEMP DETECTOR	EG	300	27A2	B	Vital Bus Power	19	I	N	N/A
1-581	93AC-A1	EMERGENCY DIESEL GENERATOR A AIR START COMPRESSOR A1	EG	272	24A2	A	Vital Bus Power	12	I	Y	1.12-2
1-582	93AR-A1	EMERGENCY DIESEL GENERATOR A AIR START RECEIVER A1	EG	272	24A2	A	Vital Bus Power	21	I	Y	1.12-43
1-594	93AR-B2	EMERGENCY DIESEL GENERATOR B AIR START RECEIVER B2	EG	272	26.5	B	Vital Bus Power	21	I	Y	11825-1.12-43B
1-624	93ECP-A	EDG A ENGINE CONTROL PANEL	EG	272	24	A	Vital Bus Power	20	I	Y	1.12-58
1-625	93ECP-B	EDG B ENGINE CONTROL PANEL	EG	272	26A3	B	Vital Bus Power	20	I	Y	1.12-58
1-628	93ECSP-A	EDG A ENGINE CONTROL SUB PANEL	EG	272	24	A	Vital Bus Power	20	I	Y	1.12-125
1-629	93ECSP-B	EDG B ENGINE CONTROL SUB PANEL	EG	272	26A3	B	Vital Bus Power	20	I	Y	1.12-125
1-634	93EDG-C	EMERGENCY DIESEL GENERATOR C	EG	272	24A2	A	Vital Bus Power	17	I	Y	1.12-95

SWEL1#	EQUIPMENT ID	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	ANC	DWG
1-635	93EDG-D	EMERGENCY DIESEL GENERATOR D	EG	272	26.5	B	Vital Bus Power	17	I	Y	1.12-95
1-636	93EGP-A	EDG A GENERATOR CONTROL PANEL	EG	272	24A1	A	Vital Bus Power	20	I	N	1.12-97, 1.12-98, SEWS
1-637	93EGP-B	EDG B GENERATOR CONTROL PANEL	EG	272	26A1	B	Vital Bus Power	20	I	Y	1.12-97, 1.12-98, SEWS
1-640	93FPAC	EDG A & C FORCED PARALLELING PANEL	EG	272	24.5A	A	Vital Bus Power	20	I	Y	1.12-58
1-642	93LI-102A	EDG A FUEL OIL DAY TANK 7A LEVEL INDIC	EG	272	23.5A4	A	Vital Bus Power	18	I	N	1.12.59
1-643	93LI-102B	EDG B FUEL OIL DAY TANK 7B LEVEL INDIC	EG	272	26A4	B	Vital Bus Power	18	I	N	1.12.59
1-646	93LOE-1A	EMERGENCY DIESEL GENERATOR A LUBE OIL COOLER	EG	272	24	A	Vital Bus Power	21	I	N	N/A
1-647	93LOE-1B	EMERGENCY DIESEL GENERATOR B LUBE OIL COOLER	EG	272	26A3	B	Vital Bus Power	21	I	N	N/A
1-658	93P1-C1	EMERGENCY DIESEL GENERATOR C FUEL OIL TRANSFER PUMP C1	EG	272	24A4	A	Vital Bus Power	5	I	Y	1.12-99
1-660	93P1-D1	EMERGENCY DIESEL GENERATOR D FUEL OIL TRANSFER PUMP D1	EG	272	26.5A4	B	Vital Bus Power	5	I	Y	FC-38A, 1.12-99
1-662	93P-2A	EMERGENCY DIESEL GENERATOR A CIRCULATING LUBE OIL PUMP	EG	272	24	A	Vital Bus Power	6	I	N	N/A
1-663	93P-2B	EMERGENCY DIESEL GENERATOR B CIRCULATING LUBE OIL PUMP	EG	272	26A3	B	Vital Bus Power	6	I	N	N/A
1-670	93P-4A	EMERGENCY DIESEL GENERATOR A FUEL OIL PUMP	EG	272	24A4	A	Vital Bus Power	5	I	N	1.12-123, 1.12-120
1-671	93P-4B	EMERGENCY DIESEL GENERATOR B FUEL OIL PUMP	EG	272	26.5A4	B	Vital Bus Power	5	I	N	1.12-123, 1.12-120
1-674	93TK-1A	EMERGENCY DIESEL GENERATOR A JACKET WATER EXPANSION TANK	EG	272	24A4	A	Vital Bus Power	21	I	N	N/A
1-675	93TK-1B	EMERGENCY DIESEL GENERATOR B JACKET WATER EXPANSION TANK	EG	272	26A4	B	Vital Bus Power	21	I	N	N/A
1-682	93TK-7A	EMERGENCY DIESEL GENERATOR A FUEL OIL DAY TANK	EG	272	24A4	A	Vital Bus Power	21	I	Y	1.12-128, SEWS
1-683	93TK-7B	EMERGENCY DIESEL GENERATOR B FUEL OIL DAY TANK	EG	272	26.5A4	B	Vital Bus Power	21	I	Y	1.12-128, FC-38A, FC-38B
1-686	93WE-1C	EMERGENCY DIESEL GENERATOR C JACKET WATER HEAT EXCHANGER	EG	272	24A4	C	Vital Bus Power	21	I	Y	1.12-35, 1.12-101
1-687	93WE-1D	EMERGENCY DIESEL GENERATOR D JACKET WATER HEAT EXCHANGER	EG	272	26.5A4	D	Vital Bus Power	21	I	N	1.12-35, 1.12-101
1-690	IR-25-01	CORE SPRAY CHANNEL "A" INST RACK	RB	242	4A	A	Low Pressure Coolant Injection	18	I	Y	7.70-81D
1-696	IR-25-62	RHR CHANNEL "B" INST RACK	RB	242	3D	B	Low Pressure Coolant Injection	18	I	Y	7.70-75, 7.70-76, 7.70-81D

Table 9.4.3 – Base List 2 (BL 2)

BL2#	EQUIPMENT ID	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	N/R
2001	**19TK-8A**	**FUEL POOL COOLING SKIMMER SURGE TANK A**	**RB**	**344**	**4D**	**A**	**Fuel Pool Cooling**	**21 - Tanks and Heat Exchangers**	**I**	**N**
2002	19FPC-32	SKIMMER SURGE TANK A COND MAKE-UP CHECK VALVE	RB	369.6	3.5Y	A	Fuel Pool Cooling	00 - Other	I	N
2003	**19LS-65**	**SKIMMER SURGE TANK A HIGH LEVEL SWITCH**	**RB**	**344**	**4D**	**A**	**Fuel Pool Cooling**	**20 - Instrument and Control Panels**	**I**	**N**
2004	**19LS-67**	**SKIMMER SURGE TANK A LOW-LOW LEVEL SWITCH**	**RB**	**347**	**4D**	**A**	**Fuel Pool Cooling**	**20 - Instrument and Control Panels**	**I**	**N**
2005	**19FPC-33**	**SKIMMER SURGE TANKS A & B TO CNDSR HOTWELL ISOL VALVE INLET ISOL**	**RB**	**326.9**	**3R**	**A&B**	**Fuel Pool Cooling**	**07 – Pneumatic-Operated Valve**	**I**	**N**
2006	**19AOV-09**	**SKIMMER SURGE TANKS A & B TO CNDSR HOT WELL ISOL VALVE**	**RB**	**326.9**	**3R**	**A&B**	**Fuel Pool Cooling**	**07 – Pneumatic-Operated Valve**	**I**	**N**
2007	**19FPC-01**	**SKIMMER SURGE TANKS A & B DRAIN VALVE**	**RB**	**326**	**3T**	**A&B**	**Fuel Pool Cooling**	**07 – Pneumatic-Operated Valve**	**I**	**N**
2008	**19P-1A**	**FUEL POOL COOLING RECIRC PUMP A**	**RB**	**326**	**3T**	**A**	**Fuel Pool Cooling**	**05 - Horizontal Pumps**	**I**	**N**
2009	**19E-1A**	**FUEL POOL COOLING HEAT EXCHANGER A**	**RB**	**326**	**4.5R**	**A**	**Fuel Pool Cooling**	**21 - Tanks and Heat Exchangers**	**I**	**N**
2010	**71MCC-131-OD1**	**19P-1A(M) FUEL POOL COOLING RECIRC PUMP A MOTOR**	**RB**	**326.9**	**3P**	**A**	**Fuel Pool Cooling**	**1 – Motor Control Center**	**I**	**N**
2011	32P-1A	DECAY HEAT REMOVAL SFP WATER PRIMARY PUMP A	RB	326	2.5Y	A	Fuel Pool Cooling	05 - Horizontal Pumps	I	N
2012	32DHR-5	DECAY HEAT REMOVAL CLG WATER RETURN ISOL VALVE	RB	300	1Y	A	Fuel Pool Cooling	07 – Pneumatic-Operated valve	I	N
2013	**71MCC-120-OE1**	**32P-1A(M) DECAY HEAT REMOVAL SFP WATER PRIMARY PUMP A MOTOR**	**YD**	**293**	**N/A**	**A**	**Fuel Pool Cooling**	**05 - Horizontal Pumps**	**O**	**N**

Table 9.4.4 – Rapid Drain-Down List (RDD)

JAF does not have qualified RDD components in SFP. The table below is intentionally left blank.

RDD#	DESCRIPTION	BASIS FOR INCLUSION/EXCLUSION	RDD

Table 9.4.5 – Seismic Walkdown Equipment List 2 (SWEL 2)

SWEL2#	EQUIPMENT ID	DESCRIPTION	BLDG.	ELEV.	ROOM	TRAIN	SYSTEM TYPE	CLASS	ENVIRONMENT	N/R	RDD
2-001	19TK-8A	FUEL POOL COOLING SKIMMER SURGE TANK A	RB	344	4D	A	Fuel Pool Cooling	21 - Tanks and Heat Exchangers	I	N	N/A
2-003	19LS-65	SKIMMER SURGE TANK A HIGH LEVEL SWITCH	RB	344	4D	A	Fuel Pool Cooling	20-Instrument and Control Panels	I	N	N/A
2-004	19LS-67	SKIMMER SURGE TANK A LOW-LOW LEVEL SWITCH	RB	347	4D	A	Fuel Pool Cooling	20-Instrument and Control Panels	I	N	N/A
2-005	19FPC-33	SKIMMER SURGE TANKS A & B TO CNDSR HOTWELL ISOL VALVE INLET ISOL	RB	326.9	3R	A&B	Fuel Pool Cooling	07 – Pneumatic-Operated Valve	I	N	N/A
2-006	19AOV-09	SKIMMER SURGE TANKS A & B TO CNDSR HOT WELL ISOL VALVE	RB	326.9	3R	A&B	Fuel Pool Cooling	07 – Pneumatic-Operated Valve	I	N	N/A
2-007	19FPC-01	SKIMMER SURGE TANKS A & B DRAIN VALVE	RB	326	3T	A&B	Fuel Pool Cooling	07 – Pneumatic-Operated Valve	I	N	N/A
2-008	19P-1A	FUEL POOL COOLING RECIRC PUMP A	RB	326	3T	A	Fuel Pool Cooling	05-Horizontal Pumps	I	N	N/A
2-009	19E-1A	FUEL POOL COOLING HEAT EXCHANGER A	RB	326	4.5R	A	Fuel Pool Cooling	21 - Tanks and Heat Exchangers	I	N	N/A
2-010	71MCC-131-OD1	19P-1A(M) FUEL POOL COOLING RECIRC PUMP A MOTOR	RB	326.9	3P	A	Fuel Pool Cooling	05- Horizontal Pumps	I	N	N/A
2-012	32DHR-18	DECAY HEAT REMOVAL CLG WATER RETURN ISOL VALVE	RB	300	1Y	A	Fuel Pool Cooling	07 – Pneumatic-Operated Valve	I	N	N/A
2-013	71MCC-120-OE1	32P-1A(M) DECAY HEAT REMOVAL SFP WATER PRIMARY PUMP A MOTOR	YD	293	N/A	A	Fuel Pool Cooling	01-Motor Control Centers	O	N	N/A

ATTACHMENT 9.4 **SEISMIC WALKDOWN EQUIPMENT LISTS FORM**

Seismic Walkdown Equipment List Approval

Prepared by: Rick Casella / Rick Casella Date: 11/1/12

Equipment Selection Personnel

Prepared by: Jeffrey Cooney / Jeffrey Cooney Date: 11/5/2012

Equipment Selection Personnel

Prepared by: Roger Locy Roger A. Locy Date: 11/5/2012

Equipment Selection Personnel

Reviewed by: Al Porch / A. Porch Date: 11/1/12

Peer Reviewer

Concurrence by: Richard Sullivan / PHIL PENNIX for R. Sullivan Date: 11/13/12

Operations Personnel

Attachment C

"Seismic Walkdown Checklists (SWCs)"

SWEL #	Equipment ID	Page #
1-001	01-125MOV-14B	6
1-011	02RV-71D	10
1-012	02RV-71E	15
1-032	03AOV-126(HCU-02-19)	19
1-033	03AOV-127(HCU-02-19)	23
1-043	03TK-125(HCU-02-19)	27
1-044	03TK-128(HCU-02-19)	31
1-052	09-3	35
1-053	09-32	40
1-056	09-45	45
1-065	10AOV-68A	50
1-069	10E-2A	54
1-079	10MOV-12A	58
1-119	10P-1A	62
1-123	10P-3A	66
1-124	10P-3B	70
1-137	10S-5A1	74
1-155	11EV-14A	78
1-157	11P-2A	82
1-161	11TK-1	87
1-164	13MOV-15	91
1-165	13MOV-16	96
1-166	13P-1	100
1-169	14MOV-12A	105
1-171	14P-1A	109
1-172	16-1RTD-131A	114
1-209	23AOV-53	119
1-210	23E-2	123

SWEL #	Equipment ID	Page #
1-213	23HOV-1	127
1-217	23LT-202A	131
1-219	23MOV-14	135
1-232	23P-150	139
1-234	23P-1M	144
1-243	23TK-1	148
1-314	27SOV-131A	153
1-319	27SOV-145	158
1-333	27TK-7A	162
1-335	29AC-1A	166
1-336	29AC-1B	170
1-343	29AOV-80A	175
1-347	29AOV-86A	180
1-360	46MOV-101A	184
1-364	46P-2A	188
1-366	46STR-5A1	192
1-367	46STR-5A2	196
1-371	66TCV-107E	200
1-372	66UC-22A	204
1-373	66UC-22B	208
1-406	70FN-4A	213
1-426	70RWC-2A(CND)	217
1-430	71-10502	222
1-433	71-10560	227
1-434	71-10602	232
1-436	71-10614	237
1-437	71-10660	241
1-438	71-11502	245

SWEL #	Equipment ID	Page #
1-439	71-11602	250
1-444	71ACB4	255
1-445	71ACUPS	260
1-446	71BAT-3A	264
1-448	71BC-1A	268
1-450	71BCB-2A	273
1-452	71BMCC-1	278
1-456	71BMCC-6	283
1-457	71DC-A2	288
1-462	71DSC-11561	292
1-470	71INV-3A	297
1-474	71L25	301
1-475	71L26	305
1-481	71MCC-161	310
1-487	71MCC-252	315
1-489	71MCC-254	319
1-491	71MCC-262	324
1-493	71MCC-264	328
1-494	71PT-71ACA2	332
1-495	71PT-71ACA4	336
1-498	71PT-71ACUPS	341
1-501	71SB-1	345
1-502	71SB-2	350
1-508	72AHU-30A	354
1-516	72FN-31A	358
1-518	72FN-46A	363
1-519	72FN-46B	368
1-522	72HV-7A	373

SWEL #	Equipment ID	Page #
1-555	92FN-1A	377
1-577	92RTD-101A	382
1-578	92RTD-101B	386
1-581	93AC-A1	390
1-582	93AR-A1	395
1-594	93AR-B2	400
1-624	93ECP-A	404
1-625	93ECP-B	409
1-628	93ECSP-A	413
1-629	93ECSP-B	418
1-634	93EDG-C	422
1-635	93EDG-D	427
1-636	93EGP-A	432
1-637	93EGP-B	437
1-640	93FPAC	442
1-642	93LI-102A	447
1-643	93LI-102B	451
1-646	93LOE-1A	455
1-647	93LOE-1B	460
1-658	93P1-C1	465
1-660	93P1-D1	470
1-662	93P-2A	474
1-663	93P-2B	479
1-670	93P-4A	483
1-671	93P-4B	488
1-674	93TK-1A	492
1-675	93TK-1B	497
1-682	93TK-7A	501

SWEL #	Equipment ID	Page #
1-683	93TK-7B	506
1-686	93WE-1C	510
1-687	93WE-1D	515
1-690	IR-25-01	519
1-696	IR-25-62	523
2-001	19TK-8A	527
2-003	19LS-65	531
2-004	19LS-67	535
2-005	19FPC-33	539
2-006	19AOV-09	543
2-007	19FPC-01	547
2-008	19P-1A	551
2-009	19E-1A	556
2-010	71MCC-131-OD1	561
2-012	32DHR-18	566
2-013	71MCC-120-OE1	570

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-001

Equipment ID No. *01-125MOV-14B* Equip. Class[1] *8 – Motor-Operated Valves*

Equipment Description *SGT Filter Train B Inlet Isolation Valve*

Location: Bldg. *SG* Floor El. *272* Room, Area *Col. 1, Line Y*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The item is an inline valve

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-001

Equipment ID No. *01-125MOV-14B* Equip. Class *8 – Motor-Operated Valves*

Equipment Description *SGT Filter Train B Inlet Isolation Valve*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from Impact.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Three overhead pipes with unsupported spans of 12'6, which is greater than the suggested span in ANSI B311 Sec 121.1.4.The inline valves and systems are noted below:
   39BAS-108: SBGT Filter Train B Breathing Air Manifold
   39SAS-20: SBGT Filter Train B Service Air Manifold
   46SWS-53G2: RX BLDG 272'El SGT Room East Service Water
   In a seismic event, the pipes are likely to fail, based on engineering judgment and the fact that the connections are soldered. The collapse of copper pipes on the valve (made of steel) will not result in damage to the valve. Hence, this is an industrial safety issue and not an adverse seismic interaction. Site personnel were notified immediately. .

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-001

Equipment ID No. *01-125MOV-14B* Equip. Class *8 – Motor-Operated Valves*

Equipment Description *SGT Filter Train B Inlet Isolation Valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/25/12*

Pouria Pourghobadi *9/25/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

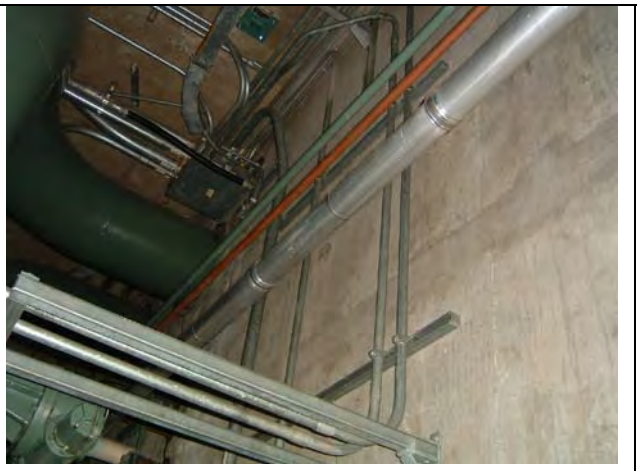
Seismic Walkdown Checklist (SWC) SWEL 1-001

Equipment ID No. *01-125MOV-14B* Equip. Class *8 – Motor-Operated Valves*

Equipment Description *SGT Filter Train B Inlet Isolation Valve*

Photographs

Note: *01-125MOV-14B Valve*



Note: *Unsupported Pipe Spans*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-011

Equipment ID No. *02RV-71D* Equip. Class *Pneumatic-operated valves*

Equipment Description *ADS main steam line b safety/relief valve*

Location: Bldg. *PC* Floor El. *295* Room, Area *Drywell, Azimuth 0°, Col. 4.5 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-011

Equipment ID No. *02RV-71D* Equip. Class *Pneumatic-operated valves*

Equipment Description *ADS main steam line b safety/relief valve*

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

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-011

Equipment ID No. *02RV-71D* Equip. Class *Pneumatic-operated valves*

Equipment Description *ADS main steam line b safety/relief valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

02TE-113D valve temp element off SRV discharge elbow is loose at threaded nipple. CR-JAF-2012-06495 initiated. This deficiency does not result in any adverse seismic interaction.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G. Porch

Alan Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-011

Equipment ID No. *02RV-71D* Equip. Class *Pneumatic-operated valves*

Equipment Description *ADS main steam line b safety/relief valve*

Photographs

Note: *02RV-71D looking toward Biological Shield Wall*

Note: *02RV-71D*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-011

Equipment ID No. *02RV-71D* Equip. Class *Pneumatic-operated valves*

Equipment Description *ADS main steam line b safety/relief valve*

Note: *Loose temperature element at threaded nipple to branch connection on SRV tailpipe elbow.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-012

Equipment ID No. *02RV-71E* Equip. Class *Pneumatic-operated valves*

Equipment Description *ADS main steam line c safety relief valve*

Location: Bldg. *PC* Floor El. *295* Room, Area *Drywell, Azimuth 138°, Col 5 Line W*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-012

Equipment ID No. *02RV-71E* Equip. Class *Pneumatic-operated valves*

Equipment Description *ADS main steam line c safety relief valve*

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

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-012

Equipment ID No. *02RV-71E* Equip. Class *Pneumatic-operated valves*

Equipment Description *ADS main steam line c safety relief valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

None.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G, Porch

Alan Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-012

Equipment ID No. *02RV-71E* Equip. Class *Pneumatic-operated valves*

Equipment Description *ADS main steam line c safety relief valve*

Photographs

Note: *02RV-71E, 3-Stage SRV*

Note: *02RV-71E, 3-Stage SRV*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-032

Equipment ID No. *03AOV-126 (HCU-02-19)* Equip. Class[1] *07-Pnuematic Operated Valve*

Equipment Description *HCU Inlet Scram Air Operated Valve*

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB East, Col. 5, Line Y*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The evaluated item in this SWC is not part of the 50% of the SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Bottom of valve is anchored by an angle plate, attached to a skid which supports multiple tanks and other AOV components in the area.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The equipment is anchored to a steel skid.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-032

Equipment ID No. *03AOV-126 (HCU-02-19)* Equip. Class *07-Pnuematic Operated Valve*

Equipment Description *HCU Inlet Scram Air Operated Valve*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Item is not one of the 50% for which an anchorage configuration verification is required.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-032

Equipment ID No. *03AOV-126 (HCU-02-19)* Equip. Class *07-Pnuematic Operated Valve*

Equipment Description *HCU Inlet Scram Air Operated Valve*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/23/2012*

Yaroslav Losev *09/23/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-032

Equipment ID No. *03AOV-126 (HCU-02-19)* Equip. Class *07-Pnuematic Operated Valve*

Equipment Description *HCU Inlet Scram Air Operated Valve*

Photographs

Note: *Picture of equipment 03AOV-126. Valve 03AOV-126 is on the left.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-033

Equipment ID No. *03AOV-127 (HCU-02-19)* Equip. Class[1] *07-Pnuematic Operated Valve*

Equipment Description *HCU Outlet Scram Air Operated Valve*

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB East, Col. 5, Line Y*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The evaluated item in this SWC is not part of the 50% of the SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-033

Equipment ID No. *03AOV-127 (HCU-02-19)* Equip. Class *07-Pnuematic Operated Valve*

Equipment Description *HCU Outlet Scram Air Operated Valve*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Inline SWEL item, which does not contain anchorage.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   There are no soft targets on the equipment.

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-033

Equipment ID No. *03AOV-127 (HCU-02-19)* Equip. Class *07-Pnuematic Operated Valve*

Equipment Description *HCU Outlet Scram Air Operated Valve*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/23/2012*

Yaroslav Losev *09/23/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-033

Equipment ID No. *03AOV-127 (HCU-02-19)* Equip. Class *07-Pnuematic Operated Valve*

Equipment Description *HCU Outlet Scram Air Operated Valve*

Photographs

Note: *Picture of equipment 03AOV-127(HCU-02-19). 03AOV-127(HCU-02-19) is the valve on the right.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-043

Equipment ID No. *03TK-125 (HCU-02-19)* Equip. Class[1] *21. Tanks and Heat Exchangers.*

Equipment Description *Water Accumulator*

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB East, Col. 5, Line Y*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The four (4), 1/2" shell anchors are free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-043

Equipment ID No. *03TK-125 (HCU-02-19)* Equip. Class *21. Tanks and Heat Exchangers.*

Equipment Description *Water Accumulator*

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

   The 03TK-125 (HCU-02-19) is mounted to the same steel skid as 03TK-128 (HCU-02-19). The configuration of the four (4), 1/2" anchors attaching the skid to the embedded steel frame is in accordance with the SEWS for equipment 03TK-125 (HCU-02-19), Rev. 0 and Drawing 11825-FC-22P, Rev. 2.

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

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

Interaction Effects

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

   The soft targets are free from impact by nearby equipment or structures.

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

   The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-043

Equipment ID No. *03TK-125 (HCU-02-19)* Equip. Class *21. Tanks and Heat Exchangers.*

Equipment Description *Water Accumulator*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/23/2012*

Yaroslav Losev *09/23/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-043

Equipment ID No. *03TK-125 (HCU-02-19)* Equip. Class *21. Tanks and Heat Exchangers.*

Equipment Description *Water Accumulator*

Photographs

Note: *Picture of equipment 03TK-125(HCU-02-19). 03TK-125(HCU-02-19) is on the left.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-044

Equipment ID No. *03TK-128 (HCU-02-19)* Equip. Class[1] *21. Tanks and Heat Exchangers.*

Equipment Description *Nitrogen Accumulator*

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB East, Col. 5, Line Y*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The four (4) 1/2" shell anchors are free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-044

Equipment ID No. *03TK-128 (HCU-02-19)* Equip. Class *21. Tanks and Heat Exchangers.*

Equipment Description *Nitrogen Accumulator*

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

   The 03TK-128(HCU-02-19) is mounted to the same steel skid as 03TK-125(HCU-02-19). The configuration of the four (4), 1/2" anchors attaching the skid to the embedded steel frame is in accordance with the SEWS for equipment 03TK-125(HCU-02-19), Rev. 0 and Drawing 11825-FC-22P, Rev. 2.

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

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

Interaction Effects

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

   The soft targets are free from impact by nearby equipment or structures.

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

   The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-044

Equipment ID No. *03TK-128 (HCU-02-19)* Equip. Class *21. Tanks and Heat Exchangers.*

Equipment Description *Nitrogen Accumulator*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/23/2012*

Yaroslav Losev *09/23/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-044

Equipment ID No. *03TK-128 (HCU-02-19)* Equip. Class *21. Tanks and Heat Exchangers.*

Equipment Description *Nitrogen Accumulator*

Photographs

Note: *Picture of equipment 03TK-128(HCU-02-19). 03TK-128(HCU-02-19) is on the left.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-052

Equipment ID No. *09-3* Equip. Class[1] *20-Instruments and control panels*

Equipment Description *Nuclear Station Main Control Board*

Location: Bldg. *CR* Floor El. *300* Room, Area *Col 10*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☒ N/A☐
   No visible corrosion, Limited visibility.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☒ N/A☐
   No visible cracks. Limited visibility.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-052

Equipment ID No. *09-3* Equip. Class *20-Instruments and control panels*

Equipment Description *Nuclear Station Main Control Board*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which anchorage configuration verification is required.) Y☐ N☐ U☒ N/A☐
   Reviewed SEWS for 09-3. Limited view inside the cabinet. Cannot verify anchorage configuration.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☒
   N/A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Latticed ceiling panels above 09-3 are tie-wrapped, but it was determined not to be an adverse seismic condition.
   Lighting is above the ceiling panels.
   76ELB-CR-300T mounted securely to column F10 , adjacent to panel.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-052

Equipment ID No. *09-3* Equip. Class *20-Instruments and control panels*

Equipment Description *Nuclear Station Main Control Board*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

The back cover of the panel was removed but due to limited visibility, verification of the anchorage was not possible. Visible plug welds appeared satisfactory.

Evaluated by: *Rick Casella* Rick Casella Date: *11/01/2012*

A. Porch A G, Porch *11/01/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-052

Equipment ID No. *09-3* Equip. Class *20-Instruments and control panels*

Equipment Description *Nuclear Station Main Control Board*

Photographs

Note: *Inside 09-3*

Note: *Inside 09-3*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

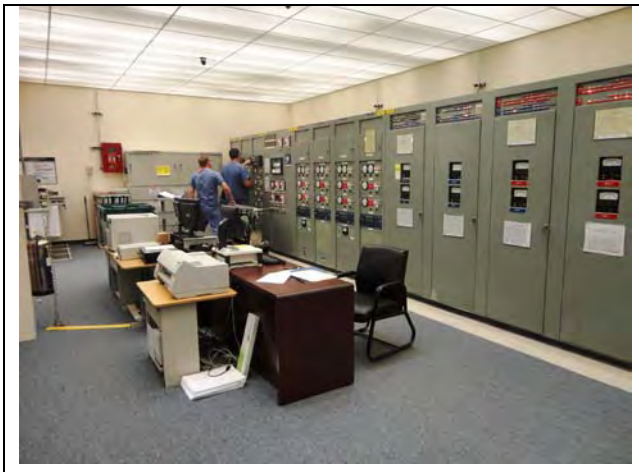
Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-052

Equipment ID No. *09-3* Equip. Class *20-Instruments and control panels*

Equipment Description *Nuclear Station Main Control Board*



Note: *09-3*

Note: *09-3*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-053

Equipment ID No. *09-32* Equip. Class[1] *20 – Instrumentation and Control Panels*

Equipment Description *Channel "A" RHR/RCIC Relay Panel*

Location: Bldg. *RR* Floor El. *284.8* Room, Area *Col. 9.5, Line F*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is free of best, broken and loose hardware.

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-053

Equipment ID No. *09-32* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Channel "A" RHR/RCIC Relay Panel*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with SWES for 09-32 (Rev. 0). The panels are bolted together and plug welded to embedded steel. 09-32 is anchored to embedded steel with six ¾" diameter plug welds to embedded steel – 3 in the front and 3 in the back.

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact from nearby equipments.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead equipments are adequately supported.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-053

Equipment ID No. *09-32* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Channel "A" RHR/RCIC Relay Panel*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/24/12*

Pouria Pourghobadi *9/24/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-053

Equipment ID No. *09-32* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Channel "A" RHR/RCIC Relay Panel*

Photographs

Note: *Cabinet 09-32*

Note: *Cabinet Front Plug Weld*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-053

Equipment ID No. *09-32* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Channel "A" RHR/RCIC Relay Panel*

Note: *Spot Welds In The Back Of The Panel.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-056

Equipment ID No. *09-45* Equip. Class[1] *20 – Instrumentation and Control Panels*

Equipment Description *Auto Blowdown Relay Cabinet*

Location: Bldg. *RR* Floor El. *284.8* Room, Area *Col. 9.5, Line FG*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-056

Equipment ID No. *09-45* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Auto Blowdown Relay Cabinet*

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

   The anchorage configuration is consistent with SWES for 09-45 (Rev. 0) and DWG. No. 1.83-10. The panels are bolted together and plug welded to embedded steel. 09-41, 45, 46, which are a total of 84" wide, are anchored by 7 plug welds – three in the front and four in the back.

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

Interaction Effects

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

   The soft targets are free from impact by nearby equipments and structures.

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

   The overhead equipments and distribution systems are not likely to collapse onto the document.

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

   The attached lines have adequate flexibility.

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

    The equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-056

Equipment ID No. *09-45* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Auto Blowdown Relay Cabinet*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/24/12*

Pouria Pourghobadi *9/24/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

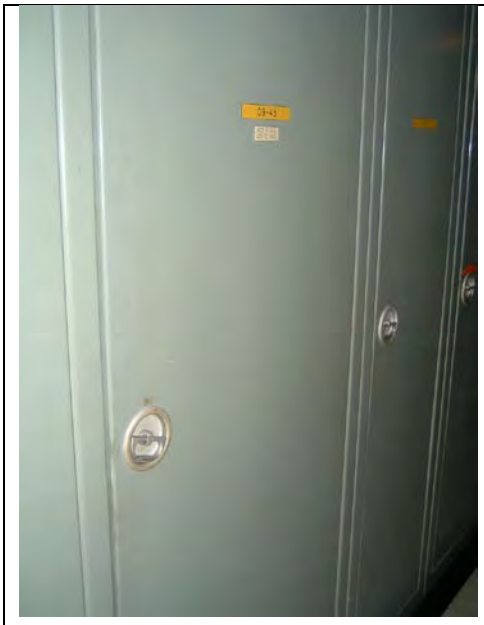
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-056

Equipment ID No. *09-45* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Auto Blowdown Relay Cabinet*

Photographs



Note: *Cabinet 09-45*

Note: *Cabinet Plug Weld*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-056

Equipment ID No. *09-45* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Auto Blowdown Relay Cabinet*

Note: *Cabinet Plug Weld*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-065

Equipment ID No. *10AOV-68A* Equip. Class *Pneumatic-operated valves*

Equipment Description *RHR A LPCI testable check valve*

Location: Bldg. *PC* Floor El. *279* Room, Area *Drywell, Azimuth 0° Col 5 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-065

Equipment ID No. *10AOV-68A* Equip. Class *Pneumatic-operated valves*

Equipment Description *RHR A LPCI testable check valve*

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

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   The component is an inline valve.

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-065

Equipment ID No. *10AOV-68A* Equip. Class *Pneumatic-operated valves*

Equipment Description *RHR A LPCI testable check valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

None.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G. Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-065

Equipment ID No. *10AOV-68A* Equip. Class *Pneumatic-operated valves*

Equipment Description *RHR A LPCI testable check valve*

Photographs

Note: *10AOV-68A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

Note: *10AOV-68A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-069

Equipment ID No. *10E-2A* Equip. Class[1] *21-Tanks and Heat Exchangers*

Equipment Description *RHR System Heat Exchanger A*

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB RHR Heat Exchange Rm, Col. 2.5, Line A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The twelve (12), 2" diameter anchors are free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The equipment is anchored to structural steel members.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-069

Equipment ID No. *10E-2A* Equip. Class *21-Tanks and Heat Exchangers*

Equipment Description *RHR System Heat Exchanger A*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The 10E-2A is supported on a steel ring. It was verified that there are (12), 2" anchors attaching the heat exchanger to the steel ring as stated in the SEWS for equipment 10E-2A, Rev. 0.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-069

Equipment ID No. *10E-2A* Equip. Class *21-Tanks and Heat Exchangers*

Equipment Description *RHR System Heat Exchanger A*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/26/2012*

Yaroslav Losev *09/26/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-069

Equipment ID No. *10E-2A* Equip. Class *21-Tanks and Heat Exchangers*

Equipment Description *RHR System Heat Exchanger A*

Photographs

Note: *Picture of equipment 10E-2A.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. *10MOV-12A* Equip. Class[1] *08-Motor Operated Valves*

Equipment Description *RHR Heat Exch. A Outlet Isol Valve*

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB RHR Heat Exchange Rm, Col. 2, Line A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The evaluated item in this SWC is not part of the 50% of the SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. *10MOV-12A* Equip. Class *08-Motor Operated Valves*

Equipment Description *RHR Heat Exch. A Outlet Isol Valve*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Inline SWEL item, which does not contain anchorage.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. *10MOV-12A* Equip. Class *08-Motor Operated Valves*

Equipment Description *RHR Heat Exch. A Outlet Isol Valve*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/26/2012*

Yaroslav Losev *09/26/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-079

Equipment ID No. *10MOV-12A* Equip. Class *08-Motor Operated Valves*

Equipment Description *RHR Heat Exch. A Outlet Isol Valve*

Photographs

Note: *Picture of equipment 10MOV-12A.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-119

Equipment ID No. *10P-1A* Equip. Class[1] *06-Vertical Pump*

Equipment Description *RHR Service Water Pump A*

Location: Bldg. *SP* Floor El. *255'* Room, Area *Pump Room Train A, Col. 26, Row B*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The four (4) 1" CIP bolts are free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are no visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-119

Equipment ID No. *10P-1A* Equip. Class *06-Vertical Pump*

Equipment Description *RHR Service Water Pump A*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration for the 1" CIP headed bolts is consistent with the SEWS documentation for equipment 10P-1A, Rev 0.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-119

Equipment ID No. *10P-1A* Equip. Class *06-Vertical Pump*

Equipment Description *RHR Service Water Pump A*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Losev *09/21/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-119

Equipment ID No. *10P-1A* Equip. Class *06-Vertical Pump*

Equipment Description *RHR Service Water Pump A*

Photographs

Note: *Picture of equipment 10P-1A.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-123

Equipment ID No. *10P-3A* Equip. Class[1] *6 – Vertical Pumps*

Equipment Description *Residual Heat Removal Pump A*

Location: Bldg. *RB* Floor El. *227.6* Room, Area *Col. 3, Line A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-123

Equipment ID No. *10P-3A* Equip. Class *6 – Vertical Pumps*

Equipment Description *Residual Heat Removal Pump A*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with File No. 2.11-5 and the SWES for 10P-3A (Rev. 0). The pump is anchored with sixteen 1.75" CIP bolts.

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on this item.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-123

Equipment ID No. *10P-3A* Equip. Class *6 – Vertical Pumps*

Equipment Description *Residual Heat Removal Pump A*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/24/12*

Pouria Pourghobadi *9/24/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-123

Equipment ID No. *10P-3A* Equip. Class *6 – Vertical Pumps*

Equipment Description *Residual Heat Removal Pump A*

Photographs

Note: *Pump 10P-3A*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-124

Equipment ID No. *10P-3B* Equip. Class[1] 6 – Vertical Pumps

Equipment Description *Residual Heat Removal Pump **B***

Location: Bldg. *RB* Floor El. *227* Room, Area *Col 3, Line D*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The anchorage is free of any visible cracks in the concrete.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-124

Equipment ID No. *10P-3B* Equip. Class 6 – Vertical Pumps

Equipment Description *Residual Heat Removal Pump B*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with SEWS for 10P-3B which is identical to 10P-3A and DWG. No. 2.11-5
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   The anchorage is free of potentially adverse seismic condition.

Interaction Effects

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-124

Equipment ID No. *10P-3B* Equip. Class 6 – Vertical Pumps

Equipment Description *Residual Heat Removal Pump B*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/2/31/12*

Pouria Pourghobadi *9/23/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-124

Equipment ID No. *10P-3B* Equip. Class 6 – Vertical Pumps

Equipment Description *Residual Heat Removal Pump B*

Photographs

Note: *10P-3B Residual Heat Removal Pump*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-137

Equipment ID No. *10S-5A1* Equip. Class[1] *00-Other*

Equipment Description *RHRSW Pumps A and C Discharge Strainer Basket 1*

Location: Bldg. *SP* Floor El. *255'* Room, Area *Pump Room Train A, Col. 26,*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The evaluated item in this SWC is not part of the 50% of the SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The one (1) anchor is free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are no visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-137

Equipment ID No. *10S-5A1* Equip. Class *00-Other*

Equipment Description *RHRSW Pumps A and C Discharge Strainer Basket 1*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Item is not one of the 50% for which an anchorage configuration verification is required.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   There is a masonry block wall near the equipment; however, the wall was evaluated under IPEEE effort to reinforce the block walls.
   (Ref Section 3.1.4.6, page 3-57 JAF-RPT-MISC-02211)
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-137

Equipment ID No. *10S-5A1* Equip. Class *00-Other*

Equipment Description *RHRSW Pumps A and C Discharge Strainer Basket 1*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Losev *09/21/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-137

Equipment ID No. *10S-5A1* Equip. Class *00-Other*

Equipment Description *RHRSW Pumps A and C Discharge Strainer Basket 1*

Photographs

Note: *Picture of equipment 10S-5A1.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-155

Equipment ID No. *11EV-14A* Equip. Class[1] *00-Other*

Equipment Description *SLC A Double SQUIB Activated Shear Explosive Valve*

Location: Bldg. *RB* Floor El. *326'* Room, Area *RB NW, Col. 6, Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The evaluated item in this SWC is not part of the 50% of the SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-155

Equipment ID No. *11EV-14A* Equip. Class *00-Other*

Equipment Description *SLC A Double SQUIB Activated Shear Explosive Valve*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Inline SWEL item, which does not contain anchorage.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-155

Equipment ID No. *11EV-14A* Equip. Class *00-Other*

Equipment Description *SLC A Double SQUIB Activated Shear Explosive Valve*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/25/2012*

Yaroslav Losev *09/25/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-155

Equipment ID No. *11EV-14A* Equip. Class *00-Other*

Equipment Description *SLC A Double SQUIB Activated Shear Explosive Valve*

Photographs

Note: *Picture of equipment 11EV-14A.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-157

Equipment ID No. *11P-2A* Equip. Class[1] 05- *Horizontal Pumps*

Equipment Description *Standby Liquid Control A Pump*

Location: Bldg. *RB* Floor El. *326'* Room, Area *RB NW, Col. 6, Line P*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

   The item is one of the 50% of SWEL items requiring anchorage configuration verification.

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

   The anchorage for the pump is free of bent, broken or loose hardware; however, this is not the governing component for possible anchorage failure. The six (6), 3/4" CIP bolts attaching the skid to the concrete footing is the governing anchorage for potential failure based on the SEWS evaluation and has been determined to be free of bent, broken, missing or loose hardware. There are two bolts utilized for guiding the motor into place onto the skid, these two bolts where never removed and have loose nuts. However, this is not an issue since these bolts are not utilized to provide anchorage capacity for the equipment. This is more of a housekeeping issue; it is recommended to remove the nuts to stay consistent with plant documentation. This is not an adverse seismic condition.

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

   Anchorage is free of corrosion that is more than mild surface oxidation.

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

   Concrete is free of visible cracks near any of the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-157

Equipment ID No. *11P-2A* Equip. Class 05- *Horizontal Pumps*

Equipment Description *Standby Liquid Control A Pump*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The configuration for the 3/4" CIP anchors are in accordance with the SEWS documentation.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-157

Equipment ID No. *11P-2A* Equip. Class 05- *Horizontal Pumps*

Equipment Description *Standby Liquid Control A Pump*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/25/2012*

Yaroslav Losev *09/25/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-157

Equipment ID No. *11P-2A* Equip. Class 05- *Horizontal Pumps*

Equipment Description *Standby Liquid Control A Pump*

Photographs

Note: *Picture of equipment 11P-2A.*

Note: *Picture showing one of the two loose nuts on the guidance bolts for mounting the motor to the skid.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-157

Equipment ID No. *11P-2A* Equip. Class 05- *Horizontal Pumps*

Equipment Description *Standby Liquid Control A Pump*

Note: *Picture showing the loose nut on the other guidance bolt for mounting the motor to the skid.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-161

Equipment ID No. *11TK-1* Equip. Class[1] 21-Tanks and Heat Exchangers

Equipment Description *Standby Liquid Control Tank*

Location: Bldg. *RB* Floor El. *326'* Room, Area *RB NW, Col. 6, Line P*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The twelve (12), 1" CIP bolts are free of bent, broken missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Concrete is free of visible cracks near any of the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-161

Equipment ID No. *11TK-1* Equip. Class 21-Tanks and Heat Exchangers

Equipment Description *Standby Liquid Control Tank*

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

   The configuration for the 1" CIP anchors is in accordance with the SEWS documentation.

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

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

Interaction Effects

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

   The SLC temperature element sensor wire (Equipment 11TE-49) is located near an unanchored Unistrut support. The unanchored Unistrut support can slip from the base and potentially damage the sensor wire during a seismic event; however, this is not considered as a seismic adverse interaction. The unanchored Unistrut support will not damage the tank.

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

   The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-161

Equipment ID No. *11TK-1* Equip. Class 21-Tanks and Heat Exchangers

Equipment Description *Standby Liquid Control Tank*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Due to uneven surface on the concrete footing there is a gap between the anchor plate and the concrete footing. Gaps on the ends of the anchor base plate are close to 0.5". Gaps between the anchor base plate and the concrete footing at the anchor locations is less than a 1/4" which by engineering judgment is not large enough to cause a significant moment on the bolts.

Evaluated by: *Harpreet Ghuman* Date: *09/25/2012*

Yaroslav Losev *09/25/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-161

Equipment ID No. *11TK-1* Equip. Class 21-Tanks and Heat Exchangers

Equipment Description *Standby Liquid Control Tank*

Photographs

Note: *Picture of equipment 11TK-1.*

Note: *Picture showing the element sensor wire (equipment 11TE-49) near the unsupported Unistrut support.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-164

Equipment ID No. *13MOV-15* Equip. Class *motor-operated and solenoid-operated valves*

Equipment Description *RCIC Steam Supply Inbd Isol Valve*

Location: Bldg. *PC* Floor El. *291* Room, Area *Drywell, Azimuth 335°, Col4 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-164

Equipment ID No. *13MOV-15* Equip. Class *motor-operated and solenoid-operated valves*

Equipment Description *RCIC steam supply inbd isol valve*

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

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-164

Equipment ID No. *13MOV-15* Equip. Class *motor-operated and solenoid-operated valves*

Equipment Description *RCIC steam supply inbd isol valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

1" conduit running 45° on RPV side of 13MOV-15 is very flexible. However, it will not result in any seismic interaction, nor will it fail in a seismic event.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G, Porch

Alan Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-164

Equipment ID No. *13MOV-15* Equip. Class *motor-operated and solenoid-operated valves*

Equipment Description *RCIC steam supply inbd isol valve*

Photographs

Note: *13MOV-15*

Note: *13MOV-15*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-164

Equipment ID No. *13MOV-15* Equip. Class *motor-operated and solenoid-operated valves*

Equipment Description *RCIC steam supply inbd isol valve*

Note: *13MOV-15*

Note: *1" dia. conduit*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-165

Equipment ID No. *13MOV-16* Equip. Class[1] *08-Motor Operated Valves*

Equipment Description *RCIC Turbine Steam Supply Outbd Isolation Valve*

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB South, Col. 3, Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The evaluated item in this SWC is not part of the 50% of the SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-165

Equipment ID No. *13MOV-16* Equip. Class *08-Motor Operated Valves*

Equipment Description *RCIC Turbine Steam Supply Outbd Isolation Valve*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Inline SWEL item, which does not contain anchorage.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-165

Equipment ID No. *13MOV-16* Equip. Class *08-Motor Operated Valves*

Equipment Description *RCIC Turbine Steam Supply Outbd Isolation Valve*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/26/2012*

Yaroslav Losev *09/26/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-165

Equipment ID No. *13MOV-16* Equip. Class *08-Motor Operated Valves*

Equipment Description *RCIC Turbine Steam Supply Outbd Isolation Valve*

Photographs

Note: *Picture of equipment 13MOV-16.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-166

Equipment ID No. *13P-1* Equip. Class[1] *5 – Horizontal Pumps*

Equipment Description *RCIC Turbine Driven Pump*

Location: Bldg. *RB* Floor El. *227.6* Room, Area *Col. 3, Line P*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-166

Equipment ID No. *13P-1* Equip. Class *5 – Horizontal Pumps*

Equipment Description *RCIC Turbine Driven Pump*

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

   The anchorage configuration is consistent with the SEWS for 13P-1, DWG. No. 2.12-3 and Drawing Number 11825-FC-20D, Rev. 7. The pump sits on a concrete pad that is 3'-7" wide x 12' long x 1.5' high concrete pad. The pad is dowelled to into the floor slab with 26 #11 bars (5' long plus a 12" 90 deg. Hook at the top).

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

Interaction Effects

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

   The soft targets are free from impact by nearby equipments or structures.

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

   The overhead equipments and distribution systems are not likely to collapse onto the equipments.

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

   The attached lines have adequate flexibility.

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

    The equipment is free f potentially adverse seismic interaction.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-166

Equipment ID No. *13P-1* Equip. Class *5 – Horizontal Pumps*

Equipment Description *RCIC Turbine Driven Pump*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/24/12*

Pouria Pourghobadi *9/24/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

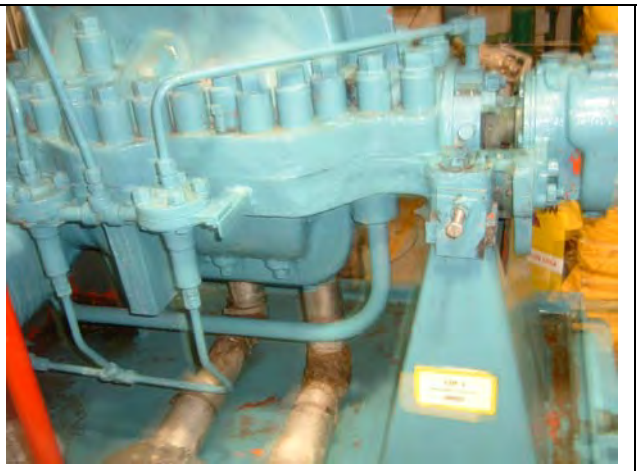
Seismic Walkdown Checklist (SWC) SWEL1-166

Equipment ID No. *13P-1* Equip. Class *5 – Horizontal Pumps*

Equipment Description *RCIC Turbine Driven Pump*

Photographs

Note: *13P-1 Pump Tag*



Note: *13P-1 Pump Side View*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-166

Equipment ID No. *13P-1* Equip. Class *5 – Horizontal Pumps*

Equipment Description *RCIC Turbine Driven Pump*

Note: *13P-1 Pump Anchorage.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-169

Equipment ID No. *14MOV-12A* Equip. Class[1] *8 – Motor-Operated Valves*

Equipment Description *Core Spray Loop A INBD Isolation Valve*

Location: Bldg. *RB* Floor El. *300* Room, Area *Col. 4.5*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-169

Equipment ID No. *14MOV-12A* Equip. Class *8 – Motor-Operated Valves*

Equipment Description *Core Spray Loop A INBD Isolation Valve*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipments or structures.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-169

Equipment ID No. *14MOV-12A* Equip. Class *8 – Motor-Operated Valves*

Equipment Description *Core Spray Loop A INBD Isolation Valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Donald Koberg Date: *9/25/12*

Pouria Pourghobadi P Pourghobadi *9/25/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-169

Equipment ID No. *14MOV-12A* Equip. Class *8 – Motor-Operated Valves*

Equipment Description *Core Spray Loop A INBD Isolation Valve*

Photographs

Note: *14MOV-12A*

Note: *14MOV-12A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 171

Equipment ID No. *14P-1A* Equip. Class[1] *6-Vertical pump*

Equipment Description *Core Spray Pump A*

Location: Bldg. *RB* Floor El. *226* Room, Area *Col 4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Mild surface corrosion on end of bolts and on base plate and bottom of pump. Not an adverse seismic condition.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No crackes detected.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 171

Equipment ID No. *14P-1A* Equip. Class *6-Vertical pump*

Equipment Description *Core Spray Pump A*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with DWG. No. 2.14-6.

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

Interaction Effects

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

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   2" attached flexible conduits and hose have adequate flexibility. Other attached lines are well supported to the pump and no deferential movement.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 171

Equipment ID No. *14P-1A* Equip. Class *6-Vertical pump*

Equipment Description *Core Spray Pump A*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *R. Casella* Rich Casella Date: *11/01/2012*

Robert S. Kester *11/01/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 171

Equipment ID No. *14P-1A* Equip. Class *6-Vertical pump*

Equipment Description *Core Spray Pump A*

Photographs

Note: *14P-1A*

Note: *14P-1A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 171

Equipment ID No. *14P-1A* Equip. Class *6-Vertical pump*

Equipment Description *Core Spray Pump A*

Note: *14P-1A*

Note: *14P-1A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 172

Equipment ID No. *16-1RTD-131A* Equip. Class[1] 19 Temperature Sensor

Equipment Description *Torus Bulk Temp Monitor*

Location: Bldg. *SU* Floor El. *227* Room, Area *Col 4 Line P*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 172

Equipment ID No. *16-1RTD-131A* Equip. Class 19 Temperature Sensor

Equipment Description *Torus Bulk Temp Monitor*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No soft targets.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 172

Equipment ID No. *16-1RTD-131A* Equip. Class 19 Temperature Sensor

Equipment Description *Torus Bulk Temp Monitor*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *R. Casella* Rich Casella Date: *11/01/2012*

R. S. Kester *11/01/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

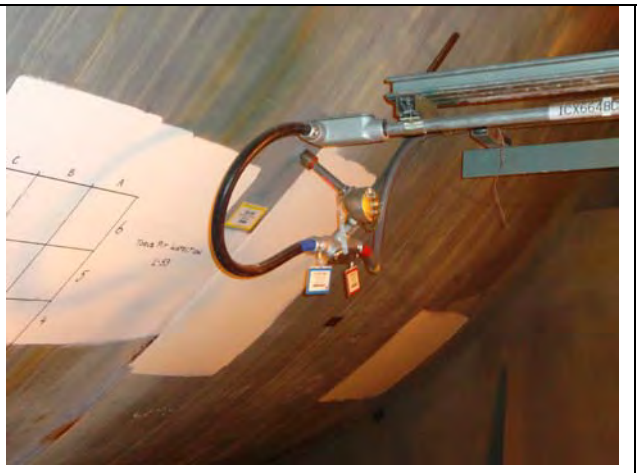
Seismic Walkdown Checklist (SWC) SWEL1- 172

Equipment ID No. *16-1RTD-131A* Equip. Class 19 Temperature Sensor

Equipment Description *Torus Bulk Temp Monitor*

Photographs

Note: *16-1RTD-131A*



Note: *16-1RTD-131A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

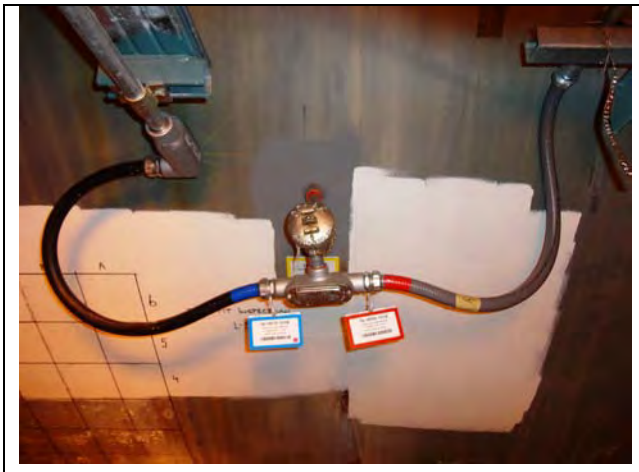
Sheet 5 of 5

Status: Y☒ N☐ U☐

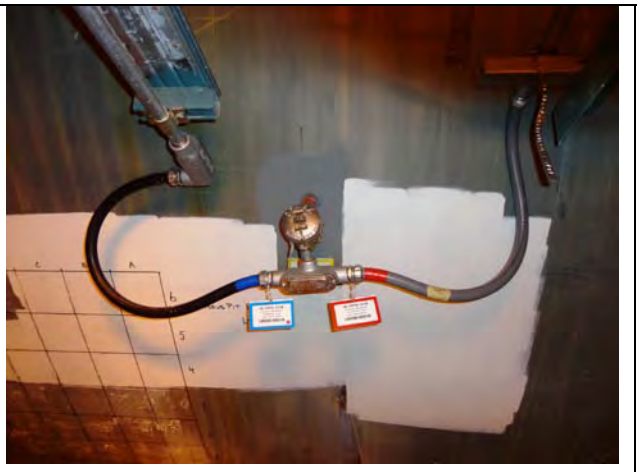
Seismic Walkdown Checklist (SWC) SWEL1- 172

Equipment ID No. *16-1RTD-131A* Equip. Class 19 Temperature Sensor

Equipment Description *Torus Bulk Temp Monitor*



Note: *16-1RTD-131A*



Note: *16-1RTD-131A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-209

Equipment ID No. *23AOV-53* Equip. Class[1] *7 – Pneumatic-Operated Valves*

Equipment Description *HPCI Turbine Steam Supply Drain Trap T-3 Bypass Valve*

Location: Bldg. *RB* Floor El. *227.6* Room, Area *Col 1 Line Y*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   This SWEL item is an inline valve.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   This SWEL item is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   This SWEL item is an inline valve.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   This SWEL item is an inline valve.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-209

Equipment ID No. *23AOV-53* Equip. Class *7 – Pneumatic-Operated Valves*

Equipment Description *HPCI Turbine Steam Supply Drain Trap T-3 Bypass Valve*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   1.5 in. conduit running close to the air pipe(at about 2" distance). Temporary scaffolding is erected at the area above the valve in support of the outage. The scaffolding appears to be well supported and is controlled in accordance with EN-MA-133.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead installations have adequate support.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-209

Equipment ID No. *23AOV-53* Equip. Class *7 – Pneumatic-Operated Valves*

Equipment Description *HPCI Turbine Steam Supply Drain Trap T-3 Bypass Valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Valve is mounted in a cantilever position off the pipe. The design package EC-11595 approves this configuration.

Evaluated by: *Donald Koberg* Date: *9/21/12*

Pouria Pourghobadi Date: *9/21/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

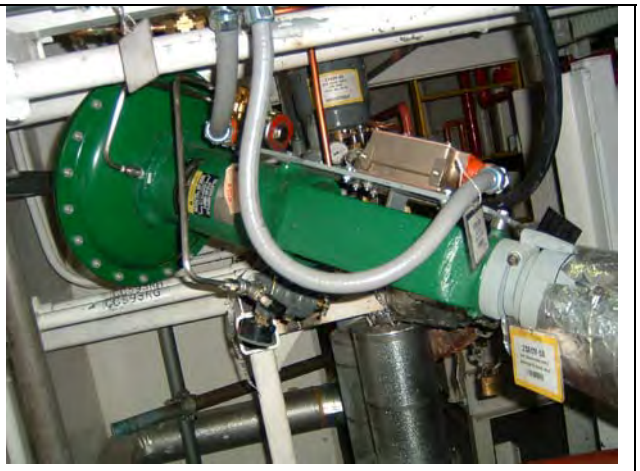
Seismic Walkdown Checklist (SWC) SWEL1-209

Equipment ID No. *23AOV-53* Equip. Class *7 – Pneumatic-Operated Valves*

Equipment Description *HPCI Turbine Steam Supply Drain Trap T-3 Bypass Valve*

Photographs

Note: *23AOV-53*



Note: *23AOV-53*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-210

Equipment ID No. *23E-2* Equip. Class[1] *21 – Tanks and Heat Exchangers*

Equipment Description *HPCI Lube Oil Cooler*

Location: Bldg. *RB* Floor El. *227.6* Room, Area *Column 1 Line T*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is intact and free of any bent,broken or loose hardware

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The tank is not installed onto concrete.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-210

Equipment ID No. *23E-2* Equip. Class *21 – Tanks and Heat Exchangers*

Equipment Description *HPCI Lube Oil Cooler*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free of any impact by nearby equipments

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☒ U☐ N/A☐
   Unistrut are supporting conduit with an unsupported span which exceeds the allow un supported span and can have potential threat. The resolution to this potentially adverse seismic condition is tracked through CR-JAF-2012-07990

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☒ U☐
    An adverse seismic interaction effect may be present. Refer to Q. 8.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-210

Equipment ID No. *23E-2* Equip. Class *21 – Tanks and Heat Exchangers*

Equipment Description *HPCI Lube Oil Cooler*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/21/12*

Pouria Pourghobadi *9/21/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-210

Equipment ID No. *23E-2* Equip. Class *21 – Tanks and Heat Exchangers*

Equipment Description *HPCI Lube Oil Cooler*

Photographs

Note: *HPCI Lube Oil Cooler*

Note: *Two P1001 conduits with unsupported span of ~21 ft, supported several conduits, junction box and smoke detector.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-213

Equipment ID No. *23HOV-1* Equip. Class[1] *07-Pnuematic Operated Valves*

Equipment Description *HPCI Turbine Steam Supply Stop Valve*

Location: Bldg. *RB* Floor El. *227.6* Room, Area *Col1 Line T*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The items is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-213

Equipment ID No. *23HOV-1* Equip. Class *07- Fluid Operated Valves*

Equipment Description *HPCI Turbine Steam Supply Stop Valve*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on this item.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☒ U☐ N/A☐
   Potentially inadequately P1001 unistruts with unsupported span of ~21 feet above the valve. The resolution to this potentially adverse seismic condition is tracked through CR-JAF-2012-07990

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☒ U☐
    An adverse seismic interaction effect may be present. Refer to Q. 8.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-213

Equipment ID No. *23HOV-1* Equip. Class *07-Pnuematic Operated Valves*

Equipment Description *HPCI Turbine Steam Supply Stop Valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

The adequacy of unistruts supporting the conduits should be evaluated.

Evaluated by: *Donald Koberg* Date: *9/21/12*

Pouria Pourghobadi *9/21/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-213

Equipment ID No. *23HOV-1* Equip. Class *07-Pnuematic Operated Valves*

Equipment Description *HPCI Turbine Steam Supply Stop Valve*

Photographs

Note: *23HOV-1*

Note: *23HOV-1*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-217

Equipment ID No. *23LT-202A* Equip. Class[1] *18 – Instrument Racks*

Equipment Description *Suppression Pool HPCI Logic Level Transmitter*

Location: Bldg. *RB* Floor El. *227* Room, Area *Col. 4.5, Line A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-217

Equipment ID No. *23LT-202A* Equip. Class *18 – Instrument Racks*

Equipment Description *Suppression Pool HPCI Logic Level Transmitter*

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

   The anchorage configuration is consistent with the SEWS for 23LT-202A (Rev. 0, and DWG. No. 7.31-193. The transmitter is anchored to an r/c wall with four ½" expansion anchors.

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-217

Equipment ID No. *23LT-202A* Equip. Class *18 – Instrument Racks*

Equipment Description *Suppression Pool HPCI Logic Level Transmitter*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/24/12*

Pouria Pourghobadi *9/24/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

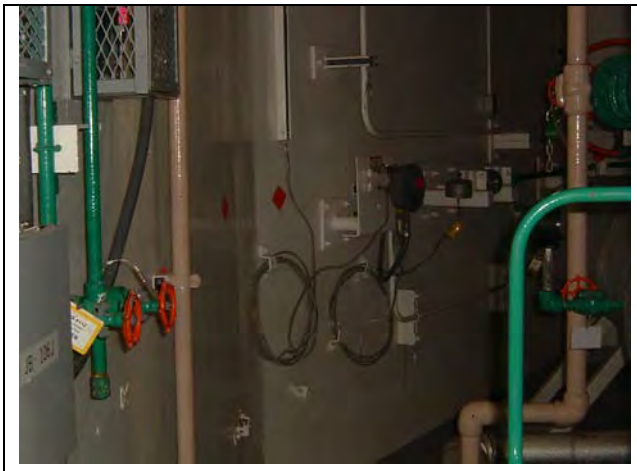
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-217

Equipment ID No. *23LT-202A* Equip. Class *18 – Instrument Racks*

Equipment Description *Suppression Pool HPCI Logic Level Transmitter*

Photographs



Note: *23LT-202A Mounted in center of the picture*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-219

Equipment ID No. *23MOV-14* Equip. Class[1] *08 – Motor-Operated Valves*

Equipment Description *HPCI Turbine Steam Inlet Isolation Valve*

Location: Bldg. *RB* Floor El. *227.6* Room, Area *Col 1 Line T*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-219

Equipment ID No. *23MOV-14* Equip. Class *08 – Motor-Operated Valves*

Equipment Description *HPCI Turbine Steam Inlet Isolation Valve*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   No soft targets.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Overhead equipments and distribution systems, ceilings and tiles, etc are well supported.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-219

Equipment ID No. *23MOV-14* Equip. Class *08 – Motor-Operated Valves*

Equipment Description *HPCI Turbine Steam Inlet Isolation Valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/21/12*

Pouria Pourghobadi *9/21/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

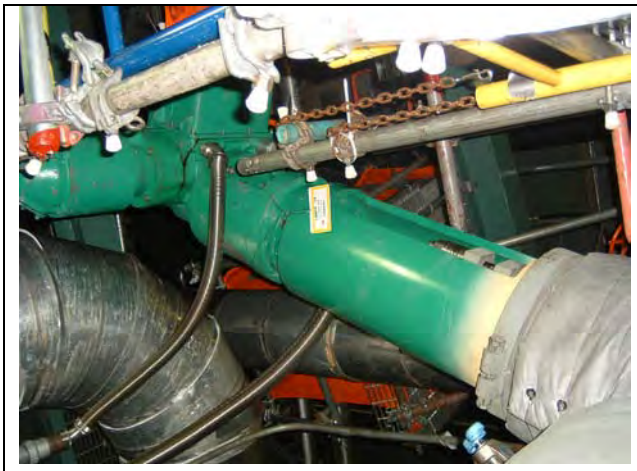
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-219

Equipment ID No. *23MOV-14* Equip. Class *08 – Motor-Operated Valves*

Equipment Description *HPCI Turbine Steam Inlet Isolation Valve*

Photographs



Note: *23MOV-14*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-232

Equipment ID No. *23P-150* Equip. Class[1] *05 – Horizontal Pump*

Equipment Description *HPCI Turbine Auxiliary Lube Oil Pump*

Location: Bldg. *RB* Floor El. *227.6* Room, Area *Col1 Line T*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is intact and free of any broken, bent or missing hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No cracks are visible in the concrete.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-232

Equipment ID No. *23P-150* Equip. Class *05 – Horizontal Pump*

Equipment Description *HPCI Turbine Auxiliary Lube Oil Pump*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The pump is supported with 4-1/2" CIP bolts to 23TU-2 skid. The anchorage configuration is consistent with SEWS for 23P-150 Rev , and DWG. No. 2.03-2 and DWG. NO. 2.03-2.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☒ U☐ N/A☐
   Two overhead P1001 unistruts supporting conduits, junction box and smoke detectors have unsupported span which exceeds the suggested span. The resolution to this potentially adverse seismic condition is tracked through CR-JAF-2012-07990*.*
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   Attached lines do have adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☒ U☐
    A potentially adverse seismic interaction effect may be present. Refer to Q. 8.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-232

Equipment ID No. *23P-150* Equip. Class *05 – Horizontal Pump*

Equipment Description *HPCI Turbine Auxiliary Lube Oil Pump*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/21/12*

Pouria Pourghobadi *9/21/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-232

Equipment ID No. *23P-150* Equip. Class *05 – Horizontal Pump*

Equipment Description *HPCI Turbine Auxiliary Lube Oil Pump*

Photographs

Note: 23P-150 pump and the motor

Note: *Anchorage bolts for 23P-150*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 1-232

Equipment ID No. *23P-150* Equip. Class *05 – Horizontal Pump*

Equipment Description *HPCI Turbine Auxiliary Lube Oil Pump*

Note: *Two P1001 unistruts supporting overhead conduits, junction box and smoke detector.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-234

Equipment ID No. *23P-1M* Equip. Class[1] *05 – Horizontal Pumps*

Equipment Description *HPCI Main Pump*

Location: Bldg. *RB* Floor El. *227.6* Room, Area *Col 1Line T*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is intact and free of any bent.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are minor surface hairline cracks visible near 3 of the anchorage bolts. These cracks are not identified as deficiency to the seismic adequacy of the anchorage.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-234

Equipment ID No. *23P-1M* Equip. Class *05 – Horizontal Pumps*

Equipment Description *HPCI Main Pump*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration was as indicated in DWG. No. FC-20D

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☒ U☐ N/A☐
   Two P1001unistrusts supporting the overhead conduits, junction box and smoke detector have an unsupported span which exceeds the suggested span. The resolution to this potentially adverse seismic condition is tracked through CR-JAF-2012-07990.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☒ U☐ N/A☐
   Two P1001unistrusts supporting the overhead conduits, junction box and smoke detector have an unsupported span which exceeds the suggested span. The resolution to this potentially adverse seismic condition is tracked through CR-JAF-2012-07990.

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☒ U☐
    A potentially adverse seismic condition may be present. Refer to Q.7 and Q.8.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-234

Equipment ID No. *23P-1M* Equip. Class *05 – Horizontal Pumps*

Equipment Description *HPCI Main Pump*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/21/12*

Pouria Pourghobadi *9/21/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-234

Equipment ID No. *23P-1M* Equip. Class *05 – Horizontal Pumps*

Equipment Description *HPCI Main Pump*

Photographs

Note: *23P-1M Pump*

Note: *Minor cracks on the concrete pedestal. They were determined not to pose any threat to seismic adequacy of the structure.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-243

Equipment ID No. *23TK-1* Equip. Class[1] 21 – Tank and Heat Exchangers

Equipment Description *HPCI Lube Oil Sump*

Location: Bldg. *RB* Floor El. *227.6* Room, Area *Column 1 Line T*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The anchorage is free of visible cracks in the concrete.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-243

Equipment ID No. *23TK-1* Equip. Class 21 – Tank and Heat Exchangers

Equipment Description *HPCI Lube Oil Sump*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free impact by nearby equipment or structures.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☒ U☐ N/A☐
   Potentially inadequately P1001 unistruts with unsupported span of ~21 feet above the valve. The resolution to this potentially adverse seismic condition is tracked through LB-01.

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☒ U☐
    A potentially adverse seismic interaction effect may exist. Refer to Q. 8.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-243

Equipment ID No. *23TK-1* Equip. Class 21 – Tank and Heat Exchangers

Equipment Description *HPCI Lube Oil Sump*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
    Review conduit unistrut support for deficiencies.

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/23/12*

Pouria Pourghobadi *9/23/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

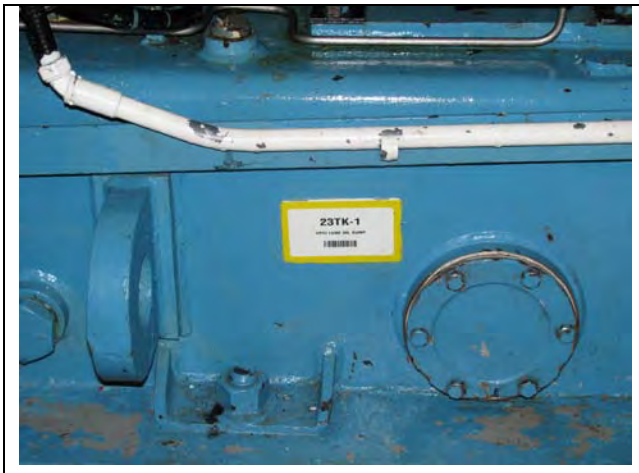
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-243

Equipment ID No. *23TK-1* Equip. Class 21 – Tank and Heat Exchangers

Equipment Description *HPCI Lube Oil Sump*

Photographs



Note: *23TK-1 HPCI Lube Oil Sump*

Note: *P1001 unistruts supporting the overhead conduits, can have a potential seismic interaction effect.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

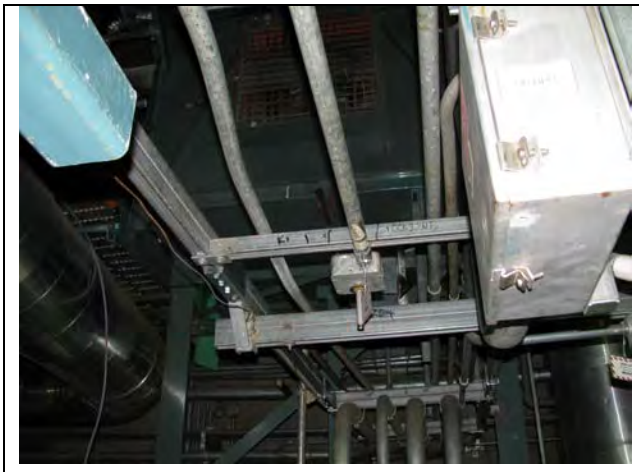
Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-243

Equipment ID No. *23TK-1* Equip. Class 21 – Tank and Heat Exchangers

Equipment Description *HPCI Lube Oil Sump*



Note: *Over head P1001 unistruts supporting conduits and junction box.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-314

Equipment ID No. *27SOV-131A* Equip. Class *Solenoid Operated Valves*

Equipment Description *CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ*

Location: Bldg. *SU* Floor El. *260* Room, Area *Col. 2 Line T*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is a valve Equalizer. No anchorage.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is a valve Equalizer. No anchorage.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is a valve Equalizer. No anchorage.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-314

Equipment ID No. *27SOV-131A* Equip. Class *Solenoid Operated Valves*

Equipment Description *CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ*

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

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-314

Equipment ID No. *27SOV-131A* Equip. Class *Solenoid Operated Valves*

Equipment Description *CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Rick Casella* Rick Casella Date: *10-8-12*

A G, Porch

Alan Porch *10-8-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

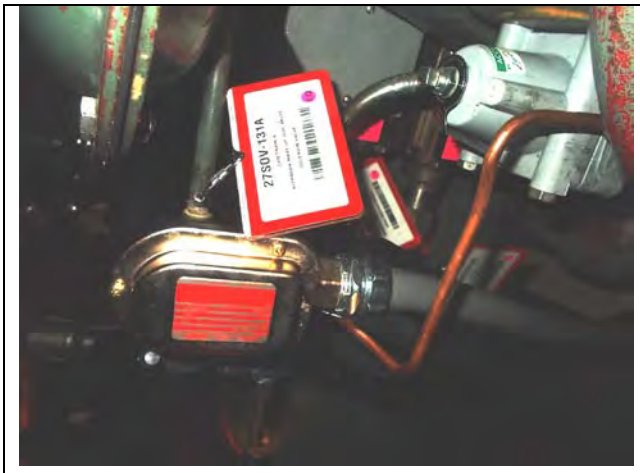
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-314

Equipment ID No. *27SOV-131A* Equip. Class *Solenoid Operated Valves*

Equipment Description *CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ*

Photographs



Note: *27SOV-131A*

Note: *27SOV-131A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-314

Equipment ID No. *27SOV-131A* Equip. Class *Solenoid Operated Valves*

Equipment Description *CAD TRAIN A NITROGEN MAKE-UP ISOL VALVE SOLENOID VALVE EQ*

Note: *27SOV-131A*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-319

Equipment ID No. *27SOV-145* Equip. Class[1] *08-Solenoid Operated Valves*

Equipment Description *DW Instr Nitrogen Backup Supply Isolation Valve*

Location: Bldg. *RB* Floor El. *296'* Room, Area *RB 296', Col. 3, Line RT*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The evaluated item in this SWC is not part of the 50% of the SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-319

Equipment ID No. *27SOV-145* Equip. Class *08-Solenoid Operated Valves*

Equipment Description *DW Instr Nitrogen Backup Supply Isolation Valve*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Inline SWEL item, which does not contain anchorage.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-319

Equipment ID No. *27SOV-145* Equip. Class *08-Solenoid Operated Valves*

Equipment Description *DW Instr Nitrogen Backup Supply Isolation Valve*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/26/2012*

Yaroslav Losev *09/26/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-319

Equipment ID No. *27SOV-145* Equip. Class *08-Solenoid Operated Valves*

Equipment Description *DW Instr Nitrogen Backup Supply Isolation Valve*

Photographs

Note: *Picture of equipment 27SOV-145.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-333

Equipment ID No. *27TK-7A* Equip. Class[1] *21 – Tanks and Heat Exchangers*

Equipment Description *CAD A Liquid Nitrogen Tank*

Location: Bldg. *CB* Floor El. *271.8* Room, Area *Col. 0.5, Line RP*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Minor Hairline cracks in the concrete under both tank saddles, which do not pass through the center line of the bolts.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-333

Equipment ID No. *27TK-7A* Equip. Class *21 – Tanks and Heat Exchangers*

Equipment Description *CAD A Liquid Nitrogen Tank*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent the SEWS for 27TK-7A (Rev. 0), DWG. No. 6.29-25 and DWG. No. 6.29-26.. The outer tank is welded to a pair of steel saddles; each saddle is anchored to a concrete pier with two 1 3/8" CIP bolts.

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipment or structures.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-333

Equipment ID No. *27TK-7A* Equip. Class *21 – Tanks and Heat Exchangers*

Equipment Description *CAD A Liquid Nitrogen Tank*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Both nitrogen tanks are missing equipment tags. The issue was discussed with operations and appropriate tags are on control panels associated with the tanks. No further action required.

Evaluated by: *Donald Koberg* Date: *9/26/12*

Yaroslav Losev *9/26/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-333

Equipment ID No. *27TK-7A* Equip. Class *21 – Tanks and Heat Exchangers*

Equipment Description *CAD A Liquid Nitrogen Tank*

Photographs

Note: *Nitrogen Tank 27TK-7A*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-335

Equipment ID No. *29AC-1A* Equip. Class[1] *21-Tanks and Heat Exchangers*

Equipment Description *MST D Outbd. MSIV Air Accumulator*

Location: Bldg. *ST* Floor El. *272'* Room, Area *ST 252', Col.6.5, Line T*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The item is not one of the 50% of SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The four (4), 1/2" expansion anchors are free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   It is unverifiable whether the concrete wall has cracks in it near the anchorage since it is covered by insulation. However, based on not insulated portion of the same wall in close proximity of this component, there are no cracks detected. Therefore, it is judged that no major cracks exist at the anchorage location of the component and that the concrete is acceptable near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-335

Equipment ID No. *29AC-1A* Equip. Class *21-Tanks and Heat Exchangers*

Equipment Description *MST D Outbd. MSIV Air Accumulator*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Item is not one of the 50% for which an anchorage configuration verification is required.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-335

Equipment ID No. *29AC-1A* Equip. Class *21-Tanks and Heat Exchangers*

Equipment Description *MST D Outbd. MSIV Air Accumulator*

Other Adverse Conditions

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

    There is a 1" copper line attached to the SWEL item that is less than 1/8" of clearance between a handrail and a P1000 UNISTRUT. However, this could be considered beneficial, since at the points for which the copper line may come into contact with the handrails during a seismic event, the handrails will provide support in one direction which will restrict the deflection of the copper line and reduce stress on supports on the same line.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *10/01/2012*

Yaroslav Losev *10/01/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-335

Equipment ID No. *29AC-1A* Equip. Class *21-Tanks and Heat Exchangers*

Equipment Description *MST D Outbd. MSIV Air Accumulator*

Photographs

Note: *Picture of equipment 29AC-1A.*

Note: *Picture of the copper line bearing close to the handrails.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-336

Equipment ID No. *29AC-1B* Equip. Class *Tanks and heat exchangers*

Equipment Description *MST "A" Inbd N2/ Air accumulator*

Location: Bldg. *PC* Floor El. *269* Room, Area *Drywell, North Side Col. 5.5*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Welded anchorage
   Discontinuous weld on liner side, lower plate. Not an adverse seismic condition.
   Discontinuous weld on RPV side, upper plate. Not an adverse seismic condition.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   SWEL item is welded to a steel column, no visible concrete cracking near anchorage.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-336

Equipment ID No. *29AC-1B* Equip. Class *Tanks and heat exchangers*

Equipment Description *MST "A" Inbd N2/ Air accumulator*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   Refer to SEWS 29AC-1B and 29AC-1A.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   There is sufficient weld available to ensure no adverse seismic conditions exist.

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-336

Equipment ID No. *29AC-1B* Equip. Class *Tanks and heat exchangers*

Equipment Description *MST "A" Inbd N2/ Air accumulator*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G, Porch

Alan Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-336

Equipment ID No. *29AC-1B* Equip. Class *Tanks and heat exchangers*

Equipment Description *MST "A" Inbd N2/ Air accumulator*

Photographs

Note: *29AC-1B (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

Note: *29AC-1B view of welded anchorage (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-336

Equipment ID No. *29AC-1B* Equip. Class *Tanks and heat exchangers*

Equipment Description *MST "A" Inbd N2/ Air accumulator*

Note: *29AC-1B showing discontinuous weld pattern (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-343

Equipment ID No. *29AOV-80A* Equip. Class *Pneumatic-operated valves*

Equipment Description *MST A Inbd Main Steam Isol Valve*

Location: Bldg. *PC* Floor El. *269* Room, Area *Drywell, North Side Col 5.5*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-343

Equipment ID No. *29AOV-80A* Equip. Class *Pneumatic-operated valves*

Equipment Description *MST A Inbd Main Steam Isol Valve*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   1 ½" conduit is flexible. There is approximately a 1-1/2" clearance with 3/8" SS tubing to SOV on actuator..

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

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

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Yes. In a seismic event, the flexible 1-1/2" conduit noted in Item 7 will not result in adverse seismic interaction with the 3/8" tubing to the SOV.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-343

Equipment ID No. *29AOV-80A* Equip. Class *Pneumatic-operated valves*

Equipment Description *MST A Inbd Main Steam Isol Valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G. Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-343

Equipment ID No. *29AOV-80A* Equip. Class *Pneumatic-operated valves*

Equipment Description *MST A Inbd Main Steam Isol Valve*

Photographs

Note: *29AOV-80A Actuator*

Note: *29AOV-80A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-343

Equipment ID No. *29AOV-80A* Equip. Class *Pneumatic-operated valves*

Equipment Description *MST A Inbd Main Steam Isol Valve*

Note: *29AOV-80A*

Note: *Conduit with 1 ½" clearance from 3/8" tubing*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-347

Equipment ID No. *29AOV-86A* Equip. Class[1] *07-Fluid Operated Valves*

Equipment Description *MST A Outbd Main Steam Isol Valve*

Location: Bldg. *ST* Floor El. *252'* Room, Area *ST 252', Col. 5.5, Line T*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The evaluated item in this SWC is not part of the 50% of the SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-347

Equipment ID No. *29AOV-86A* Equip. Class *07-Fluid Operated Valves*

Equipment Description *MST A Outbd Main Steam Isol Valv*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Inline SWEL item, which does not contain anchorage.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Inline SWEL item, which does not contain anchorage.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.

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

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-347

Equipment ID No. *29AOV-86A* Equip. Class *07-Fluid Operated Valves*

Equipment Description *MST A Outbd Main Steam Isol Valv*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *10/01/2012*

Yaroslav Losev *10/01/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-347

Equipment ID No. *29AOV-86A* Equip. Class *07-Fluid Operated Valves*

Equipment Description *MST A Outbd Main Steam Isol Valv*

Photographs

Note: *Picture of equipment 29AOV-86A.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-360

Equipment ID No. *46MOV-101A* Equip. Class[1] 8 – *Motor-Operated Valves*

Equipment Description *Emergency Service Water Loop A Supply Header Isolation Valve*

Location: Bldg. *SP* Floor El. *255* Room, Area *C: 26.5, L: A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-360

Equipment ID No. *46MOV-101A* Equip. Class 8 – *Motor-Operated Valves*

Equipment Description *Emergency Service Water Loop A Supply Header Isolation Valve*

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

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   The item is an in-line valve.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipment or structures.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-360

Equipment ID No. *46MOV-101A* Equip. Class 8 – *Motor-Operated Valves*

Equipment Description *Emergency Service Water Loop A Supply Header Isolation Valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Harpreet Ghuman* Date: *9/21/12*

Yaroslav Losev *9/21/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-360

Equipment ID No. *46MOV-101A* Equip. Class 8 – *Motor-Operated Valves*

Equipment Description *Emergency Service Water Loop A Supply Header Isolation Valve*

Photographs

Note: *46MOV-101A*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-364

Equipment ID No. *46P-2A* Equip. Class[1] *06-Vertical Pump*

Equipment Description *Emergency Service Water Pump A*

Location: Bldg. *SP* Floor El. *255'* Room, Area *Pump Room Train A, Col. 26, Row B*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The four (4) 1" CIP headed bolts are free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are no visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-364

Equipment ID No. *46P-2A* Equip. Class *06-Vertical Pump*

Equipment Description *Emergency Service Water Pump A*

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

   The anchorage configuration for the 1" CIP headed bolts is consistent with the SEWS documentation for equipment 10P-1A (which is nearly identical to equipment 46P-2A), Rev 0, and Vensor DWG.71452-D

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

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

Interaction Effects

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

   There are no soft targets on the equipment.

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

   A 3" diameter conduit supported by the tray is found to be improperly secured in Service Water Pump Room A. Portion of the conduit is secured by a single plastic zip tie on the side of a rod hanger which provides support for the 1TH604R Tray. Based on engineering judgment, the overhead conduit will not damage the equipment during a seismic event. The resolution to this deficiency is tracked through CR-JAF-2012-06191

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

   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-364

Equipment ID No. *46P-2A* Equip. Class *06-Vertical Pump*

Equipment Description *Emergency Service Water Pump A*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Losev *09/21/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-364

Equipment ID No. *46P-2A* Equip. Class *06-Vertical Pump*

Equipment Description *Emergency Service Water Pump A*

Photographs

Note: *Picture of equipment 46P-2A.*

Note: *Picture of the conduit spanning over the top of equipment 46P-2A.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-366

Equipment ID No. *46STR-5A1* Equip. Class[1] *00-Other*

Equipment Description *Emergency Service Water Pump A Discharge South Basket Strainer*

Location: Bldg. *SP* Floor El. *255'* Room, Area *Pump Room Train A, Col. 26, Row B*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The item is not one of the 50% of SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The one (1) anchor bolt is free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are no visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-366

Equipment ID No. *46STR-5A1* Equip. Class *00-Other*

Equipment Description *Emergency Service Water Pump A Discharge South Basket Strainer*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Item is not one of the 50% for which an anchorage configuration verification is required.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   There is a masonry block wall near the equipment; however, the wall was evaluated under IPEEE effort to reinforce the block walls.
   (Ref Section 3.1.4.6, page 3-57 JAF-RPT-MISC-02211)
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-366

Equipment ID No. *46STR-5A1* Equip. Class *00-Other*

Equipment Description *Emergency Service Water Pump A Discharge South Basket Strainer*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Losev *09/21/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-366

Equipment ID No. *46STR-5A1* Equip. Class *00-Other*

Equipment Description *Emergency Service Water Pump A Discharge South Basket Strainer*

Photographs

Note: *Picture of equipment 46STR-5A1.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-367

Equipment ID No. *46STR-5A2* Equip. Class[1] *00-Other*

Equipment Description *Emergency Service Water Pump A Discharge North Basket Strainer*

Location: Bldg. *SP* Floor El. *255'* Room, Area *Pump Room Train A, Col. 26, Row B*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The item is not one of the 50% of SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The one (1) anchor bolt is free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are no visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-367

Equipment ID No. *46STR-5A2* Equip. Class *00-Other*

Equipment Description *Emergency Service Water Pump A Discharge North Basket Strainer*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Item is not one of the 50% for which an anchorage configuration verification is required.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   There is a masonry block wall near the equipment; however, the wall was evaluated under IPEEE effort to reinforce the block walls.
   (Ref Section 3.1.4.6, page 3-57 JAF-RPT-MISC-02211)
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-367

Equipment ID No. *46STR-5A2* Equip. Class *00-Other*

Equipment Description *Emergency Service Water Pump A Discharge North Basket Strainer*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Losev *09/21/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-367

Equipment ID No. *46STR-5A2* Equip. Class *00-Other*

Equipment Description *Emergency Service Water Pump A Discharge North Basket Strainer*

Photographs

Note: *Picture of equipment 46STR-5A2.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-371

Equipment ID No. *66TCV-107E* Equip. Class[1] 7 – Pnuematic-Operated Valves

Equipment Description *West Crescent Area UC-22E SWS Inlet Temperature Control Valve*

Location: Bldg. *RB* Floor El. *242* Room, Area *Col 3*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-371

Equipment ID No. *66TCV-107E* Equip. Class 7 – Pnuematic-Operated Valves

Equipment Description *West Crescent Area UC-22E SWS Inlet Temperature Control Valve*

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

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-371

Equipment ID No. *66TCV-107E* Equip. Class 7 – Pnuematic-Operated Valves

Equipment Description *West Crescent Area UC-22E SWS Inlet Temperature Control Valve*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/24/12*

Pouria Pourghobadi *9/24/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-371

Equipment ID No. *66TCV-107E* Equip. Class 7 – Pnuematic-Operated Valves

Equipment Description *West Crescent Area UC-22E SWS Inlet Temperature Control Valve*

Photographs

Note: *66TCV-107E*

Note: *66TCV-107E*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-372

Equipment ID No. *66UC-22A* Equip. Class[1] 10 – Air Handlers

Equipment Description *West Crescent Area Unit Cooler 22A*

Location: Bldg. *RB* Floor El. *242* Room, Area *Col 1, Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-372

Equipment ID No. *66UC-22A* Equip. Class 10 – Air Handlers

Equipment Description *West Crescent Area Unit Cooler 22A*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with DWG. No. 10.00-113.

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

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Scaffolding in the area is determined to be adequate however it has reached the 90 day review period. Not an adverse seismic condition. Site personnel were notified and the scaffolding is to be evaluated for long term erection in accordance with EN-MA-133.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-372

Equipment ID No. *66UC-22A* Equip. Class 10 – Air Handlers

Equipment Description *West Crescent Area Unit Cooler 22A*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/24/12*

Pouria Pourghobadi *9/24/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-372

Equipment ID No. *66UC-22A* Equip. Class 10 – Air Handlers

Equipment Description *West Crescent Area Unit Cooler 22A*

Photographs

Note: *66UC-22A*

Note: *66UC-22A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-373

Equipment ID No. *66UC-22B* Equip. Class[1] 10 – Air Handlers

Equipment Description *East Crescent Area Unit Cooler 22B*

Location: Bldg. *RB* Floor El. *242* Room, Area *Col 4 Line D*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Mild surface corrosion around the anchorage, but not an adverse seismic condition.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The cooler is mounted on I-beam supports.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-373

Equipment ID No. *66UC-22B* Equip. Class 10 – Air Handlers

Equipment Description *East Crescent Area Unit Cooler 22B*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with SEWS for 66UNC-22B, which is identical 66UNC-22A and DGW. No. 10.00-113.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-373

Equipment ID No. *66UC-22B* Equip. Class 10 – Air Handlers

Equipment Description *East Crescent Area Unit Cooler 22B*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/23/12*

Pouria Pourghobadi *9/23/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-373

Equipment ID No. *66UC-22B* Equip. Class 10 – Air Handlers

Equipment Description *East Crescent Area Unit Cooler 22B*

Photographs

Note: *mild surface corrosion on connection.*

Note: *66UNC-22B*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-373

Equipment ID No. *66UC-22B* Equip. Class 10 – Air Handlers

Equipment Description *East Crescent Area Unit Cooler 22B*

Note: *66UNC-22B connection to I-beam flange.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-406

Equipment ID No. *70FN-4A* Equip. Class[1] *9 – Fans*

Equipment Description *Control Room Ventilation Exhaust Fan A*

Location: Bldg. *AD* Floor El. *300* Room, Area *Col. 9.5, Line V*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The fan is mounted on a skid that is welded to the building steel. No cracks are visible on the walls which the beams are bolted to.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-406

Equipment ID No. *70FN-4A* Equip. Class *9 – Fans*

Equipment Description *Control Room Ventilation Exhaust Fan A*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with the SEWS for 70FN-4A (Rev. 0) and drawing SFSK-41. The fan is supported from a substantial welded steel frame which is welded to building steel.

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipment and structures.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-406

Equipment ID No. *70FN-4A* Equip. Class *9 – Fans*

Equipment Description *Control Room Ventilation Exhaust Fan A*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/24/12*

Pouria Pourghobadi *9/24/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-406

Equipment ID No. *70FN-4A* Equip. Class *9 – Fans*

Equipment Description *Control Room Ventilation Exhaust Fan A*

Photographs

Note: *Fan 70FN-4A*

Note: *Fan 70FN-4A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-426

Equipment ID No. *70RWC-2A(CND)* Equip. Class[1] *11 - Chillers*

Equipment Description *Control Room Chiller A Condenser*

Location: Bldg. *AD* Floor El. *300* Room, Area *Col. 10.5 Line S*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-426

Equipment ID No. *70RWC-2A(CND)* Equip. Class *11 - Chillers*

Equipment Description *Control Room Chiller A Condenser*

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

   The anchorage and base plate is consistent with DWG. No SK-051351-C-023 SH 1 (Calculation JAF-CALC-09-00004) and DWG. No. FC-32C. Refer to "Comments" section of this document for details.

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

Interaction Effects

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

   The soft targets are free from impact by nearby equipment or structures.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-426

Equipment ID No. *70RWC-2A(CND)* Equip. Class *11 - Chillers*

Equipment Description *Control Room Chiller A Condenser*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

At the front support of the condenser, Four 5/8" DIA HKB-3 X 10" Long anchors are used to install the 1" THK base plate and the ¾" THK mounting plates. The 5/8' vendor provided plate is welded on top of the mounting plates, making this connection rigid.

At the back support, a sole plate ¾" X 2' X 6' A36, is installed on top of the existing concrete pedestal. Eight 5/8" DIA. HKB-3 X 10" Long anchors are used to install the sole plate. 5/8" THK supplied by vendor is welded on top of the sole plate.

Evaluated by: *Donald Koberg* Donald Koberg Date: *9/25/12*

Pouria Pourghobadi P Pourghobadi *9/25/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-426

Equipment ID No. *70RWC-2A(CND)* Equip. Class *11 - Chillers*

Equipment Description *Control Room Chiller A Condenser*

Photographs

Note: *70RWC-2A(CND) Condenser*

Note: *70RWC-2A (CND) Chiller and Condenser.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-426

Equipment ID No. *70RWC-2A(CND)* Equip. Class *11 - Chillers*

Equipment Description *Control Room Chiller A Condenser*

Note: *front base plate of 70RWC-2A (CND) Chiller Condenser.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 430

Equipment ID No. *71-10502* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10500)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 24 line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

   From north end of panel on side, hairline cracks (< 1/16” wide) at 2”, 6”, 14”, 18.5”, 22.5”. Cracks are likely a second pour (concrete or grout) in cavity that was excavated for embedded anchorage.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 430

Equipment ID No. *71-10502* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10500)*

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

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

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   See area walkby for discussion of lighting. Adverse seismic affect is not credible.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 430

Equipment ID No. *71-10502* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10500)*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *R Casella* Rich Casella Date: *10-31-12*

A Porch A G. Porch *10-31-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

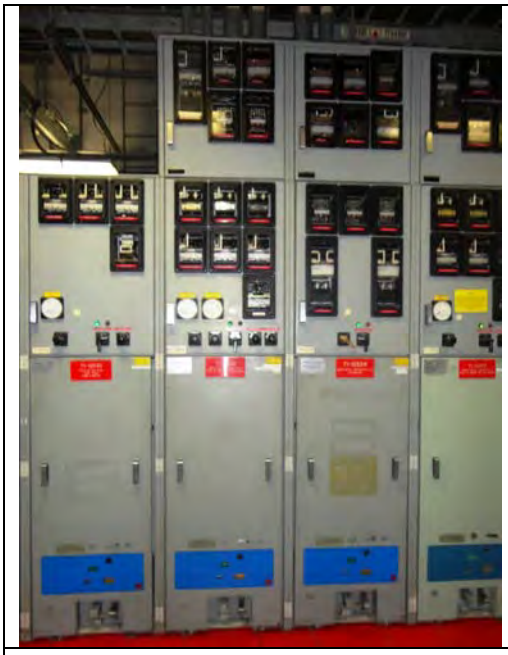
Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 430

Equipment ID No. *71-10502* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10500)*

Photographs



Note: *71-10502*

Note: *Conduit, duct, and cable trays above 71-10502*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

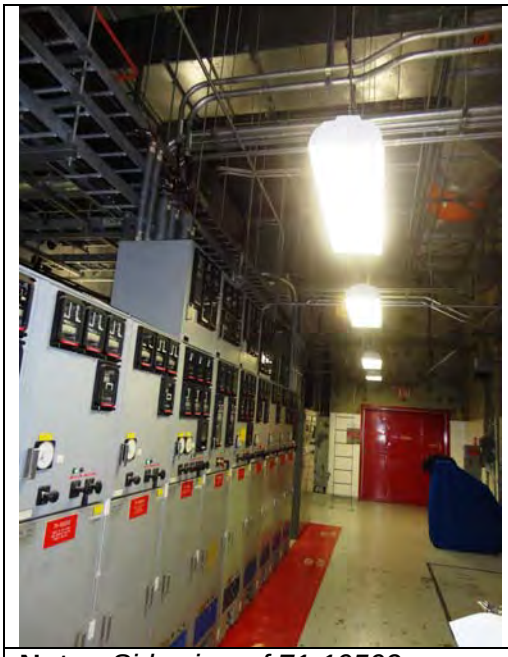
Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 430

Equipment ID No. *71-10502* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10500)*



Note: *Side view of 71-10502*

Note: *Cracks in grout at rear of 71-10502*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 433

Equipment ID No. *71-10560* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10500)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 26 line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

   Rear side has hairline cracks at 2”, 9”, 13.5”. 20”, and 26” from north end. All cracks are less than 1/16” wide. The largest crack is at 20”. The cracks are likely through a second pour in a cavity that was excavated for embedded anchorage.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 433

Equipment ID No. *71-10560* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10500)*

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

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

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Fluorescent light at rear of unit could potentially come unhooked at one end. However, to impact 71-10560, significant out-of-plane pendulum motion would have to occur. This is not a credible scenario. Therefore, no adverse seismic interaction effect.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 433

Equipment ID No. *71-10560* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10500)*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *R Casella* Rick Casella Date: *10-31-12*

A Porch A G. Porch *10-31-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 433

Equipment ID No. *71-10560* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10500)*

Photographs

Note: *71-10560*

Note: *Conduits, ducts, and cable trays above 71-10560*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 433

Equipment ID No. *71-10560* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10500)*

Note: *Crack in grouting at rear of 71-10560*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 434

Equipment ID No. *71-10602* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 26 line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion evident.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No cracks are visible.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 434

Equipment ID No. *71-10602* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with SEWS for 71-10602, and vendor DWG. No. 0673D0516.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The equipment is free from impact by nearby equipment.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Fluorescent light at rear of unit could potentially come unhooked at one end allowing it to swing into the panel near its top (Out of plane motion). Based on a low g level and low mass of a aluminum light frame, impact loading would not cause adverse seismic condition at the panel. Also to impact 71-10602, significant out-of-plane pendulum motion would have to occur. This is not a credible scenario. Therefore, No credible seismic interaction.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The attached lines have adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 434

Equipment ID No. *71-10602* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *09-27-12*

Donald Kolberg *09-27-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 434

Equipment ID No. *71-10602* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

Photographs

Note: *71-10602 anchorage configuration.*

Note: *71-10602 plug welds*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 434

Equipment ID No. *71-10602* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

Note: *71-10602*

Note: *71-10602*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 436

Equipment ID No. *71-10614* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 26 line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion evident.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No cracks are visible.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 436

Equipment ID No. *71-10614* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

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

   The anchorage configuration is consistent with SEWS for 71-10614 and vendor DWG. No.0673D0517.

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

Interaction Effects

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

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

   Fluorescent light at rear of unit could potentially come unhooked at one end allowing it to swing into the panel near its top (out of plane motion). Based on a low g level and low mass of a aluminum light frame, impact loading would not cause adverse seismic condition at the panel. Also to impact 71-10614, significant out-of-plane pendulum motion would have to occur. This is not a credible scenario.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 436

Equipment ID No. *71-10614* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *09-27-12*

Donald Kolberg *09-27-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 436

Equipment ID No. *71-10614* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

Photographs

Note: *71-10614 anchorage configuration.*

Note: *71-10614 plug welds*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 437

Equipment ID No. *71-10660* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 26 line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion evident.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No cracks are visible.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 437

Equipment ID No. *71-10660* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

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

   The anchorage configuration is consistent with SEWS for 71-10660 and vendor DGW. No. 0673D0518

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

Interaction Effects

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

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

   Fluorescent light at rear of unit could potentially come unhooked at one end allowing it to swing into the panel near its top (out of plane motion). Based on a low g level and low mass of a aluminum light frame, impact loading would not cause adverse seismic condition at the panel. Also to impact 71-10660, significant out-of-plane pendulum motion would have to occur. This is not a credible scenario.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 437

Equipment ID No. *71-10660* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *09-27-12*

Donald Kolberg *09-27-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 437

Equipment ID No. *71-10660* Equip. Class Medium Voltage, Metal-clad Switchgear

Equipment Description *4160V Switchgear Distribution (Bus 10600)*

Photographs

Note: *71-10660*

Note: *71-10660 plug welds*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 438

Equipment ID No. *71-11502* Equip. Class[1] 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 11500) BKR 02*

Location: Bldg. *RB* Floor El. *300* Room, Area *Col 2 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 438

Equipment ID No. *71-11502* Equip. Class 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 11500) BKR 02*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No soft targets.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 438

Equipment ID No. *71-11502* Equip. Class 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 11500) BKR 02*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *A. Porch* Date: *10/31/2012*

C. Swatzke *10/31/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 438

Equipment ID No. *71-11502* Equip. Class 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 11500) BKR 02*

Photographs

Note: *71-11502*

Note: *71-11502*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 438

Equipment ID No. *71-11502* Equip. Class 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 11500) BKR 02*

Note: *71-11502*

Note: *Hairline crack near 71-11502*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 439

Equipment ID No. *71-11602* Equip. Class[1] 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 11600) BKR 02*

Location: Bldg. *RB* Floor El. *300* Room, Area *Col 6 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 439

Equipment ID No. *71-11602* Equip. Class 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 11600) BKR 02*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No soft targets.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 439

Equipment ID No. *71-11602* Equip. Class 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 11600) BKR 02*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Communication cable above and north of unit is lightweight and well supported.

Evaluated by: *A. G. Porch* Date: *10/31/2012*

C. Sawatzke *10/31/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 439

Equipment ID No. *71-11602* Equip. Class 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 11600) BKR 02*

Photographs

Note: *71-11602*

Note: *71-11602*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

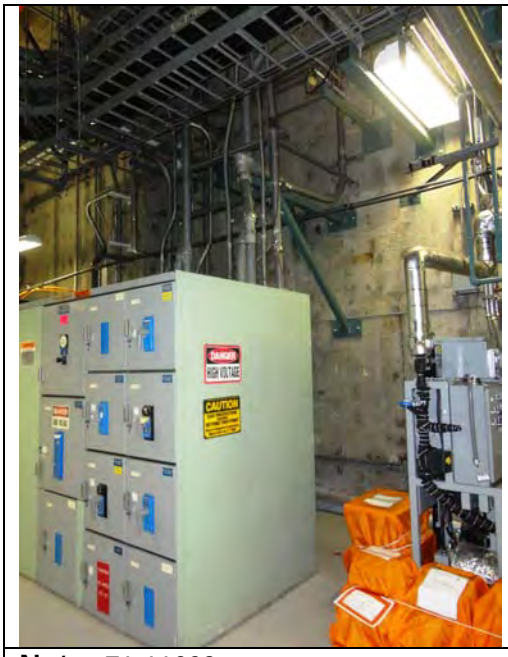
Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 439

Equipment ID No. *71-11602* Equip. Class 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 11600) BKR 02*



Note: *71-11602*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-444

Equipment ID No. *71ACB4* Equip. Class[1] *14 – Distribution Panels*

Equipment Description *EDG Building Emergency Power Distribution Panel*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col. 26, Line A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-444

Equipment ID No. *71ACB4* Equip. Class *14 – Distribution Panels*

Equipment Description *EDG Building Emergency Power Distribution Panel*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with SEWS for 71ACB4 (Rev. 0). The Distribution panel is 14" wide x 33" high x 5" deep and is bolted by 4 ½"bolts to a pair of unistruts.

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipment and structure.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-444

Equipment ID No. *71ACB4* Equip. Class *14 – Distribution Panels*

Equipment Description *EDG Building Emergency Power Distribution Panel*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Tool cart with no locked wheels or any chain is present near the panel. It was judged not to be a credible seismic condition considering the height of the cart and the elevation of the component. Site personnel were notified immediately.

Evaluated by: *Donald Koberg* Date: *9/27/12*

Pouria Pourghobadi *9/27/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-444

Equipment ID No. *71ACB4* Equip. Class *14 – Distribution Panels*

Equipment Description *EDG Building Emergency Power Distribution Panel*

Photographs

Note: *71ACB4 Distribution Panel*

Note: *Room View.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-444

Equipment ID No. *71ACB4* Equip. Class *14 – Distribution Panels*

Equipment Description *EDG Building Emergency Power Distribution Panel*

Note: *Cart with unlocked wheels and no other attachments. 71ACB4 is in the background.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-445

Equipment ID No. *71ACUPS* Equip. Class[1] *14 – Distribution Panels*

Equipment Description *Relay Room Uninterruptable Bus Distribution Panel*

Location: Bldg. *RR* Floor El. *284.8* Room, Area *Col. 11, Line F*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The component is mounted on unistruts which are welded to the steel column I-beam.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-445

Equipment ID No. *71ACUPS* Equip. Class *14 – Distribution Panels*

Equipment Description *Relay Room Uninterruptable Bus Distribution Panel*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with the SEWS for 71ACUPS (Rev. 0). The panel is bolted to a pair of Unistruts which are welded to building steel.

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipment or structure.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-445

Equipment ID No. *71ACUPS* Equip. Class *14 – Distribution Panels*

Equipment Description *Relay Room Uninterruptable Bus Distribution Panel*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/24/12*

Pouria Pourghobadi *9/24/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-445

Equipment ID No. *71ACUPS* Equip. Class *14 – Distribution Panels*

Equipment Description *Relay Room Uninterruptable Bus Distribution Panel*

Photographs

Note: *71ACUPS Panel*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-446

Equipment ID No. *71BAT-3A* Equip. Class[1] *16-Battery Chargers and Inverters.*

Equipment Description *LPCI Inverter Battery*

Location: Bldg. *RB* Floor El. *344.6'* Room, Area *LPCI Battery Room, Col.5.5, Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☒ N/A☐
   The 1/2" expansion anchors are free of bent, broken, missing or loose hardware.
   Panels need to be removed and anchorage of internal components needs to be checked.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are hair line cracks in the concrete which are insignificant to the strength of the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-446

Equipment ID No. *71BAT-3A* Equip. Class *16-Battery Chargers and Inverters.*

Equipment Description *LPCI Inverter Battery*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The 1/2" expansion anchors are configured in accordance with the SEWS document for equipment 71BAT-3A, Rev. 0.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☒
   Inverters panels need to be removed and anchorage of internal components needs to be checked.

Interaction Effects

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-446

Equipment ID No. *71BAT-3A* Equip. Class *16-Battery Chargers and Inverters.*

Equipment Description *LPCI Inverter Battery*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

There is no equipment tag on any of the walls in the room or on the equipment itself. The need to add equipment tag to identify the battery racks was brought to site personnel's attention. Site personnel were notified and the matter was discussed with Operations and it was indicated that appropriate tags are located on control panels out site of the room. No further action required.

Evaluated by: *Harpreet Ghuman* Date: *09/30/2012*

Yaroslav Losev *09/30/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-446

Equipment ID No. *71BAT-3A* Equip. Class *16-Battery Chargers and Inverters.*

Equipment Description *LPCI Inverter Battery*

Photographs

Note: *Picture of equipment 71BAT-3A.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 448

Equipment ID No. *71BC-1A* Equip. Class *16 - Battery Chargers and Inverters*

Equipment Description *125VDC Station Battery Charger*

Location: Bldg. *BR* Floor El. *272* Room, Area *12.5 E*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☒ N/A☐
   The external bolting of cabinet contains all necessary hardware
   The panels need to be opened and anchorage of internal components needs to be checked.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The bolting shows signs of oxidation. However, the oxidation is mild and not a structural concern

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Cracking in grout around bolts. However, based on review of SEWs the bolts are connected to a steel plate which cannot be visually verified. Conclusion – Grout cracking has no impact on seismic capacity of anchorage.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 448

Equipment ID No. *71BC-1A* Equip. Class *16 - Battery Chargers and Inverters*

Equipment Description *125VDC Station Battery Charger*

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

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☒
   The panels need to be opened and anchorage of internal components needs to be checked.

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 448

Equipment ID No. *71BC-1A* Equip. Class *16 - Battery Chargers and Inverters*

Equipment Description *125VDC Station Battery Charger*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

The panels for this item need to be opened and internal anchorage of the components need to be checked.

Evaluated by: *Rick Casella* Rick Casella Date: *10/30/12*

A G, Porch

Al Porch *10/30/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 448

Equipment ID No. *71BC-1A* Equip. Class *16 - Battery Chargers and Inverters*

Equipment Description *125VDC Station Battery Charger*

Photographs

Note: *71BC-1A*

Note: *71BC-1A anchorage*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 448

Equipment ID No. *71BC-1A* Equip. Class *16 - Battery Chargers and Inverters*

Equipment Description *125VDC Station Battery Charger*

Note: *71BC-1A anchorage showing grout cracking*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 450

Equipment ID No. *71BCB-2A* Equip. Class *14 - Distrubution Panels and Auomatic Transfer Switches*

Equipment Description *Battery A Control Board*

Location: Bldg. *BR* Floor El. *272* Room, Area *13 C*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☒ N/A☐
   The anchorage contains all necessary hardware
   Panels need to be removed and anchorage of internal components needs to be checked.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Mild surface oxidation and mild paint chipping was observed - no structural concern

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No cracking in the concrete near the anchorage exists

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 450

Equipment ID No. *71BCB-2A* Equip. Class *14 - Distrubution Panels and Auomatic Transfer Switches*

Equipment Description *Battery A Control Board*

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.)
   (Ref. DSK-71U, associated SEWS sheet)
   Y☒ N☐ U☐ N/A☐

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?
   Panels need to be removed and anchorage of internal components needs to be checked.
   Y☐ N☐ U☒

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 450

Equipment ID No. *71BCB-2A* Equip. Class *14 - Distrubution Panels and Auomatic Transfer Switches*

Equipment Description *Battery A Control Board*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Rick Casella* Rick Casella Date: *10/30/12*

A G, Porch

Al Porch *10/30/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 450

Equipment ID No. *71BCB-2A* Equip. Class *14 - Distrubution Panels and Auomatic Transfer Switches*

Equipment Description *Battery A Control Board*

Photographs

Note: *71BCB-2A*

Note: *71BCB-2A (note support added at top of unit based on SEWS A-46 evaluation)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 450

Equipment ID No. *71BCB-2A* Equip. Class *14 - Distrubution Panels and Auomatic Transfer Switches*

Equipment Description *Battery A Control Board*

Note: *71BCB-2A anchorage (note panel bolted to channel)*

Note: *71BCB-2A (note intermittent fillet welds connecting channel to steel)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-452

Equipment ID No. *71BMCC-1* Equip. Class[1] *1- Motor Control Center*

Equipment Description *Reactor building West Crescent Motor Control Center*

Location: Bldg. *RB* Floor El. *242'* Room, Area *Col / Line 1R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   No bent, broken, loose or missing hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Mild surface rust on painted anchorage brackets

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   No concrete in area

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-452

Equipment ID No. *71BMCC-1* Equip. Class *1- Motor Control Center*

Equipment Description *Reactor building West Crescent Motor Control Center*

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

   The anchorage configuration matches the descriptions on SEWS for 71BMCC-1

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

Interaction Effects

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

   The equipment is free of soft targets. The only external devices to the panel doors are robust switches.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-452

Equipment ID No. *71BMCC-1* Equip. Class *1- Motor Control Center*

Equipment Description *Reactor building West Crescent Motor Control Center*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Portable HEPA unit adequately secured to rigid handrails. No credible seismic interaction.

Evaluated by: *Rick Casella* Rick Casella Date: *11/01/2012*

Robert S. Kester *11/01/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-452

Equipment ID No. *71BMCC-1* Equip. Class *1- Motor Control Center*

Equipment Description *Reactor building West Crescent Motor Control Center*

Photographs

Note: *71BMCC-1 Front View*

Note: *71BMCC-1 Anchorage*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-452

Equipment ID No. *71BMCC-1* Equip. Class *1- Motor Control Center*

Equipment Description *Reactor building West Crescent Motor Control Center*

Note: *71BMCC-1 From Above.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-456

Equipment ID No. *71BMCC-6* Equip. Class[1] *1- Motor Control Center*

Equipment Description *Reactor building Motor Control Center*

Location: Bldg. *RB* Floor El. *272'* Room, Area *Col 8, Line Y*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-456

Equipment ID No. *71BMCC-6* Equip. Class *1- Motor Control Center*

Equipment Description *Reactor building Motor Control Center*

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

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-456

Equipment ID No. *71BMCC-6* Equip. Class *1- Motor Control Center*

Equipment Description *Reactor building Motor Control Center*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *A.G. Porch* Date: *10/31/2012*

C. Sawatzke *10/31/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-456

Equipment ID No. *71BMCC-6* Equip. Class *1- Motor Control Center*

Equipment Description *Reactor building Motor Control Center*

Photographs

Note: *71BMCC-6 Front View*

Note: *71BMCC-6 Attached Lines*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-456

Equipment ID No. *71BMCC-6* Equip. Class *1- Motor Control Center*

Equipment Description *Reactor building Motor Control Center*

Note: *71BMCC-6 Side View*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-457

Equipment ID No. *71DC-A2* Equip. Class[1] *14 – Distribution Panels*

Equipment Description *Relay Room Distribution Cabinet*

Location: Bldg. *RR* Floor El. *284.8* Room, Area *Col. 10, Line F*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☒ U☐ N/A☐
   The bottom right hand corner Unistrut Channel nut has failed. The resolution to this deficiency is to be tracked by CR-JAF-2012-07954

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-457

Equipment ID No. *71DC-A2* Equip. Class *14 – Distribution Panels*

Equipment Description *Relay Room Distribution Cabinet*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with the SEWS for 71DC-A2 (Rev. 0). The panel is anchored with four 3/8" bolts to a pair of unistrut channels, which are welded to a steel building column.

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipments and structures.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-457

Equipment ID No. *71DC-A2* Equip. Class *14 – Distribution Panels*

Equipment Description *Relay Room Distribution Cabinet*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/24/12*

Pouria Pourghobadi *9/24/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-457

Equipment ID No. *71DC-A2* Equip. Class *14 – Distribution Panels*

Equipment Description *Relay Room Distribution Cabinet*

Photographs

Note: *71DC-A2 Cabinet*

Note: *Failed Unistrut Channel Nut, Refer to question 2.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 462

Equipment ID No. *71DSC-11561* Equip. Class[1] *3 Medium Voltage, Metal clad Switchgear*

Equipment Description *L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW*

Location: Bldg. *RB* Floor El. *300* Room, Area *Col 2 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☒ N/A☐
   The anchorage is not visible for anchorage.

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 462

Equipment ID No. *71DSC-11561* Equip. Class *3 Medium Voltage, Metal clad Switchgear*

Equipment Description *L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No soft targets.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   8' lighting fixture would not likely to hit SWEL Item. If chain (1 of 2) break, SWEL is secured- no seismic concern.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 462

Equipment ID No. *71DSC-11561* Equip. Class *3 Medium Voltage, Metal clad Switchgear*

Equipment Description *L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *A. G, Porch* Date: *11/01/2012*

C. Sawatzke *11/01/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

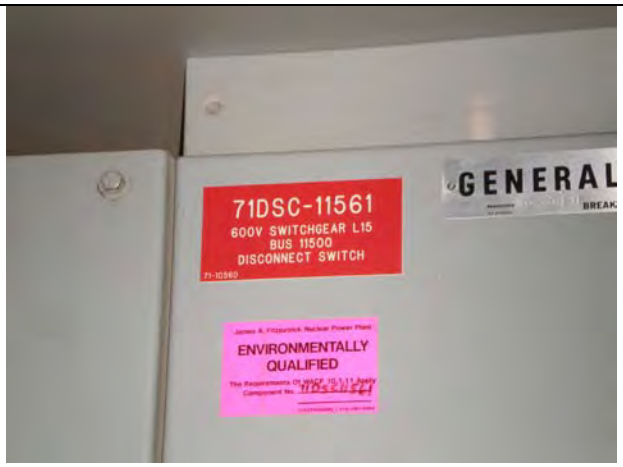
Seismic Walkdown Checklist (SWC) SWEL1- 462

Equipment ID No. *71DSC-11561* Equip. Class *3 Medium Voltage, Metal clad Switchgear*

Equipment Description *L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW*

Photographs

Note: *71DSC-11561*



Note: *71DSC-11561*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 462

Equipment ID No. *71DSC-11561* Equip. Class *3 Medium Voltage, Metal clad Switchgear*

Equipment Description *L15 UNIT SUBSTATION TRANSF T-13 HIGH SIDE DISC SW*

Note: *71DSC-11561*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-470

Equipment ID No. *71INV-3A* Equip. Class[1] *16-Battery Chargers and Inverters*

Equipment Description *LPCI MOV Indep Power Supply A Inverter*

Location: Bldg. *RB* Floor El. *344.6'* Room, Area *RB 344.6', Col.5.5, Line P*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☒ N/A☐
   The expansion anchors and mounting bolts are free of bent, broken, missing or loose hardware.
   Panels need to be removed and anchorage of internal components needs to be checked.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are hair line cracks in the grout on top of concrete foundation, and are deemed insignificant based on engineering judgment.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-470

Equipment ID No. *71INV-3A* Equip. Class *16-Battery Chargers and Inverters*

Equipment Description *LPCI MOV Indep Power Supply A Inverter*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The 5/8", 3/4", and 1" Hilti Kwik Bolt 3 anchors and the 1/2" ASTM A449 mounting bolts are configured in accordance with the JAF-CALC-09-00042 calculation, Rev. 3 per EC-17239, DWG. No 1.26-2 and 1.26-102.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☒
   The external anchorage is free of potentially adverse seismic conditions.
   Panels need to be removed and anchorage of internal components needs to be checked.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Soft targets are free from impact from nearby equipment or structures.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Light fixtures near the SWEL item need safety latches to prevent it from falling down during a seismic event. However the light fixtures will not damage the SWEL item.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-470

Equipment ID No. *71INV-3A* Equip. Class *16-Battery Chargers and Inverters*

Equipment Description *LPCI MOV Indep Power Supply A Inverter*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/30/2012*

Yaroslav Losev *09/30/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-470

Equipment ID No. *71INV-3A* Equip. Class *16-Battery Chargers and Inverters*

Equipment Description *LPCI MOV Indep Power Supply A Inverter*

Photographs

Note: *Picture of equipment 71NV-3A.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 474

Equipment ID No. *71L25* Equip. Class[1] 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 12500)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 18.5 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   Tha anchorage is not visible-Deferred.

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 474

Equipment ID No. *71L25* Equip. Class 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 12500)*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No soft targets.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 474

Equipment ID No. *71L25* Equip. Class 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 12500)*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *A Porch* Date: *11/01/2012*

C. Sawatzke *11/01/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 474

Equipment ID No. *71L25* Equip. Class 2 Low Voltage Switch gear and Breaker Panel

Equipment Description *600V Switchgear Distribution (Bus 12500)*

Photographs

Note: *71L25*

Note: *71L25*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-475

Equipment ID No. *71L26* Equip. Class[1] *2 – Low Voltage Switchgears and Breaker Panels*

Equipment Description *600V Switchgear Distribution BUS 12600*

Location: Bldg. *EB* Floor El. *272* Room, Area *C: 18.5, L: B*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-475

Equipment ID No. *71L26* Equip. Class *2 – Low Voltage Switchgears and Breaker Panels*

Equipment Description *600V Switchgear Distribution BUS 12600*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with the SEWS for 71L26 (Rev. 0). The plug welds were confirmed.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipment and structure.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Masonary block wall divides the East and West Electric bay. Modifications were made to enhance the walls as part of IE Bulliten 80-11. (Ref. Calculation No. C012, "HCLPF for block walls EB-272-1,2")
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The attached lines have adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    The equipment is free of adverse seismic interaction effect.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-475

Equipment ID No. *71L26* Equip. Class *2 – Low Voltage Switchgears and Breaker Panels*

Equipment Description *600V Switchgear Distribution BUS 12600*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/25/12*

Pouria Pourghobadi *9/25/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-475

Equipment ID No. *71L26* Equip. Class *2 – Low Voltage Switchgears and Breaker Panels*

Equipment Description *600V Switchgear Distribution BUS 12600*

Photographs

Note: *71L26*

Note: *Bottom Corner Panel Open*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-475

Equipment ID No. *71L26* Equip. Class *2 – Low Voltage Switchgears and Breaker Panels*

Equipment Description *600V Switchgear Distribution BUS 12600*

Note: *Cabinet Base Plug Weld*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 481

Equipment ID No. *71MCC-161* Equip. Class[1] 1 Motor Control Center

Equipment Description *600V Motor Control Center (Bus 116100)*

Location: Bldg. *RB* Floor El. *272* Room, Area *Col 1.5 Line W*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☒ N/A☐
   Not Readily accessible.

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 481

Equipment ID No. *71MCC-161* Equip. Class 1 Motor Control Center

Equipment Description *600V Motor Control Center (Bus 116100)*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No soft targets.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 481

Equipment ID No. *71MCC-161* Equip. Class 1 Motor Control Center

Equipment Description *600V Motor Control Center (Bus 116100)*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Area above 71MCC-161 is highly congested; cable trays, piping and conduits appear well supported. Supports, hardware etc are intact.

Evaluated by: *A. Porch* Date: *10/31/2012*

C. Sawatzke *10/31/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

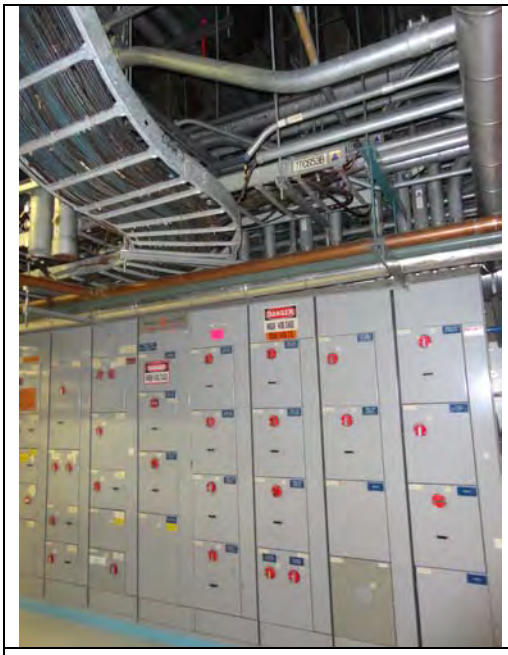
Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 481

Equipment ID No. *71MCC-161* Equip. Class 1 Motor Control Center

Equipment Description *600V Motor Control Center (Bus 116100)*

Photographs



Note: *71MCC-161*

Note: *71MCC-161*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 481

Equipment ID No. *71MCC-161* Equip. Class 1 Motor Control Center

Equipment Description *600V Motor Control Center (Bus 116100)*

Note: *71MCC-161*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 487

Equipment ID No. *71MCC-252* Equip. Class[1] *1 Motor Control Centers and Wall-mounted contactors*

Equipment Description *600V Motor Control Center (Bus 125200)*

Location: Bldg. *EB* Floor El. *272* Room, Area *Col. 18 Line A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 487

Equipment ID No. *71MCC-252* Equip. Class *1 Motor Control Centers and Wall-mounted contactors*

Equipment Description *600V Motor Control Center (Bus 125200)*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   No soft targets.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 487

Equipment ID No. *71MCC-252* Equip. Class *1 Motor Control Centers and Wall-mounted contactors*

Equipment Description *600V Motor Control Center (Bus 125200)*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *A.Porch /* Date: *11/1/2012*

C. Sawatzke / *11/1/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 487

Equipment ID No. *71MCC-252* Equip. Class *1 Motor Control Centers and Wall-mounted contactors*

Equipment Description *600V Motor Control Center (Bus 125200)*

Photographs

Note: *71MCC-252*

Note: *71MCC-252*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL 1- 489

Equipment ID No. *71MCC-254* Equip. Class Motor Control Centers and Wall-mounted Contactors

Equipment Description *600V Motor Control Center (Bus 125400)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 23 line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No cracks noted.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL 1- 489

Equipment ID No. *71MCC-254* Equip. Class Motor Control Centers and Wall-mounted Contactors

Equipment Description *600V Motor Control Center (Bus 125400)*

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

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL 1- 489

Equipment ID No. *71MCC-254* Equip. Class Motor Control Centers and Wall-mounted Contactors

Equipment Description *600V Motor Control Center (Bus 125400)*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *R Casella* Rich Casella Date: *10-31-12*

A Porch A C. Porch *10-31-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL 1- 489

Equipment ID No. *71MCC-254* Equip. Class Motor Control Centers and Wall-mounted Contactors

Equipment Description *600V Motor Control Center (Bus 125400)*

Photographs

Note: *71MCC-254*

Note: *Conduit, duct, and cable tray above 71MCC-254*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL 1- 489

Equipment ID No. *71MCC-254* Equip. Class Motor Control Centers and Wall-mounted Contactors

Equipment Description *600V Motor Control Center (Bus 125400)*

Note: *Fillet welds at base of 71MCC-254*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-491

Equipment ID No. *71MCC-262* Equip. Class[1] *1 – Motor Control Centers and Wall Mounted Contractors*

Equipment Description *600V Motor Control Center (BUS 12600)*

Location: Bldg. *EB* Floor El. *272* Room, Area *Col. 18, Line B*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Anchorage is free of bent, broken, missing or loos hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL1-491**

Equipment ID No. *71MCC-262* Equip. Class *1 – Motor Control Centers and Wall Mounted Contractors*

Equipment Description *600V Motor Control Center (BUS 12600)*

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

   The anchorage configuration is consistent with SEWS for 71MCC-262. The 1/8" fillets 2" Long 20" center were field verified in accordance with DWG. No. 1.43-88.

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

Interaction Effects

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

   The soft targets are free from imact by nearby equipment and structures

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

   Masonary block wall divides the East and West Electric bay. Modifications were made to enhance the walls as part of IE Bulliten 80-11. (Ref. Calculation No. C012, "HCLPF for block walls EB-272-1,2")

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

   The attached lines have adequate flexibility.

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

    The equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-491

Equipment ID No. *71MCC-262* Equip. Class *1 – Motor Control Centers and Wall Mounted Contractors*

Equipment Description *600V Motor Control Center (BUS 12600)*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/25/12*

Pouria Pourghobadi *9/25/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-491

Equipment ID No. *71MCC-262* Equip. Class *1 – Motor Control Centers and Wall Mounted Contractors*

Equipment Description *600V Motor Control Center (BUS 12600)*

Photographs

Note: *71MCC-262*

Note: *Base Welds*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-493

Equipment ID No. *71MCC-264* Equip. Class[1] *1 – Motor Control Centers and Wall Mounted Contractors*

Equipment Description *600V Motor Control Center (BUS 126400)*

Location: Bldg. *EB* Floor El. *272* Room, Area *Col. 25.5, Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) **SWEL1-493**

Equipment ID No. *71MCC-264* Equip. Class *1 – Motor Control Centers and Wall Mounted Contractors*

Equipment Description *600V Motor Control Center (BUS 126400)*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from imact by nearby equipment and structures

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   masonary block walls have been evaluated and enhanced according to DC# D1-96-011, Rev 0 as part IPEEE evaluations.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) S SWEL1-493

Equipment ID No. *71MCC-264* Equip. Class *1 – Motor Control Centers and Wall Mounted Contractors*

Equipment Description *600V Motor Control Center (BUS 126400)*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Harptreet Ghuman* Date: *9/25/12*

Yaroslav Losev *9/25/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-493

Equipment ID No. *71MCC-264* Equip. Class *1 – Motor Control Centers and Wall Mounted Contractors*

Equipment Description *600V Motor Control Center (BUS 126400)*

Photographs

Note: *71MCC-264*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-494

Equipment ID No. *71PT-71ACA2* Equip. Class[1] *4 - Transformers*

Equipment Description *Emergency Distribution 15kVA Transformer 71MCC-253-OD3*

Location: Bldg. *CS* Floor El. *272* Room, Area *Col. 11, Line C*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-494

Equipment ID No. *71PT-71ACA2* Equip. Class *4 - Transformers*

Equipment Description *Emergency Distribution 15kVA Transformer 71MCC-253-OD3*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with SEWS for 71PT-71ACA2 (Rev. 0). The transformer is wall mounted with four ½" shells.

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipments and structures.

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-494

Equipment ID No. *71PT-71ACA2* Equip. Class *4 - Transformers*

Equipment Description *Emergency Distribution 15kVA Transformer 71MCC-253-OD3*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/25/12*

Pouria Pourghobadi *9/25/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

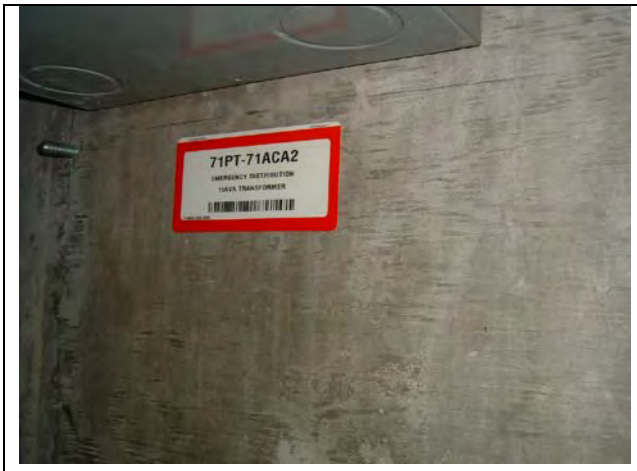
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-494

Equipment ID No. *71PT-71ACA2* Equip. Class *4 - Transformers*

Equipment Description *Emergency Distribution 15kVA Transformer 71MCC-253-OD3*

Photographs



Note: *71PT-71ACA2Transformer*

Note: *71PT-71ACA2Transformer*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 495

Equipment ID No. *71PT-71ACA4* Equip. Class 4-Transformers

Equipment Description *Emergency Distribution 7.5 Kva Transformer*

Location: Bldg. *EG* Floor El. *272'* Room, Area *Col. 24 Line A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage has all necessary hardware

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   There are no signs of any corrosion on the anchorage

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are no cracks in the concrete near the anchorage

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 495

Equipment ID No. *71PT-71ACA4* Equip. Class 4-Transformers

Equipment Description *Emergency Distribution 7.5 Kva Transformer*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Only soft target is anchored cable

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   All conduit located overhead is all well supported.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   Only has attached conduit and armored cable. Both have adequate flexibility

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 495

Equipment ID No. *71PT-71ACA4* Equip. Class 4-Transformers

Equipment Description *Emergency Distribution 7.5 Kva Transformer*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *R. Casella /* Rick Casella Date: *10-26-12*

A.G. Porch / A G, Porch *10-26-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 495

Equipment ID No. *71PT-71ACA4* Equip. Class 4-Transformers

Equipment Description *Emergency Distribution 7.5 Kva Transformer*

Photographs

Note: *71PT-71ACA4*

Note: *71PT-71ACA4 anchorage*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 495

Equipment ID No. *71PT-71ACA4* Equip. Class 4-Transformers

Equipment Description *Emergency Distribution 7.5 Kva Transformer*

Note: *71PT-71ACA4 anchorage*

Note: *71PT-71ACA4*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-498

Equipment ID No. *71PT-71ACUPS* Equip. Class[1] *04-Transformers*

Equipment Description *Uninterruptable Bus 37.5KVA Transformer 71MCC-252-OD2*

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB South East, Col. 14, Line A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Only three anchors actually penetrate through the block wall and are fastened to the back side with a plate and an L2x2 structural angle. This is acceptable since the SEWS evaluation addressed this anchorage configuration and found that it was acceptable.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The transformer unit is anchored to a block wall. There are no visible cracks on the wall.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-498

Equipment ID No. *71PT-71ACUPS* Equip. Class *04-Transformers*

Equipment Description *Uninterruptable Bus 37.5KVA Transformer 71MCC-252-OD2*

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

   Four (4), 1/2" anchors attach the transformer to the wall. Only three out of four anchors penetrate through the wall and are fastened on the back of the wall by structural members and a steel plate. Only three anchors are utilized in the analysis. The 4, 1/2" anchors are configured in accordance with the SEWS document for equipment 71PT-71ACUPS, Rev. 0.

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

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

Interaction Effects

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

   There are no soft targets on the equipment.

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

   The masonry block walls were evaluated in calculation C012, "HCLPF for Block Walls EB-272-1,2" under project USI A-46/IPEEE Seismic Evaluation Project, and were found to be acceptable. The overhead equipment, distribution systems, ceiling tiles and lighting not likely to collapse onto the equipment.

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

   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-498

Equipment ID No. *71PT-71ACUPS* Equip. Class *04-Transformers*

Equipment Description *Uninterruptable Bus 37.5KVA Transformer 71MCC-252-OD2*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/28/2012*

Yaroslav Losev *09/28/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-498

Equipment ID No. *71PT-71ACUPS* Equip. Class *04-Transformers*

Equipment Description *Uninterruptable Bus 37.5KVA Transformer 71MCC-252-OD2*

Photographs

Note: *Picture of equipment 71PT-71ACUPS.*

Note: *Picture of the anchorage attachment to the wall on the back side.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 501

Equipment ID No. *71SB-1* Equip. Class *15 - Battery Racks*

Equipment Description *125 Volt Station Battery A*

Location: Bldg. *BR* Floor El. *272* Room, Area *Col 12 Line E*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage has all necessary hardware

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Minor paint chipping was found at specific locations. This is not a structural concern

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The concrete is free of cracking in the areas near the anchorage

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 501

Equipment ID No. *71SB-1* Equip. Class *15 - Battery Racks*

Equipment Description *125 Volt Station Battery 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.)
   (Ref. 1.20-3, 1.20-8, associated SEWS document)
   Y☒ N☐ U☐ N/A☐

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

Interaction Effects

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

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

9. Do attached lines have adequate flexibility to avoid damage?
   Flexible conduit connections to station batteries have adequate flexibility.
   Y☒ N☐ U☐ N/A☐

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 501

Equipment ID No. *71SB-1* Equip. Class *15 - Battery Racks*

Equipment Description *125 Volt Station Battery A*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Rick Casella* Rick Casella Date: *10/30/12*

A G, Porch

Al Porch *10/30/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 501

Equipment ID No. *71SB-1* Equip. Class *15 - Battery Racks*

Equipment Description *125 Volt Station Battery A*

Photographs

Note: *71SB-1*

Note: *71SB-1*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 501

Equipment ID No. *71SB-1* Equip. Class *15 - Battery Racks*

Equipment Description *125 Volt Station Battery A*

Note: *71SB-1 anchorage*

Note: *71SB-1 anchorage*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-502

Equipment ID No. *71SB-2* Equip. Class[1] *15-Battery Racks*

Equipment Description *125 Volt Station Battery B*

Location: Bldg. *BR* Floor El. *272'* Room, Area *BR3, Col.12, Line F*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The seventy two (72), 1/2" diameter expansion anchors are free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are no visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-502

Equipment ID No. *71SB-2* Equip. Class *15-Battery Racks*

Equipment Description *125 Volt Station Battery B*

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

   The frames of the racks are spaced at 27" on center. There are two racks mounted to each other (back to back) at the center location. The racks on the sides are by themselves. The 72, 1/2" expansion anchors (18 for the side racks, and 36 for the center rack) are configured in accordance with the EC36608 and drawing 1.20-3.

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

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

Interaction Effects

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

   There are no soft targets on the equipment.

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

   The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

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

   The lines attached to the SWEL item have adequate flexibility to avoid damage.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-502

Equipment ID No. *71SB-2* Equip. Class *15-Battery Racks*

Equipment Description *125 Volt Station Battery B*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/30/2012*

Yaroslav Losev *09/30/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-502

Equipment ID No. *71SB-2* Equip. Class *15-Battery Racks*

Equipment Description *125 Volt Station Battery B*

Photographs

Note: *Picture of equipment 71SB-2.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 508

Equipment ID No. *72AHU-30A* Equip. Class 10. Air Handlers

Equipment Description *Battery Room A Air Handling Unit*

Location: Bldg. *BR* Floor El. *282* Room, Area *Col 12 line E*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No cracks.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 508

Equipment ID No. *72AHU-30A* Equip. Class 10. Air Handlers

Equipment Description *Battery Room A Air Handling Unit*

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

Interaction Effects

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 508

Equipment ID No. *72AHU-30A* Equip. Class 10. Air Handlers

Equipment Description *Battery Room A Air Handling Unit*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Missing mounting screws on door of unit

2 missing screws on west hinged door

1 missing screw on east hinged door

All screws missing on bottom row of door panel

The existing screws will keep the door secured. This condition will not create any credible adverse seismic interaction.

Although only a portion of the anchorage was visible, the existing SEWS for 72AHU-30A shows significant anchorage margin.

Evaluated by: *R. Casella* Rick Casella Date: *10-30-12*

A. Porch A. C. Porch *10-30-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 508

Equipment ID No. *72AHU-30A* Equip. Class 10. Air Handlers

Equipment Description *Battery Room A Air Handling Unit*

Photographs

Note: *72AHU-30A*

Note: *72AHU-30A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 516

Equipment ID No. *72FN-31A* Equip. Class Fans

Equipment Description *Battery Room A Recirc Fan*

Location: Bldg. *BR* Floor El. *282* Room, Area *Col 12 line E*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   3/8" anchor bolts to floor (4 locations- 4 bolts per location) are slightly skewed. This condition was noted and accepted in the SEWS A-46 evaluation.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The bolting shows signs of minor surface oxidation. This is not a structural concern

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The concrete nearby the anchorage has no cracking

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 516

Equipment ID No. *72FN-31A* Equip. Class Fans

Equipment Description *Battery Room A Recirc Fan*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage is consistent with A-46 SEWS for 72FN-31A.

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 516

Equipment ID No. *72FN-31A* Equip. Class Fans

Equipment Description *Battery Room A Recirc Fan*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *R Casella* Rick Casella Date: *10-30-12*

A Porch A G. Porch *10-30-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 516

Equipment ID No. *72FN-31A* Equip. Class Fans

Equipment Description *Battery Room A Recirc Fan*

Photographs

Note: *72FN-31A*

Note: *72FN-31A anchorage*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

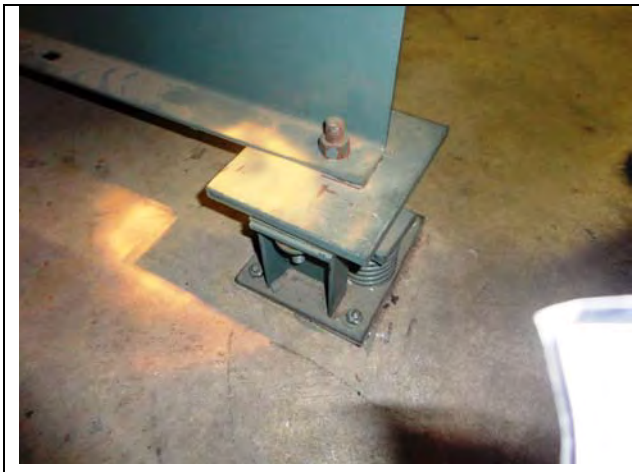
Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 516

Equipment ID No. *72FN-31A* Equip. Class Fans

Equipment Description *Battery Room A Recirc Fan*



Note: *72FN-31A anchorage of fan assembly to vibration isolator and to floor*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 518

Equipment ID No. *72FN-46A* Equip. Class *09 - Fans*

Equipment Description *Battery Room A Exhaust Fan*

Location: Bldg. *BR* Floor El. *282* Room, Area *12, E*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☒ U☐ N/A☐
   East Hat - SW & NE bolts slightly skewed but have contact with hat flange. SE & NE bolts have less than full thread encasement (<Threads below full encasement). Blot size is 3/8 inch. Each hat secure to floor with bolts. These issues judged to not be a seismic concern.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The bolting shows signs of minor surface oxidation. The oxidation is not a seismic concern

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No cracking was present

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 518

Equipment ID No. *72FN-46A* Equip. Class *09 - Fans*

Equipment Description *Battery Room A Exhaust Fan*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   ½ inch bolts at connection between fan/motor s/zid and vibration damper (1.79-474, SEWS document)
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 518

Equipment ID No. *72FN-46A* Equip. Class *09 - Fans*

Equipment Description *Battery Room A Exhaust Fan*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Rick Casella* Date: *10/30/12*

Al Porch *10/30/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 518

Equipment ID No. *72FN-46A* Equip. Class *09 - Fans*

Equipment Description *Battery Room A Exhaust Fan*

Photographs

Note: *72FN-46A*

Note: *72FN-46A anchorage*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 518

Equipment ID No. *72FN-46A* Equip. Class *09 - Fans*

Equipment Description *Battery Room A Exhaust Fan*

Note: *72FN-46A showing vibration isolators*

Note: *72FN-46A showing one anchor to floor installed at a slight skew*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-519

Equipment ID No. *72FN-46B* Equip. Class[1] *09-Fans*

Equipment Description *Battery Room B Exhaust Fan*

Location: Bldg. *BR* Floor El. *282'* Room, Area *BR4, Col.12, Line F*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☒ U☐ N/A☐
   One anchor is missing on the North East corner of the skid; however, this is already documented in the SEWS evaluation and was found to be acceptable. One anchor is loose on the North West corner of the skid.The resolution to this deficiency is tracked through CR-JAF-2012-06538

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are no visible cracks in the concrete near the SWEL item.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-519

Equipment ID No. *72FN-46B* Equip. Class *09-Fans*

Equipment Description *Battery Room B Exhaust Fan*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The 8, 1/4" expansion anchors are configured in accordance with the SEWS document for 72FN-46A ,which has the same configuration as 72FN-46B, except for one missing bolt, which was evaluate in SEWS to be OK).
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☒ U☐
   Based on the above anchorage evaluations, the anchorage is not free of potentially adverse seismic conditions. See item 2.

Interaction Effects

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-519

Equipment ID No. *72FN-46B* Equip. Class *09-Fans*

Equipment Description *Battery Room B Exhaust Fan*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/30/2012*

Yaroslav Losev *09/30/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-519

Equipment ID No. *72FN-46B* Equip. Class *09-Fans*

Equipment Description *Battery Room B Exhaust Fan*

Photographs

Note: *Picture of equipment 72FN-46B.*

Note: *Picture showing the missing anchor on the skid for the SWEL item.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-519

Equipment ID No. *72FN-46B* Equip. Class *09-Fans*

Equipment Description *Battery Room B Exhaust Fan*

Note: *PIcture showing the loose anchor on the skid for the SWEL item.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-522

Equipment ID No. *72HV-7A* Equip. Class[1] *20-Instrument and Control Panels*

Equipment Description *Admin Building Ventilation Control Panel*

Location: Bldg. *BR* Floor El. *272'* Room, Area *BR5, Col.11.5, Line C*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The item is not one of the 50% of SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The equipment is stitch welded in four (4) locations and the welds are intact and do not appear damaged.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are no visible cracks in the concrete near the SWEL item.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-522

Equipment ID No. *72HV-7A* Equip. Class *20-Instrument and Control Panels*

Equipment Description *Admin Building Ventilation Control Panel*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Item is not one of the 50% for which an anchorage configuration verification is required.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Soft targets are free from impact by nearby equipment.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Safety latches for the overhead light fixtures should be installed. There is a masonry block wall near the equipment; however, the wall was evaluated under IPEEE effort to reinforce the block walls under JAF-RPT-MISC-02211, Section 3.1.4.1, page 3-44, Table 3.1.4.1.
   There is a 1" gap between cable tray 1TC077R and the SWEL item; however, based on engineering judgment this is a sufficient amount of space during a seismic event to where there will be no interaction between SWEL equipment and raceway.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-522

Equipment ID No. *72HV-7A* Equip. Class *20-Instrument and Control Panels*

Equipment Description *Admin Building Ventilation Control Panel*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/30/2012*

Yaroslav Losev *09/30/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-522

Equipment ID No. *72HV-7A* Equip. Class *20-Instrument and Control Panels*

Equipment Description *Admin Building Ventilation Control Panel*

Photographs

Note: *Picture of equipment 72HV-7A.*

Note: *Picture showing the 1" gap between the cable tray 1TC077R and the SWEL item.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 555

Equipment ID No. *92FN-1A* Equip. Class 9 - Fans

Equipment Description *Emergency Diesel Generator A Vent Supply Fan*

Location: Bldg. *EG* Floor El. *272'* Room, Area *Col. 24 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Ability to discern condition of anchorage was difficult based on distance to anchorage from our location. Based on what we could see, anchorage was free of bent, broken or missing hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion was evident, based on limited view from floor.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The component is connected to steel. There is no concrete.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 555

Equipment ID No. *92FN-1A* Equip. Class 9 - Fans

Equipment Description *Emergency Diesel Generator A Vent Supply Fan*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on this equipment.

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

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☒
   No attached lines

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 555

Equipment ID No. *92FN-1A* Equip. Class 9 - Fans

Equipment Description *Emergency Diesel Generator A Vent Supply Fan*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: A.G. Porch / A.G. Porch Date: 10/26/12

R. Casella / Rick Casella 10/26/12

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

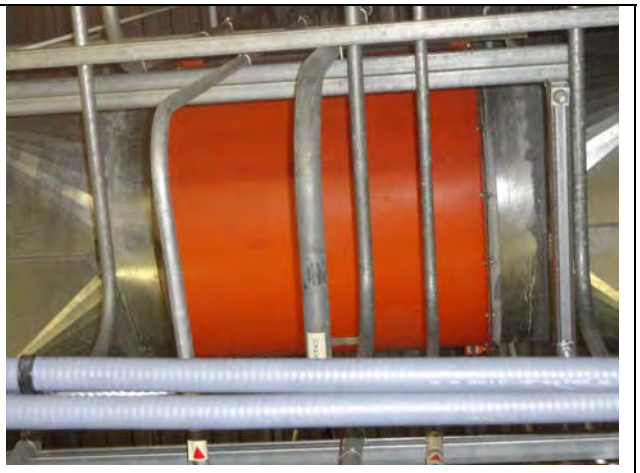
Seismic Walkdown Checklist (SWC) SWEL1- 555

Equipment ID No. *92FN-1A* Equip. Class 9 - Fans

Equipment Description *Emergency Diesel Generator A Vent Supply Fan*

Photographs

Note: *92FN-1A*



Note: *92FN-1A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 555

Equipment ID No. *92FN-1A* Equip. Class 9 - Fans

Equipment Description *Emergency Diesel Generator A Vent Supply Fan*

Note: *92FN-1A*

Note: *92FN-1A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 577

Equipment ID No. *92RTD-101A* Equip. Class 19 - Temperature Sensor

Equipment Description *Emergency Diesel Generator Room A South Side Resist Temperature Detector*

Location: Bldg. *EG* Floor El. *300* Room, Area *Col. 23 Line A2, AZ*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Ability to discern condition of anchorage was difficult based on distance to anchorage from our location. Based on what we could see to the ceiling mounted component, it appeared to be secured to the flange of the roof steel.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Ability to discern condition of anchorage was difficult based on distance to anchorage from our location. Based on what we could see to the ceiling mounted component, it appeared to be secured to the flange of the roof steel.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   There is no concrete. The component is mounted to steel beam flange.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 577

Equipment ID No. *92RTD-101A* Equip. Class 19 - Temperature Sensor

Equipment Description *Emergency Diesel Generator Room A South Side Resist Temperature Detector*

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

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

Interaction Effects

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

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☒
   Attached to overhead roof steel beam, there are no visible objects to fall on the SWEL item.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 577

Equipment ID No. *92RTD-101A* Equip. Class 19 - Temperature Sensor

Equipment Description *Emergency Diesel Generator Room A South Side Resist Temperature Detector*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

(see photo)

Evaluated by: A.G. Porch / A.G. Porch Date: 10/26/12

R. Casella / Rick Casella 10/26/12

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

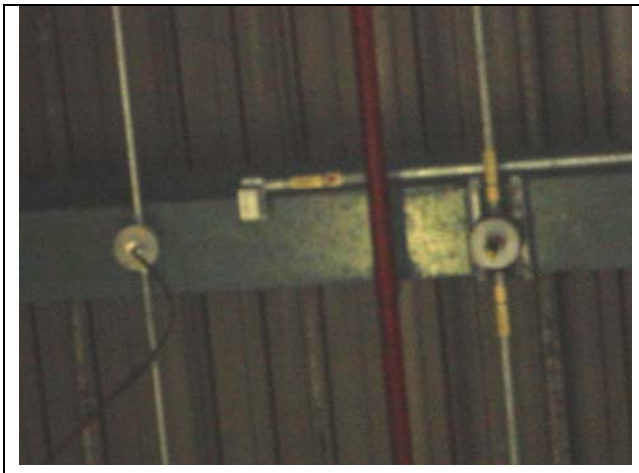
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 577

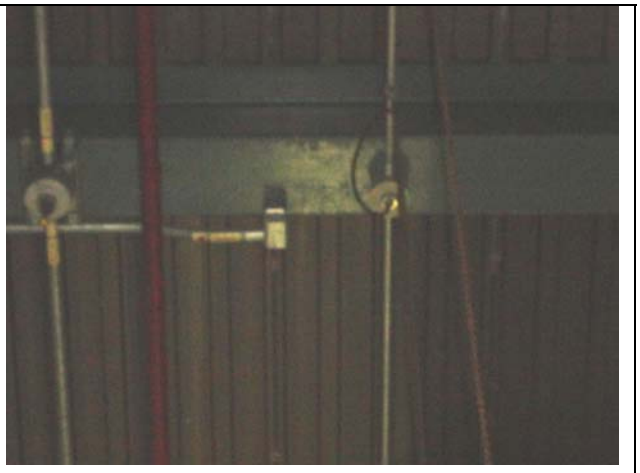
Equipment ID No. *92RTD-101A* Equip. Class 19 - Temperature Sensor

Equipment Description *Emergency Diesel Generator Room A South Side Resist Temperature Detector*

Photographs



Note: *92RTD-101A*



Note: *92RTD-101A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-578

Equipment ID No. *92RTD-101B* Equip. Class[1] *19 – Temperature Sensors*

Equipment Description *EDG B Room South Side Resistance Temperature Detector*

Location: Bldg. *EG* Floor El. *272* Room, Area *C: 27, L: A2*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The unit is at high elevation. No close visual inspection is possible. Based on review of drawings, and weight of the equipment, the anchorage was determined to be adequate

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The unit is at high elevation. No close visual inspection is possible

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The unit is at high elevation. No close visual inspection is possible

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-578

Equipment ID No. *92RTD-101B* Equip. Class *19 – Temperature Sensors*

Equipment Description *EDG B Room South Side Resistance Temperature Detector*

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

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   The anchorage is free of any potentially adverse seismic condition.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipment and structures.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Unit is mounted on a masonry block wall. The block walls have been evaluated and enhanced in accordance with DC# D1-96-011, Rev0 as part of IPEEE evaluations.

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-578

Equipment ID No. *92RTD-101B* Equip. Class *19 – Temperature Sensors*

Equipment Description *EDG B Room South Side Resistance Temperature Detector*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/21/12*

Donald Koberg *9/21/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

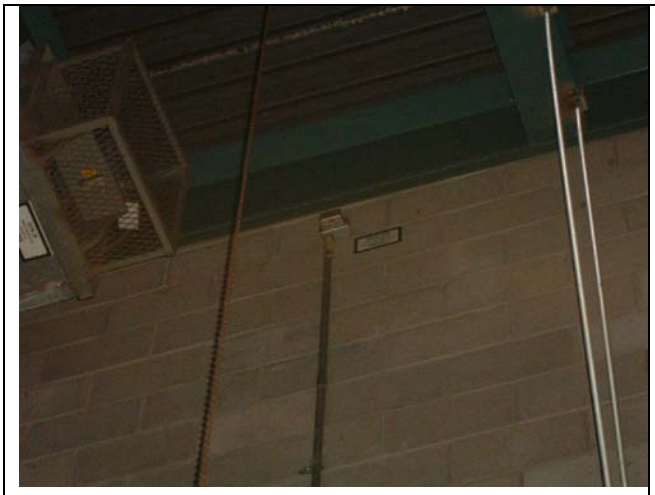
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-578

Equipment ID No. *92RTD-101B* Equip. Class *19 – Temperature Sensors*

Equipment Description *EDG B Room South Side Resistance Temperature Detector*

Photographs



Note: *92RTD-101B Temperature sensor installed on concrete block.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 581

Equipment ID No. *93AC-A1* Equip. Class 12-Air Compressors

Equipment Description *Emergency Diesel Generator A Air Start Compressor A1*

Location: Bldg. *EG* Floor El. *272'* Room, Area *Col. 24 Line A2*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Anchorage contains all necessary hardware

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The anchorage has a small amount of paint chipping that is not a structural concern

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are no cracks in the concrete around the anchorage

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 581

Equipment ID No. *93AC-A1* Equip. Class 12-Air Compressors

Equipment Description *Emergency Diesel Generator A Air Start Compressor A1*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   (Ref. 1.12-2, associated SEWS document)

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Soft targets = 1/4" tubing (cu) see photo; Cable trays, conduit and 2" diameter air piping well supported (Note tubing in tube track - secure - SAT). No soft target issues - SAT.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Lighting, masonry wall, cable trays - all SAT.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   Flex conduit and air hose (air start system ref.. 93RV-101A) - all SAT.

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 581

Equipment ID No. *93AC-A1* Equip. Class 12-Air Compressors

Equipment Description *Emergency Diesel Generator A Air Start Compressor A1*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Some cracks running E-W along masonry wall near concrete pad (see photo) - not an issue (i.e. shrinkage/settlement cracks). Not considered adverse to anchorage system.

Evaluated by: R. Casella / Rick Casella Date: 10/26/12

A.G. Porch / A G. Porch 10/26/12

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 581

Equipment ID No. *93AC-A1* Equip. Class 12-Air Compressors

Equipment Description *Emergency Diesel Generator A Air Start Compressor A1*

Photographs

Note: *93AC-A1*

Note: *93AC-A1 including anchorage on east end*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 581

Equipment ID No. *93AC-A1* Equip. Class 12-Air Compressors

Equipment Description *Emergency Diesel Generator A Air Start Compressor A1*

Note: *93AC-A1anchorage*

Note: *93AC-A1*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 582

Equipment ID No. *93AR-A1* Equip. Class 21

Equipment Description *Emergency Diesel Generator A Air Start Receiver A1*

Location: Bldg. *EG* Floor El. *272'* Room, Area *24, A2*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Anchorage contains all necessary hardware

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Mild surface oxidation and paint chipping was observed - no structural concerns

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☒ U☐ N/A☐
   Settlement crack in slab along masonry block wall approximately 4" South of wall. Not an issue based on load on anchor - OK.
   Hairline crack (very light) - SAT.
   Welds - leg to base plate and tank - SAT

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 582

Equipment ID No. *93AR-A1* Equip. Class 21

Equipment Description *Emergency Diesel Generator A Air Start Receiver A1*

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.)
   (Ref. 1.12-43, associated SEWS document) Y☒ N☐ U☐ N/A☐

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures?
   93EDG-701A (3/4" drain valve - air receiver drain valve) only soft target - free from seismic effects (ppg above is well supported) - SAT Y☒ N☐ U☐ N/A☐

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 582

Equipment ID No. *93AR-A1* Equip. Class 21

Equipment Description *Emergency Diesel Generator A Air Start Receiver A1*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Other air tanks are typical of 93AR-A1

Evaluated by: R. Casella / Rich Casella Date: 10/26/122

A.G. Porch / A G, Porch 10/26/12

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 582

Equipment ID No. *93AR-A1* Equip. Class 21

Equipment Description *Emergency Diesel Generator A Air Start Receiver A1*

Photographs

Note: *93AR-A1*

Note: *93AR-A1including support legs (note – 3rd support leg in rear cannot be seen in this photo)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 582

Equipment ID No. *93AR-A1* Equip. Class 21

Equipment Description *Emergency Diesel Generator A Air Start Receiver A1*

Note: *93AR-A1 anchorage to floor*

Note: *93AR-A1 anchorage to floor at 2 of the 3 legs*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-594

Equipment ID No. *93AR-B2* Equip. Class[1] *18-Instrument Racks*

Equipment Description *EDG B Air Start Receiver B2*

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room B, Col. 26.5*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The three (3), 3/8" expansion anchors are free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are concrete hairline cracks within the vicinity of the anchors but they do not pass through the center of any of the anchors. Therefore, based on engineering judgment there will be no significant reduction in the anchor strength due to these cracks and is deemed acceptable.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-594

Equipment ID No. *93AR-B2* Equip. Class *18-Instrument Racks*

Equipment Description *EDG B Air Start Receiver B2*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The configuration of the three (3), 3/8" expansion anchors are consistent with the SEWS documentation for equipment 93AR-A1 (same as 93AR-B2).
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-594

Equipment ID No. *93AR-B2* Equip. Class *18-Instrument Racks*

Equipment Description *EDG B Air Start Receiver B2*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Losev *09/21/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-594

Equipment ID No. *93AR-B2* Equip. Class 21-Tanks and Heat Exchangers

Equipment Description *EDG B Air Start Receiver B2*

Photographs

Note: *Picture of equipment 93AR-B2.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 624

Equipment ID No. *93ECP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Engine Control Panel*

Location: Bldg. *EG* Floor El. *272* Room, Area *24, G1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 624

Equipment ID No. *93ECP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Engine Control Panel*

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

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

   N/A

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 624

Equipment ID No. *93ECP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Engine Control Panel*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Conduit (rigid) is supported by unistrut vertical / laterally (via knee brace); There is approximately 5 feet of flex conduit at inter with top of panel. Therefore any seismic loads below rigid conduit support will be dissipated by flex.

Evaluated by: *Rick Casella* Rick Casella Date: *10/29/12*

A G, Porch

Al Porch *10/29/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 624

Equipment ID No. *93ECP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Engine Control Panel*

Photographs

Note: *93ECP-A*

Note: *93ECP-A with flex conduit rising off top of panel*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 624

Equipment ID No. *93ECP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Engine Control Panel*

Note: *Soft targets (hoses) off back of 93ECP-A*

Note: *Conduits supported above 93ECP-A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-625

Equipment ID No. *93ECP-B* Equip. Class[1] *20-Instrument and Control Panels*

Equipment Description *EDG B Engine Control Panel*

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room B, Col. 26, Line A3*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The four (4) 3/4" expansion anchors are free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The anchors are free of visible cracks in the concrete.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-625

Equipment ID No. *93ECP-B* Equip. Class *20-Instrument and Control Panels*

Equipment Description *EDG B Engine Control Panel*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The configuration of the four (4), 3/4" expansion anchors is consistent with the SEWS documentation for equipment 93ECP-A (same as 93ECP-B).
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-625

Equipment ID No. *93ECP-B* Equip. Class *20-Instrument and Control Panels*

Equipment Description *EDG B Engine Control Panel*

Other Adverse Conditions

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

    Top of the Control Panel is unsupported. The SWES evaluation determined that the panel is acceptable without these anchors; however the same evaluation does not include the load transferred from the overhead conduits attached to the panel. These conduits drop approximately 10 ft vertically into the panel without any lateral support to minimize the interaction load to the panel. Based on engineering judgment, during a seismic event a significant lateral load from the conduits will contribute to the moment arm transferred to the base anchors which potentially could result in failure of the anchors and overturn the panel. The resolution to this deficiency is tracked through LB-01.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Losev *09/21/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-625

Equipment ID No. *93ECP-B* Equip. Class *20-Instrument and Control Panels*

Equipment Description *EDG B Engine Control Panel*

Photographs

Note: *Picture of equipment 93ECP-B. Note: the conduits attached at the top of the panel are the ones that extend approximately 10' vertically.*

Note: *Picture showing that the control panel is not attached/supported at the top.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 628

Equipment ID No. *93ECSP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Engine Control Sub-Panel*

Location: Bldg. *EG* Floor El. *272* Room, Area *24, A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 628

Equipment ID No. *93ECSP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Engine Control Sub-Panel*

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

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 628

Equipment ID No. *93ECSP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Engine Control Sub-Panel*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Need support detail

Evaluated by: *Rick Casella* Rick Casella Date: *10/29/12*

A G, Porch

Al Porch *10/29/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 628

Equipment ID No. *93ECSP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Engine Control Sub-Panel*

Photographs

Note: *93ECSP-A*

Note: *93ECSP-A including anchorage*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 628

Equipment ID No. *93ECSP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Engine Control Sub-Panel*

Note: *93ECSP-A anchorage*

Note: *Electrical connections to 93ECSP-A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-629

Equipment ID No. *93ECSP-B* Equip. Class[1] *20 – Instrument and Control Panels*

Equipment Description *EDG-B Engine Control Sub Panel*

Location: Bldg. *EG* Floor El. *272* Room, Area *C: 26, L: A3*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☒ N/A☐
   The four (4) 3/8" Hilti anchors are free of bent, broken, missing or loose hardware.
   Panels need to be removed and anchorage of internal components needs to be checked.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-629

Equipment ID No. *93ECSP-B* Equip. Class *20 – Instrument and Control Panels*

Equipment Description *EDG-B Engine Control Sub Panel*

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

   The configuration of the four (4), 3/8" Hilti Anchors is consistent with SEWS for 93 ECSP-A Rev 0, which is identical to ECSP-B.

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

   Panels need to be removed and anchorage of internal components needs to be checked.

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-629

Equipment ID No. *93ECSP-B* Equip. Class *20 – Instrument and Control Panels*

Equipment Description *EDG-B Engine Control Sub Panel*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Harpreet Ghuman* Date: *9/21/12*

Yaroslav Losev *9/21/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-629

Equipment ID No. *93ECSP-B* Equip. Class *20 – Instrument and Control Panels*

Equipment Description *EDG-B Engine Control Sub Panel*

Photographs

Note: *93ECSP-B Engine Control Sub Panel*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 634

Equipment ID No. *93EDG-C* Equip. Class Engine Generators

Equipment Description *Emergency Diesel Generator C*

Location: Bldg. *EG* Floor El. *272'* Room, Area *Col. 24 line A4, AZ*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Anchorage contains all necessary hardware

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☒ U☐ N/A☐
   Hairline cracks in grout at various bolt locations (previously addressed at 93EDG-D and documented in CR-JAF-2012-06090)

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 634

Equipment ID No. *93EDG-C* Equip. Class Engine Generators

Equipment Description *Emergency Diesel Generator C*

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.)
   (Ref. 1.12-95, associated SEWS document)
   Y☒ N☐ U☐ N/A☐

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures?
   Numerous soft targets on EDG. No credible seismic impacts
   Y☒ N☐ U☐ N/A☐

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 634

Equipment ID No. *93EDG-C* Equip. Class Engine Generators

Equipment Description *Emergency Diesel Generator C*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: R. Casella / Rick Casella Date: 10/26/12

A.G. Porch / A.G. Porch 10/26/12

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 634

Equipment ID No. *93EDG-C* Equip. Class Engine Generators

Equipment Description *Emergency Diesel Generator C*

Photographs

Note: *93EDG-C*

Note: *93EDG-C*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 634

Equipment ID No. *93EDG-C* Equip. Class Engine Generators

Equipment Description *Emergency Diesel Generator C*

Note: *93EDG-C*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-635

Equipment ID No. *93EDG-D* Equip. Class *Engine Generator*

Equipment Description *Emergency Diesel Generator D*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col. 26.5*

Manufacturer, Model, Etc. (optional but recommended) *EMD Engine Portec Gen*

Instructions for Completing Checklist

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

Anchorage

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

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Mild surface corrosion on the bolts. No impact on seismic adequacy.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchors on north side of unit - Hairline crack in grout adjacent to the 3rd anchor from the Northeast corner. Crack continues on concrete at base of unit. Hairline crack 4" S of 5th anchor from northeast. Both the 7th and 8th bolts have hair line cracks at the bolts in the grout.
   Anchors on south side of unit – Additional hair line cracks similar to north side.
   The above condition is addressed in CR-JAF-2012-06345. As discussed in the response to CA #1, the existing condition is acceptable with no adverse seismic effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-635

Equipment ID No. *93EDG-D* Equip. Class *Engine Generator*

Equipment Description *Emergency Diesel Generator D*

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

Interaction Effects

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-635

Equipment ID No. *93EDG-D* Equip. Class *Engine Generator*

Equipment Description *Emergency Diesel Generator D*

Other Adverse Conditions

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

    Support for 2" air line has 2 bolts on each side that are either flush with the nuts or less than full thread engagement. This condition was addressed in CR-JAF-2012-06345. There is no adverse seismic impact resulting from this condition.

Comments (Additional pages may be added as necessary)

Hair line crack from support of south air start line. Vertical side less pronounced. This item is addressed in CR-JAF-2012-06345. This does not constitute an adverse seismic condition.

Evaluated by: *Rick Casella* Rick Casella Date: *9-27-12*

Alan Porch A G, Porch *9-27-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-635

Equipment ID No. *93EDG-D* Equip. Class *Engine Generator*

Equipment Description *Emergency Diesel Generator D*

Photographs

Note: *93EDG-D*

Note: *93EDG-D*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-635

Equipment ID No. *93EDG-D* Equip. Class *Engine Generator*

Equipment Description *Emergency Diesel Generator D*

Note: *93EDG-D crack in grout in proximity of anchor bolt*

Note: *93EDG Anchor Bolt (8 on each side of Unit)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-636

Equipment ID No. *93EGP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Generator Control Panel*

Location: Bldg. *EG* Floor El. *272* Room, Area *24, A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-636

Equipment ID No. *93EGP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Generator Control Panel*

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

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

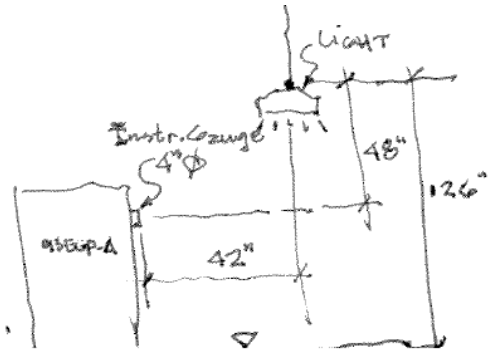
Interaction Effects

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

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

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

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



See Comments.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-636

Equipment ID No. *93EGP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Generator Control Panel*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Question 10: In a seismic event, if light fixture was decoupled from 1 of its 2 supporting chains, out-of-plane swinging motion (i.e. toward 93EGO-A) would be limited and will not contact the panel. No adverse seismic interaction.

Evaluated by: *Rick Casella* Rick Casella Date: *10/29/12*

A G, Porch

Al Porch *10/29/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

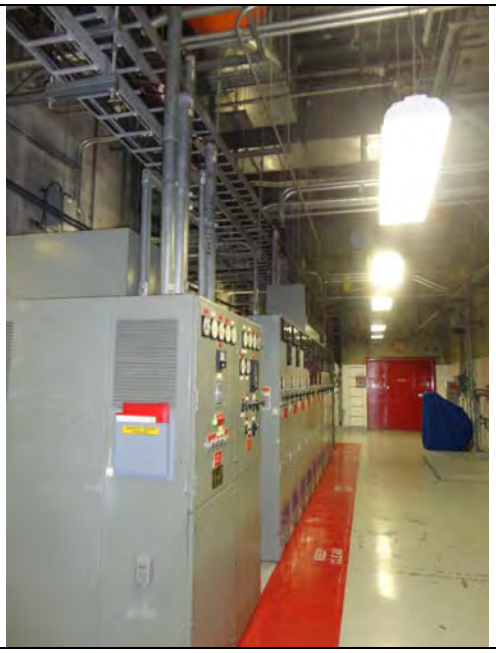
Seismic Walkdown Checklist (SWC) SWEL1-636

Equipment ID No. *93EGP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Generator Control Panel*

Photographs

Note: *93EGP-A*



Note: *Side view of 93EGP-A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1-636

Equipment ID No. *93EGP-A* Equip. Class *20 - Instrument and Control Panels*

Equipment Description *EDG A Generator Control Panel*

Note: *Conduit off top of 93EGP-A*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-637

Equipment ID No. *93EGP-B* Equip. Class[1] *20 – Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator B Control Panel*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col. 26, Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☒ N/A☐
   External anchorage is free of bent, broken, missing or loose hardware.
   Panels need to be removed and anchorage of internal components needs to be checked.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-637

Equipment ID No. *93EGP-B* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator B Control Panel*

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

   The anchorage configuration is consistent with the SEWS for 93EGP-B (Rev. 0). The front welding consists of six 1" x 1/8" fillets, the back welding consists of six 1" seam welds plus one 2" corner weld.

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

Interaction Effects

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

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

   Cable from tray 1TC456B is overhanging the tray. Will not damage the cabinet in a seismic event

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-637

Equipment ID No. *93EGP-B* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator B Control Panel*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/27/12*

Pouria Pourghobadi *9/27/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-637

Equipment ID No. *93EGP-B* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator B Control Panel*

Photographs

Note: *93EGP-B Panel*

Note: *93EGP-B Panel*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-637

Equipment ID No. *93EGP-B* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator B Control Panel*

Note: *93EGP-B Panel base welds.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 640

Equipment ID No. *93FPAC* Equip. Class Instrumentation and Control Panels

Equipment Description *Emergency Diesel Generator A and C Forced Paralleling Panel*

Location: Bldg. *EG* Floor El. *272'* Room, Area *24.5, A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 640

Equipment ID No. *93FPAC* Equip. Class Instrumentation and Control Panels

Equipment Description *Emergency Diesel Generator A and C Forced Paralleling Panel*

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

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 640

Equipment ID No. *93FPAC* Equip. Class Instrumentation and Control Panels

Equipment Description *Emergency Diesel Generator A and C Forced Paralleling Panel*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Conduits 1CK402RC and 1CC421RE off the top of 93FPAC 1st support is 3' 9" above top of box. This exceeds 3' spacing given in IS-E-05. Not a seismic concern low 'g' levels in EDG switchgear at Elevation 272.

Evaluated by: R. Casella / Rick Casella Date: 10/26/12

A.G. Porch / A.G. Porch 10/26/12

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 640

Equipment ID No. *93FPAC* Equip. Class Instrumentation and Control Panels

Equipment Description *Emergency Diesel Generator A and C Forced Paralleling Panel*

Photographs

Note: *93FPAC*

Note: *93FPAC*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL1- 640

Equipment ID No. *93FPAC* Equip. Class Instrumentation and Control Panels

Equipment Description *Emergency Diesel Generator A and C Forced Paralleling Panel*

Note: *93FPAC*

Note: *93FPAC*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 642

Equipment ID No. *93LI-102A* Equip. Class *18 - Instrument Racks*

Equipment Description *EDG A Fuel Oil Day Tank A Level Indicator*

Location: Bldg. *BR* Floor El. *282* Room, Area *12, E*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   No concrete.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 642

Equipment ID No. *93LI-102A* Equip. Class *18 - Instrument Racks*

Equipment Description *EDG A Fuel Oil Day Tank A Level Indicator*

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

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

Interaction Effects

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

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 642

Equipment ID No. *93LI-102A* Equip. Class *18 - Instrument Racks*

Equipment Description *EDG A Fuel Oil Day Tank A Level Indicator*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Attached to South side SWEL item 93ECP-A (see photo)

Evaluated by: *Rick Casella* Rick Casella Date: *10/29/12*

A G, Porch

Al Porch *10/29/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 642

Equipment ID No. *93LI-102A* Equip. Class *18 - Instrument Racks*

Equipment Description *EDG A Fuel Oil Day Tank A Level Indicator*

Photographs

Note: *93LI-102A (located on 93ECP-A)*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-643

Equipment ID No. *93LI-102B* Equip. Class[1] *18-Instrument Racks*

Equipment Description *EDG B Fuel Oil Day Tank B Level Indicator*

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room B, Col. 26, Line A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The evaluated item in this SWC is not part of the 50% of the SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The four (4) self-tapping screws are free of bent, broken, missing or loose hardware.

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Gage/Instrument is attached to a steel panel.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-643

Equipment ID No. *93LI-102B* Equip. Class *18-Instrument Racks*

Equipment Description *EDG B Fuel Oil Day Tank B Level Indicator*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Item is not one of the 50% for which an anchorage configuration verification is required.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-643

Equipment ID No. *93LI-102B* Equip. Class *18-Instrument Racks*

Equipment Description *EDG B Fuel Oil Day Tank B Level Indicator*

Other Adverse Conditions

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

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Lose *v* *09/21/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-643

Equipment ID No. *93LI-102B* Equip. Class 18-Instrument Racks

Equipment Description *EDG B Fuel Oil Day Tank B Level Indicator*

Photographs

Note: *Picture of equipment 93LI-102B.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 646

Equipment ID No. *93LOE-1A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description *EDG A Lube Oil Cooler*

Location: Bldg. *EG* Floor El. *272* Room, Area *24 A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

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

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   No concrete.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 646

Equipment ID No. *93LOE-1A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description *EDG A Lube Oil Cooler*

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

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

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? *(See Photo)* Y☒ N☐ U☐ N/A☐

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

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

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

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 646

Equipment ID No. *93LOE-1A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description *EDG A Lube Oil Cooler*

Other Adverse Conditions

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

Comments (Additional pages may be added as necessary)

Evaluated by: *Rick Casella* Rick Casella Date: *10/29/12*

A G, Porch

Al Porch *10/29/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 646

Equipment ID No. *93LOE-1A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description *EDG A Lube Oil Cooler*

Photographs

Note: *93LOE-1A (large rectangular component in center of picture)*

Note: *93LOE-1A (long rectangular component at top)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 646

Equipment ID No. *93LOE-1A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description *EDG A Lube Oil Cooler*

Note: *93LOE-1A (it is the rectangular shaped component mounted on angle)*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-647

Equipment ID No. *93LOE-1B* Equip. Class[1] *21 – Tanks and Heat Exchangers*

Equipment Description *EDG B Lube Oil Cooler*

Location: Bldg. *EG* Floor El. *272* Room, Area *C: 26, L: A3*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

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

Anchorage

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

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

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The anchorage is free of corrosion.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-647

Equipment ID No. *93LOE-1B* Equip. Class *21 – Tanks and Heat Exchangers*

Equipment Description *EDG B Lube Oil Cooler*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Soft targets in this SWEL item are gauges. They are free from any impact by nearby equipment.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The north wall of the room, is a masonary block wall but it has been enhanced according to DC# D1-96-011, Rev 0 as part IPEEE evaluations.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The attached line have adequate flexibility.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    The equipment is free of any adverse seismic interaction.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-647

Equipment ID No. *93LOE-1B* Equip. Class *21 – Tanks and Heat Exchangers*

Equipment Description *EDG B Lube Oil Cooler*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/21/12*

Donald Koberg *9/21/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-647

Equipment ID No. *93LOE-1B* Equip. Class *21 – Tanks and Heat Exchangers*

Equipment Description *EDG B Lube Oil Cooler*

Photographs

Note: *93LOE-1B EDG B Lube Oil Cooler*

Note: *93LOE-1B EDG B Lube Oil Cooler*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-647

Equipment ID No. *93LOE-1B* Equip. Class *21 – Tanks and Heat Exchangers*

Equipment Description *EDG B Lube Oil Cooler*

Note: *93LOE-1B EDG B Lube Oil Cooler*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 658

Equipment ID No. *93P1-C1* Equip. Class Horizontal Pumps

Equipment Description *Emergency Diesel Generator C Fuel Oil Transfer Pump C1*

Location: Bldg. *EG* Floor El. *272'* Room, Area *24.5, A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage contains all necessary hardware

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The anchorage has mild oxidation on its surface. There is no structural concern

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   There are no cracks in the concrete near the anchors

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 658

Equipment ID No. *93P1-C1* Equip. Class Horizontal Pumps

Equipment Description *Emergency Diesel Generator C Fuel Oil Transfer Pump C1*

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.)
   (Ref. 1.12-99, associated SEWS document) Y☒ N☐ U☐ N/A☐

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 658

Equipment ID No. *93P1-C1* Equip. Class Horizontal Pumps

Equipment Description *Emergency Diesel Generator C Fuel Oil Transfer Pump C1*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: R. Casella / Rick Casella Date: 10/26/12

A.G. Porch / A.G. Porch 10/26/12

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 658

Equipment ID No. *93P1-C1* Equip. Class Horizontal Pumps

Equipment Description *Emergency Diesel Generator C Fuel Oil Transfer Pump C1*

Photographs

Note: *93P1-C1*

Note: *93P1-C1*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 658

Equipment ID No. *93P1-C1* Equip. Class Horizontal Pumps

Equipment Description *Emergency Diesel Generator C Fuel Oil Transfer Pump C1*

Note: *93P1-C1 anchorage*

Note: *93P1-C1 general area*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-660

Equipment ID No. *93P1-D1* Equip. Class[1] *05-Horizontal Pump*

Equipment Description *EDG D Fuel Oil Transfer Pump D1*

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room D, Col. 26.5, Line A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐
   The item is one of the 50% of SWEL items requiring anchorage configuration verification.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is free of bent, broken, missing or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Anchorage is free of corrosion that is more than mild surface oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The anchorage is free of visible cracks in the concrete near the anchors.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-660

Equipment ID No. *93P1-D1* Equip. Class *05-Horizontal Pump*

Equipment Description *EDG D Fuel Oil Transfer Pump D1*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The configuration of the six (6), 1/2" Phillips studs is consistent with the SEWS documentation for equipment 93P1-A1 (same as 93P1-D1), Rev. 0 and drawing 1.12-99, Rev. 4.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets on the equipment.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls are not likely to collapse onto the equipment.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The lines attached to the SWEL item have adequate flexibility to avoid damage.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Based on the above seismic interaction evaluations, the equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-660

Equipment ID No. *93P1-D1* Equip. Class *05-Horizontal Pump*

Equipment Description *EDG D Fuel Oil Transfer Pump D1*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

    No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Losev *09/21/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-660

Equipment ID No. *93P1-D1* Equip. Class *05-Horizontal Pump*

Equipment Description *EDG D Fuel Oil Transfer Pump D1*

Photographs

Note: *Picture of equipment 93P1-D1.*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 662

Equipment ID No. *93P-2A* Equip. Class *06 - Vertical Pumps*

Equipment Description *EDG A Circulating Lube Oil Pump*

Location: Bldg. *EG* Floor El. *272* Room, Area *24 A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   93P-2A (SWEL 1-662) is not anchored. It is connected to its motor which is bolted, but the pump is in-line with no anchorage of its own.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   93P-2A (SWEL 1-662) is not anchored. It is connected to its motor which is bolted, but the pump is in-line with no anchorage of its own.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   No concrete.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 662

Equipment ID No. *93P-2A* Equip. Class *06 - Vertical Pumps*

Equipment Description *EDG A Circulating Lube Oil Pump*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   93P-2A (SWEL 1-662) is not anchored. It is connected to its motor which is bolted, but the pump is in-line with no anchorage of its own.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Flex conduit off motor.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 662

Equipment ID No. *93P-2A* Equip. Class *06 - Vertical Pumps*

Equipment Description *EDG A Circulating Lube Oil Pump*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

See Photos

Evaluated by: *Rick Casella* Rick Casella Date: *10/29/12*

A G, Porch

Al Porch *10/29/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 662

Equipment ID No. *93P-2A* Equip. Class *06 - Vertical Pumps*

Equipment Description *EDG A Circulating Lube Oil Pump*

Photographs

Note: *93P-2A*

Note: *93P-2A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 662

Equipment ID No. *93P-2A* Equip. Class *06 - Vertical Pumps*

Equipment Description *EDG A Circulating Lube Oil Pump*

Note: *93P-2A*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-663

Equipment ID No. *93P-2B* Equip. Class[1] *5 – Horizontal Pump*

Equipment Description *Emergency Diesel Generator B Circulating Lube Oil Pump*

Location: Bldg. *EG* Floor El. *272* Room, Area *C: 26, L: A3*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is free of bent, broken, missing or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The anchorage is free of corrosion.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   No concrete

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-663

Equipment ID No. *93P-2B* Equip. Class *5 – Horizontal Pump*

Equipment Description *Emergency Diesel Generator B Circulating Lube Oil Pump*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipment and structures.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead equipment and distribution systems are not likely to collapse onto the equipment.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The attached lines have adequate flexibility.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    The equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-663

Equipment ID No. *93P-2B* Equip. Class *5 – Horizontal Pump*

Equipment Description *Emergency Diesel Generator B Circulating Lube Oil Pump*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/21/12*

Pouria Pourghobadi *9/21/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-663

Equipment ID No. *93P-2B* Equip. Class *5 – Horizontal Pump*

Equipment Description *Emergency Diesel Generator B Circulating Lube Oil Pump*

Photographs

Note: *93P-2B Pump*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 670

Equipment ID No. *93P-4A* Equip. Class *05 - Horizontal Pumps*

Equipment Description *EDG A Fuel Oil Pump*

Location: Bldg. *EG* Floor El. *272* Room, Area *24, A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   Dwg not available under 93P-3A (Not used for anchorage)

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Anchorage was free of bent, broken, missing and loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion was evident

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   There is no concrete

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 670

Equipment ID No. *93P-4A* Equip. Class *05 - Horizontal Pumps*

Equipment Description *EDG A Fuel Oil Pump*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Anchorage is free of potentially adverse seismic conditions.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Protected by superstructure above pump.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   (See #7 above)

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 670

Equipment ID No. *93P-4A* Equip. Class *05 - Horizontal Pumps*

Equipment Description *EDG A Fuel Oil Pump*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

(Photos)

Evaluated by: *Rick Casella* Rick Casella Date: *10/29/12*

A G, Porch

Al Porch *10/29/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 670

Equipment ID No. *93P-4A* Equip. Class *05 - Horizontal Pumps*

Equipment Description *EDG A Fuel Oil Pump*

Photographs

Note: *93P-4A*

Note: *93P-4A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 670

Equipment ID No. *93P-4A* Equip. Class *05 - Horizontal Pumps*

Equipment Description *EDG A Fuel Oil Pump*

Note: *93P-4A (could not get any closer picture of anchorage)*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-671

Equipment ID No. *93P-4B* Equip. Class[1] *5 – Horizontal Pumps*

Equipment Description *EDG B Fuel Oil Pump*

Location: Bldg. *EG* Floor El. *272* Room, Area *C: 26.5, L: A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is free of bent, broken, missing or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The anchorage is free of corrosion.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   No concrete. The equipment is mounted on the generator skid.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-671

Equipment ID No. *93P-4B* Equip. Class [2] *5 – Horizontal Pumps*

Equipment Description *EDG B Fuel Oil Pump*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

[2] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-671

Equipment ID No. *93P-4B* Equip. Class [3] *5 – Horizontal Pumps*

Equipment Description *EDG B Fuel Oil Pump*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Pump missing equipment tag. The issue was brought to site personnel attention immediately.

Evaluated by: *Pouria Pourghobadi* Date: *9/21/12*

Donald Koberg *9/21/12*

[3] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-671

Equipment ID No. *93P-4B* Equip. Class [4] *5 – Horizontal Pumps*

Equipment Description *EDG B Fuel Oil Pump*

Photographs

Note: *EDG B Fuel Oil Pump*

Note:

[4] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 674

Equipment ID No. *93TK-1A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description *EDG A Jacket Water Expansion Tank*

Location: Bldg. *EG* Floor El. *272* Room, Area *24, A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is free of bent, broken, missing or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion evident.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   There is no concrete.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 674

Equipment ID No. *93TK-1A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

   N/A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 674

Equipment ID No. *93TK-1A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Tank well supported; no interaction effects noted. Mounted on diesel skid / frame.

Evaluated by: *Rick Casella* Rick Casella Date: *10/29/12*

A G, Porch

Al Porch *10/29/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 674

Equipment ID No. *93TK-1A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description

Photographs

Note: *93TK-1A*

Note: *93TK-1A shown on EDG A unit*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 674

Equipment ID No. *93TK-1A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description

Note: *93TK-1A underside*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-675

Equipment ID No. *93TK-1B* Equip. Class[1] *21 – Tanks and Heat Exchangers*

Equipment Description *Emergency Diesel Generator B Jacket Water Expansion Tank*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col. 26, Line A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is free of bent, broken, missing or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The anchorage is free of corrosion that is more than mild surface oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-675

Equipment ID No. *93TK-1B* Equip. Class [2] *21 – Tanks and Heat Exchangers*

Equipment Description *Emergency Diesel Generator B Jacket Water Expansion Tank*

5.	Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.)	Y☐ N☐ U☐ N/A☒
6.	Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Y☒ N☐ U☐

Interaction Effects

7.	Are soft targets free from impact by nearby equipment or structures?	Y☒ N☐ U☐ N/A☐
8.	Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	Y☒ N☐ U☐ N/A☐
9.	Do attached lines have adequate flexibility to avoid damage?	Y☒ N☐ U☐ N/A☐
10.	Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Y☒ N☐ U☐

[2] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-675

Equipment ID No. *93TK-1B* Equip. Class [3] *21 – Tanks and Heat Exchangers*

Equipment Description *Emergency Diesel Generator B Jacket Water Expansion Tank*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/21/12*

Donald Koberg *9/21/12*

[3] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-675

Equipment ID No. *93TK-1B* Equip. Class [4] *21 – Tanks and Heat Exchangers*

Equipment Description *Emergency Diesel Generator B Jacket Water Expansion Tank*

Photographs

Note: *93TK-1B Front view*

Note: *93TK-1B Side view*

[4] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 682

Equipment ID No. *93TK-7A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description *EDG A Fuel Oil Day Tank*

Location: Bldg. *EG* Floor El. *272* Room, Area *24,A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

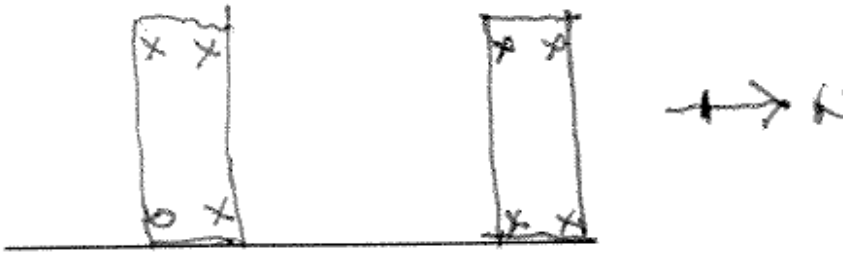
Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Anchorage contains all necessary hardware

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Anchorage contains no corrosion

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☒ U☐ N/A☐
   Hairline cracks (@ x) at anchors primarily at top of concrete pedestal (refer to 93TK-7B and CR-JAF-2012-06090)



ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 682

Equipment ID No. *93TK-7A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description *EDG A Fuel Oil Day Tank*

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.) *(Ref. 1.12-128, associated SEWS document)* Y☒ N☐ U☐ N/A☐

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 682

Equipment ID No. *93TK-7A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description *EDG A Fuel Oil Day Tank*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

None

Evaluated by: *Rick Casella* Rick Casella Date: *10/29/12*

A G, Porch

Al Porch *10/29/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 682

Equipment ID No. *93TK-7A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description *EDG A Fuel Oil Day Tank*

Photographs

Note: *93TK-7A*

Note: *93TK-7A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 682

Equipment ID No. *93TK-7A* Equip. Class *21 - Tanks and Heat Exchangers*

Equipment Description *EDG A Fuel Oil Day Tank*

Note: *93TK-7A anchor bolt (note hairline crack in concrete right of bolt centerline)*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-683

Equipment ID No. *93TK-7B* Equip. Class[1] *21-Tanks & Heat Exchangers*

Equipment Description *Emergency Diesel Generator B Fuel Oil Day Tank*

Location: Bldg. *EG* Floor El. *272* Room, Area *EDG B Room, Column 26.5 Line A4*

Manufacturer, Model, Etc. (optional but recommended) *T312 Trinity Equip Corp*

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐
   The anchorage configuration was verified and found to be acceptable. This item is part of the 50% of SWEL items.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is free of bent, broken, missing or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The anchorage is free of corrosion that is more than mild surface oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☒ U☐ N/A☐
   Multiple visible hairline cracks on the foundation, from bottom of floor elevation through the center line of 7/8" bolts/anchors on both saddles. On the North saddle West end there is noticeable damage to the concrete foundation due to interaction of the concrete wall and the Fuel Day Tank Drain Line. The resolution to this deficiency is tracked by CR-JAF-2012-06090.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-683

Equipment ID No. *93TK-7B* Equip. Class *21-Tanks & Heat Exchangers*

Equipment Description *Emergency Diesel Generator B Fuel Oil Day Tank*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐

   The anchorage configuration is consistent with DWG. No. 1.12-128 and SEWS for 93TK-7A, which has the same configuration as 93TK-7B.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☒ U☐

   Cracks in concrete pedestal at the anchorage and damage by the fuel day tank drain line jeopardizes the safety of the tank's support. The resolution to this deficiency is tracked by CR-JAF-2012-06090.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒

   The equipment is free of soft targets.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-683

Equipment ID No. *93TK-7B* Equip. Class *21-Tanks & Heat Exchangers*

Equipment Description *Emergency Diesel Generator B Fuel Oil Day Tank*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *01/21/2012*

Donald Kolberg *01/21/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

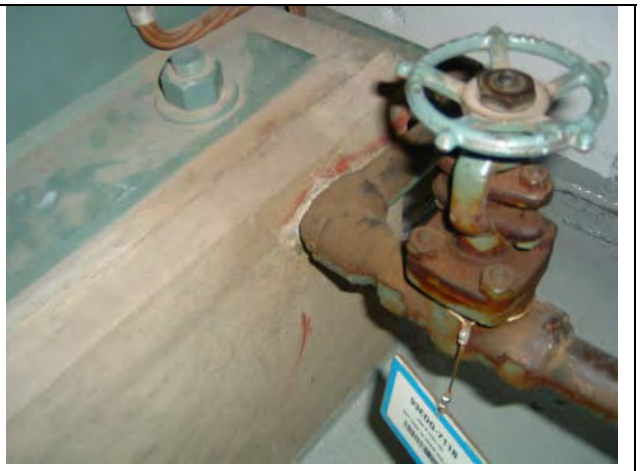
Seismic Walkdown Checklist (SWC) SWEL1-683

Equipment ID No. *93TK-7B* Equip. Class *21-Tanks & Heat Exchangers*

Equipment Description *Emergency Diesel Generator B Fuel Oil Day Tank*

Photographs

Note: *Diesel Fuel Day Tan 93TK-7B*



Note: *Damage to north concrete pedestal by the Diesel Fuel Day Tank Drain Line (Valve 93EDG-711B)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 686

Equipment ID No. *93WE-1C* Equip. Class 21 - Tanks and Heat Exchangers

Equipment Description *Emergency Diesel Generator C Jacket Water Heat Exchanger*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col. 25 line A4,AZ*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage has all necessary hardware

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The anchorage shows no signs of any type of corrosion

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   There are no cracks in the concrete near the anchors

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 686

Equipment ID No. *93WE-1C* Equip. Class 21 - Tanks and Heat Exchangers

Equipment Description *Emergency Diesel Generator C Jacket Water Heat Exchanger*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   (Ref. 1.12-35, 1.12-101, associated SEWS document)

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   46EXJ-9C, 10C are epoxy soft targets. No credible seismic interactions

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 686

Equipment ID No. *93WE-1C* Equip. Class 21 - Tanks and Heat Exchangers

Equipment Description *Emergency Diesel Generator C Jacket Water Heat Exchanger*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: R. Casella / Rick Casella Date: 10/26/12

A.G. Porch / A.G. Porch 10/26/12

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 686

Equipment ID No. *93WE-1C* Equip. Class 21 - Tanks and Heat Exchangers

Equipment Description *Emergency Diesel Generator C Jacket Water Heat Exchanger*

Photographs

Note: *93WE-1C (looking East)*

Note: *93WE-1C*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1- 686

Equipment ID No. *93WE-1C* Equip. Class 21 - Tanks and Heat Exchangers

Equipment Description *Emergency Diesel Generator C Jacket Water Heat Exchanger*

Note: *93WE-1C Anchorage – Fixed Foot*

Note: *93WE-1C Anchorage – Sliding Foot*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-687

Equipment ID No. *93WE-ID* Equip. Class[1] *21 – Heat Exchangers*

Equipment Description *Emergency Diesel Generator D Jacket Water Heat Exchanger*

Location: Bldg. *EG* Floor El. *272* Room, Area *EG Room D C: 27, L: A4*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The four (4) bolts are free of bent, broken, missing or loose hardware

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The anchorage is free of any corrosion.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-687

Equipment ID No. *93WE-ID* Equip. Class *21 – Heat Exchangers*

Equipment Description *Emergency Diesel Generator D Jacket Water Heat Exchanger*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒
   Item is not one of the 50% for which an anchorage configuration verification is required.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on the above anchorage evaluations, the anchorage is free of potentially adverse seismic conditions.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   This component does not have soft targets.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Masonry block wall divides the Delta and Bravo train in EDG. Modifications were made to enhance the walls as part of IE Bulletin 80-11. (Ref. Calculation No. JAF-CALC-EDG-02153 Rev 0) and IPEEE evaluations D1-96-011 Rev 0.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The attached lines have adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    The equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-687

Equipment ID No. *93WE-ID* Equip. Class *21 – Heat Exchangers*

Equipment Description *Emergency Diesel Generator D Jacket Water Heat Exchanger*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *09/21/2012*

Donald Koberg *09/21/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-687

Equipment ID No. *93WE-ID* Equip. Class *21 – Heat Exchangers*

Equipment Description *Emergency Diesel Generator D Jacket Water Heat Exchanger*

Photographs

Note: *93WE-ID*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-690

Equipment ID No. *IR-25-01* Equip. Class[1] *18 – Instrument Racks*

Equipment Description *Core Spray System Channel A Rack*

Location: Bldg. *RB* Floor El. *242.8* Room, Area *Col. 4, Line A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Anchorage is free of bent, broken, missing or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Anchorage is free of corrosion that is more than mild surface oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The component is not anchored in concrete.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-690

Equipment ID No. *IR-25-01* Equip. Class *18 – Instrument Racks*

Equipment Description *Core Spray System Channel A Rack*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☒ U☐ N/A☐
   The rack is bolted to steel plates which are welded to an I-beam. The spacing between the anchors is 15 inches. They are not 18 inches as shown 7.70-81D due to interference with an I-beam.
   The resolution to this deficiency it tracked through CR-2012-JAF-08186.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☒ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipment and structures.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead equipments and distribution systems are not likely to collapse onto the equipment.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The attached lines have adequate flexibility.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    The equipment is free of potentially adverse seismic interaction effect

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-690

Equipment ID No. *IR-25-01* Equip. Class *18 – Instrument Racks*

Equipment Description *Core Spray System Channel A Rack*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/25/12*

Pouria Pourghobadi *9/25/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-690

Equipment ID No. *IR-25-01* Equip. Class *18 – Instrument Racks*

Equipment Description *Core Spray System Channel A Rack*

Photographs

Note: *Instrument Panel*

Note: *Rack Anchorage*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-696

Equipment ID No. *IR-25-62* Equip. Class[1] 18 – Instrument Racks

Equipment Description *RHR Channel B Instrument Rack*

Location: Bldg. *RB* Floor El. *242* Room, Area *Col 3 Line D*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐
   Anchorage configuration verification is required.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is free of bent, broken, missing or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   The anchorage is free of corrosion that is more than mild surface oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The anchorage is not embedded in concrete.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-696

Equipment ID No. *IR-25-62* Equip. Class 18 – Instrument Racks

Equipment Description *RHR Channel B Instrument Rack*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   The anchorage configuration is consistent with SEWS for IR-25-62, DWG. No. 7.70-81
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   The soft targets are free from impact by nearby equipments and structures.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   The overhead equipments, distribution systems, ceiling tiles and lighting and masonry walls.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The attached lines have adequate flexibility.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    The equipment is free of potentially adverse seismic interaction effects.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-696

Equipment ID No. *IR-25-62* Equip. Class 18 – Instrument Racks

Equipment Description *RHR Channel B Instrument Rack*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Donald Koberg* Date: *9/23/12*

Pouria Pourghobadi *9/23/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL1-696

Equipment ID No. *IR-25-62* Equip. Class 18 – Instrument Racks

Equipment Description *RHR Channel B Instrument Rack*

Photographs

Note: *IR-25-62 Instrument rack*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. *19TK-8A* Equip. Class *Tanks and heat exchangers*

Equipment Description *Fuel pool cooling skimmer surge tank A*

Location: Bldg. *RB* Floor El. *344* Room, Area *Col 4 Line D*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is free of bent, broken, missing or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   The anchorage is free of cracks.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. *19TK-8A* Equip. Class *Tanks and heat exchangers*

Equipment Description *Fuel pool cooling skimmer surge tank A*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No soft targets on tank

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    The tank is structurally robust. It is supported at El. 369'. Any minimal lateral tank movement will not impact any SSCs

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. *19TK-8A* Equip. Class *Tanks and heat exchangers*

Equipment Description *Fuel pool cooling skimmer surge tank A*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G, Porch

Alan Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-001

Equipment ID No. *19TK-8A* Equip. Class *Tanks and heat exchangers*

Equipment Description *Fuel pool cooling skimmer surge tank A*

Photographs

Note: *19TK-8A with anchorage at ceiling.*

19TK-8A at base

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. *19LS-65* Equip. Class 20. *Instrumentation and Control Panels*

Equipment Description *Skimmer surge tank A high level switch*

Location: Bldg. *RB* Floor El. *344* Room, Area *Col 4 Line D*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   SWEL item is not independently supported; it is attached to a pipe stand running vertically which is supported at the top and bottom.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   SWEL item is not independently supported; it is attached to a pipe stand running vertically which is supported at the top and bottom.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   SWEL item is not independently supported; it is attached to a pipe stand running vertically which is supported at the top and bottom.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. *19LS-65* Equip. Class 20. *Instrumentation and Control Panels*

Equipment Description *Skimmer surge tank A high level switch*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   N/A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Flexible conduit is a soft target near item. There are no credible seismic interactions.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☒
   Fluorescent light in the room is located several feet from SWEL item. No interaction likely.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   Conduit attached to the wall and has a flexible connection at the swell item. SWEL item is not independently supported, it is attached to a pipe stand running vertically which is supported at the top and bottom.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. *19LS-65* Equip. Class 20. *Instrumentation and Control Panels*

Equipment Description *Skimmer surge tank A high level switch*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G, Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-003

Equipment ID No. *19LS-65* Equip. Class 20. *Instrumentation and Control Panels*

Equipment Description *Skimmer surge tank A high level switch*

Photographs

Note: *19LS-65*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. *19LS-67* Equip. Class 20. *Instrumentation and Control Panels*

Equipment Description *Skimmer surge tank A low-low level switch*

Location: Bldg. *RB* Floor El. *347* Room, Area *Col 4 Line D*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is not supported independently.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is not supported independently.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is not supported independently. No concrete.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. *19LS-67* Equip. Class 20. *Instrumentation and Control Panels*

Equipment Description *Skimmer surge tank A low-low level switch*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   N/A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Flexible conduit is a soft target near item. There are no credible seismic interactions.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☒

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. *19LS-67* Equip. Class 20. *Instrumentation and Control Panels*

Equipment Description *Skimmer surge tank A low-low level switch*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G, Porch

Alan Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-004

Equipment ID No. *19LS-67* Equip. Class 20. *Instrumentation and Control Panels*

Equipment Description *Skimmer surge tank A low-low level switch*

Photographs

Note: *19LS-67*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-005

Equipment ID No. *19FPC-33* Equip. Class 07-*Pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B to cndsr hotwell isol valve inlet isol*

Location: Bldg. *RB* Floor El. *326.9* Room, Area *Col 3 line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-005

Equipment ID No. *19FPC-33* Equip. Class 07-*Pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B to cndsr hotwell isol valve inlet isol*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   N/A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   No soft targets

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Piping and overhead conduit well supported.

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☒

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-005

Equipment ID No. *19FPC-33* Equip. Class 07-*Pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B to cndsr hotwell isol valve inlet isol*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G, Porch

Alan Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-005

Equipment ID No. *19FPC-33* Equip. Class 07- *Pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B to cndsr hotwell isol valve inlet isol*

Photographs

Note: *19FPC-33 valve shown on left side of photo. (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

Note: *19FPC-33 (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. *19AOV-09* Equip. Class *7. pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B to cndsr hotwell isol valve*

Location: Bldg. *RB* Floor El. *326.9* Room, Area *Col 3 line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. *19AOV-09* Equip. Class 7. *pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B to cndsr hotwell isol valve*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   N/A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Piping and conduit above the item is well supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☒

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. *19AOV-09* Equip. Class 7. *pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B to cndsr hotwell isol valve*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G, Porch

Alan Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-006

Equipment ID No. *19AOV-09* Equip. Class 7. *pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B to cndsr hotwell isol valve*

Photographs

Note: *19AOV-09 valve shown in center of picture. (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. *19FPC-01* Equip. Class 7. *Pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B drain valve*

Location: Bldg. *RB* Floor El. *326* Room, Area *Col 3 line T*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. *19FPC-01* Equip. Class 7. *Pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B drain valve*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   None overhead. Fluorescent light directly south will not damage hand wheel if it fails.

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☒
   No line attached.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. *19FPC-01* Equip. Class 7. *Pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B drain valve*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G, Porch

Alan Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-007

Equipment ID No. *19FPC-01* Equip. Class 7. *Pneumatic-operated valves*

Equipment Description *Skimmer surge tanks A & B drain valve*

Photographs

Note: *19FPC-01 (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

Note: *19FPC-01(The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-008

Equipment ID No. *19P-1A* Equip. Class 5. *Horizontal pumps*

Equipment Description *Fuel pool cooling recirc pump A*

Location: Bldg. *RB* Floor El. *326* Room, Area *Col 3 line T*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The anchorage is free of bent, broken, missing or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Mild corrosion where paint is chipped

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☒ U☐ N/A☐
   Single hairline cracks less then 1/16” in foundation near each bolt. These cracks are judged to have no adverse seismic impact on 19P-1A

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-008

Equipment ID No. *19P-1A* Equip. Class 5. *Horizontal pumps*

Equipment Description *Fuel pool cooling recirc pump A*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Piping and conduit above oil reservoir are well supported.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-008

Equipment ID No. *19P-1A* Equip. Class 5. *Horizontal pumps*

Equipment Description *Fuel pool cooling recirc pump A*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G, Porch

Alan Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-008

Equipment ID No. *19P-1A* Equip. Class 5. *Horizontal pumps*

Equipment Description *Fuel pool cooling recirc pump A*

Photographs

Note: *19P-1A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

Note: *19P-1A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL2-008

Equipment ID No. *19P-1A* Equip. Class 5. *Horizontal pumps*

Equipment Description *Fuel pool cooling recirc pump A*

Note: *19P-1A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

Note: *19P-1A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 2-009

Equipment ID No. *19E-1A* Equip. Class 21. *Tanks And Heat Exchangers*

Equipment Description *Fuel pool cooling heat exchanger A*

Location: Bldg. *RB* Floor El. *326* Room, Area *Col 4.5 line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Anchorage is intact with all hardware present and in proper configuration.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Minor surface corrosion. No adverse seismic concern.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No visible cracks in vicinity of anchorage.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 2-009

Equipment ID No. *19E-1A* Equip. Class 21. *Tanks And Heat Exchangers*

Equipment Description *Fuel pool cooling heat exchanger A*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   4.17-4

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Very minor surface rust on plate.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 2-009

Equipment ID No. *19E-1A* Equip. Class 21. *Tanks And Heat Exchangers*

Equipment Description *Fuel pool cooling heat exchanger A*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G. Porch *9-28-12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 2-009

Equipment ID No. *19E-1A* Equip. Class 21. *Tanks And Heat Exchangers*

Equipment Description *Fuel pool cooling heat exchanger A*

Photographs

Note: *19E-1A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

Note: *19E-1A (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

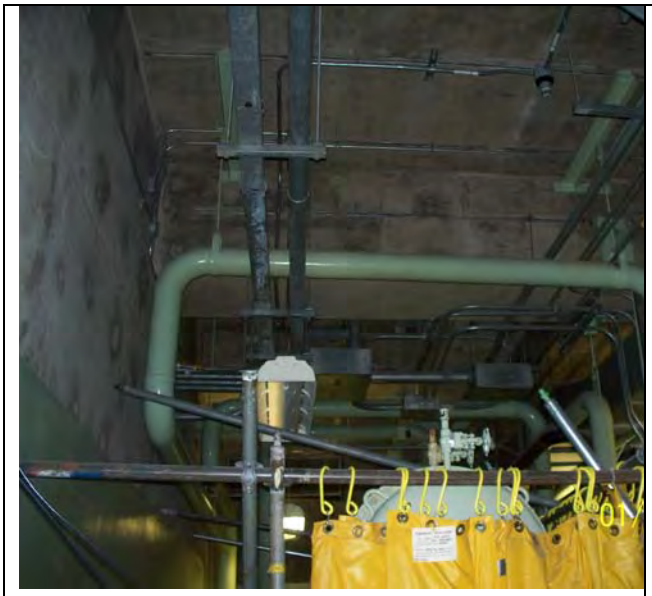
Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 2-009

Equipment ID No. *19E-1A* Equip. Class 21. *Tanks And Heat Exchangers*

Equipment Description *Fuel pool cooling heat exchanger A*



Note: *19E-1A with lead shielding around it. (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

Note: *19E-1A with shielding draped around it. (The date provided on the bottom right cornet is not correct the date that the picture was taken. Malfunction with camera setting)*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL 2-010

Equipment ID No. *71MCC-131-OD1* Equip. Class[1] *1 Motor Control Center*

Equipment Description *19P-1A(M) FUEL POOL COOLING RECIRC PUMP A MOTOR*

Location: Bldg. *RB* Floor El. *326.9* Room, Area *Col 3 Line P*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The anchorage is not visible for anchorage.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☒ N/A☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☒ N/A☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☒ N/A☐

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL 2-010

Equipment ID No. *71MCC-131-OD1* Equip. Class *1 Motor Control Center*

Equipment Description *19P-1A(M) FUEL POOL COOLING RECIRC PUMP A MOTOR*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☒

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL 2-010

Equipment ID No. *71MCC-131-OD1* Equip. Class *1 Motor Control Center*

Equipment Description *19P-1A(M) FUEL POOL COOLING RECIRC PUMP A MOTOR*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *A Porch* A G. Porch Date: *11/01/12*

C. Sawatzke C. Sawatzke *11/01/12*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL 2-010

Equipment ID No. *71MCC-131-OD1* Equip. Class *1 Motor Control Center*

Equipment Description *19P-1A(M) FUEL POOL COOLING RECIRC PUMP A MOTOR*

Photographs

Note: *71MCC-131-OD1*

Note: *71MCC-131-OD1*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL 2-010

Equipment ID No. *71MCC-131-OD1* Equip. Class *1 Motor Control Center*

Equipment Description *19P-1A(M) FUEL POOL COOLING RECIRC PUMP A MOTOR*

Note: *71MCC-131-OD1 Side View*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 2-012

Equipment ID No. *32DHR-18* Equip. Class[1] *7-Pneumatic-Operated Valve*

Equipment Description *Decay Heat removal CLG Water Return ISOL Valve*

Location: Bldg. *RB* Floor El. *300* Room, Area *Col 1 Line Y*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   The item is an inline valve.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   The item is an inline valve.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   No visible corrosion, Limited visibility.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   No visible cracks. Limited visibility.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 2-012

Equipment ID No. *32DHR-18* Equip. Class *7-Pneumatic-Operated Valve*

Equipment Description *Decay Heat removal CLG Water Return ISOL Valve*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   N/A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   There are no soft targets.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☒
   No attached line.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 2-012

Equipment ID No. *32DHR-18* Equip. Class *7-Pneumatic-Operated Valve*

Equipment Description *Decay Heat removal CLG Water Return ISOL Valve*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *A.Porch* Date: *11/01/2012*

C.Sawatzke *11/01/2012*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL 2-012

Equipment ID No. *32DHR-18* Equip. Class *7-Pneumatic-Operated Valve*

Equipment Description *Decay Heat removal CLG Water Return ISOL Valve*

Photographs

Note: *32DHR-18*

Note:

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL2-013

Equipment ID No. *71MCC-120-OE1* Equip. Class[1] *1-Motor Control Centers*

Equipment Description *32P-1A(M) Decay Heat Removal SFP Water Primary Pump A Motor*

Location: Bldg. *YD* Floor El. *272* Room, Area *N/A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☒ N/A☐

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☒ N/A☐

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☒ N/A☐

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL2-013

Equipment ID No. *71MCC-120-OE1* Equip. Class[2] *1-Motor Control Centers*

Equipment Description *32P-1A(M) Decay Heat Removal SFP Water Primary Pump A Motor*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☒

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   This component consists of four separate panels, each with a latch to open. There are no gauges, indicators, relays, etc. on the exterior of the panel. Therefore, no soft targets

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☒
   The item is located outside in the yard area. There are no overhead equipments.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The conduit and cable trays coming off the back of the unit have adequate flexibility.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

[2] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL2-013

Equipment ID No. *71MCC-120-OE1* Equip. Class[3] *1-Motor Control Centers*

Equipment Description *32P-1A(M) Decay Heat Removal SFP Water Primary Pump A Motor*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Some rust present along baseboard of MCC cabinet. Will not affect structural integrity of equipment.

Evaluated by: *A Porch* A G. Porch Date: *11-14-12*

R Casella Rich Casella *11-14-12*

[3] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 4

Status: Y☐ N☐ U☒

Seismic Walkdown Checklist (SWC) SWEL2-013

Equipment ID No. *71MCC-120-OE1* Equip. Class[4] *1-Motor Control Centers*

Equipment Description *32P-1A(M) Decay Heat Removal SFP Water Primary Pump A Motor*

Photographs

Note: *71MCC-120-OE1(Front)*

Note: *71MCC-120-OE1 (Back)*

[4] Enter the equipment class name from Appendix B: Classes of Equipment.

Attachment D

"Area Walk-By Checklists (AWCs)"

AWC #	SWEL #s	Page #
001	1- 426	4
002	1- 406	7
003	1- 578, 594, 625, 629, 643, 647, 663, 671, 675, and 683	10
004	1- 335, 347	15
005	1- 502	18
006	1- 519	21
007	1- 522	25
008	1- 333	28
009	1- 494	31
010	1- 475, 491	34
011	1- 498	37
012	1- 637, 434, 436, 437, 444, 493	42
013	1- 489, 495, 555, 636, 430, 433, 640	47
014	1-635, 660, and 687	52
015	1- 209, 210, 213, 219, 232, 234, 243	57
016	1-446	61
017	1- 119, 137, 360, 364, 366 and 367	64
018	1- 069, 079	68
019	1-319	73
020	1-470	77
021	1-032, 033, 043 and 044	80
022	1 -155, 157 and 161	84
023	1 - 165	87
024	1-371	91
025	1-169	95
026	1- 373, 696	98
027	1-124	101
028	1-217	104

AWC #	SWEL #s	Page #
029	1-690	109
030	1-372	110
031	1-166	113
032	1- 123, 171	117
033	1- 053, 056, 445, 457	120
034	1-001	124
035	1- 335, 347	128
036	1-438, 462	131
037	1- 052	134
038	1- 448, 450	138
039	1-474	143
040	1-487	146
041	1-439	149
042	1-481	152
043	1- 336, 343	156
044	1-456	159
045	1-314	162
046	1-452	165
047	1-164	168
048	1- 516, 518, and 508	171
049	1- 581, 582, 624, 628, 642, 646, 662, 670, 674, 682, 577	175
050	1- 634, 658, 686	179
051	1-635	183
052	2-003 and 2-004	186
053	2-005, 2-006, 2-007, 2-008, 2-009	190
054	1-011	193
055	1-012	196
056	1-065	199

AWC #	SWEL #s	Page #
057	2-014	202
058	2-010	206
059	1-501	210
060	1-172	214
061	1-439, 462	217
062	2-013	220

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 001

Location: Bldg. *AD* Floor El. *300* Room, Area[1] *Col. 10.5 Line S*

SWEL Components: SWEL1- 426

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 001

Location: Bldg. *AD* Floor El. *300* Room, Area *Col. 10.5 Line S*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-001

Location: Bldg. *AD* Floor El. *300* Room, Area *Col. 10.5 Line S*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/24/12*

Donald Koberg *9/24/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 002

Location: Bldg. *AD* Floor El. *322* Room, Area[1] *Col. 9.5 Line V*

SWEL Components: SWEL1- 406

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-002

Location: Bldg. *AD* Floor El. *322* Room, Area *Col. 9.5 Line V*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 002

Location: Bldg. *AD* Floor El. *322* Room, Area *Col. 9.5 Line V*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/24/12*

Donald Koberg *9/24/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 003

Location: Bldg. *EG* Floor El. *272'* Room, Area[1] *EG Room B*

SWEL Components: SWEL 1-578, 594, 625, 629, 643, 647, 663, 671, 675, and 683

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The clean/dirty rag bins and a hand held fire extinguisher have anchors that are not tightened/loose. However, items are not close enough to any vital equipment to cause adverse behavior during a seismic event.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 003

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room B*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 003

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room B*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Losev *09/21/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 003

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room B*

SWEL Components: SWEL 1-578, 594, 625, 629, 643, 647, 663, 671, 675, and 683

Photographs

Note: *PIcture of the clean/dirty rag bins.*

Note: *PIcture of the non-tightened/loose anchorage of the clean/dirty rag bins.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 003

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room B*

SWEL Components: SWEL 1-578, 594, 625, 629, 643, 647, 663, 671, 675, and 683

Note: *PIcture of the 76CX-609 hand held fire extinguisher.*

Note: *PIcture of the non-tightened/loose anchorage of the 76CX-609 hand held fire extinguisher.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 004

Location: Bldg. *ST* Floor El. *252'* Room, Area[1] *ST 252'*

SWEL Components: SWEL1- 335, 347

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 004

Location: Bldg. *ST* Floor El. *252'* Room, Area *ST 252'*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 004

Location: Bldg. *ST* Floor El. *252'* Room, Area *ST 252'*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *10/01/2012*

Yaroslav Losev *10/01/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 005

Location: Bldg. *BR* Floor El. *272'* Room, Area[1] *BR 3*

SWEL Components: SWEL1- 502

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 005

Location: Bldg. *BR* Floor El. *272'* Room, Area *BR 3*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 005

Location: Bldg. *BR* Floor El. *272'* Room, Area *BR 3*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/30/2012*

Yaroslav Losev *09/30/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 006

Location: Bldg. *BR* Floor El. *282'* Room, Area[1] *BR 4*

SWEL Components: SWEL1- 519

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☐ N☒ U☐ N/A☐

   North West anchor on the skid of equipment 72FN-46D is loose. Also there is a loose anchor on the UNISTRUT post base of equipment 72MOD-101B.

   The resolution to this deficiency is tracked through CR-JAF-2012-06539 and CR-JAF-2012-06537.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 006

Location: Bldg. *BR* Floor El. *282'* Room, Area *BR 4*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 006

Location: Bldg. *BR* Floor El. *282'* Room, Area *BR 4*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/30/2012*

Yaroslav Losev *09/30/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 006

Location: Bldg. *BR* Floor El. *282'* Room, Area *BR 4*

SWEL Components: SWEL1-519

Photographs

Note: *Picture of a loose anchor for equipment 72FN-46D is loose.*

Note: *Picture of a loose anchor in the UNISTRUT post base for equipment 72MOD-101B.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 007

Location: Bldg. *BR* Floor El. *272'* Room, Area[1] *BR 5*

SWEL Components: SWEL1- 522

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 007

Location: Bldg. *RB* Floor El. *272'* Room, Area *BR 5*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 007

Location: Bldg. *RB* Floor El. *272'* Room, Area *BR 5*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/30/2012*

Yaroslav Losev *09/30/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 008

Location: Bldg. *CB* Floor El. *271.8* Room, Area[1] *Col 0.5, Line RP*

SWEL Components: SWEL1- 333

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 008

Location: Bldg. *CB* Floor El. *271.8* Room, Area *Col 0.5, Line RP*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 008

Location: Bldg. *CB* Floor El. *271.8* Room, Area *Col 0.5, Line RP*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Yaroslav Losev* Date: *9/26/12*

Donald Koberg *9/26/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 009

Location: Bldg. *CS* Floor El. *272* Room, Area[1] *Cable Spreading Room, Col. 11, Line C*

SWEL Components: SWEL1- 494

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 009

Location: Bldg. *CS* Floor El. *272* Room, Area *Cable Spreading Room, Col. 11, Line C*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   CO_2 Sprinkler System is present in the area however it is properly supported and free from potentially adverse seismic interactions

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 009

Location: Bldg. *CS* Floor El. *272* Room, Area *Cable Spreading Room, Col. 11, Line C*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/25/12*

Donald Koberg *9/25/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 010

Location: Bldg. *EB* Floor El. *272* Room, Area[1] *Electric Bay, Col. 18, Line B*

SWEL Components: SWEL1- 475, 491

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 010

Location: Bldg. *EB* Floor El. *272* Room, Area *Electric Bay, Col. 18, Line B*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 010

Location: Bldg. *EB* Floor El. *272* Room, Area *Electric Bay, Col. 18, Line B*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/25/12*

Donald Koberg *9/25/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 011

Location: Bldg. *EB* Floor El. *272'* Room, Area[1] *EB South*

SWEL Components: SWEL1- 498

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 011

Location: Bldg. *EB* Floor El. *272'* Room, Area *EB South*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   Compressed gas cylinder tanks have loose anchorage. One bolt out of two should be tightened on each support of gas tanks. There are also tools (i.e. wrenches) in the back of the gas cylinder tanks with no work order posted in the area. It is determined that these items will not adversely affect the equipment in the area.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 011

Location: Bldg. *EB* Floor El. *272'* Room, Area *EB South*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/28/2012*

Yaroslav Losev *09/28/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 011

Location: Bldg. *EB* Floor El. *272'* Room, Area *EB South*

SWEL Components: SWEL1- 498

Photographs

Note: *Picture showing the span of the 4.5" conduit lines including the JB-FPS20 junction box on the East Side of the block wall.*

Note: *Picture showing the span of other conduits on the West Side of the block wall.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 011

Location: Bldg. *EB* Floor El. *272'* Room, Area *EB South*

SWEL Components: SWEL1- 498

Note: *Picture of the compressed gas cylinder tanks.*

Note: *Picture showing the loose bolts attaching the compressed gas cylinder tanks to a concrete wall and improperly stored tools.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 012

Location: Bldg. *EG* Floor El. *272* Room, Area[1] *EG B & D Panel Room*

SWEL Components: SWEL1-637, 434, 436, 437, 444, 493

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

   There is a roll of excess cable hanging over the edge of the cable tray 1TC456B. Not a credible adverse seismic condition. Site personnel were notified.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 012

Location: Bldg. *EG* Floor El. *272* Room, Area *EG B & D Panel Room*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   Two lights next to Motor Control Centers (MCCs) do not have latches present on the hooks. In a seismic event one end may become unhooked and swing. For the fixture to hit the MCC, and out-of-plane motion is required which is very unlikely. Not a credible seismic event.

   The site personnel were notified immediately.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   Unanchored cabinets are present which may tip and slide into other equipment.

   Fire Extinguisher Portable Tank on a hand truck. The wheels do not have wheel stops preventing the cart from becoming mobile. This is not an adverse seismic condition but the site personnel were notified.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 012

Location: Bldg. *EG* Floor El. *272* Room, Area *EG B & D Panel Room*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Some cables are overhanging the cable tray above the MCCs.This is not a credible seismic interaction.

Two cabinets in EDG-B/D switchgear room, do not seem to be anchor to the wall nor the floor.The plant personnel were notified. This is not a credible seismic interaction.

Evaluated by: *Pouria Pourghobadi* Date: *9/21/12*

Donald Koberg *9/21/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 012

Location: Bldg. *EG* Floor El. *272* Room, Area *EG B & D Panel Room*

SWEL Components: SWEL1-637, 434, 436, 437, 444, 493

Photographs

Note: *Unanchored Cabinets*

Note: *Improper light hooks.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 012

Location: Bldg. *EG* Floor El. *272* Room, Area *EG B & D Panel Room*

SWEL Components: SWEL- SWEL1-637, 434, 436, 437, 444, 493

Note: *Overhanging cables.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 013

Location: Bldg. *EG* Floor El. *272* Room, Area *A/C EDG Switchgear*

SWEL Components: SWEL1- 489, 495, 555, 636, 430, 433, 640

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 013

Location: Bldg. *EG* Floor El. *272* Room, Area *A/C EDG Switchgear*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   33" clearance (east-west) between light fixture and 71-10512,10514,10502,10504 . If light fixture failed in a seismic event, hanging by a single chain, out-of-plane pendulum motion of 33" is not a credible scenario. Conclusion, No adverse seismic spatial interaction.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   CO_2 fire extinguisher 76CX-606 has wheel chocked on opposite sides, Inaccordance with AP-17.02, Housekeeping and Cleanliness Control.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 013

Location: Bldg. *EG* Floor El. *272* Room, Area *A/C EDG Switchgear*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *R Casella* Rich Casella Date: *10-29-12*

A Porch A G. Porch *10-29-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

Status: Y☒ N☐ U☐

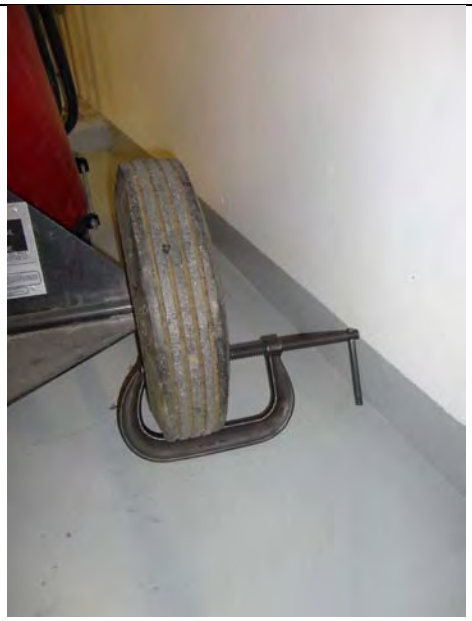
Area Walk-By Checklist (AWC) AWC- 013

Location: Bldg. *EG* Floor El. *272* Room, Area *A/C EDG Switchgear*

SWEL Components: SWEL1- 489, 495, 555, 636, 430, 433, 640

Photographs

Note: *CO_2 fire extinguisher 76CX-606*



Note: *CO_2 fire extinguisher 76CX-606*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

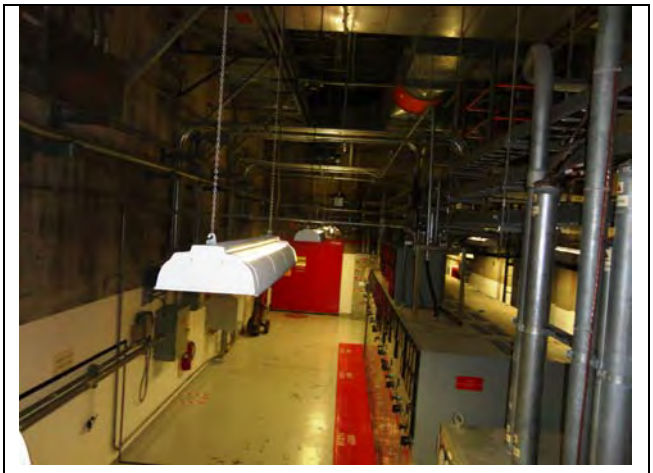
Sheet 5 of 5

Status: Y☒ N☐ U☐

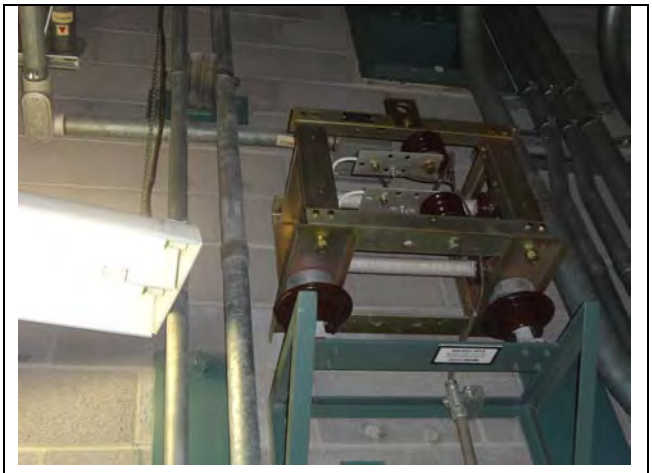
Area Walk-By Checklist (AWC) AWC- 013

Location: Bldg. *EG* Floor El. *272* Room, Area *A/C EDG Switchgear*

SWEL Components: SWEL1- 489, 495, 555, 636, 430, 433, 640



Note: *Light Fixture and MCC's*



Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 014

Location: Bldg. *EG* Floor El. *272'* Room, Area[1] *EG Room D*

SWEL Components: SWEL 1-635, 660, and 687

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The clean/dirty rag bins and hand held fire extinguisher have anchors that are not tightened. Also one anchor is missing on the work bench. However, items are not close enough to any vital equipment to cause adverse affect onto a SWEL item during a seismic event.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 014

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room D*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 014

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room D*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Losev *09/21/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 014

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room D*

SWEL Components: SWEL 1-635, 660, and 687

Photographs

Note: *Picture of the clean/dirty rags.*

Note: *Picture of the non-tightened anchorage of the clean/dirty rags.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 5

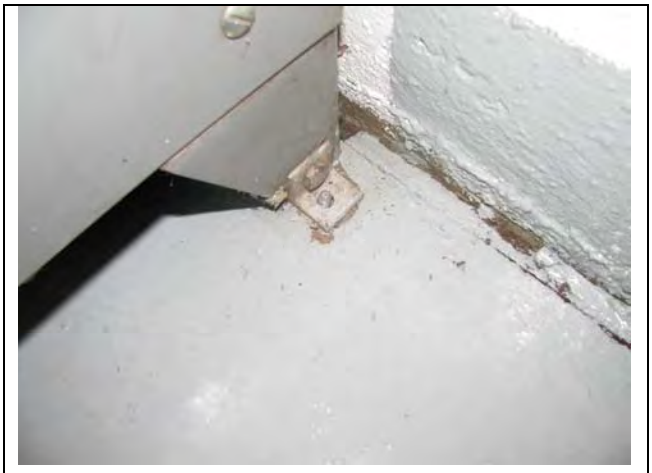
Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 014

Location: Bldg. *EG* Floor El. *272'* Room, Area *EG Room D*

SWEL Components: SWEL 1-635, 660, and 687

Note: *Picture of the work bench.*



Note: *Picture of the missing anchorage of the work bench.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 015

Location: Bldg. *RB* Floor El. *227* Room, Area[1] *Crescent East HPCI*

SWEL Components: SWEL1- 209, 210, 213, 219, 232, 234, 243

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☐ N☒ U☐ N/A☐
   Two P1001 conduits run the width of the room (approximately 21ft) parallel to each other, supporting conduits, smoke detector and a Pull Box. No visible supports provided through the entire run. Unistrut lines are supporting conduit with potentially inadequate supports. The resolution to this deficiency is tracked by CR-JAF-2012-07990

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐
   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐
   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 015

Location: Bldg. *RB* Floor El. *227* Room, Area *Crescent East, HPCI*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 015

Location: Bldg. *RB* Floor El. *227* Room, Area *Crescent East, HPCI*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/21/12*

Donald Koberg *9/21/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 015

Location: Bldg. *RB* Floor El. *227* Room, Area *HPCI*

SWEL Components: SWEL- SWEL1- 209, 210, 213, 219, 232, 234, 243

Photographs

Note: *Unistruts providing supporting the conduits and Junction box.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 016

Location: Bldg. *RB* Floor El. *344.6'* Room, Area[1] *LPCI Battery Room*

SWEL Components: SWEL1- 446

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 016

Location: Bldg. *RB* Floor El. *344.6'* Room, Area *LPCI Battery Room*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 016

Location: Bldg. *RB* Floor El. *344.6'* Room, Area *LPCI Battery Room*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/30/2012*

Yaroslav Losev *09/30/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 017

Location: Bldg. *SP* Floor El. *255'* Room, Area[1] *Pump Room Train A*

SWEL Components: SWEL1- 119, 137, 360, 364, 366 and 367

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, appear to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   Anchorage for a small UNISTRUT support, which is supporting instrumentation piping, is significantly degraded. However, this is not deemed adverse. If the support was to fail and damage the I&C piping, it will not affect the functionality of the strainer or other components in the area, other than the pressure gage connected to the I&C piping. Also, the failure of the support and piping will not result in a fire or flooding hazard. This deficiency is tracked through CR-JAF-2012-06185.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   There is a 6" conduit that hangs over the 1TH604R cable tray rails and is unrestrained. Another 6" diameter conduit supported by the tray is found to be improperly secured in Service Water Pump Room A. Portion of the conduit is secured by a single plastic zip tie on the side of a rod hanger which provides support for the 1TH604R Tray. These conduits are not deemed as adverse seismic conditions since the below equipment is constructed of steel and have no soft targets. The resolution to this deficiency is tracked through CR-JAF-2012-06191.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 017

Location: Bldg. *SP* Floor El. *255'* Room, Area *Pump Room Train A*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 017

Location: Bldg. *SP* Floor El. *255'* Room, Area *Pump Room Train A*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

While passing through Pump Room B, engineers have found an uncovered wall penetration through the West Wall of Service Water Pump Room B. This might be a fire barrier breach since all other penetrations on the same West wall are sealed. Not an adverse seismic condition. Site personnel notified.

Step ladder found in Service Water Pump Room B. Not in designated location. No service tags were found near the location suggesting that the area is being serviced. Not an adverse seismic condition. The site personnel are notified.

Evaluated by: *Harpreet Ghuman* Date: *09/21/2012*

Yaroslav Losev *09/21/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 017

Location: Bldg. *SP* Floor El. *255'* Room, Area *Pump Room Train A*

SWEL Components: SWEL1- 119, 137, 360, 364 and 367

Photographs

Note: *Picture of the degraded anchorage of the UNISTRUT support.*

Note: *Picture of the conduit hanging over the side of cable tray 1TH604R1.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 017

Location: Bldg. *SP* Floor El. *255"* Room, Area *Pump Room Train A*

SWEL Components: SWEL1- 119, 137, 360, 364 and 367

Note: *Picture of the conduit tied to a rod hanger support the on cable tray 1TH604R1.*

Note: *Picture of uncovered penetration in Pump Rom B, West wall.*

Note: *Picture of a step ladder not in designated location in Pump Rom B.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 018

Location: Bldg. *RB* Floor El. *272'* Room, Area[1] *RB RHR Heat Exchange Rm*

SWEL Components: SWEL1- 069, 079

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appear to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   Instrumentation pipe, along the West Wall of the RHR Heat Exchanger Room, is poorly supported. The pipe has an un-braced length of approximately 10'. Pipe bears on a strut at mid-span.. The pipe deflects a significant amount; however, the pipe is not detrimental to any surrounding equipment. Failure of this I&C pipe during a seismic event will not affect nearby equipment except for 10SOV-264A equipment which this line is attached to.

   Site personnel notified. The resolution to this deficiency is tracked thru CR-JAF-2012-07912.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 018

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB RHR Heat Exchange Rm*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   Area contains tools and scaffolding along with current work order inside this room. It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 018

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB RHR Heat Exchange Rm*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/26/2012*

Yaroslav Losev *09/26/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 018

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB RHR Heat Exchange Rm*

SWEL Components: SWEL1-069,079

Photographs

Note: *Picture showing the deflected shape of the instrumentation line resting on a strut support and the un-braced length.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 019

Location: Bldg. *RB* Floor El. *296'* Room, Area[1] *RB 296'*

SWEL Components: SWEL1- 319

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appear to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 019

Location: Bldg. *RB* Floor El. *296'* Room, Area *RB 296'*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   Temporary scaffold in the area has been there since 06-21-2012. The elapsed time since installation is greater than 90 days. Scaffold must be seismically evaluated or removed. Scaffold Log # R20-046. Site personnel are notified and the scaffolding is to be evaluated for long erection period.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 019

Location: Bldg. *RB* Floor El. *296'* Room, Area *RB 296'*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/26/2012*

Yaroslav Losev *09/26/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 019

Location: Bldg. *RB* Floor El. *296'* Room, Area *RB 296'*

SWEL Components: SWEL1- 319

Photographs

Note: *Picture showing the out of date scaffold tag.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 020

Location: Bldg. *RB* Floor El. *344.6'* Room, Area[1] *RB 344.6'*

SWEL Components: SWEL1- 470

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 020

Location: Bldg. *RB* Floor El. *344.6'* Room, Area *RB 344.6'*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 020

Location: Bldg. *RB* Floor El. *344.6'* Room, Area *RB 344.6'*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/30/2012*

Yaroslav Losev *09/30/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 021

Location: Bldg. *RB* Floor El. *272'* Room, Area[1] *RB East*

SWEL Components: SWEL1-032, 033, 043 and 044

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appear to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 021

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB East*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   All equipment on skids are set up the same and spaced an equal distance apart. The gap between each skid is small, but during a seismic event the skids will act in unison; therefore will have no interaction with one another.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   There was a tool located on the ground in the area without any work orders in vicinity; however, this is not considered a significant source to damage any equipment during a seismic event due to the size of the tool and location.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 021

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB East*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/23/2012*

Yaroslav Losev *09/23/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

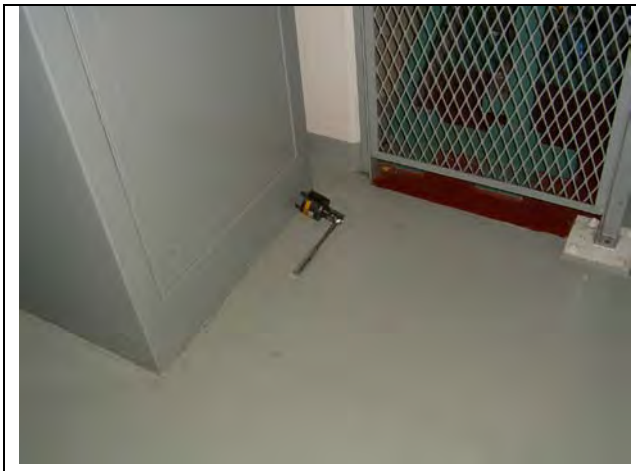
Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 021

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB East*

SWEL Components: SWEL1-032, 033, 043 and 044

Photographs



Note: *Picture showing the location of the improperly stored tool.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 022

Location: Bldg. *RB* Floor El. *326'* Room, Area[1] *RB NW 326'*

SWEL Components: SWEL1 -155, 157 and 161

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, appear to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 022

Location: Bldg. *RB* Floor El. *326'* Room, Area *RB NW 326'*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 022

Location: Bldg. *RB* Floor El. *326'* Room, Area *RB NW 326'*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/25/2012*

Yaroslav Losev *09/25/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 023

Location: Bldg. *RB* Floor El. *272'* Room, Area[1] *RB South, Col. 3, Line R*

SWEL Components: SWEL1 - 165

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appear to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 023

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB South, Col. 3, Line R*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 023

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB South, Col. 3, Line R*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/26/2012*

Yaroslav Losev *09/26/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-023

Location: Bldg. *RB* Floor El. *272'* Room, Area *RB South, Col. 3, Line R*

SWEL Components: SWEL1 - 165

Photographs

Note: *Picture showing the deflected shape of the instrumentation line and the unbraced length.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 024

Location: Bldg. *RB* Floor El. *242* Room, Area[1] *Col. 3*

SWEL Components: SWEL1- 371

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 024

Location: Bldg. *RB* Floor El. *242* Room, Area *Col. 3*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   One gallon of water stored in inacceptable manner. No straps, loose hose. Not an adverse seismic condition.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 024

Location: Bldg. *RB* Floor El. *242* Room, Area *Col. 3*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/24/12*

Donald Koberg *9/24/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 024

Location: Bldg. *RB* Floor El. *242* Room, Area *Col. 3*

SWEL Components: SWEL1- 371

Photographs

Note: *water storage.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 025

Location: Bldg. *RB* Floor El. *300* Room, Area[1] *Col. R, Line 4.5*

SWEL Components: SWEL1- 169

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 025

Location: Bldg. *RB* Floor El. *300* Room, Area *Col. R, Line 4.5*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 025

Location: Bldg. *RB* Floor El. *300* Room, Area *Col. R, Line 4.5*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/25/12*

Donald Koberg *9/25/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 026

Location: Bldg. *RB* Floor El. *242* Room, Area[1] *Col. 4, Line D, Crescent East 242*

SWEL Components: SWEL1- 373, 696

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 026

Location: Bldg. *RB* Floor El. *242* Room, Area *Col. 4, Line D, Crescent East 242*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 026

Location: Bldg. *RB* Floor El. *242* Room, Area *Col. 4, Line D, Crescent East 242*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/23/12*

Donald Koberg *9/23/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 027

Location: Bldg. *RB* Floor El. *227* Room, Area[1] *Crescent East RHR Pump*

SWEL Components: SWEL1- 124

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 027

Location: Bldg. *RB* Floor El. *227* Room, Area *Crescent East RHR Pump*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 027

Location: Bldg. *RB* Floor El. *227* Room, Area *Crescent East RHR Pump*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/23/12*

Donald Koberg *9/23/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 028

Location: Bldg. *RB* Floor El. *227* Room, Area[1] *West Crescent*

SWEL Components: SWEL1-217, 171

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 028

Location: Bldg. *RB* Floor El. *227* Room, Area *West Crescent*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 028

Location: Bldg. *RB* Floor El. *227* Room, Area *West Crescent*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/21/12*

Donald Koberg *9/21/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 029

Location: Bldg. *RB* Floor El. *242* Room, Area[1] *Crescent West: Col. 4, Line A*

SWEL Components: SWEL1- 690

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 029

Location: Bldg. *RB* Floor El. *242* Room, Area *Crescent West: Col. 4, Line A*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 029

Location: Bldg. *RB* Floor El. *242* Room, Area *Crescent West: Col. 4, Line A*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/25/12*

Donald Koberg *9/25/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 030

Location: Bldg. *RB* Floor El. *242* Room, Area[1] *Col. 1, Line R*

SWEL Components: SWEL1- 372

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 030

Location: Bldg. *RB* Floor El. *272* Room, Area *Col. 1, Line R*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   Temporary scaffolding is(log # R20-014) erected in the area. It is near the 90 allowance. Evaluations are to be performed for long-period erection of the scaffolding per EN-MA-133.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 030

Location: Bldg. *RB* Floor El. *242* Room, Area *Col. 1, Line R*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/25/12*

Donald Koberg *9/25/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 031

Location: Bldg. *RB* Floor El. *227* Room, Area[1] *Col. 3, Line P, RCIC Pump Room*

SWEL Components: SWEL1- 166

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   See comments.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 031

Location: Bldg. *RB* Floor El. *227* Room, Area *Col. 3, Line P, RCIC Pump Room*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐
   See comments.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐
   Sprinkler system in the area is adequately supported.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐
   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐
   Temporary scaffolding is present and well secured. Temporary tools are we secured.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 031

Location: Bldg. *RB* Floor El. *227* Room, Area *Col. 3, Line P, RCIC Pump Room*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

RCIC VAC pump to turbine pipe is supported approximately 20 inches above room floor with no lateral support on the vertical span extending from elevations 227' to 242'. Not an adverse seismic interaction.

The turbine exhaust pipe is supported at approximately 40 inches above room floor and appears to have been in contact with conduit 1CC594RU3, 9 feet above the support, which has created a dent on the pipe insulation. The indentation on the pipe insulation is minor and the conduit is rigid. Not and adverse seismic interaction. The pipe support is PFSK-1963 which limits thermal expansion/seismic movement of the RCIC line.

The site personnel were notified of the conditions immediately.

Evaluated by: *Pouria Pourghobadi* Date: *9/24/12*

Donald Koberg *9/24/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 031

Location: Bldg. *RB* Floor El. *227* Room, Area *Col. 3, Line P, RCIC Pump Room*

SWEL Components: SWEL1- 166

Photographs

Note: *Unsupported vertical pipes and pipe/conduit interaction point.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 032

Location: Bldg. *RB* Floor El. *227* Room, Area[1] *Col. 3, Line A, RHR Pump*

SWEL Components: SWEL1- 123, 171

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 032

Location: Bldg. *RB* Floor El. *227* Room, Area *Col. 3, Line A, RHR Pump*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 032

Location: Bldg. *RB* Floor El. *227* Room, Area *Col. 3, Line A, RHR Pump*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/24/12*

Donald Koberg *9/24/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 033

Location: Bldg. *RR* Floor El. *284'8"* Room, Area[1] *Relay Room Col. 9-11, Line F-G*

SWEL Components: SWEL1- 053, 056, 445, 457

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 033

Location: Bldg. *RR* Floor El. *284'8"* Room, Area *Relay Room Col. 9-11, Line F-G*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 033

Location: Bldg. *RR* Floor El. *284'8"* Room, Area *Relay Room Col. 9-11, Line F-G*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/24/12*

Donald Koberg *9/24/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

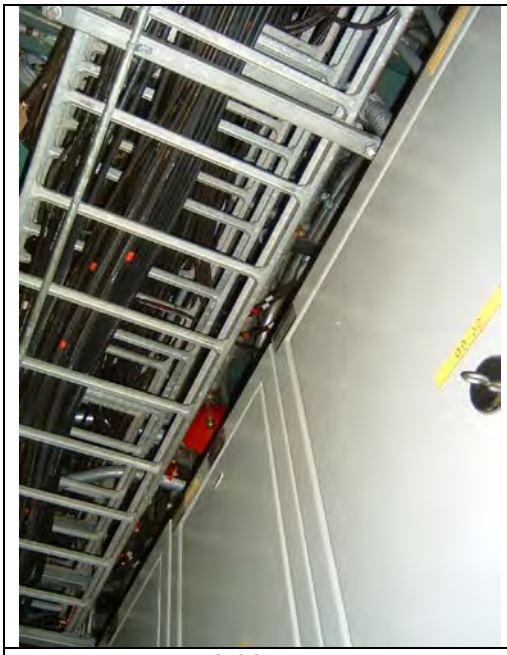
Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 033

Location: Bldg. *RR* Floor El. *242'8"* Room, Area *Control Room Ventilation Exhaust Fan A*

SWEL Components: SWEL1- 053, 056, 445, 457

Photographs



Note: *$C0_2$ Sprinkler System*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 034

Location: Bldg. *SG* Floor El. *272* Room, Area[1] *Standby Gas, Col. 1, Line Y*

SWEL Components: SWEL1- 001

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   Three pipes (two of which are copper pipes) are present in the area above the valve. The unsupported length does appear long enough to present a significant support issue. In a seismic event, the pipes are likely to fail, based on engineering judgment and the fact that the connections are soldered. The collapse of copper pipes on the valve (made of steel) will not result in damage to the valve. Hence, this is an industrial safety issue and not an adverse seismic interaction. Site personnel were notified immediately. .

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 034

Location: Bldg. *SG* Floor El. *272* Room, Area *Standby Gas, Col. 1, Line Y*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 034

Location: Bldg. *SG* Floor El. *272* Room, Area *Standby Gas, Col. 1, Line Y*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

Evaluated by: *Pouria Pourghobadi* Date: *9/25/12*

Donald Koberg *9/25/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 034

Location: Bldg. *SG* Floor El. *272* Room, Area *Standby Gas, Col. 1, Line Y*

SWEL Components: SWEL1- 001

Photographs

Note: *Unsupported Pipe Spans*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 035

Location: Bldg. *ST* Floor El. *252'* Room, Area[1] *ST 252'*

SWEL Components: SWEL1- 335, 347

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significant degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 035

Location: Bldg. *ST* Floor El. *252'* Room, Area *ST 252'*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 035

Location: Bldg. *ST* Floor El. *252'* Room, Area *ST 252'*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *10/01/2012*

Yaroslav Losev *10/01/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-036

Location: Bldg. *RB* Floor El. *300* Room, Area *Col. 2 Line R*

SWEL Components: SWEL1-438, 462

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-036

Location: Bldg. *RB* Floor El. *300* Room, Area *Col. 2 Line R*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-036

Location: Bldg. *RB* Floor El. *300* Room, Area *Col. 2 Line R*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   *There is a 2" DIA. DWBA (DW Breaking Air) copper line that is being hung with other lines whose U-bolt is loose. The adjacent (upstream and downstream) supports are secured and there is no possibility of line becoming free or overstressed. Support is approximately 87' above 292' , 1'-6" north and 2' west of 66HV-3B. * Ref. Col line W1). WR# 289378 is written to tighten nuts on 2" DIA. U-bolt.*

Comments (Additional pages may be added as necessary)

There is a light fixture hung with 2 chains(one on each end) above ¼" tubing from gas cylinder labeled flammable; both chains/hooks would need to fail to have fixture fall on tubing-not credible seismic condition.

Evaluated by: *Al G. Porch* Date: *10/31/12*

C. Sawatzke *10/31/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-036

Location: Bldg. *RB* Floor El. *300* Room, Area *Col. 2 Line R*

SWEL Components: SWEL1-438, 462

Photographs

Note: *Light fixture above ¼" tubing from the gas tanks*

Note: *Light fixture above ¼" tubing from the gas tanks*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 037

Location: Bldg. *CR* Floor El. *300* Room, Area *10F*

SWEL Components: SWEL1- 052

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 037

Location: Bldg. *CR* Floor El. *300* Room, Area *10F*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 037

Location: Bldg. *CR* Floor El. *300* Room, Area *10F*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel at elevation 282 (at flange connecting SRV to SRV discharge piping). The resolution to this deficiency is tracked through CR-JAF-2012-06495.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G, Porch

Alan Porch *9-28-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 038

Location: Bldg. *BR-1* Floor El. *272* Room, Area

SWEL Components: SWEL1- 448, 450

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 038

Location: Bldg. *BR-1* Floor El. *272* Room, Area

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 038

Location: Bldg. *BR-1* Floor El. *272* Room, Area

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Cable trays 1TC268N and 1TX256N appear to be close to capacity. All cables are within the tray I.E. No over-hang and were well supported. No seismic concern.

Evaluated by: *R Casella* Rick Casella Date: *10-30-12*

A Porch A G. Porch *10-30-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 038

Location: Bldg. *BR-1* Floor El. *272* Room, Area

SWEL Components: SWEL1- 448, 450

Photographs

Note: *Cable trays*

Note: *Cable trays*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 038

Location: Bldg. *BR-1* Floor El. *272* Room, Area

SWEL Components: SWEL1- 448, 450

Note: *Cable trays*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-039

Location: Bldg. *W. EB* Floor El. *272'* Room, Area[1] *Col A1 Line 18.5*

SWEL Components: SWEL1- 474

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area appears to be free of potentially adverse seismic conditions.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   The anchorage of equipment in the area, around the SWEL item(s), appears to be free of significantly degraded conditions.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   The cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions.

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-039

Location: Bldg. *EB* Floor El. *272'* Room, Area *Col A1 Line 18.5*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic spatial interactions with other equipment in the area.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area.

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

   It appears that the area is free of potentially adverse seismic interactions that could cause a fire in the area.

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-039

Location: Bldg. *EB* Floor El. *272'* Room, Area *Col A1 Line 18.5*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   No other seismic conditions that could adversely affect the safety functions of the equipment in the area were found.

Comments (Additional pages may be added as necessary)

No additional comments.

Evaluated by: *Harpreet Ghuman* Date: *09/28/2012*

Yaroslav Losev *09/28/2012*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-040

Location: Bldg. *W. EB* Floor El. *272* Room, Area *Col. A1 Line 18*

SWEL Components: SWEL1-487

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-040

Location: Bldg. *W. EB* Floor El. *272* Room, Area *Col. A1 Line 18*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-040

Location: Bldg. *W. EB* Floor El. *272* Room, Area *Col. A1 Line 18*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

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Evaluated by: *Al G. Porch* A G. Porch Date: *11/1/12*

C. Sawatzke C. Sawatzke

11/1/12

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-041

Location: Bldg. *RB* Floor El. *300* Room, Area[1] *Col. 6 line R*

SWEL Components: SWEL1- 439

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-041

Location: Bldg. *RB* Floor El. *300* Room, Area *Col 6 Line R*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐
   See comments

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐
   See comments

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-041

Location: Bldg. *RB* Floor El. *300* Room, Area *Col 6 line R*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

There is a light fixture (hung by one chain at each end) above ¼" tubing to gas cylinders labeled flammable. Both chains would have to fail to allow the fixture to fall onto the tubing. This is not a credible seismic concern.

Evaluated by: *A Porch* A G. Porch Date: *10-31-12*

C Sawatzke C. Sawatzke *10-31-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-042

Location: Bldg. *RB* Floor El. *272* Room, Area *Col. 1.5 Line W*

SWEL Components: SWEL1-481

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-042

Location: Bldg. *RB* Floor El. *272* Room, Area *Col. 1.5 Line W*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-042

Location: Bldg. *RB* Floor El. *272* Room, Area *Col. 1.5 Line W*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   *There is a 2" DIA. DWBA (DW Breathing Air) copper line that is being hung with other lines on a common structural angle member, the U bolt on the copper line is loose. The adjacent (upstream and downstream) supports are secured and there is no possibility of line becoming free or overstressed. Support is approximately 87" above 292' , 1'-6" north and 2' west of 66HV-3B. * Ref. Col line W1). WR# 289378 is written to tighten nuts on 2" DIA. U-bolt. No credible impact on safety function of any equipment in the area.*

Comments (Additional pages may be added as necessary)

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Evaluated by: *Al G. Porch* Date: *11/1/12*

C. Sawatzke *11/1/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

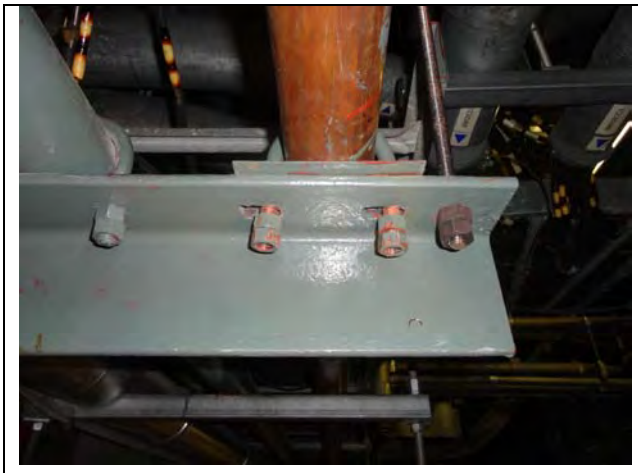
Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-042

Location: Bldg. *RB* Floor El. *272* Room, Area *Col. 1.5 Line W*

SWEL Components: SWEL1-481

Photographs



Note: *Loose nuts on the U-bolt connection.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 043

Location: Bldg. *PC* Floor El. *268* Room, Area *Near 29AOV-80A*

SWEL Components: SWEL1- 336, 343

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   See tubing interaction item addressed on SWEL for 29AOV-80A (#343)

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 043

Location: Bldg. *PC* Floor El. *268* Room, Area *Near 29AOV-80A*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 043

Location: Bldg. *PC* Floor El. *268* Room, Area *Near 29AOV-80A*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G, Porch *9-28-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-044

Location: Bldg. *RB* Floor El. *272* Room, Area *West of Airlock*

SWEL Components: SWEL1- 456

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-044

Location: Bldg. *RB* Floor El. *272* Room, Area *West of Airlock*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-044

Location: Bldg. *RB* Floor El. *272* Room, Area *West of Airlock*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Crack in concrete floor at column line A3-28, Runs north/ south from north wall to the joint with the foundation for the RB

Evaluated by: *C. Sawatzke* Date: *9-28-12*

Alan Porch *9-28-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 045

Location: Bldg. *SU* Floor El. *260* Room, Area *Col. 2 Line T*

SWEL Components: SWEL1- 314

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☐ N☐ U☐ N/A☒

   This equipment is located in Torus. There are no equipments in this area with anchorage.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☐ N☐ U☐ N/A☒

   This equipment is located in Torus. There are no equipments in this area with anchorage.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☐ N☐ U☐ N/A☒

   This equipment is located in Torus. There are no cable trays.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 045

Location: Bldg. *SU* Floor El. *260* Room, Area *Col. 2 Line T*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 045

Location: Bldg. *SU* Floor El. *260* Room, Area *Col. 2 Line T*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☐ N☐ U☒

Comments (Additional pages may be added as necessary)

Approximately 12' of ¾" copper line is unsupported due to degraded unistrut supports. 1/8" clearance between 1CC584BV1 and 27AOV-116 motor. The possible seismic interaction is evaluated through LB- 03 and tracked through CR-JAF-2012-07069

Evaluated by: *Rick Casella* Rick Casella Date: *10-8-12*

Alan Porch A G. Porch *10-8-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-046

Location: Bldg. *RB* Floor El. *242* Room, Area *West Crescent*

SWEL Components: SWEL1-452

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   71BMCC-3 is anchored similar to 71BMCC-1.

   Rack 25-50 cage bolted to floor and wall. Rack is adequately supported.

   66UC-22A adequately supported.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   Mild surface corrosion on 66UC-22A mounting bolts. Not an adverse seismic condition.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-046

Location: Bldg. *RB* Floor El. *242* Room, Area *West Crescent*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   Portable HEPA Unit adjacent to MCC is adequately secured to handrail per Housekeeping Proc. AP-17.02. Verified non-credible seismic interactions.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-046

Location: Bldg. *RB* Floor El. *242* Room, Area *West Crescent*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

There is a light fixture hung with 2 chains (one on each end) above ¼" tubing from gas cylinder labeled flammable; both chains/hooks would need to fail to have fixture fall on tubing- not a credible seismic condition.

Evaluated by: *Rick Casella* Rick Casella Date: *10/31/12*

Robert Kester *10/31/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 047

Location: Bldg. *PC* Floor El. *290* Room, Area *Vicinity of 13MOV-15*

SWEL Components: SWEL1- 164

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☐ N☐ U☐ N/A☒

   This equipment is in the Drywell. There is no equipment in the area with anchorage.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☐ N☐ U☐ N/A☒

   This equipment is in the Drywell. There is no equipment in the area with anchorage.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 047

Location: Bldg. *PC* Floor El. *290* Room, Area *Vicinity of 13MOV-15*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 047

Location: Bldg. *PC* Floor El. *290* Room, Area *Vicinity of 13MOV-15*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G, Porch *9-28-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 048

Location: Bldg. *BR* Floor El. *282* Room, Area

SWEL Components: SWEL1- 516, 518, and 508

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 048

Location: Bldg. *BR* Floor El. *282* Room, Area

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   Approximately ¼" clearance between a 4" pipe running east-west and a junction box for conduit 1CC267RC1. Pipe penetration S-1653 through east wall is 42" from junction box. Not a seismic concern. 3 flexible conduit off the bottom of the box.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 048

Location: Bldg. *BR* Floor El. *282* Room, Area

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *R Casella* Rick Casella Date: *10-30-12*

A Porch A G. Dench *10-30-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 048

Location: Bldg. *BR* Floor El. *282* Room, Area

SWEL Components: SWEL1- 516, 518, and 508

Photographs

Note: *Battery Room Elev. 282*

Note: *Battery Room Elev. 282*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 049

Location: Bldg. *EG* Floor El. *272* Room, Area[1] *EDG A Room*

SWEL Components: SWEL1- 581, 582, 624, 628, 642, 646, 662, 670, 674, 682, 577

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   Anchorage at sliding foot of 93WE-1A is missing washer under bolt (2 locations). However, head of bolt is contacting frame. No seismic concern.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   Minor hairline cracks in pedestal at 93TK-7A. (Note: previously addressed at 93TK-7B)

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 049

Location: Bldg. *EG* Floor El. *272* Room, Area *EDG A Room*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   Loose nut on 1of 2 bolts attaching "dirty rag" bin to south wall. No seismic concern. Bin has little mass and one bolt is tight.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 049

Location: Bldg. *EG* Floor El. *272* Room, Area *EDG A Room*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Numerous cracks in concrete floor. Concern previously addressed in CR-JAF-2012-6345. Joint connecting masonry wall w/ concrete wall at NW corner of room has crack that extends from floor to ceiling. At 3 locations within bottom 8 feet of wall has grout missing (approx. ½" wide). Same condition exists on north side of room.

Evaluated by: *R Casella* Rick Casella Date: *10-26-12*

A Porch A G. Danch *10-26-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 049

Location: Bldg. *EG* Floor El. *272* Room, Area *EDG A Room*

SWEL Components: SWEL- 581, 582, 624, 628, 642, 646, 662, 670, 674, 682, 577

Photographs

Note: *Bolt missing washer on 93 WE-1A*

Note: *Masonry wall joint with approx. ½" cracks.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 050

Location: Bldg. *EG* Floor El. *272* Room, Area[1] *EDG C Room*

SWEL Components: SWEL1- 634, 658, 686

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   Four 3/8" bolts spaced 9.5" on center anchoring 46FIS-102C to the floor (west side of the room) each have approximately 1 thread below full thread engagement. Not considered a seismic concern. The resolution to this deficiency is tracked through CR-JAF-2012-06345.

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-050

Location: Bldg. *EG* Floor El. *272* Room, Area *EDG C Room*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 050

Location: Bldg. *EG* Floor El. *272* Room, Area *EDG C Room*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   ¼" Copper tubing from 93AC-C1 to 93EDG-23C is routed in tube track. At the last section of the track the anchor to masonry wall is missing.

   8-3/4" section of tube track is resting on ¼" tubing. Not a seismic concern, but should be repaired.

   The resolution to this deficiency is tracked through CR-JAF-2012-07963.

Comments (Additional pages may be added as necessary)

3/8" Hose from 93PS-1C is pinched against housing for 93MP-1C, "C" speed pickup sensor governor control (pinched at top west side of housing) Not a seismic concern

Evaluated by: *R Casella* Rick Casella Date: *10-26-12*

A Porch A G. Porch *10-26-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

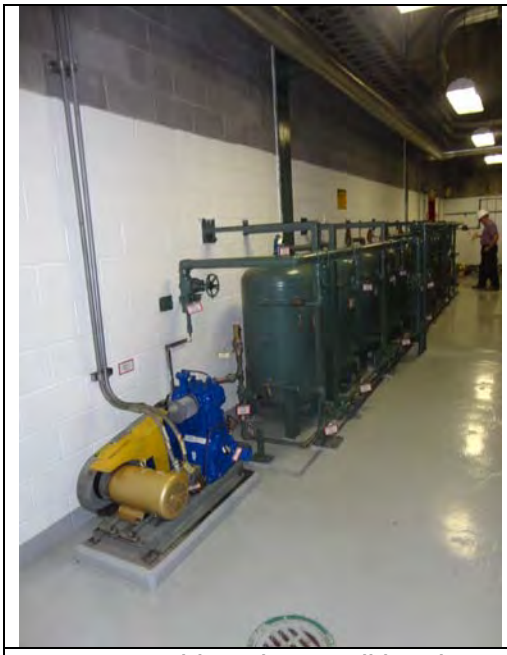
Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 050

Location: Bldg. *EG* Floor El. *272* Room, Area *EDG C Room*

SWEL Components: SWEL1- 634, 658, 686

Photographs



Note: *¼" tubing along wall in tube track that is missing an anchor bolt*

Note: *46FIS-102C anchorage. Less than full engagement by approx. 1 thread*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 051

Location: Bldg. *EG* Floor El. *272* Room, Area *EDG-D room*

SWEL Components: SWEL1- 635

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

   Minor hairline cracks at 2 of 4 bolts on each of 2 pedestals on 93TK-1D

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 051

Location: Bldg. *EG* Floor El. *272* Room, Area *EDG-D room*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 051

Location: Bldg. *EG* Floor El. *272* Room, Area *EDG-D room*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Crack in concrete floor at column line A3-28, Runs north/ south from north wall to the joint with the foundation for the EDG

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G, Porch *9-28-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 052

Location: Bldg. *RB* Floor El. *344* Room, Area *"A" skimmer surge tank enclosure*

SWEL Components: SWEL 2-003 and 2-004

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

   See picture of instrumentation anchored to north wall of enclosure.

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

   Conduit are adequately supported. There are no cable trays in the area.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 052

Location: Bldg. *RB* Floor El. *344* Room, Area *"A" skimmer surge tank enclosure*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   Fluorescent light in the area is away from any SSCs, therefore there are no credible seismic interactions. The visible duct is supported by a larger size duct above it.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☐ N☐ U☐ N/A☒

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☐ N☐ U☐ N/A☒

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☐ N☐ U☐ N/A☒

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 052

Location: Bldg. *RB* Floor El. *344* Room, Area *"A" skimmer surge tank enclosure*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

The post for containment boundary marker is near the tube track. The large base on the post provides stability and the tube track is rigid, no cause for concern.

Conduit on east wall is well supported.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G, Porch *9-28-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 052

Location: Bldg. *RB* Floor El. *344* Room, Area *"A" skimmer surge tank enclosure*

SWEL Components: SWEL2-003 and 2-004

Photographs

Note: *AWC-52*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 053

Location: Bldg. *RB* Floor El. *326* Room, Area *Fuel pool heat exchanger room*

SWEL Components: SWEL 2-005, 2-006, 2-007, 2-008, 2-009

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 053

Location: Bldg. *RB* Floor El. *326* Room, Area *Fuel pool heat exchanger room*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

   2 fluorescent lights on north side would not damage items if they were to fall during a seismic event. Lights appear to be secure.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 053

Location: Bldg. *RB* Floor El. *326* Room, Area *Fuel pool heat exchanger room*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

   Flexible vertical conduit on the west side of pump A is well supported. 19FPS-318-tubing 3/8", will not be affected during a seismic event.

Comments (Additional pages may be added as necessary)

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G, Porch *9-28-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 054

Location: Bldg. *PC* Floor El. *292* Room, Area *02RV-71D cluster*

SWEL Components: SWEL1- 011

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☐ N☐ U☐ N/A☒

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☐ N☐ U☐ N/A☒

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 054

Location: Bldg. *PC* Floor El. *292* Room, Area *02RV-71D cluster*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 054

Location: Bldg. *PC* Floor El. *292* Room, Area *02RV-71D cluster*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

3/16" tubing connected to electrical device on RPV side of 02RV-71K is being pinched by grating and channel steel @ elev. 292 (at flange connecting SRV to SRV discharge piping) The resolution to this deficiency is tracked through CR-JAF-2012-06452.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

A G, Porch

Alan Porch *9-28-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 055

Location: Bldg. *PC* Floor El. *292* Room, Area *02RV-71E cluster*

SWEL Components: SWEL1- 012

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☐ N☐ U☐ N/A☒

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☐ N☐ U☐ N/A☒

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 055

Location: Bldg. *PC* Floor El. *292* Room, Area *02RV-71E cluster*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 055

Location: Bldg. *PC* Floor El. *292* Room, Area *02RV-71E cluster*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Typical to SRV D, thermo well threaded connected to SRV discharge downstream elbow is very loose. Insulation blanket is resting on 3/16" tubing from thermo well.

The resolution to this deficiency is tracked through CR-JAF-2012-06495.

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G. Porch *9-28-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 056

Location: Bldg. *PC* Floor El. *279* Room, Area *Near 10AOV-68A*

SWEL Components: SWEL1- 065

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 056

Location: Bldg. *PC* Floor El. *279* Room, Area *Near 10AOV-68A*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

   Various outage tools in the area. None of which would result in an adverse seismic interaction.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 056

Location: Bldg. *PC* Floor El. *279* Room, Area *Near 10AOV-68A*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G, Porch *9-28-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-057

Location: Bldg. *RB* Floor El. *300* Room, Area *S-E corner near elevator*

SWEL Components: SWEL2-014

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-057

Location: Bldg. *RB* Floor El. *300* Room, Area *S-E corner near elevator*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☐ N☐ U☐ N/A☐

   Light fixture in front (west of elevator), one chain broken/ come loose fixture could hit ½"cuppor tubing (see photo). Fixture ~ 2' above tubing and 1' north of tubing.

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-057

Location: Bldg. *RB* Floor El. *300* Room, Area *S-E corner near elevator*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Crack in concrete floor at column line A3-28, Runs north/ south from north wall to the joint with the foundation for the EDG

Evaluated by: *Rick Casella* Rick Casella Date: *9-28-12*

Alan Porch A G. Porch *9-28-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

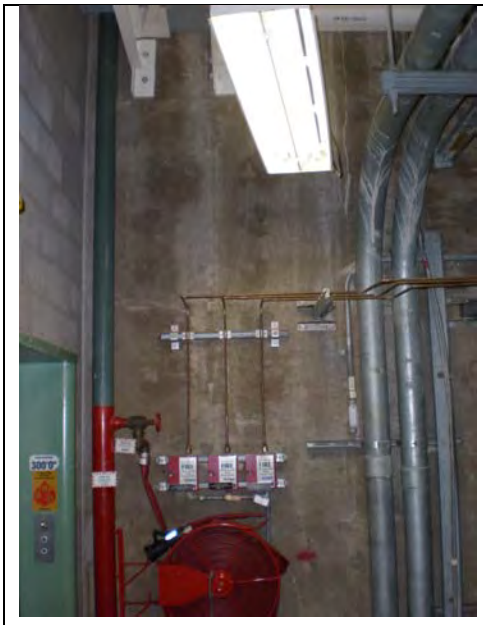
Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-057

Location: Bldg. *RB* Floor El. *300* Room, Area *S-E corner near elevator*

SWEL Components: SWEL2-14

Photographs



Note: *light fixture and copper tubing.*

Note:

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-058

Location: Bldg. *RB* Floor El. *326* Room, Area *Col Line 3P*

SWEL Components: SWEL2-010

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-058

Location: Bldg. *RB* Floor El. *326* Room, Area *Col Line 3P*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-058

Location: Bldg. *RB* Floor El. *326* Room, Area *Col Line 3P*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

1) *Light fixture is supported from 1" conduit approximately 15" from conduit support-Judged acceptable for ½ 8' light load. 1C x 723 x IB3.*
2) *Excess cable hanging from side of cable tray 1TC723R (See photo- not a seismic adverse condition.*
3) *Pipe support (Trapeze spring cans) 1 south can rubs against 1" conduit 1CX72Z. 2' east of #15FE112 due to vibrations-wear very minimal-judged acceptable.*

Evaluated by: *Al G. Porch* Date: *11/1/12*

C. Sawatzke *11/1/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

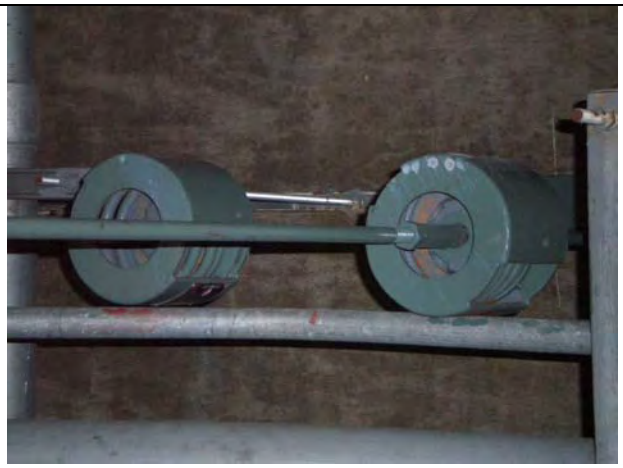
Area Walk-By Checklist (AWC) AWC-058

Location: Bldg. *RB* Floor El. *326* Room, Area *Col Line 3P*

SWEL Components: SWEL2-010

Photographs

Note: *:Light fixture chain supported from conduit.*



Note: *South spring cans pipe support.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 059

Location: Bldg. *BR-1* Floor El. *272* Room, Area _____

SWEL Components: SWEL1- 501

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 059

Location: Bldg. *BR-1* Floor El. *272* Room, Area _____

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 059

Location: Bldg. *BR-1* Floor El. *272* Room, Area

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Hairline crack radiating from floor drain. It does not pas through anchorage. No seismic concern.

Evaluated by: *R Casella* Rick Casella Date: *10-30-12*

A Porch A G. Danch *10-30-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 4

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 059

Location: Bldg. *BR-1* Floor El. *272* Room, Area

SWEL Components: SWEL1- 501

Photographs

Note: *Battery Room A*

Note: *Battery Room A*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-060

Location: Bldg. *SU* Floor El. *227* Room, Area

SWEL Components: SWEL1-172

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-060

Location: Bldg. *RB* Floor El. *227* Room, Area *West Crescent*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-060

Location: Bldg. *SU* Floor El. *227* Room, Area

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Evaluated by: *R. Casella* Rich Casella Date: *11/01/12*

R. S. Kester *11/01/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-061

Location: Bldg. *RB* Floor El. *300* Room, Area *Col. 6 Line R*

SWEL Components: SWEL1-439, 462

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-061

Location: Bldg. *RB* Floor El. *300* Room, Area *Col. 6 Line R*

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 3

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC-061

Location: Bldg. *RB* Floor El. *300* Room, Area *Col. 6 Line R*

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

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Evaluated by: *Al G. Porch* Date: *11/1/12*

C. Sawatzke *11/1/12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 062

Location: Bldg. *YD* Floor El. *293* Room, Area[1] _____

SWEL Components: SWEL2-013

Instructions for Completing Checklist

This checklist may be used to document the results of the Area Walk-By near one or more SWEL items. 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.

1. Does anchorage of equipment in the area appear to be free of potentially adverse seismic conditions (if visible without necessarily opening cabinets)? Y☒ N☐ U☐ N/A☐

2. Does anchorage of equipment in the area appear to be free of significant degraded conditions? Y☒ N☐ U☐ N/A☐

3. Based on a visual inspection from the floor, do the cable/conduit raceways and HVAC ducting appear to be free of potentially adverse seismic conditions (e.g., condition of supports is adequate and fill conditions of cable trays appear to be inside acceptable limits)? Y☒ N☐ U☐ N/A☐

[1] If the room in which the SWEL item is located is very large (e.g., Turbine Hall), the area selected should be described. This selected area should be based on judgment, e.g., on the order of about 35 feet from the SWEL item.

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 062

Location: Bldg. *YD* Floor El. *293* Room, Area _____

4. Does it appear that the area is free of potentially adverse seismic spatial interactions with other equipment in the area (e.g., ceiling tiles and lighting)? Y☒ N☐ U☐ N/A☐

5. Does it appear that the area is free of potentially adverse seismic interactions that could cause flooding or spray in the area? Y☒ N☐ U☐ N/A☐

6. Does it appear that the area is free of potentially adverse seismic interactions that could cause a fire in the area? Y☒ N☐ U☐ N/A☐

7. Does it appear that the area is free of potentially adverse seismic interactions associated with housekeeping practices, storage of portable equipment, and temporary installations (e.g., scaffolding, lead shielding)? Y☒ N☐ U☐ N/A☐

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 062

Location: Bldg. *YD* Floor El. *293* Room, Area

8. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment in the area? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Cracks up to ½" in grout between panel seams on NE corner on both bottom and top panels of adjacent enclosed structure. Concrete panels are 4' deep. These cracks pose no credible adverse seismic effect. Corrosion at base of anchorage connections for JB generator (located just south of 71MCC-120-OE1) on both east and west sides. Anchors are sat. Also, surface corrosion at baseplate of raceway support (back of MCC). These conditions will not result in any adverse seismic effects.

Work requests 291043 and 291044 were generated to address the issues.

Evaluated by: *R Casella* Rick Casella Date: *11-14-12*

A Porch A C. Dench *11-14-12*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 4 of 5

Status: Y☒ N☐ U☐

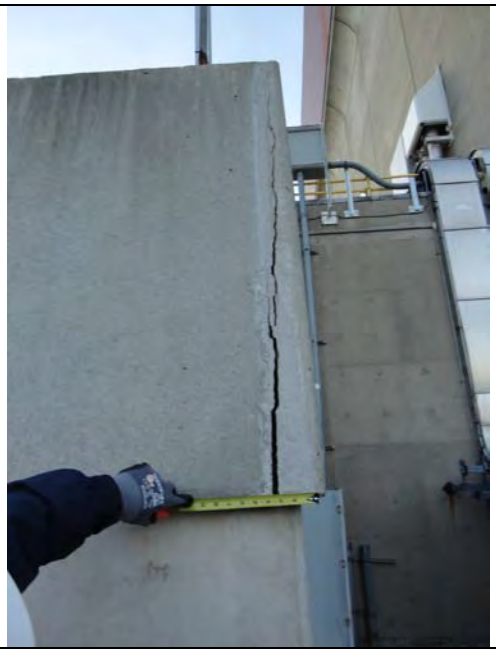
Area Walk-By Checklist (AWC) AWC- 062

Location: Bldg. *YD* Floor El. *293* Room, Area

SWEL Components: SWEL2-093

Photographs

Note: *Surface rust on baseplate for raceway support (back, i.e., west side, of 71MCC-120-OE1).*



Note: *Cracks in grout panel at enclosure that is adjacent to (south of) 71MCC-120-OE1.*

ATTACHMENT 9.7 **AREA WALK-BY CHECKLIST**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Area Walk-By Checklist (AWC) AWC- 062

Location: Bldg. *YD* Floor El. *293* Room, Area

SWEL Components: SWEL2-013

Note: *Area view in vicinity of 71MCC-120-OE1*

Note: *Corrosion at base of JB Generator (box-like component in center of photo)*

Attachment E

Potentially Adverse Seismic Conditions

ATTACHMENT 9.8 **POTENTIALLY ADVERSE SEISMIC CONDITIONS**

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	SWEL 1-683	Hairline cracks were found on concrete pedestal for 93TK-7B, Diesel Fuel Day Tank. The cracks pass through 7 of the 8 anchored locations. The crack lengths range from 1-1/2 inch to 6 inch maximum. All cracks were less than 1/32 inch width. See attached for representative photo. In addition, small section on east side of east pedestal has been chipped out. This likely occurred during installation of adjacent piping to allow for pipe movement. In the "as-found" condition, 3/4 inch Day Tank drain line has clearance of approximately 3/16 inch with pedestal. Based on preliminary evaluation, cracks are minor and do not impact the structural integrity of the anchor bolts and pedestal. Since the Day Tank oil drain pipe is at ambient temperature, pipe thermal expansion will be negligible. In a seismic event, movement of the pipe is not expected to result in loss of structural integrity of the drain pipe.	N/A	CR-JAF-2012-06090 Per the CRG, Address and correct the identified condition per EN-LI-102. Perform disposition review within 30 days and ensure actions are assigned as applicable to correct the problem. Initiate CAs for the actions not completed.	CR-JAF-2012-06090
N/A	AWC-017	1. A flexible conduit (approx. 3 inch) carrying spare cable terminating in safety related Cable Tray 1TH604R in the southeast comer of the "A" Emergency Pump Room is supported above the tray by a tie-wrap to a rod supporting the cable tray. This does not conform to station configuration standards. For both items, in a postulated seismic event, no credible seismic interactions resulting from movement of the flexible cable are postulated. 2. A flexible conduit (approx. 1/2 inch) carrying spare cable in safety related Cable Tray 1TH604R in the "A" Emergency Pump Room is partially hanging over the side of the cable tray. This does not conform to station configuration standards.	N/A	CR-JAF-2012-06191 Remove flex conduits from the tray.	Resolved
N/A	AWC-017	Bolted floor connection at base of UNISTRUT supporting tube track in the "A" Emergency Pump Room has heavy surface rust. See attached picture. The tube track supports 3/8 inches tubing to 10DPIS-277A, RHR SW Pump Discharge Strainer A Differential Pressure Indication Switch. The support is located approximately 3 ft. east of the 10S-5A1 pedestal. Floor drain is located directly south of the support. In the "as-found" condition, the bolted connection remains rigidly fixed to the floor and the UNISTRUT. The structural integrity of the support is not expected to be compromised in a seismic event.	N/A	CR-JAF-2012-06185 Request Operability Input per EN-OP-104. The tubing support identified in the condition report is obviously damaged and meets the criteria of EN-OP-I 04 Attachment 9.1 Table 1 [49]. Engineering Input is needed in order to classify as Operable-DNC or Operable-OP EVAL. EC Reply 40018 has been approved. The degraded support will continue to perform its design function for all conditions including the design basis earthquake.	Resolved

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	AWC-006	The Battery Room B Exhaust Fan 72FN-46D (Battery Charger room Elev. 282 mezzanine) is mounted to the floor with two structural channel flange supports, each with four 1/4 in. anchor assemblies. Nuts on both anchors on the north end of the west support are loose (i.e., gaps between 1/8 in. and 1/4 in.). The remaining six anchors of the fan assembly are secure. Based on the evaluation of this component during the USI A-46 SQUG walk-downs (Ref. Screening Evaluation Worksheet, SEWS, for 72FN-46D), the approximate loads on each of the anchor bolts was determined to be less than 100 lbs. Since the capacity of each 1/4 in. anchor bolt is 300 lbs. in tension and 530 lbs. in shear, the load carrying capacity of the six remaining bolts exceeds the design loads. The as-found configuration does not affect the support's ability to perform its design function in a seismic event.	N/A	CR-JAF-2012-06539 Repair per WR.	Resolved
N/A	AWC-006	UNISTRUT support for conduits 1CX257NE, 1CC269BC, and 1CC269BO located in the B Battery Charger room on the mezzanine level is mounted to the floor by three bolts. The nut on the east bolt is loose. The remaining two anchors are secure. The support is located in front of 72F-27B. The capacity of each of the 1/4 in. anchors is 300 lbs. in tension and 530 lbs. in shear. Based on the configuration of the support and the low seismic accelerations, the capacity of the two secured bolts exceeds the imposed design loads. The as-found configuration does not affect the support's ability to perform its design function in a seismic event.	N/A	CR-JAF-2012-06537 Repair per WR.	Resolved
N/A	SWEL 1-519	The Battery Room B Exhaust Fan 72FN-46B (Battery Charger room Elev. 282 mezzanine) is mounted to the floor with two structural channel flange supports, each with four 1/4 in. anchor assemblies. On the west support, the nut on the northeast anchor is loose (approximately 1/2 in. gap between bottom of nut and washer). On the east support, the northeast anchor is missing. The remaining six anchors of the fan assembly are secure. The missing anchor condition was identified and accepted during the USI A-46 SQUG walk-downs as documented on the Screening Evaluation Worksheet (SEWS) for 72FN-46B. Based on the SEWS evaluation, the approximate load on each of the anchors is less than 100 lbs. Since the capacity of each 1/4 in. anchor bolt is 300 lbs. in tension and 530 lbs. in shear, the load carrying capacity of the six remaining bolts exceeds the design loads. The as-found configuration does not affect the support’s ability to perform its design function in a seismic event.	N/A	CR-JAF-2012-06538 Repair per WR.	Resolved

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	AWC-050	Inspection of 93EDG-D resulted in the following findings: 1. Crack in concrete floor at column lines A3-28 extending in the north-south direction from the north wall of the 93EDG-D bay to the joint that connects with the slab that supports the 93EDG-D unit. 2. Hairline cracks in the grout and concrete foundation at or near several of the 1 in. bolts that anchor 93EDG-D to the concrete. 3. Crack in concrete at base plate for support of air start 2 in. pipe on the south side of the unit approximately 14ft. west of east end of checker plate platform. 4. Two of four bolts in base plate for support of air start 2 in. pipe do not have full thread engagement of the nut. The lack of engagement is less than one thread. This condition is typical for support on both the north and south side of the unit. 5. Hairline cracks in concrete of piers for 93TK-7D at anchor bolts connecting the tank to the pier. This condition exists at two of four bolt locations on each pier. Same condition was identified on CR-JAF-2012-06090 to address cracking on 93TK-7B. On items 1, 2, and 3, EDG pedestal is 7ft deep and founded on bedrock. The adjacent floor slabs are founded on concrete fill. The cracks will not impact structural integrity of the floor structure. Continue to monitor floor crack in accordance with maintenance rule. For item 4, sufficient remaining capacity in connection. For item 5, shrinkage cracks. No impact on structural integrity of pedestal.	N/A	CR-JAF-2012-06345 Provide Operability input to the Shift Manager for cracks and thread engagement. See EC 40051. Plant Engineering recommends this CA to be closed. No repairs required.	Resolved
N/A	AWC-055 AWC-037	The following deficiencies were observed on equipment associated with temperature elements for ADS SRV Tailpipes D, F, K. 02TE-113D has a loose threaded conduit connection to the thermo-well. 02TE-113F has a loose and bent threaded conduit connecting to the thermo-well. 02TE-112A (TE for 02RV-71K tailpipe) mineral insulated cable is pinched between steel grating and beam. Additional: The pinched cable may be older condition since it matches the historical photo in Maxgraphics. Also it is metal jacketed but cable and silica insulation could be adversely affected. Found during Fukushima Seismic Walk-downs (note- not seismic related concerns). This condition relates to loose temperature element connection heads and a pinched cable. There are no adverse seismic interactions adverse associated with this issue.	N/A	CR-JAF-2012-06495 Notified I&C supervisor. Initiated WRs- 285455, 6, 7. Do not close until WO# is entered in CR References and CR# is entered in INDUS. Review of CR operability tab shows equipment determined to be non-functional. No further action required under this CA.	Resolved
N/A	AWC-054	Damaged section of grating at EL 294 Drywell is an industrial safety hazard. Location is in the walkway between G and L SRV about 180 Azimuth. There is no part of the grating loose enough to be a seismic 2 over 1 concern but it deflects enough to potentially cause an injury. This was found by structural engineers involved in Fukushima Seismic Walk-down Program. Note - this grating section is significantly worse than observed last outage.	N/A	CR-JAF-2012-06452 Initiated WR 285392 to repair or replace grating section.	WO 00328133.

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	AWC-045	Two UNISTRUT supports for copper tubing Instrument Air line 3/4"-AI-21 B-150 (Ref. FM-39N) located in the torus room Valve Farm along the east side of the El. 272 ft. concrete floor beam in the vicinity of 27AOV-111 are degraded. The north UNISTRUT support is not attached to the concrete beam (only attached to the copper tubing). There are no anchors present. The next support 47" south of the first degraded support has a damaged clamp (it is bent and completely detached from the tubing). Note: Tape is wrapped between 3/4" copper tubing and stainless steel tubing running above it at a single location in vicinity of the north degraded tubing support. The 3/4" copper tubing is resting on a junction box south of the degraded supports. The next support 40" south is intact. The support configuration is degraded; however there is sufficient support before and after the two degraded supports to prevent the tubing from falling or breaking. In a seismic event, no adverse impact to safety related components is anticipated. In the same general location just north of the north degraded tubing support there is a conduit support on the underside of the referenced concrete beam with loose anchor bolts. There are two safety related 2-1/2" conduits mounted on the UNISTRUT support. Label was illegible but conduits appear to be terminating at CAD AOVs located in the Valve Farm. The southernmost anchor is shown at approximately 1/4" from the beam and the northern anchor is at approximately 1/8" from the bottom of the beam. The anchors are still providing some degree of support and the conduits are supported before and after this degraded conduit support. The conduits are in no danger of falling and will continue to perform their intended design functions until the degraded anchors and/or UNISTRUT can be repaired.	N/A	CR-JAF-2012-07069 Repair the deficient IAS tubing supports (2) and conduit support (1) and remove tape between copper tubing and stainless steel tubing. Engineering to initiate CA-00002 to allow Maintenance personnel to reinstall the supports that have detached from the tubing to provide rigidity to the tubing and to reduce the excessive span length. (Reference WR #00286710 and EC 40286). Initiated WRs 286512 and 286513.	Resolved
N/A	SWEL 1-457	Found during Fukushima Seismic Walkdown: 71 DC-A2 Relay Room Distribution Cabinet has a minor discrepancy at one of its four mounting bolt connections. At the lower right panel connection the spring nut is misaligned within the UNISRUT support channel and the channel is slightly distorted at the bolt location. The spring nut and bolt are fully engaged and the connection is tight and secure. The portion of the support channel that is distorted is localized and does not diminish the load capacity of the channel nor does it affect the way that the panel attaches to the building column. The overall integrity of the panel mounting is not affected and there is significant load capacity design margin per review of the seismic evaluation SEWS for this equipment. Also the panel mounting has additional vertical and lateral restraint at the bottom provided by three short rigid conduits connected to the panel base and anchored in the concrete.	N/A	CR-JAF-2012-07954 Condition acceptable “as-is.”	Resolved

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	AWC-015 SWEL 1-234 SWEL 1-232 SWEL 1-213 SWEL 1-210	[Found During Fukushima Seismic Walkdowns] Two adjacent PIOOI UNISTRUT Channel functioning as a support frame with intermediate lateral cross members span the width of the HPCI enclosure in the East Crescent approximately 12 ft. above Floor Elev. 227. The span length is approximately 20 ft. The UNISTRUT supports numerous conduit (sizes ranging from? in. to 2 ? in.) and 3 Junction Boxes associated with the HPCI system. There is no known design documentation that qualifies this safety related assembly. This is a non-standard configuration and based on the span length and the numerous conduit loads, the acceptance of the UNISTRUT support frame cannot be readily determined. This Condition Report is being initiated to document the condition and ensure a thorough evaluation is performed. Based on USI A-46 (SQUG) guidance for equipment in this area, the peak seismic demand is 0.25g acceleration. Using this seismic criteria, an initial evaluation of the applied loads to the UNISTRUT frame shows there is reasonable assurance the assembly will remain functional and its structural integrity will be maintained in a postulated seismic event. In addition, a field inspection performed by a Structural Engineer confirmed that the structural frame is relatively rigid and no hardware deficiencies exist.	N/A	CR-JAF-2012-07990	Resolved
N/A	AWC-018	Tube-track is disconnected from its support resulting in an 11 foot long unsupported section at mid-span of the tube track. The tube track contains a three-eighths inch SS tube downstream of 10SOV-264A, and a quarter inch copper tube which leads to 10AOV-71A(OP) Positioner. These components and the affected tubing are NSR. There are no sensitive SR components below this tube track which could pose a seismic 2 over I target. The remainder of the tube track is well supported at each end in proximity to the referenced components. This is located in south east corner of A-RHR HX room about 6 feet above floor, and was found during Fukushima Seismic Walkdowns.	N/A	CR-JAF-2012-07912 Initiated WR 289749.	WO 332631
N/A	AWC-050	Area walk-by by Entergy. Missing bolt on tube track protecting 1/4" copper tubing running between 93AC-C1 and 93EDG-23C. No support deficiency for tubing air line, since this portion of tube track only serves as a protective guard and not as actual support. This condition does not result in any potential adverse seismic interaction.	N/A	CR-JAF-2012-07963 Initiated WR 289960 to install anchor bolts.	WO 332730

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	1-052	During the Fukushima seismic open panel inspection of Control Room Panel 09-3, Nuclear Station Main Control Board, it was found that 1 of the 4 screws (studs) mounting 23VM-100, HPCI Turbine Vibration Monitor, to the inside of the 09-3 panel structure is missing. The non-Safety Related vibration monitor is intended to be mounted by 1 screw in each of its four corners. The missing screw is in the upper corner on the east side. The remaining 3 fasteners visually appear to be secure. Considering the weight of 23VM-100 to be 30 lbs. (conservatively assumed based on comparison with current replacement model) and each of the 3 remaining screws to be Size 05 (0.125 in. diameter) and applying maximum seismic accelerations including consideration of in-cabinet amplification, the resulting loads on the 3 screws during a postulated seismic event will be bounded by the capacity of the fasteners. The fasteners will perform their design function during a seismic event to ensure that 23VM-100 remains mounted to the 09-3 panel and no safety related function of any other component is affected.	N/A	CR-JAF-2014-00149	WO 371700 (refer to EC 50276)
N/A	1-430	An internal cover plate located inside 71-10502 (EDG A FEED TO EMERGENCY 4KV BUS 10500) is missing 1 of the 10 screws that secure the steel plate. The plate is at the top of the Protective Relay cubicle above breaker 10502. The estimated dimensions of the plate are 1/8 in. x 12 in. x 18 in. The as-found configuration is not an adverse seismic condition. Based on an estimated weight of 30 lbs. to account for the weight of the plate and cable resting on the plate from the cubicle above and low seismic accelerations associated with the EDG area, the remaining nine screws provide significant load margin to ensure the plate will remain in-place and all components within the cubicle will continue to perform their design safety function in a postulated DBE seismic event. Based on visual inspection of the cubicle, no evidence of the missing screw was found.	N/A	CR-JAF-2013-04618	Resolved
N/A	1-433	During Fukushima Walkdown Inspection of 71-10560 "FEED TO 600V SWITCHGEARS BUS 11500 AND 12500" it was identified that 4 out of 7 relays connected to the panel door were missing 1 out of 4 mounting screws each.		CR-JAF-2014-04877	Resolved

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	1-434	The following issues were found during the open panel inspection of 71-10602, EDG B Feed to Emergency 4KV BUS 10600. All of the items below are associated with the top panel (i.e., furthest above floor). 1. A screw for a contact at relay 71-27XB-1H0EB03 (mounted on panel door) is not fully tightened down. The screw is the furthest right on the top row of contacts. There are no wires connected to this contact. See attached picture. 2. Nut is missing from screw connection at rear top right corner of the cubicle's metal framing. Two other screw connections along top rear of enclosure are securely fastened with nut. See attached picture. 3. Bottom plate of cubicle's metal framing is fastened by a total of 8 screws. There is a hole in the plate but screw is missing at rear right side (i.e., northwest) and front right side (i.e., northeast) connections. The affected plate is approximately 24 in. x 20 in. and 0.125 in. thick. See attached picture. 4. Foreign material a) approximately 1 ft. length of masking tape loosely attached to wiring at top rear of panel, and b) thin strip of plastic approximately 2 in. length laying on bottom plate in right, front corner of cubicle. See attached picture.		CR-JAF-2014-03310	WO 387476
N/A	1-436	The following issue was found during the open panel inspection of 71-10614, 4KV BUS 10400 Feed to Emergency 4KV BUS 10600. The item below is associated with the top panel (i.e., furthest above floor). Bottom plate of cubicle's metal framing is currently fastened by a total of 7 screws. At eighth location at front right side (i.e., northeast) there is a hole in the plate for a fastener but screw is missing. The affected plate is approximately 24 in. x 20 in. and 0.125 in. thick. See attached picture.		CR-JAF-2014-03313	WO 387478
N/A	1-448	Two of four screws mounting 71VM-BAT-1APG to the north panel door of 71BC-1A, 125VDC Station Battery Charger, are missing. The remaining two screws appear to be tight. Based on the small mass of the of the ground voltmeter, the low seismic acceleration levels in the Turbine Building Elevation 272 ft., and the two remaining secure fasteners, there is no adverse seismic condition that would result from this deficiency. See attached pictures.		CR-JAF-2014-02712	WO 384323
N/A	1-456	71BMCC-6-OA1, 23MOV-16 HPCI TURBINE STEAM SUPPLY OUTBD ISOL VALVE, was found not completely racked into the cubicle. The nut securing the MCC bucket to the top of the is not tight and the lockwasher is not compressed. The bucket sticks out approximately 1/4 inch more at the top in comparison to the bottom. This was found during the Seismic inspection of the BMCC under WO 339286-01.		CR-JAF-2013-06361	Resolved

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	1-474	Several screws (approx. 6 to 8 screws 1/4 in. size) threaded into the lower section of the south rear panel of 71L25, 600V SWITCHGEAR DISTRIBUTION BUS 12500 (West Electric Bay, Elev. 272), are not fully inserted. See attached pictures. The purpose of these screws would be to fasten a terminal block cover plate to the internal framing of the panel, if such a cover plate was present. However, there is no coverplate installed at this location. The subject screws do not carry any load and appear to be securely mounted, although not fully inserted. No adverse seismic interaction was noted that would prevent any component from performing its safety function in a seismic event. The terminal block coverplate installed on the upper section of the panel is securely fastened and all screws are fully tightened per visual observation.		CR-JAF-2014-02209	WO 381832
N/A	1-474	While performing Fukushima seismic open panel inspection of 71L25, 600V SWITCHGEAR DISTRIBUTION BUS 12500, in the West Electric Bay, foreign material was found at the base of cubicle 71-12502, 600V EMERG BUS 12500 FEED BREAKER. The material appears to be plastic or rubber (i.e., non-metallic) and approximately 1/2 in. x 1/2 in. in size. See attached picture. The inspection of the cubicle did not result in any structural related deficiencies. Foreign material was not removed as the work scope did not allow breaking the plane of the panel/cubicle.		CR-JAF-2014-02210	Resolved
N/A	1-481	While performing inspection of 71MCC-161 (600V Motor Control Center Bus 116100), it was discovered that 1 of 4 screws attaching a control power transformer mounting plate to the panel in cubicle 71MCC-161-OE3 was missing. The missing screw is at the top on the west side. The remaining three screws attaching the mounting plate are securely fastened based on visual inspection. The transformer is securely fastened to the mounting plate by four screws. The cubicle is labeled as a Spare which is consistent with JAF File Dwg. FE-1S. Based on the small weight of the transformer (conservatively 10 lbs.) and the low seismic acceleration levels (2.25g peak horizontal acceleration at Reactor Building Elev. 272), the remaining three screws that secure the transformer mounting plate to the panel provide considerably more capacity than required to ensure the transformer can perform its design function during and after a design basis seismic event (DBE).		CR-JAF-2013-04995	WO 363770

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	1-491	A self-tapping screw connecting a metal cover plated to the rear framing of 71MCC--262 is missing. This is a Safety Related MCC and judged by the wear around the screw hole, the screw has been missing for some time. A total of 8 cover plates makeup the rear of the MCC. Each cover plate is secured by 16 fasteners. The missing screw is at the bottom plate in the northwest corner of the MCC. There are no other missing or deficient cover plate fasteners at any of the 8 plates. The total weight of a single cover plate is estimated to be 16 lbs. There is sufficient capacity provided by the remaining 15 fasteners to ensure the MCC will perform its safety function in a design basis seismic event. See attached photo.		CR-JAF-2014-03814	WO 390063
N/A	1-493	A steel channel section at the base of 71MCC-264 (EDG B/D Switchgear Room) is notched on the top and one side for a length of approximately 5.5 in. to allow clearance for an electrical penetration through the floor. The remaining side of the channel section is continuous. JAF File Drawing 1.43-98 showing the base channels does not show that a section is notched. Steel channels located at the base of 71MCC-264 run the length of the MCC four bays on the front (north) and rear (south) sides. Screws (1 each) in the four corners of each bay attach the MCC to the base channels. The base channels are welded to embedded steel at the Switchgear room floor at Elev. 272. The notched section is near the center of the rear base channel section in the bay housing the OB1 through OB6 panels.		CR-JAF-2013-03756	Resolved
N/A	1-624	In the framed support for the Engine Control Panel 93ECP-A located beneath the A EDG checker-plate platform, welds between the framing members (L 4 in. x 4 in. x 0.5 in.) and welds connecting the frame to the baseplate are not all-around 0.25 in. fillet welds as called out on JAF File Dwg. SKE-471. While the weld size is consistent with the drawing, the weld patterns are of various configurations and lengths and not consistent with the weld detail shown on the drawing because of the complexities of the diagonal angle bracing to the vertical member fit-ups, interferences, etc. A seismic qualification of 93ECP-A was performed in 1995 in accordance with the USI A-46 program with a completed Screening Evaluation Worksheet (SEWS). The SEWS includes a sketch of the panel and its support and characterizes the panel support as a substantial welded steel frame. The SEWS concluded that the capacity of the 93ECP-A assembly exceeded the seismic demand, and is therefore, seismically qualified for a design basis seismic event.		CR-JAF-2013-04672	Resolved

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	1-629	Two of four 0.25 in. bolts securing the Hoffman enclosure at 93ECSP-B to the structural baseplate underneath are not flush with the inside surface of the enclosure. The bolt heads are bearing on metal burrs from the bottom of the enclosure that were not ground flush when the bolt holes were made. The affected bolts are located at the southwest (approximately 0.125 in. gap between bottom of bolt and enclosure surface) and northeast (approximately 0.0625 in. gap) corners of the enclosure. Since the lock washers on the affected bolts are compressed indicating a tight bolted connection and the nuts associated with these two bolts are tight, there is reasonable assurance these connections can perform their design function in a seismic event. The remaining two bolts securing the enclosure to the baseplate are sat with no deficiency.		CR-JAF-2013-02475	Resolved
N/A	1-636	An approximate 25 in. length of a metal channel section located at the base of 93EGP-A (Emergency Diesel Generator A Generator Control Panel) is cut out. It was likely removed during initial plant construction due to interferences with electrical floor penetrations 1FC490R01, 1FC490R02, and 1FC490R03. The metal channel is not a primary structural framing member. The removed section is similar to the configuration at the base of 93EGP-B, which has the same approximate length of the same channel section removed. The 93EGP-B condition is documented in JAF-CR-2013-02458. The same loads apply to both 93EGP-A and 93EGP-B. As stated in CR-2013-02458, the channel section is not included in the USI A-46 Screening Evaluation Worksheet (SEWS) which provides the basis for the seismic qualification of both 93EGP-A and 93EGP-B. Since the removed channel section is not part of the bounding load path, the seismic qualification of the panel is not impacted by the removed section. In addition, based on visual inspection with the rear of 93EGP-A opened, the Seismic Walkdown engineers conclude that the removed channel section has a negligible impact on the overall stiffness of the panel. Therefore, 93EGP-A remains fully qualified for a postulated design basis earthquake (DBA) with the approximate 25 in. length of the base channel section removed.		CR-JAF-2013-04634	Resolved

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
N/A	1-637	A sheet metal channel located at the base of the 93EGP-B enclosure is not continuous as shown on JAF File Drawing 1.12-98 because a two foot long section is cut out. This metal channel is not a primary structural framing member and is not part of the base anchorage of 93EGP-B to the Elev. 272 floor. The sheet metal channel section was most likely removed during plant construction due to interference with electrical penetrations that traverse through the Elev. 272 concrete slab at a location behind the front face of the enclosure. The sheet metal channel section is not a component of the USI A-46 Screening Evaluation Worksheet (SEWS) which provides the basis for the seismic qualification of the 93EGP-B panel. Therefore, the removed sheet metal channel section does not affect the seismic qualification of the 93EGP-B panel.		CR-JAF-2013-02458	Resolved
N/A	2-010	A self-tapping screw connecting a metal cover plate to the rear framing of 71MCC-131 is missing. A total of 12 plates makeup the rear of the MCC. Each plate is secured by sixteen fasteners. The missing screw is on the bottom row of the bottom plate on the north end of 71MCC-131. There is no visual evidence of any gap between the cover plate and the MCC framing at the location of the missing fastener. No other observed deficiencies at the remaining 15 screw locations on the north end bottom cover plate or at any of the other 11 rear cover plates. 71MCC-131, 600V Motor Control Center BUS 113100, is non-safety related, and the missing fastener will not result in any Cat II over I interaction in a design seismic event.		CR-JAF-2014-03720	WO 389563
LB-01	SWEL 1-625	Top of the 93ECP-B Control Panel is unsupported. The SEWS evaluation determined that the panel is acceptable without these anchors; however the same evaluation does not include the load transferred from the overhead conduits attached to the panel. These conduits drop approximately 10 ft vertically in to the panel without any lateral support to minimize the interaction load to the panel. The SWE determined that a potential adverse seismic condition could exist. During seismic event significant North South lateral load from conduits will contribute to the moment arm transferred to 4 (3/4") base anchors which might result in failure of the anchors and overturn the Control Panel. For pictures see SWC 1-625, Attachment C.	In Licensing Bases Evaluation it was concluded that the weight of the conduits attached to the top of the Control Panel have to weigh more than 7,646 lb to fail a component with minimum design load factor of 3.958, which is very unlikely. Therefore the Control Panel is adequately supported and can withstand design basis seismic event.	N/A	N/A

LB #	SWC/AWC #	IDENTIFIED CONDITION	LICENSING BASIS EVALUATION CONCLUSION	RESOLUTION	STATUS
LB-02	SWEL 1-690	The Core Spray System Channel “A” Rack is bolted to steel plates which are welded to a structural steel I-beam. The spacing as noted on the drawing 7.70-81D should be 18” between anchor bolts, but due to interference with the I-beam, the spacing between the anchors was reduced to 15”. Due to reduced spacing the SWE determined that this could be a potential adverse seismic condition. For pictures see SWC 1-690, Attachment C.	From review of the SEWS evaluation it was determined that the minimum design factor of a member is 31.1. This approximately results in only 3.2% load capacity used. The moment arm acting at a smaller distance will result in lower prying affect and reduce tension on the West anchors, but as a result increasing load on East anchors. Based on evaluation performed in LB-03, there is sufficient capacity to accommodate load shift from West to East anchors. The 31.1 design factor was for a different instrument rack. However, based on the significant available margin, IR-25-01 was found to be acceptable by comparison. Based on simple computation, that shows that Interaction Ratio (IR) for tension and shear is less than 0.25.	CR-JAF-2012-08186 Revise drawing to reflect "as-found" bolt spacing for Instrument Rack IR-25-01 on drawing 7.70-81.	Resolved
LB-03	AWC-045	North side of 27AOV-116 valve/operator assembly has a 1/8 in. clearance with conduit 1CC584BV1 (Blue).	The valve assembly is located near the Torus shell where it is anchored. The line temperature as given in the JAF Line Designation Table is ambient. Therefore, negligible thermal growth in piping. No contact with the conduit during normal plant operation. In a postulated seismic event, possible soft contact could occur between the valve assembly and the condulet threaded into the end of the 2” conduit. This will not result in any adverse seismic interaction. The 27AOV-116 valve assembly and the wires within the conduit/condulet will continue to perform their design function.	WR 291400 is generated to increase the gap from 1/8 in. to 1 in., between North side of 27AOV-116 valve/operator assembly and conduit 1CC584BV1 (Blue).	WO 334036.
LB-04	SWEL 1-452	The “as-found” welding configuration for the connection of the 2” x 2” x 3/8” angle to the 4” x 4” I-beam and to the platform steel is not in full compliance with the Field Sketch included in the Screening Evaluation Worksheet (SEWS) for 71BMCC-1.	The critical load path as identified in the SEWS still governs based on the “as-found” anchorage configuration.		ISSUE IS CLOSED. No FURTHER ACTION REQUIRED.

Revision 0 Signatures:

Prepared by: Yaroslav Losev / Date: 11/21/2012

Reviewed by: Tom Panayotidi / Date: 11/21/2012
Peer Review Team Member

Revision 1 Signatures:

Prepared by: Rick Casella / Date: 12/11/2014

Reviewed by: Bill Grabowski / Date: 12/11/2014
Peer Review Team Member

Attachment F

“Licensing Basis Evaluation Forms”

ATTACHMENT 9.9 **LICENSING BASIS EVALUATION FORMS**

Licensing Basis (LB) Evaluation Form

LB Evaluation No. 01 Originating SWC/AWC SWEL 1-625

Equipment ID No. 93ECP-B Equip. Class 20-Instrument and Control Panels
Equipment Description EDG B Engine Control Panel
Location: Bldg. EG Floor El. 272' Room, Area EG Room B, Col. 26, Line A3

Condition

Top of the 93ECP-B Control Panel is unsupported. The SEWS evaluation determined that the panel is acceptable without these anchors; however the same evaluation does not include the load transferred from the overhead conduits attached to the panel. These conduits drop approximately 10 ft vertically in to the panel without any lateral support to minimize the interaction load to the panel. Based on engineering judgment, during seismic event significant North South lateral load from conduits will contribute to the moment arm transferred to 4 (3/4") base anchors which might result in failure of the these anchors and overturn the Control Panel. For pictures see SWC 1-625, Attachment C.

Documents Reviewed

References:

1. SEWS walk-down evaluation for equipment 93ECP-B (same as 93ECP-A).

Licensing Basis

The 93ECP-B Control Panel contains essential relays for EDG-B.
Seismic qualification is based on SQUG engineer judgment on SEWS package.

Evaluation

The condition is not specifically addressed on the SEWS package. However, the evaluation presented here demonstrates that the judgment applies.

W = 850lb, weight of the cabinet and components [Ref. 1, Sheet 2]
a = 0.44g, acceleration in North-South direction [Ref. 1, Sheet 6]
The minimum design factor of 3.958 [Ref. 1, Sheet 10] was calculated in SEWS evaluation.

For simplification, treat the geometry of the Control Panel as a simple cantilever pinned at the bottom to get the maximum lateral load the anchors can experience. The moment is not taken into account in this LBE since the cabinet is fairly flexible and will allow some lateral deflection between anchorage of the cabinet and "Substantially Welded Steel Frame", shown on SEWS, Field Sketch for 93ECP-A/B [Ref.1]; therefore the anchorage was treated as pinned connections, releasing moments at the anchorage between steel frame and concrete. Based on above the moment transferred to the anchors between steel frame and concrete will be negligible.

The stresses that the anchors endure are directly proportional to the loading of the joints (i.e. Maximum Load divided by Allowable Load). Calculating the maximum weight that the anchors have to take to fail and

comparing that load to the maximum weight of 10ft of flexible conduits attached on the top of the Control Panel.

Let "X" equal to the weight which would fail the component with minimum design factor of 3.958
X/(850 lb) = 3.958
X > 3,364.3 lb
With a lateral acceleration of 0.44g this means that the applied lateral seismic load to the top of the control panel cannot exceed:
X/(0.44) = 7,646 lb

Based on the seismic acceleration levels for this area and flex conduit connections into top of panel, it is not credible that the transferred weight of the flexible conduits to the top of the Control Panel can be more than 7,646 lb; therefore the Control Panel is adequately supported and can withstand design basis seismic event.

Conclusion Condition Meets the Licensing Basis: ☒ Yes ☐ No

Prepared by: Yaroslav Losev Date 11/07/2012
Licensing Basis Reviewer

Reviewed by: Jeffrey H. Horton Date 11/12/2012
Peer Reviewer

ATTACHMENT 9.9 **LICENSING BASIS EVALUATION FORMS**

Licensing Basis (LB) Evaluation Form

LB Evaluation No. 02 Originating SWC/AWC SWEL 1-690

Equipment ID No. IR-25-01 Equip. Class 18-Instrument Racks
Equipment Description Core Spray System Channel A Rack
Location: Bldg. RB Floor El. 242.8' Room, Area Col. 4, Line A

Condition

The Core Spray System Channel "A" Rack is bolted to steel plates which are welded to a structural steel I-beam. The spacing as noted on the drawing 7.70-81D should be 18" between anchor bolts, but due to interference with the I-beam, the spacing between the anchors was reduced to 15". Due to reduced spacing the SWE determined that this could be a potential adverse seismic condition. For pictures see SWC 1-690, Attachment C.

Documents Reviewed

References:

1. Drawing 11825-7.70-81D.
2. SEWS walk-down evaluation for equipment 25-60 (same as IR-25-01).

Licensing Basis

The IR-25-01 Core Spray System Channel "A" Rack provides support to Core Spray electrical, mechanical and I&C equipment.

Evaluation

During a subsequent walk-down it was determined the spacing is actually 12" (3" less than what was noted) and that there are 6 bolts with ½" diameter. There will be no shear reduction since material and area resisting shear is not changed.

The moment arm acting at a smaller distance will result in lower prying affect and reduce tension on the West anchors, but as a result increasing load on East anchors. From review of the SEWS evaluation it was determined that the minimum design factor of a component is 31.1. This approximately results in only 3.2% load capacity used. SEWS Evaluation was done for IR-25-60. IR-25-01 was compared to IR-25-60 and accepted.

Since moment is directly proportional to the distance the maximum load increase of East anchors will be 100% *(1 - 12"/18") = 33.3%. Approximately 96.8% capacity is sufficient to accommodate load shift of 33.3% from West to East anchors.

Conclusion Condition Meets the Licensing Basis: ☒ Yes ☐ No

Prepared by: Yaroslav Losev Date 11/07/2012
Licensing Basis Reviewer

Reviewed by: Jeffrey H. Horton Date 11/12/2012
Peer Reviewer

ATTACHMENT 9.9 **LICENSING BASIS EVALUATION FORMS**

Licensing Basis (LB) Evaluation Form

LB Evaluation No. 03 Originating SWC/AWC AWC-045

Equipment ID No. 27AOV-116 Equip. Class N/A
Equipment Description Torus Purge and Inert Isolation Valve
Location: Bldg. SU Floor El. 262.6' Room, Area Col. 6, Torus Room

Condition

North side of valve/operator assembly for 27AOV-116 has 1/8 in. clearance with conduit 1CC584BV1 (Blue). For pictures see AWC-045, Attachment D.

Documents Reviewed

FM-18B
FE-3HW
MSK-309A1
11825-L1ST-1 JAFNPP Line Designation Table
UFSAR

Licensing Basis

27AOV-116 is a Torus Purge Inlet Isolation Valve. It is a safety related valve that provides primary containment (torus) isolation along with 27AOV-115. The basic function of these valves is to provide necessary isolation of the containment in the event of accidents or similar critical conditions when the free release of containment atmosphere cannot be permitted (Ref. UFSAR Section 5.2.3.5).

Evaluation

The valve is located in the torus room approximately 6 ft. from the Torus shell. Since the Torus shell anchors the pipe and the temperature of line 27-20"-N-152A-7 is ambient, thermal expansion of the pipe is negligible.

A length of approximately 2 ft. of 2" conduit runs from Junction Box JB-PCI30. A condulet is threaded into the end of the 2ft. conduit run. The 1/8" clearance is between a flange on the valve assembly and the condulet. Each end of the condulet connects to flexible conduit that terminates at 27AOV-116. Review of the wiring diagram (FE-3HW) shows 3-12 gauge wires routed in the conduit from the junction box to the valve.

In a postulated seismic event, the flange could contact the condulet, causing the condulet to displace laterally. The weak link would be the connection of the conduit to the junction box.

Since 27AOV-116 is located so close to the Torus shell (anchor point), expected movements in a seismic event are minimal. In addition, the routing of the conduit to the junction box is curved, providing some measure of flexibility in the conduit. It is concluded that the conduit, acting as a cantilevered beam has sufficient flexibility to ensure its structural integrity is not compromised in a seismic event. Structural integrity of the conduit and condulet will ensure the internal wires will be able to perform their respective design functions. Contact between the 27AOV-116 assembly and the conduit/condulet will have no impact on the valve to perform its safety related function.

Conclusion Condition Meets the Licensing Basis: ☒ Yes ☐ No

Prepared by: Rick Casella / R Casella Date 11-17-12
Licensing Basis Reviewer

Reviewed by: A. G. Porch / A G Porch Date 11/17/12
Peer Reviewer

ATTACHMENT 9.9 **LICENSING BASIS EVALUATION FORMS AND INSTRUCTIONS**
Sheet 1 of 2

Licensing Basis (LB) Evaluation Form

LB Evaluation No. 04 Originating SWC/AWC SWEL 1-452

Equipment ID No. 71BMCC-1 Equip. Class 1 – Motor Control Center

Equipment Description Reactor Building West Crescent Motor Control Center

Location: Bldg. RB Floor El. 242' Room, Area Col / Line 1R

Condition

The "as-found" welding configuration for the connection of the 2" x 2" x 3/8" angle to the 4" x 4" I-beam and to the platform steel is not in full compliance with the Field Sketch included in the Screening Evaluation Worksheet (SEWS) for 71BMCC-1.

Documents Reviewed

1. Screening Evaluation Worksheet (SEWS) for 71BMCC-1
2. FE-1AJ Rev. 21, 125V DC One Line Diagram
3. General Electric 7700 Series AC and DC Motor Control Centers, QDR 02.01, Rev. 2

Licensing Basis

71BMCC-1 is a General Electric 7700 Series DC MCC whose purpose is to supply electrical power for the control and operation of installed loads (Ref. 3). Except for 27MOV-123, Outboard Bypass Valve for Torus Exhaust Isolation Valves 27AOV-117 and 118, all of the other components powered by this MCC are associated with the Reactor Coolant Isolation Cooling (RCIC) system (Ref. 2).

Evaluation

In the evaluation of the anchorage for 71BMCC-1, the SEWS considers the load path from the MCC unit through the self-tapping screws into the base channel (Path 1), then through the weld connecting the MCC base channel to the 4" x 4" I-beam below the MCC unit (Path 2), and finally through the structural angle to platform "house" steel (Path 3). The SEWS Field Sketch depicts this load path.

The bounding load path as documented in the SEWS is Path 2. The capacity, as given in terms of "per bay" in the 5-bay MCC, is 2.7 kips. The SEWs capacity for Path 3 is 4.3 kips.

The Path 3 SEWS evaluation is based on a minimum of 4 in. of weld connecting either

- the 4" by 4" I-beam to the angle, or
- the angle to the platform steel

Based on the June 23, 2014 walkdown data documented on the Seismic Walkdown Checklist Form for SWEL 1-452, the discrepancy found is that "as-found" weld lengths varied at the 9 connection angles from the SEWS evaluation, in that at some of the angle locations weld lengths were less than 4" while others were greater than 4". In the "as-found" condition, there is a total of approximately 36 in. of weld for the 9 angle clips (5 on front of MCC and 4 on back side of MCC) at both the connections to the 4x4 I-beam and to the platform steel. Since the average weld length for load transfer is 36 in. / 9 angles = 4 in., it is consistent with the SEWS evaluation for load Path 3. Therefore, Load Path 2 still governs. The June 23, 2014 walkdown confirmed that welds for Load Path 2 were consistent with the existing SEWS documentation.

Conclusion (8) Condition Meets the Licensing Basis: ☒ Yes ☐ No

Prepared by: Rick Casella / Rick Casella Date 11/5/14
Licensing Basis Reviewer

Reviewed by: Robert Kester / Robert Kester Date 11/5/14
Peer Reviewer

Attachment G

“Peer Review Checklist For SWEL”

Entergy

Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title Peer Review Checklist Comments
Quality Related: ☒ Yes ☐ No		**Special Notes or Instructions:** SEE ATTACHED E-MAILS DATED 9/3/12 AND 11/12/12 WHICH SUPPLEMENT THIS REVIEW FORM	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
1	Question 2b	The team should also consider RHRSW strainers (not on Base List) and the new three stage SRV solenoids.	RHRSW Strainer 10S-5A1 and 02RV-71E (new 3-Stage SRV) have been added to the SWEL 1 list.	RCC for R Sullivan
2	Question 2d	All components listed the same environmental conditions. The could breakdown the environment conditions further to provide some discrimination such as inside primary containment, in HELB environment, etc.	Table 9.4.2 from EN-DC-168 is the Seismic Equipment Walkdown List (SWEL 1) and Table 9.4.5 is the SWEL 2. As shown on EN-DC-168 Attach. 9.4, Sheet 9 of 11 (page 47 of 80 in the procedure), Item 25 designates various environment items (T) High Temp, (H) Humid, (I) Inside, (O) Outside, and (B) Borated. The SWEL has been broken down into each of these environments. The appropriate environments have been added to the SWEL lists. The column titled "BLDG." on both SWEL 1 & 2 shows location of each component, such as PC for Primary Containment and EG for EDG structures. We do not have to list HELB environment because the purpose of this effort is to look at the normal environmental conditions.	RCC for R Sullivan

3	Question 3b	Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2?	EN-DC-168 Section 5.5[4](a) states, "All SSCs which could potentially cause the spent fuel pool to drain rapidly (Rapid Drain Down), as described in EPRI 1025286, Section 3, shall be selected for SWEL 2 and documented in Attachment 9.4. EN-DC-168, Table 9.4.4 (Rapid Drain-Down List) includes a column labeled "Basis for Inclusion/Exclusion." EPRI Walkdown Guidance states that if there are no SFP penetrations below about 10 ft. above the top of the fuel assemblies, then no rapid drain-down items would be added to the SWEL. Since this is the case for JAF, we do not have any entries on EN-DC-168 Table 9.4.4.	RCC for R Sullivan
4	Question 4	Why doesn't the base list include all the items listed in B-2 of the EPRI document? Example, CRD Pumps, suppression pool, RHRSW Strainers.	The Base List was chosen by first considering the A-46 Composite Safe Shutdown Equipment List (SSEL). This list was then compared to the IPEEE Table 3A.1, JAF Seismic Margin Assessment Shutdown List. The Base List was reduced to those items which were on both the A-46 SSEL and IPEEE Table 3A.1. Core Spray Pump 14P-1A and RHRSW Strainer 10S-5A1 (both on the IPEEE, but not on A-46) were added to complete the Base List. The CRD pumps (03P-16A, 16B) are not on the IPEEE Table 3A.1 and therefore were not included in the Base List. Various components within the systems listed in Table B-2 such as HPCI, Core Spray, and LPCI were included on the Base List.	RCC for R. Sullivan

		Many components selected did not "Maintain at least one of the 5 Safety Functions" per the Base List. Many of these components were electrical components or CAD system and probably support one of the five safety functions. According to figure 1-1 in the EPRI 1025286 document, these components should not be part of SWEL 1.	EPRI Seismic Walkdown Guidance Report 1025286 states on page 3-4 states that the USI A-46 program Safe Shutdown Equipment List address the first four safe shutdown functions listed above (i.e., in the EPRI Report). On page 3-3 of the EPRI report, it is stated that the IPEEE program was intended to address the seismic margin of SSCs associated with all of the above 5 safety functions. The items on SWEL 1 are listed on IPEEE or A-46 (in 2 cases, a SEWS evaluation walkdown was performed indicating the component was part of A-46, but could not find item on the A-46 Safe Shutdown Equipment List). One exception, 72HV-7A was neither on A-46 or IPEEE. There are sufficient number of components on the SWEL to discard 72HV-7A.	RCC for R. Sullivan

Reviewed By:	*		Date		Resolved By:	R. Casella / R Casella
Site/Department:		Ph.			Date:	11/13/12

* Rich Sullivan (Operations) provided review comments on e-mail dated 9/3/12 (see attached)

R Casella 11/13/12

Porch, Alan

From:	Sullivan, Richard
Sent:	Monday, September 03, 2012 6:35 PM
To:	Casella, Richard; Bacanskas, Vincent P; Saunders, Michelle; Wallace, David J; Brey, Sheila; Porch, Alan; Favara, John A; Cooney, Jeffrey; phansen@enercon.com
Cc:	Grabowski, Bill; Carlon, Christopher; Locy, Roger
Subject:	RE: Fukushima - Seismic Walkdowns - SWEL 1 & SWEL 2 Prepared
Attachments:	Peer Review Checklist for SWEL.doc

Rick,

Here are my comments. I used the format in the EPRI document.

Thanks,

Rich

From: Casella, Richard
Sent: Friday, August 31, 2012 6:57 PM
To: Bacanskas, Vincent P; Saunders, Michelle; Wallace, David J; Brey, Sheila; Sullivan, Richard; Porch, Alan; Favara, John A; Cooney, Jeffrey; phansen@enercon.com
Cc: Grabowski, Bill; Carlon, Christopher; Locy, Roger
Subject: Fukushima - Seismic Walkdowns - SWEL 1 & SWEL 2 Prepared

To all,

Please find attached the prepared JAF SWEL 1 and SWEL 2 (Spent Fuel Pool related) lists comprising the proposed components to be walked down during RO21. The lists were prepared in accordance with EN-DC-168 and EPRI Report 1025286, Seismic Walkdown Guidance. The lists were prepared by myself, Roger Locy, and Jeff Cooney. ***The expectation is that the SWEL 1 and SWEL 2 lists will be issued by close of business on Thursday, 9/6/12.*** The Peer Review team consists of Rich Sullivan, Al Porch, and John Favara.

There are 111 items listed on SWEL 1 and 13 items listed on SWEL 2. The attachments include "Base List 1" which is the original list of candidate components as taken from the IPEEE (Individual Plant Examination of External Events) and the SSEL (Safe Shutdown Equipment List) from the USI A-46 effort. The 111 items for SWEL 1 were selected from the Base List. Note the SWEL 1 components are yellow highlighted in the Base List.

Please send any comments related to review of SWEL 1 and SWEL 2 to Rick Casella at JAF. I can be reached by phone at (315) 349-6549.

Thanks,
Rick

Peer Review Checklist for SWEL

Instructions for Completing Checklist
This peer review checklist may be used to document the review of the Seismic Walkdown Equipment List (SWEL) in accordance with Section 6: Peer Review. The space below each question in this checklist should be used to describe any findings identified during the peer review process and how the SWEL may have changed to address those findings. Additional space is provided at the end of this checklist for documenting other comments.

1. Were the five safety functions adequately represented in the SWEL 1 selection?

   ☒YES ☐ NO

   All five safety functions are adequately represented.

2. Does SWEL 1 include an appropriate representation of items having the following sample selection attributes:

   a. Various types of systems?

      ☒YES ☐ NO

      Various systems and components were selected.

   b. Major new and replacement equipment?

      ☒YES ☐ NO

      ESW strainers and 71INV-3A were selected both of which were recently modified.

      The team should also consider RHRSW strainers (not on Base List) and the new three stage SRV solenoids.

      Also selected was 71UPS-1(MTR). This component was recently changed out and replaced by an inverter. The list was not updated.

   c. Various types of equipment?

      ☒YES ☐ NO

      Various types of equipment have been selected, MOVs, AOVs, Vertical pumps, horizontal pumps, strainers, MCCs, L-Gear, Inverters, Heat Exchangers, etc.

   d. Various environments?

      ☐YES ☒ NO See EN-DC-168 Attach 9.11 For Resolution RCC 11/14/12

      All components listed the same environmental conditions. The team could breakdown the environment conditions further to provide some discrimination such as inside primary containment, in HELB environment, etc.

   e. Equipment enhanced based on the findings of the IPEEE (or equivalent) program?

      ☒YES ☐ NO

      The "Base List 1" is the original list of candidate components as taken from the IPEEE (Individual Plant Examination of External Events) and the SSEL (Safe Shutdown Equipment List) from the USI A-46 effort.

   f. Were risk insights considered in the development of SWEL 1?

      ☒YES ☐ NO

3. For SWEL 2:

   a. Were spent fuel pool related items considered, and if applicable included in SWEL 2?

   ☒YES ☐ NO

   b. Was an appropriate justification documented for spent fuel pool related items not included in SWEL 2?

   RCC 11/14/12 ☒YES ☐ NO SEE EN-DC-168 ATTACH 9.11, FOR RESOLUTION OF THIS ITEM. PEER REVIEWERS HAVE CONCURRED.

   Not sure. I did not see any such documentation.

4. Provide any other comments related to the peer review of the SWELs.

   1) Why doesn't the base list include all the items listed in B-2 of the EPRI document? Example, CRD Pumps, suppression pool, RHRSW Strainers.
   2) Many components selected did not "Maintains at least one of the 5 Safety Functions" per the Base List.(Items 168, 213, 241, 247, 317, 322, 336, 391, 394, 409, 429, 460, 465, 473, 475, 476, 490, 492, 494, 496, 497, 498, 501, 510, 519, 521, 522, 557, 579, 580, 583). Many of these components were electrical components or CAD system and probably support one of the five safety functions. According to Figure 1-1 in the EPRI 1025286 document, these components should not be part of SWEL 1.

5. Have all peer review comments been adequately addressed in the final SWEL?

   RCC 11/14/12 ☒YES ☐ NO SEE EN-DC-168 ATTACH 9.11 FOR RESOLUTION OF ALL COMMENTS.

Peer Reviewer #1: R. SULLIVAN / R. Caselle* Date: 11/14/12

Peer Reviewer #2: A G Porch / A G Porch Date: 11.14.12

* SIGNED FOR R SULLIVAN PER E-MAIL AUTHORIZATION DATED 11/12/12, 6:22 PM.

R Caselle 11/14/12

Casella, Richard

From: Sullivan, Richard
Sent: Monday, November 12, 2012 6:22 PM
To: Casella, Richard; Penny, Phil O
Subject: RE: Fukushima Equipment list Approval

Rick, Phil,

I have reviewed the information and approve it. You can sign for me per this e-mail.

Thanks,

Rich Sullivan

From: Casella, Richard
Sent: Sunday, November 11, 2012 8:06 PM
To: Sullivan, Richard; Penny, Phil O
Cc: Carlon, Christopher; Porch, Alan; Johnson, Joseph G
Subject: RE: Fukushima Equipment list Approval

Rich,

I have attached the SWEL 1 and SWEL 2 lists. I have also attached response to your comments. If acceptable to you, please initial the comment form. I will also forward the sheet from EN-DC-168 for your signature as completing Peer Review of the SWEL. I appreciate your help very much.

Thanks,
Rick

From: Sullivan, Richard
Sent: Wednesday, November 07, 2012 6:08 PM
To: Penny, Phil O
Cc: Casella, Richard; Carlon, Christopher
Subject: RE: Fukushima Equipment list Approval

Where is the list? I had some comments. How were those disposed? BTW, I am Columbia this week and next.

Rich

From: Penny, Phil O
Sent: Tuesday, November 06, 2012 8:31 AM
To: Sullivan, Richard
Cc: Casella, Richard; Carlon, Christopher
Subject: RE: Fukushima Equipment list Approval

Rich,

Please Approve the list you already concurred with via this email. You are the only signature left for completion.

Thanks

Phil Penny
Supervisor
Design Electrical Engineering
JAF Nuclear Power Station
Entergy Nuclear Operations
(ph) 315-349-6832

(ph) 315-402-9358
ppenny@entergy.com

From: Carlon, Christopher
Sent: Monday, November 05, 2012 1:58 PM
To: Sullivan, Richard; Locy, Roger
Cc: Casella, Richard; Penny, Phil O
Subject: Fukushima Equipment list Approval

Richard, Roger

I need your signature for participating in the Seismic Walkdown Equipment List (SWEL) review/preparation back in early September. Please signed the attached file and send back to me ASAP.

Thank you

Christopher Carlon
Design Engineering - Mechanical
J.A. Fitzpatrick Nuclear Power Plant
Phone: 315-349-6916
Email: ccarlon@entergy.com

Attachment H

“Seismic Walkdown Engineer Training Certificates”

EPRI ELECTRIC POWER RESEARCH INSTITUTE

Certificate of Completion

Alan Porch

Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns

July 19,2012
Date

R.P. Kassawara
Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity

EPRI | ELECTRIC POWER RESEARCH INSTITUTE

Certificate of Completion

Christopher Sawatzke

Training on Near Term Task Force
Recommendation 2.3
- Plant Seismic Walkdowns

R.P. Kassawara

July 11, 2012
Date

Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity

Enercon Walkdown
Team Lead for PNPS

,:ENERCON

Excellence—Every project. Every day.

Certificate of Completion

is hereby granted to

Laura Maclay

for successful completion of

TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3

PLANT SEISMIC WALKDOWNS

Awarded: 7/26/2012 in Mt.Arlington, NJ

Kenneth Whitmore
Certified Seismic Walkdown Engineer
Alexandria, VA- 6/20/2012

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Certificate of Completion

is hereby granted to

Jeff Horton

for successful completion of

TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3 *PLANT SEISMIC WALKDOWNS*

Awarded: 7/26/2012 in Mt. Arlington, NJ

Kenneth Whitmore
Certified Seismic Walkdown Engineer
Alexandria, VA – 6/20/2012

SQUG

Certificate of Achievement

This is to Certify that

Bob Kester

has Completed the SQUG Walkdown Screening and Seismic Evaluation Training Course Held August 2–6, 1993

Neil P. Smith, Commonwealth Edison
SQUG Chairman

David A. Freed, MPR Associates
SQUG Training Coordinator

Robert P. Kassawara, EPRI
SQUG Program Manager

ENERCON

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Certificate of Completion

is hereby granted to

Tom Panayotidi

for successful completion of

TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3

PLANT SEISMIC WALKDOWNS

Awarded: 9/13/2012 in Mt. Arlington, NJ

Kevin Bessell
Certified Seismic Walkdown Engineer
Palo Alto, CA – 6/13/2012

Alex Smerch
Certified Seismic Walk down Engineer
Palo Alto, CA – 6/13/2012

ENERCON

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Certificate of Completion

is hereby granted to

Pouria Pourghobadi

for successful completion of

TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3

PLANT SEISMIC WALKDOWNS

Awarded: 9/13/2012 in Mt. Arlington, NJ

Kevin Bessell
Certified Seismic Walkdown Engineer
Palo Alto, CA – 6/13/2012

Alex Smerch
Certified Seismic Walkdown Engineer
Palo Alto, CA – 6/13/2012

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Certificate of Completion

is hereby granted to

Yaroslav Losev

for successful completion of

TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3

PLANT SEISMIC WALKDOWNS

Awarded: 9/13/2012 in Mt. Arlington, NJ

Kevin Bessell
Certified Seismic Walkdown Engineer
Palo Alto, CA – 6/13/2012

Alex Smerch
Certified Seismic Walkdown Engineer
Palo Alto, CA – 6/13/2012

SQUG

Certificate of Achievement

This is to Certify that

Rick Casella

has Completed the SQUG Walkdown Screening and Seismic Evaluation Training Course Held June 11-15, 2007

Richard G. Starck, MPR Associates, Inc.
SQUG Instructor

Paul D. Baughman, ARES Corporation
SQUG Instructor

Certificate of Completion

is hereby granted to

Harpreet Ghuman

for successful completion of

TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3

PLANT SEISMIC WALKDOWNS

ARES CORPORATION

July 26, 2012
Date

Mark W. Eli, SCE, P.E.
Certified Seismic Walkdown Engineer
Palo Alto, CA June 27, 2012

Certificate of Completion

is hereby granted to

Donald Koberg

for successful completion of

TRAINING ON NEAR TERM TASK FORCE RECOMMENDATION 2.3

PLANT SEISMIC WALKDOWNS

ARES CORPORATION

July 26, 2012
Date

Mark W. Eli, SCE, P.E.
Certified Seismic Walkdown Engineer
Palo Alto, CA June 27, 2012

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Certificate of Completion

William Grabowski

Training on Near Term Task Force Recommendation 2.3 - Plant Seismic Walkdowns

July 27, 2012
Date

R.P. Kassawara
Robert K. Kassawara
EPRI Manager,
Structural Reliability & Integrity

EPRI

Certificate of Completion

Dave Grimes

Training on Near Term Task Force Recommendation 2.3 - Plant Seismic Walkdowns

July 27, 2012
Date

R.P. Kassawara
Robert K. Kassawara
EPRI Manager
Structural Reliability & Integrity

Attachment I

"Peer Review Comments"

ATTACHMENT 9.11 **PEER REVIEW COMMENT FORM**

Entergy

Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☐ Yes ☒ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
Attachment C				
1	Cover sheet	Cover sheet is missing. This comment applies to all attachments for this report.	Comment incorporated	LM
2	General	Add a header on each page with an overall page count. This comment applies to all attachments for this report.	Comment incorporated	LM
3	General	The SWEL numbering doesn't appear to be sequential or correctly labeled per EN-DC-168, page 46, number 16. Each item for SWEL 1 should be labeled SWEL1-XXX, *and* sequential. The SWEL 2 items appear to be labeled correctly.	Comment incorporated.	LM
4	General	Typical *all* sheets - remove sheets 6-8 and if the second page of photos (page 5) is not used, delete it. Make sure to update sheet numbering in left corner of each page	Comment incorporated	LM
5	SWEL1-1	SWEL-1, Page 1, the equipment description misspells 'valve'.	Comment incorporated.	LM
6	SWEL1-011, 232, and 430	SWEL-11, SWEL-232, and SWEL-430-Sh. 4 & 5, 'Status' box is not checked on any of these items	Comment incorporated for SWEL1-11 and SWEL1-232. For SWEL1-430 the status was changed to U since this is a deferred item.	LM

Entergy

Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☐ Yes ☒ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
7	SWEL1-032	SWEL-32, some sheets say SWEL-32, some read SWEL-#32, be consistent	Comment Incorporated and format is consistent with EN-DC-168	LM
8	SWEL1-052	SWEL-52, question #6 is marked both 'Y' and 'U, which is correct?	Status changed to U, item is deferred.	LM
9	SWEL1-065, 164, 433, 555, 555, 577, 624, 640, 642, 646, 662, 670, 674, 2-1, 2-3, 2-5, 2-6.	Question #6 is blank on the following SWEL items: SWEL-65, SWEL-164, SWEL-433, SWEL-555, SWEL-555, SWEL-577, SWEL-624, SWEL-640, SWEL-642, SWEL-646, SWEL-662, SWEL-670, SWEL-674, SWEL2-1, SWEL2-3, SWEL 2-5, SWEL2-6. *Each question should have an answer marked, including Question #6. If the item is an in-line mounted valve or similar, it may not explicitly have anchorage. In these cases the question should be marked "Y" with an explanation, as you infer. The explanation could be "In-line mounted component" or similar.*	SWEL1-065, SWEL1-164, SWEL1-555, SWEL1-577, SWEL1-642, SWEL1-646, SWEL1-662, SWEL1-670, SWEL1-674, 2-1, 2-3, 2-5 comment incorporated. SWEL1-433, 624,640 status is U, items are deferred.	LM
10	SWEL1-209, 210, 213, 219	Status' box on page 4 is not checked for the following SWEL items: SWEL-209, SWEL-210, SWEL-213, SWEL-219	209, 210, 213, 219 Comment Incorporated	LM
11	SWEL1-234	SWEL-234- 'Status' box on page 3 & 4 is not checked	Comment Incorporated	LM
12	SWEL1-360	SWEL-360- 'Status' box on page 3 is not checked	Comment Incorporated	LM
13	SWEL1-372, 2-14	SWEL-372 and SWEL2-14 are missing signatures	Comment Incorporated	LM
14	SWEL1-373	SWEL-373- 'Status' box on page 5 is not checked	Comment Incorporated	LM
15	SWEL1 426	SWEL 426- Question #1 is not checked	Comment Incorporated	LM

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Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☐ Yes ☒ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
16	SWEL1-433	SWEL-433- pages 2-5 are not labeled per the guideline, should have SWEL1-XXX, not just XXX. Also, pages 4 & 5 'Status' boxes are not checked	Status changed to U, the item is deferred.	LM
17	SWEL1-439	SWEL-439-page 4 labeled status 'U', but page 5 labeled 'Status' 'Y', which is correct?	Status changed to U, the item is deferred.	LM
18	SWEL1-456	SWEL-456-page 4 labeled 'Status' 'U', but page 5 labeled 'Status' 'Y', which is correct?	Status is changed to U. The item is deferred.	LM
19	SWEL1-475	SWEL-475 Question #6 marked 'U' but status is 'Y'?	Comment incorporated	LM
20	SWEL1-508	SWEL-508, Question #6 not checked and the 'Status' on page 4 is not checked	Comment incorporated	LM
21	SWEL1-516, 522	SWEL-516 and SWEL-522, Question #5 marked 'U' but status 'Y'?	Comment incorporated	LM
22	SWEL1-628	SWEL-628 is partially blank. Is this a deferred item? If so, status should be marked 'U'	Comment incorporated. The item is differed and the status is changed to U.	LM
23	SWEL1-636	SWEL-636, Question #10 is marked 'U', but overall 'Status' is 'Y', should #10 be 'N'? Also, question #6 is not checked.	Response provided by site staff, inconsistency is resolved.	LM
24	SWEL2-7	SWEL2-7, Question #6 not checked, and page 4 'Status' is not checked	Comment incorporated	LM
25	SWEL2-9	SWEL2-9, page 5 'Status' is not checked.	Comment incorporated.	LM
26	SWEL1-243	SWEL-243- 'Status' box on page 5 is not checked.	Comment Incorporated.	LM
Attachment D				
27	Cover sheet	Cover sheet is missing. This comment applies to all attachments for this report.	Comment incorporated	LM

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Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☐ Yes ☒ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
28	General	Add a header on each page with an overall page count. This comment applies to all attachments for this report.	Comment incorporated	LM
29	General	Typical all sheets - remove sheets 6-8 and if the second page of photos (page 5) is not used, delete it. Make sure to update sheet numbering in left corner of each page.	Comment incorporated	LM
30	AWC-003, AWC-011, AWC-012, AWC-013, AWC-014, AWC-019, AWC-023	Pages 4 and 5 of AWC-03, AWC-11, AWC-12, AWC-13, AWC-14, AWC-19, AWC-23 are missing the list of SWEL components in the heading	Comment incorporated. Note:AWC-003 and AWC-013 were identical. Hence, AWC-013 was replaced.	LM
31	AWC-006	AWC-06, the status is marked 'N' at the top of the page, but it appears that the walkdown has been completed. Refer to page 67 for an explanation of the status boxes. It should be 'Y'.	Comment incorporated	LM
32	AWC-012	AWC-12 has a different status on each page, only one is valid	Comment incorporated	LM
33	AWC-024	AWC-24 has 'Y' status on some pages, and 'N' on others, only one is valid.	Comment incorporated	LM
34	AWC-031, AWC-034, AWC-051	AWC-31, AWC-34 and AWC-51 are missing signatures	Comment incorporated.	LM

Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☐ Yes ☒ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
35	AWC-056, AWC-047, AWC-045, AWC-044, AWC-043.	AWC-40, AWC-41, AWC-42, AWC-43 and AWC-58 do not have any Status boxes checked	Comment incorporated. Note: The order of some of the AWC's had to be changed and new numbers were assigned to them: • AWC-40 is changed to AWC-056. • AWC-41 is changed to AWC-047. • AWC-42 is changed to AWC-045. • AWC-58 is changed to AWC-044.	LM
36	AWC-013	AWC-53 does not have any Status boxes checked and Question #4 is not checked	Waiting for SWE response and clarification. • AWC-53 is changed to AWC-013	LM
Attachment E				
37	N/A	Remove last row of sheet that has (1) (2), etc.	Comment incorporated	LM
38	N/A	I believe Tom P.'s name should go in the "Reviewed by" line as he is the peer reviewer. I am the internal reviewer.	Comment incorporated	LM
39	N/A	The LBE forms are not part of Attachment E. They belong in Attachment F.	Comment incorporated. Removed all LBEs and moved them to Attachment F.	LM
40	N/A	Remove instruction pages, they are not part of the final report.	Comment incorporated	LM

Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☐ Yes ☒ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
41	Pages 17 and 18	Pages 17 and 18 are labeled 'Non-adverse seismic condition items'. This is not part of the procedural requirements; I believe it should be removed.	Comment incorporated. Deleted table.	LM
42	Page 4	Page 4, first box, second paragraph, "Label was illegible but conduits appear to be ***terminate*** at CAD…" Change 'terminate' to 'terminating'.	Comment incorporated.	LM
Attachment F				
43	N/A	Missing. Currently the LBE forms that belong in this section are in Attachment E.	Comment incorporated.	LM
Attachment G				
44	N/A	Missing – part of final report	SWEL Peer Review to be generated by JAF personnel.	LM
Attachment H				
45		Add a cover sheet as the first page.	Comment incorporated.	LM
Attachment B				
46		Remove instruction sheets	Comment incorporated.	LM
47		**BOLD** SWEL 1 items on BL 1 as required per page 46, number 15 in EN-DC-168	Comment incorporated.	LM
48		**BOLD** SWEL 2 items on BL 2 as required per page 48, number 34 in EN-DC-168	Comment incorporated.	LM
50	Page 12	Page 12, last item says 'retired' in Decay Heat Removal box. This column is only supposed to have checkmarks, no words	Comment incorporated. Replaced with check mark.	LM

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Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☐ Yes ☒ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
51	Page 13	Page 13, first item says 'retired' in Decay Heat Removal box. This column is only supposed to have checkmarks, no words	Comment incorporated. Replaced with check mark.	LM
52	General	SWEL1 items are numbered incorrectly. Refer to page 46, number 16 of EN-DC-168 for the correct sequential numbering	Comment incorporated. Added 1-### to SWEL 1 Items and 2-### to SWEL 2 items.	LM
Report				
53	General	Coversheet has Quality Related box checked, is the issuing EC created as quality related? The pilgrim report is not quality related.	Based on Entergy's plants these reports are non quality related. Changed Quality status to Non quality related.	LM
54	General	General comment- There's a lot of missing information in this report, specifically sections 5, 6, 8 and 9. I have reviewed the overall format as it pertains to the procedure, but in order to verify number from tables, I will need to review it in detail when the missing information is available, hopefully prior to the final report submittal.	Information was filled in when inputs where provided by the client.	LM
55	General	Page 4,5,6,8, 18 refer to track comments on report, minor grammatical comments	Grammatical comments incorporated as suggested.	LM
56	General	Page 7 and 31 verify UFSAR is correct. Should it be FSAR instead?	UFSAR is Updated Final Safety Analysis Report. JAF has updated their FSAR throughout plant modifications. The document is UFSAR.	LM

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Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☐ Yes ☒ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials

Reviewed By:	Laura Maclay	Date	11/20/12	Resolved By:	Pouria Pourghobadi Yaroslav Losev
Site/Department:	JAF/Engineering	Ph.		Date:	11/20/2012

Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☒ Yes ☐ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
57	SWEL1-001	The SWC title should be SWEL1-001. Misspelled the word "Valve" Q2, Q3, Q4: Explain why N/A is checked; otherwise answer Y. Q8: Need a CR #, not an LBE # Q9: misspelled the word "attached" Delete pp.5-8	- *Comment Incorporated. SWEL formatting fixed.* - *Answers provided to Q2,3,and 4. Item is an inline valve* - *For this item LB was needed to evaluate the need for a CR.* - *Misspelling is corrected.* - *Pg.5-8 are deleted.*	TP
58	SWEL1-032	The SWC title should be SWEL1-032. Q7: Response should be "item is not a soft target" Delete pp.5-8	- *Comment Incorporated. SWEL formatting fixed.* - *The item does not have any soft targets (pipes, gauges, etc)* - *Pg.5-8 are deleted.*	TP
59	SWEL1-052	The SWC title should be SWEL1-052. Q1, Q2: Response to Q1 should be moved to Q2 Q6: Should be "U" Q6: Response should be blank Sheet 5: Status should be "U" Delete pp.6-8	- Comment incorporated. - Q6 is answered U. - *Pg.5-8 are deleted.*	TP

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Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☒ Yes ☐ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
60	SWEL1-069	The SWC title should be SWEL1-069 Q7: Response should be "item is not a soft target" Delete pp.5-8	- *Comment incorporated. SWEL formatting fixed.* - *The item does not have any soft targets (pipes, gauges, etc)* - *Pg.5-8 are deleted.*	TP
61	SWEL1-137	The SWC title should be SWEL1-137 Q7: Response should be "item is not a soft target" Sheet 4: Caption should say "Photo" instead of "Illustration" Delete pp.5-8	- Comments incorporated. - *The item does not have any soft targets (pipes, gauges, etc)* - *Caption changed to picture.* - *Pg. 5-8 deleted.*	TP
62	SWEL1-157	The SWC title should be SWEL1-157 Q7: Response should be "item is not a soft target" Delete pp.6-8	- Comments incorporated. - *The item does not have any soft targets (pipes, gauges, etc)*	TP
63	SWEL1-213	The SWC title should be SWEL1-213 Q2, Q3, Q4: Explain why N/A is checked; otherwise answer Y. Q7: Response should be "item is not a soft target" Q8: Need a CR #, not an LBE # Sheet 4: Status should be "Y" Delete pp.5-8	- Comments incorporated. - Comment incorporated and answers changed to yes. - *The item does not have any soft targets (pipes, gauges, etc)* - *For this item LB was needed to evaluate the need for a CR.* - *Pg. 5-8 deleted.*	TP

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Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☒ Yes ☐ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
64	SWEL1-433	The SWC title should be SWEL1-433 Q2, Q3: Explain why N/A is checked; otherwise answer Y. Q6: Should be "Y" Q6: Response should be blank Sheet 4: Status should be "Y" Sheet 5: Status should be "Y" Delete pp.6-8	- *Comments incorporated.* - *Comment incorporated and answers changed to yes.* - *Sheets 4 and 5 are answered u since the item is deferred.* - *Pg 6-8 are deleted.*	TP
65	SWEL1-448	The SWC title should be SWEL1-448 Status should be "Y" Q7: If the answer is "Y", then the response should be deleted Delete pp.6-8	- *All comments incorporated.*	TP
66	SWEL1-452	The SWC title should be SWEL1-452 Delete pp.6-8	- *Comment incorporated*	TP
67	SWEL1-457	The SWC title should be SWEL1-457 Delete pp.5-8	- *Comment incorporated*	TP
68	SWEL1-474	The SWC title should be SWEL1-474 Q5: should be N/A Delete pp.5-8	- *Comment incorporated*	TP

Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

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Quality Related: ☒ Yes ☐ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
69	SWEL1-494	The SWC title should be SWEL1-494 Under "Equipment Description", the designation "253-OD3" does not match what's in the SWEL, which is "254-A3A" Q7: Response should be "item is not a soft target" Delete pp.5-8	- *Comment incorporated*	TP
70	SWEL1-501	The SWC title should be SWEL1-501 Delete pp.6-8	- *Comment incorporated*	TP
71	SWEL1-519	The SWC title should be SWEL1-519 Q5: If one bolt is missing, then status should be "N"; otherwise provide justification why you think it is "Y". Q7: Response should be "item is not a soft target" Sheet 5: Equipment class should be "09-Fans" Sheets 4,5" Caption should say "Photo" instead of "Illustration" Delete pp.6-8	- *Response provided in Q.2 and CR generated to track the deficiency. Missing bolt was already identified in previous walkdowns (SEWS) and evaluations indicated it to be acceptable.* - *Equipment class identified as 09-Fan.* - *Caption was fixed.* - *Extra pages deleted.*	TP

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Quality Related: ☒ Yes ☐ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
72	SWEL1-624	The SWC title should be SWEL1-624 Q2, Q3, Q4: Explain why N/A is checked; otherwise answer Y. Q6: Should be "Y". Response should be blank Delete pp.6-8	- *Comment incorporated* - *The answers to questions Q.2,3, 4 and 6 are changed to U. the items is deferred.*	TP
73	SWEL1-646	The SWC title should be SWEL1-646 Q2, Q3, Q4: Explain why N/A is checked; otherwise answer Y. Q6: Should be "Y". Response should be blank Delete pp.6-8	- *Comment incorporated* - *Waiting for response from SWE to clarify the inconsistency.* - *Extra pages deleted.*	TP
74	SWEL1-670	The SWC title should be SWEL1-670 Q2, Q3, Q4: Explain why N/A is checked; otherwise answer Y. Q6: Should be "Y". Response should be blank Delete pp.6-8	- *Comment incorporated* - *Answers changed to Y.* - *Extra pages deleted.*	TP
75	SWEL1-683	The SWC title should be SWEL1-683 Q1: The sentence "The anchorage configuration was verified and found to be acceptable" should be deleted. Q7: Response should be "item is not a soft target" Delete pp.6-8	- *Comment incorporated* - *Comment incorporated* - *There are no soft targets as part of the equipment.*	TP

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Review Comments and Resolutions Form

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Quality Related: ☒ Yes ☐ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
76	SWEL1-686	The SWC title should be SWEL1-686 Delete pp.6-8	- *Comment incorporated*	TP
77	SWEL1-690	The SWC title should be SWEL1-690 Q5: Need CR #, not LBE # Delete pp.5-8	- *Comment incorporated* - *LBE was needed to be performed to evaluate the need for a CR.*	TP
78	SWEL2-007	The SWC title should be SWEL2-007 Q2, Q3, Q4: Explain why N/A is checked; otherwise answer Y. Q6: Should be "Y". Response should be blank Q7: Response should be "item is not a soft target" Sheet 4: Status should be "Y" Delete pp.5-8	- *Comment incorporated* - *The item is an inline valve. Responses provided. Comment incorporated.* - *Extra pages deleted.*	TP
79	SWEL2-007	The SWC title should be SWEL2-007 Sheet 5: Status should be "Y" Delete pp.6-8	- *Comment incorporated* - *Extra pages deleted.*	TP
80	AWC-003	The AWC title should be AWC-003 The SWEL components should be "SWEL1-XXX" Sheets 4,5: Caption should say "Photo" instead of "Illustration" Delete pp.6-8	- *Comment incorporated* - *Caption is corrected.* - *Extra pages deleted.*	TP

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Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☒ Yes ☐ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
81	AWC-006	The AWC title should be AWC-006 The SWEL components should be "SWEL1-XXX" Status should be "Y" Delete pp.5-8	- *Comment incorporated* - *Comment incorporated* - *Extra pages deleted.*	TP
82	AWC-009	The AWC title should be AWC-009 Delete pp.5-8	- *Comment incorporated*	TP
83	AWC-013	The AWC title should be AWC-013 The SWEL components should be "SWEL1-XXX" Sheets 4,5: SWEL components should be specified Sheets 4,5: Caption should say "Photo" instead of "Illustration" Delete pp.6-8	- *Comment incorporated* • *Comment incorporated* - *Comment incorporated* - *Comment incorporated*	TP
84	AWC-015	The AWC title should be AWC-015 The SWEL components should be "SWEL1-XXX" Status should be "Y" Q1: Need CR# not LBE# Sheets 4: Need photo, since there is a potentially adverse seismic condition under Q1 Delete pp.5-8	- *Comment incorporated* - *Comment incorporated* - *LBE was performed to evaluate the need for a CR.*	TP

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Quality Related: ☒ Yes ☐ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
85	AWC-017	The AWC title should be AWC-017 The SWEL components should be "SWEL1-XXX" Sheets 4,5: Caption should say "Photo" instead of "Illustration" Delete pp.6-8	- *Comment incorporated* - *Comment incorporated* - *Caption corrected.*	TP
86	AWC-018	The AWC title should be AWC-018 The SWEL components should be "SWEL1-XXX" Sheets 4: Caption should say "Photo" instead of "Illustration" Delete pp.5-8	- *Comment incorporated* - *Comment incorporated* - *Caption corrected.*	TP
87	AWC-021	The AWC title should be AWC-021 The SWEL components should be "SWEL1-XXX" Sheets 4: Caption should say "Photo" instead of "Illustration" Delete pp.5-8	- *Comment incorporated* - *Comment incorporated* - *Caption corrected.*	TP
88	AWC-022	The AWC title should be AWC-022 The SWEL components should be "SWEL1-XXX" Delete pp.5-8	- *Comment incorporated* - *Comment incorporated*	TP
89	AWC-029	The AWC title should be AWC-029 The SWEL components should be "SWEL1-XXX" Delete pp.5-8	- *Comment incorporated* - *Comment incorporated* .	TP

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Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☒ Yes ☐ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
90	AWC-033	The AWC title should be AWC-033 The SWEL components should be "SWEL1-XXX" Delete pp.5-8	- *Comment incorporated* - *Comment incorporated*	TP
91	AWC-034	The AWC title should be AWC-034 The SWEL components should be "SWEL1-XXX" Q3: Need CR#, not LBE# Q8: Need CR#, not LBE# Delete pp.5-8	- *Comment incorporated* - *Comment incorporated* - *LBE was performed to evaluate the need for a CR.*	TP
92	AWC-045	The AWC title should be AWC-045 The SWEL components should be "SWEL1-XXX" Under Comments, insert space before "appear" Delete pp.6-8	- *Comment incorporated* - *Comment incorporated*	TP
93	AWC-047	The AWC title should be AWC-047 The SWEL components should be "SWEL1-XXX" Room, Area should be "14E" Under Comments, insert space before "appear" Delete pp.5-8	- *Comment incorporated* - *Comment incorporated* - *Comment incorporated*	TP
94	AWC-049	The AWC title should be AWC-049 The SWEL components should be "SWEL1-XXX" Delete pp.5-8	- *Comment incorporated* - *Comment incorporated*	TP

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Seismic Walkdown Submittal Report
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Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☒ Yes ☐ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
95	AWC-057	The AWC title should be AWC-049 The SWEL components should be "SWEL1-XXX" Delete pp.5-8	- *Comment incorporated* - *Comment incorporated*	TP
96	REPORT	Editorial comments made in report (Word) document with Track Changes on.	- *Comment incorporated*	TP

Reviewed By:	Tom Panayotidi	Date	11/21/12	Resolved By:	Pouria Pourghobadi Yaroslav Losev
Site/Department:	JAF/Engineering	Ph.		Date:	11/21/2012

ATTACHMENT 9.11 **PEER REVIEW COMMENT FORM**

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Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☐ Yes ☒ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
96	LB-01	Show me where in Ref. 1 850 lbs weight value exists.	Sheets 2 and 6, under "Comments" Section and under "Weight" Section respectively.	JHH
97	LB-01	Same as LBE-01 need to be specific on how this value was obtained (i.e. Reference page number in SEWS Package.)	Added, Sheet 6 to referenced value.	JHH
98	LB-01	Need to change the sentence to reflect reaction load applied to the top of the Cabinet such as: " With a lateral acceleration of 0.44g this means that the applied lateral seismic load to the top of the control panel cannot exceed:"	Changed paragraph as suggested.	JHH

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Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 0	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☐ Yes ☒ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
99	LB-01	Need to revise the conclusion statement to reflect my previous comment (Comment # 104). Also, you need to consider the effect the seismic lateral load will have on the moment applied by the reaction applied to the top of the control panel by the conduits. I have no problem with your engineering judgment but you need to make sure you have considered the moment from the conduit reaction force at the top of the panel.	Revised paragraph to incorporate comments above. Added to Evaluation section of the LBE, "The moment is not taken into account in this LBE since the cabinet is fairly flexible and will allow some lateral deflection between anchorage of the cabinet and "Substantially Welded Steel Frame", shown on SEWS, Field Sketch for 93ECP-A/B [Ref.1]; therefore the anchorage was treated as pinned connections, releasing moments at the anchorage between steel frame and concrete. Based on above the moment transferred to the anchors between steel frame and concrete will be negligible."	JHH
100	LB-01	General comment it appears that these conduits may be flexible conduits am I correct.	Yes, the conduits are flexible and will reduce transferred load to the top of the panel.	JHH

Reviewed By:	Jeffrey H. Horton	Date	11/12/12	Resolved By:	Yaroslav Losev
Site/Department:	JAF/Engineering Ph.			Date:	11/12/2012

ATTACHMENT 9.11 **PEER REVIEW COMMENT FORM**

Sheet 1 of 1

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Seismic Walkdown Submittal Report
Review Comments and Resolutions Form

Engineering Report Number	JAF-RPT-12-00015	Rev. 1	Title: James A. FitzPatrick (JAF) Nuclear Power Plant Seismic Walkdown Report for Resolution of Fukushima Near-Term Task Force Recommendation 2.3: Seismic
Quality Related: ☐ Yes ☒ No		**Special Notes or Instructions:** N/A	

Comment Number	Section/Page No.	Review Comment	Response/Resolution	Reviewer's Accept Initials
1	Attachment E	Ensure appropriate information is documented in the "Status" box. Only applicable information. If issue has been resolved, then simply state "Resolved"	Corrected	BG
2	Attachment J	Make appropriate administrative corrections to marked-up SWEL Checklists	Corrected	BG
3	Report Body, p. 2	Ensure page numbers on cover sheet correctly reflect corresponding page number to applicable sections of report.	Corrected	BG
4	Report Body, p. 37	Reword sentence in last paragraph of section 8.3 if needed.	Corrected	BG
5	Report Body, p. 42	Section 9.3 – add E to IPEE	Corrected	BG
6	Report Body, p. 42	Under "Summary of Overall Effectiveness of Peer Review Effort" put space between ina in last sentence.	Corrected	BG
7	Report Body and Attachments	The page numbers don't match in the header of the document (i.e. last page says 159 of 160 or 45 of 44) – this doesn't make sense.	Corrected	BG

Reviewed By:	Bill Grabowski		Date	12/11/2014	Resolved By:	Rick Casella / Michelle Saunders	
Site/Department:	Engineering	Ph. 6280			Date:	12/11/14	

Attachment J

"DEFERRED SEISMIC WALKDOWN CHECKLISTS (SWCs)"

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-052 (Deferred Walkdown Checklist)

Equipment ID No. *09-3* Equip. Class[1] *20-Instruments and Control Panels*

Equipment Description *Nuclear Station Main Control Board*

Location: Bldg. *CR* Floor El. *300* Room, Area *Col 10*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Visible plug welds are SAT. No other anchorage was visible.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Visible was free of oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No concrete cracks were identified at visible anchorage.

[1] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-052 (Deferred Walkdown Checklist)

Equipment ID No. *09-3* Equip. Class *20-Instruments and Control Panels*

Equipment Description *Nuclear Station Main Control Board*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   Visible anchorage is consistent with completed SEWS for 09-6 panel

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No soft targets located in the rear of the 09-3 panel. Lighting panel grates that could impact the front of the panel are secured by tie-wraps to drop-ceiling grid.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Yes, see response to number 7 above.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   The only attached line is conduit to gai-tronics. No seismic concern exists.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-052 (Deferred Walkdown Checklist)

Equipment ID No. *09-3* Equip. Class *20-Instruments and Control Panels*

Equipment Description *Nuclear Station Main Control Board*

Other Adverse Conditions

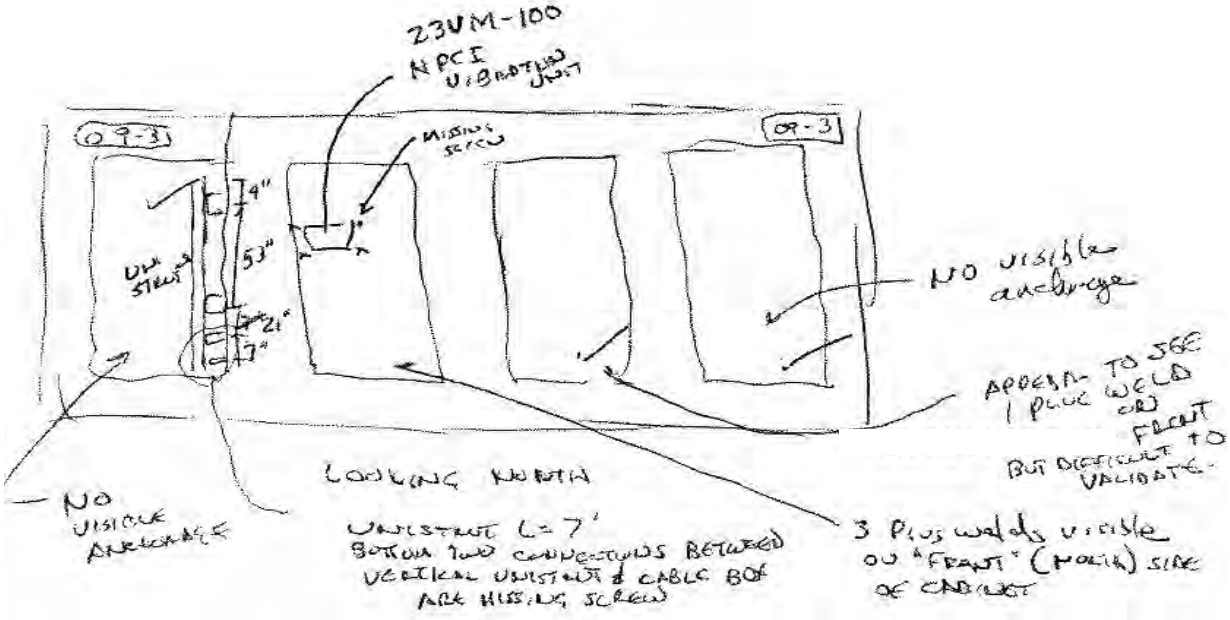
11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
    Internal panel inspection performed. See sketch below.

Comments (Additional pages may be added as necessary)

From #11 above,

Connections at the bottom of unistrut member supporting vertical cable cage with missing cap screw is not a potential seismic concern. The vertical unistrut is securely fastened at 2 locations. This provides adequate seismic support.

23VM-100, HPCI vibration monitor is secured to panel by 3 of 4 screws. Top east nut and screw appear to be missing/ sheared. It is judged, based on assumed weight of the component, that this condition will not result in an adverse seismic condition. (Ref. CR-JAF-2014-00149)



Evaluated by: *R Casella /* Rick Casella Date: *1-8-14*

AG Porch / A G. Porch *1-8-14*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

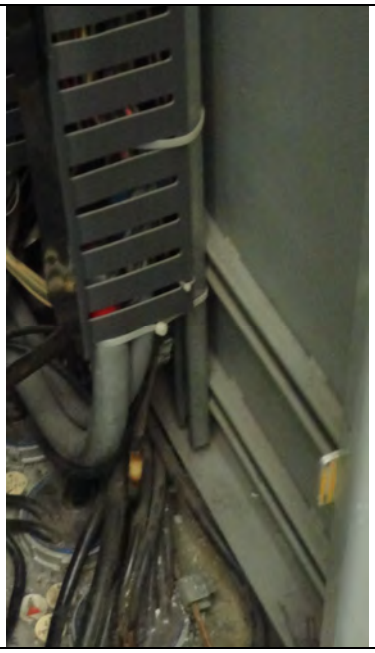
Seismic Walkdown Checklist (SWC) **SWEL- 1-052** (Deferred Walkdown Checklist)

Equipment ID No. *09-3* Equip. Class *20-Instruments and Control Panels*

Equipment Description *Nuclear Station Main Control Board*

Photographs

Note: *23VM-100 with missing nut at top right location inside 09-3 panel*



Note: *Unistrut member inside 09-3 panel*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-052 (Deferred Walkdown Checklist)

Equipment ID No. *09-3* Equip. Class *20-Instruments and Control Panels*

Equipment Description *Nuclear Station Main Control Board*

Note: *09-3 Panel internals*

Note: *09-3 Panel internals*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-430 (Deferred Walkdown Supplement)

Equipment ID No. *71-10502* Equip. Class[2] *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10500)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 24 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   No visible anchorage with cover and breaker removed. Anchorage covered by cabinet base.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   No visible anchorage with cover and breaker removed. Anchorage covered by cabinet base.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☐
   See 10-31-12 walkdown.

[2] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-430

Equipment ID No. *71-10502* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10500)*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☐
   N/A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐
   See 10-31-12 Walkdown

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐
   See 10-31-12 Walkdown

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐
   See 10-31-12 Walkdown

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    See 10-31-12 Walkdown

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-430 (Deferred Walkdown Supplement)

Equipment ID No. *71-10502* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10500)*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Internal panel inspection

Lower section – no anchorage is visible. No loose connections found. Connections to adjacent cabinets are secure.

Middle section – cover plate missing one of ten screws (all others tight). The plate appears to be 1/8" thick and has little mass; therefore, this condition is not a seismic concern.

Upper section – All connections are secure per visual inspection. What appears to be a mating surface for a plate at the bottom of the section has tapped holes but no screws. The plate that would attach was most likely removed to allow cables to pass through. No adverse seismic conditions. Mating surface is welded on north side.

Comments (Additional pages may be added as necessary)

CR-JAF-2013-04618 was initiated to address missing screw on plate in the middle section.

Evaluated by: *R Casella /* Rick Casella Date: *9-9-13*

A Porch / A. G. Porch *9-9-13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

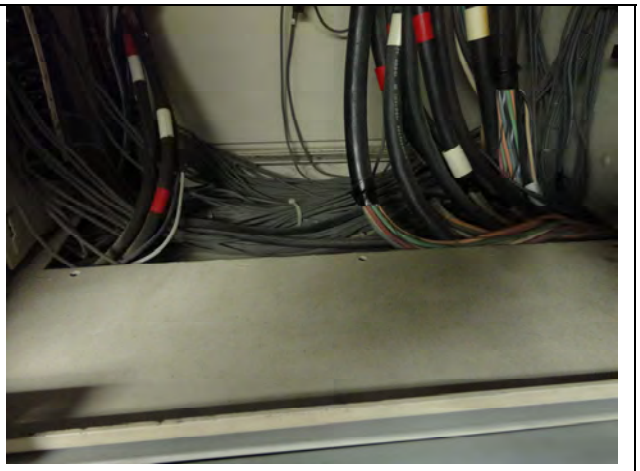
Seismic Walkdown Checklist (SWC) **SWEL- 1-430** (Deferred Walkdown Supplement)

Equipment ID No. *71-10502* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10500)*

Photographs

Note: *Lower section of 71-10502.*



Note: *Upper section of 71-10502. Tapped holes on mating surface shown.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL- 1-430** (Deferred Walkdown Supplement)

Equipment ID No. *71-10502* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10500)*

Note: *Components on the panel door in middle section of 71-10502 are securely fastened.*

Note: *Screw missing at top left of the middle section of 71-10502*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-433 (Deferred Walkdown Checklist)

Equipment ID No. *71-10560* Equip. Class[3] *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10500)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 26 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☐
   See 10-31-12 Inspection Checklist

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☐
   See 10-31-12 Inspection Checklist

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☐
   See 10-31-12 Inspection Checklist

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☐
   See 10-31-12 Inspection Checklist

[3] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-433 (Deferred Walkdown Checklist)

Equipment ID No. *71-10560* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10500)*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☐
   See 10-31-12 Inspection Checklist

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☐
   See 10-31-12 Inspection Checklist

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐
   See 10-31-12 Inspection Checklist

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐
   See 10-31-12 Inspection Checklist

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐
   See 10-31-12 Inspection Checklist

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    See 10-31-12 Inspection Checklist

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-433 (Deferred Walkdown Checklist)

Equipment ID No. *71-10560* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10500)*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

This is a deferred walkdown performed to inspect the panel internals. This inspection was performed while the plant was off-line, during RO 21 on 9/3/14. Fuses and fuse covers were removed per tag out requirements for work being done on the bus.

Four out of seven relays were missing one out of 4 screws. WR #349694 and CR-JAF-2014-4877 were initiated for the observed conditions.

Evaluated by: *B. Grabowski* Date: *9/3/14*

D. F. Grimes *9/3/14*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL- 1-433** (Deferred Walkdown Checklist)

Equipment ID No. *71-10560* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10500)*

Photographs

Note: *Photo of panel interior.*

Note: *Typical missing screw on upper right edge of relay mounting box.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

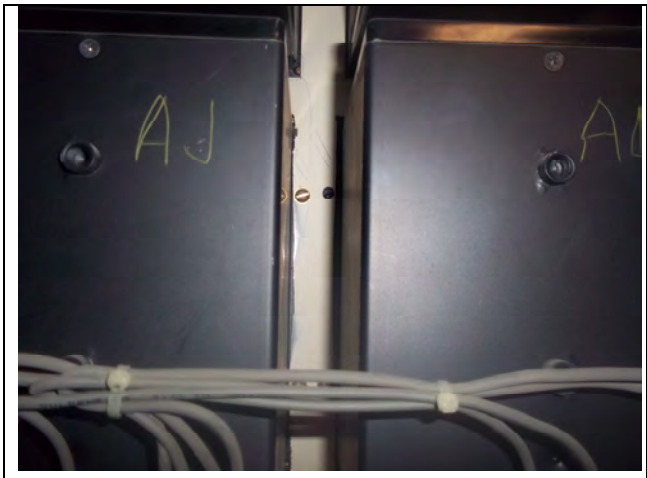
Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-433 (Deferred Walkdown Checklist)

Equipment ID No. *71-10560* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10500)*



Note: *Missing screw as viewed from back of panel door.*

Note: *Missing screw as viewed from back of panel door.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-434 (Deferred Walkdown Checklist)

Equipment ID No. *71-10602* Equip. Class[4] *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 26 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐
   See 9/22/12 walkdown.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   See 9/22/12 walkdown.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   See 9/22/12 walkdown.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

[4] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-434 (Deferred Walkdown Checklist)

Equipment ID No. *71-10602* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   No change from 9/27/12 walkdown.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    No change from 9/27/12 walkdown.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-434 (Deferred Walkdown Checklist)

Equipment ID No. *71-10602* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Open panel inspection performed. No adverse seismic conditions found. See comments below.

Comments (Additional pages may be added as necessary)

Open panel inspection discovery as follows:

- *A screw for a contact at relay 71-27XB-1HOEB03 (mounted on panel door) is not fully tightened down. Screw is furthest right on top row of contacts.*
- *Nut missing from screw connection at rear top right corner of cubicle's metal framing. Two other screw connections along top rear of enclosure are securely fastened with nut.*
- *Bottom plate of cubicle's metal framing is fastened by total of 8 screws. There is a hole in the plate but screw is missing at right rear side (northwest) and front right side (northeast) connections. Plate is approx. 24" x 20" x 0.125" thickness.*
- *Foreign material a) approx. 1' length of masking tape loosely attached to wiring at top rear of panel, and b) thin strip of plastic approx. 2" length laying on bottom plate in right, front corner of cubicle.*

CR-JAF-2014-03310 generated to identify issues above. Engineering Input to Support Operability documented in CA #1 (Ref. EC 51748). EC concludes "as-found" conditions do not adversely impact the ability of 71-10602 (or its internal sub-components) from performing its design function in a seismic event.

Evaluated by: *R. Casella /* Rick Casella Date: *6/30/14*

B. Grabowski / *6/30/14*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-434 (Deferred Walkdown Checklist)

Equipment ID No. *71-10602* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

Photographs

Note: *Top panel of 71-10602. Note missing nut at top right corner at back of panel. Also note piece of masking tape at top of panel.*

Note: *Full view of open top panel of 71-10602.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

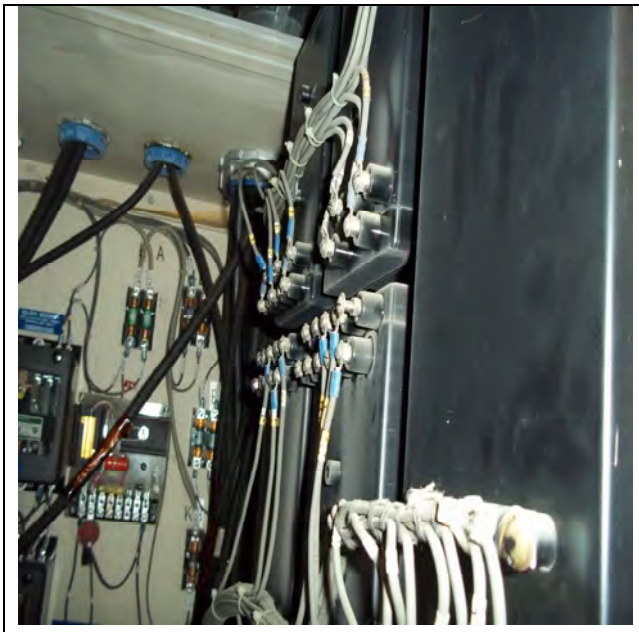
Sheet 5 of 5

Status: Y☒ N☐ U☐

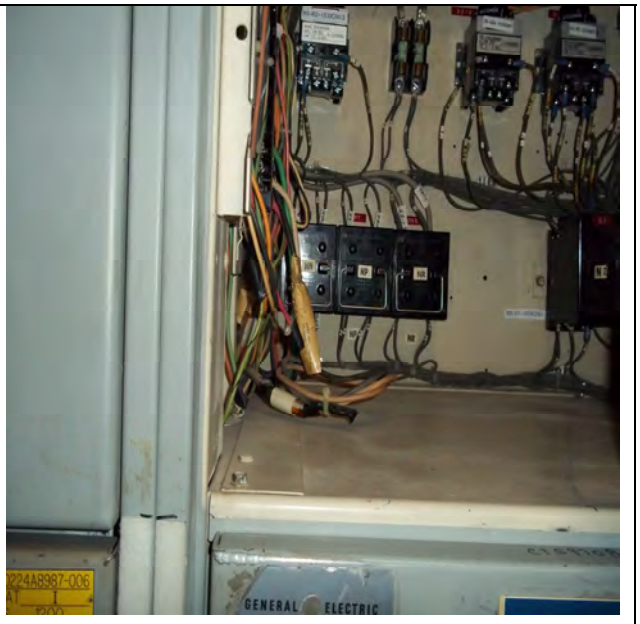
Seismic Walkdown Checklist (SWC) SWEL- 1-434 (Deferred Walkdown Checklist)

Equipment ID No. *71-10602* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*



Note: *Top panel of 71-10602. Note screw not tightened down at relay contact (no attached wire at contact).*



Note: *General view of lower panel of 71-10602.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-436 (Deferred Walkdown Checklist)

Equipment ID No. *71-10614* Equip. Class[5] *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 26 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   See 9/27/12 walkdown.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   See 9/27/12 walkdown.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   See 9/27/12 walkdown.

[5] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-436 (Deferred Walkdown Checklist)

Equipment ID No. *71-10614* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   No change from 9/27/12 walkdown.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    No change from 9/27/12 walkdown.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-436 (Deferred Walkdown Checklist)

Equipment ID No. *71-10614* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

    Open panel inspection performed. No adverse seismic conditions found. See comments below.

Comments (Additional pages may be added as necessary)

Open panel inspection observations –

- *Top enclosure – bottom plate of cubicle's metal framing fastened by a total of 7 screws. At the 8th location at front right side (i.e., northeast), hole in plate for a fastener but screw is missing. The affected plate is approximately 24" x 20" x 0.125" thickness.*

CR-JAF-2014-03313 initiated to address this finding. Engineering Input to Support Operability in CA #1 concludes that "as-found" condition will not adversely impact the ability of 71-10614 to perform its design function in a design seismic event.

Evaluated by: *Rick Casella /* Rick Casella Date: *6/30/14*

Bill Grabowski / *6/30/14*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

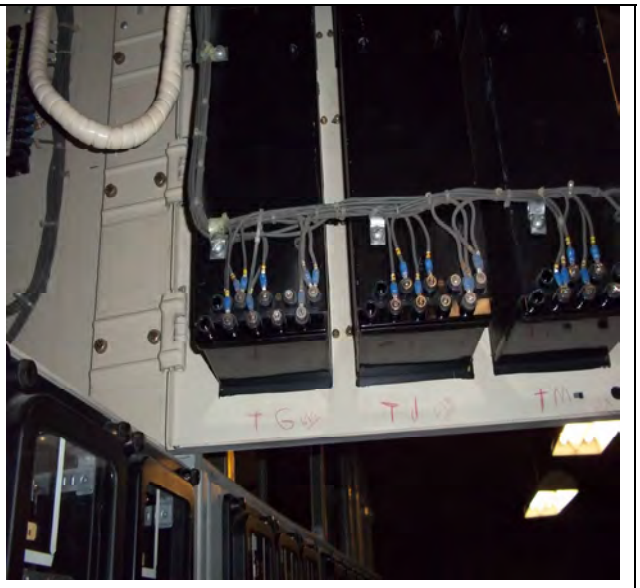
Seismic Walkdown Checklist (SWC) SWEL- 1-436 (Deferred Walkdown Checklist)

Equipment ID No. *71-10614* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

Photographs

Note: *Top enclosure of 71-10614. Note missing connection on bottom plate at front right side.*



Note: *Top enclosure of 71-10614 showing inside of door with relays mounted.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

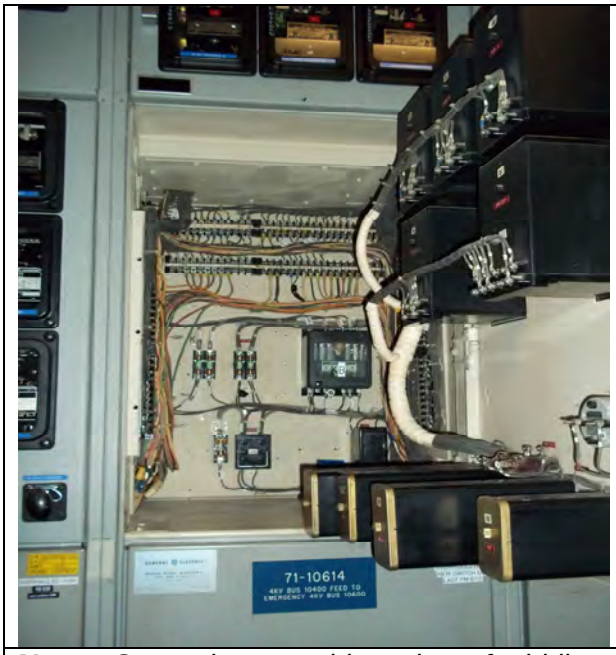
Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-436 (Deferred Walkdown Checklist)

Equipment ID No. *71-10614* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*



Note: *General open cabinet view of middle Switchgear 71-10614 enclosure.*

Note: *General view of Switchgear 71-10614.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-437 (Deferred Walkdown Checklist)

Equipment ID No. *71-10660* Equip. Class[6] *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 26 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   See 9/27/12 walkdown.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   See 9/27/12 walkdown.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   See 9/27/12 walkdown.

[6] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-437 (Deferred Walkdown Checklist)

Equipment ID No. *71-10660* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   See 9/27/12 walkdown.

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   No change from 9/27/12 walkdown.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   No change from 9/27/12 walkdown.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    No change from 9/27/12 walkdown.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-437 (Deferred Walkdown Checklist)

Equipment ID No. *71-10660* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Open panel inspection performed. See comments belos.

Comments (Additional pages may be added as necessary)

Internal inspection of upper cubicle performed.

No adverse seismic conditions identified.

Foreign material – short length of string draped over wires connected to contacts on back wall of panel. The string is essential without mass and it cannot cause any adverse seismic condition.

Evaluated by: *R. Casella /* Rich Casella Date: *6/30/14*

B. Grabowski / *6/30/14*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

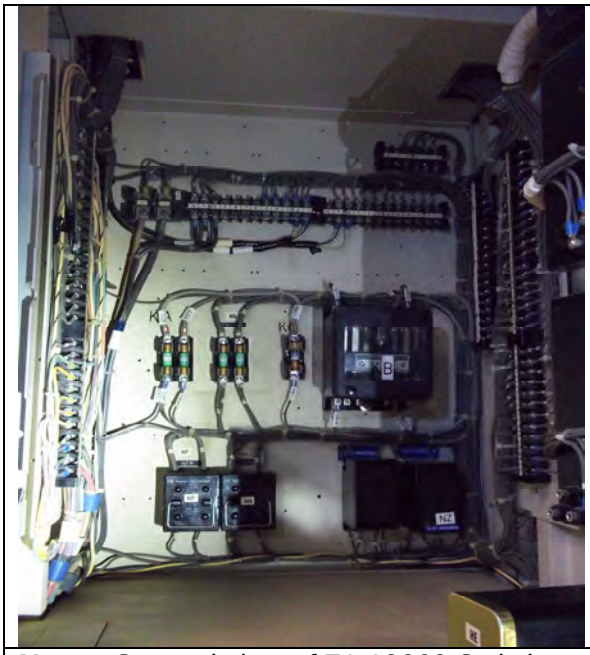
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-437 (Deferred Walkdown Checklist)

Equipment ID No. *71-10660* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

Photographs



Note: *General view of 71-10660 Switchgear upper panel internals.*

Note: *View of south side of 71-10660 Switchgear upper panel internals.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-437 (Deferred Walkdown Checklist)

Equipment ID No. *71-10660* Equip. Class *Medium Voltage, Metal-clad Switchgear*

Equipment Description *4160V Switchgear Distribution (BUS 10600)*

Note: *Inside door of upper cubicle for 71-10660 Switchgear.*

Note: *View of lower half of upper cubicle for 71-10660 Switchgear.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-438 (Deferred Walkdown Checklist)

Equipment ID No. *71-11502* Equip. Class[7] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 11500) BKR 02*

Location: Bldg. *RB* Floor El. *300* Room, Area *Col 2 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒
   71-11502 is a cubicle within the 71L15 switchgear and therefore has no anchorage associated with it.

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   71-11502 is a cubicle within the 71L15 switchgear and therefore has no anchorage associated with it.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   71-11502 is a cubicle within the 71L15 switchgear and therefore has no anchorage associated with it.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   71-11502 is a cubicle within the 71L15 switchgear and therefore has no anchorage associated with it.

[7] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-438 (Deferred Walkdown Checklist)

Equipment ID No. *71-11502* Equip. Class *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 11500) BKR 02*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☐
   N/A

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   There are no soft targets associated with 71-11502

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Above listed items are not likely to collapse onto the equipment.

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☒
   The cubicle is surrounded by adjacent cubicles and does not have external lines attached.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-438 (Deferred Walkdown Checklist)

Equipment ID No. *71-11502* Equip. Class *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 11500) BKR 02*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

    The open panel inspection was performed and no deficiencies were identified.

Comments (Additional pages may be added as necessary)

Breaker frame connections – Each corner is connected by 3 screws with the inside screw being the only one that has a nut.

Based on the configuration of the bottom left connection, it was concluded that the plate to plate holes are tapped. If they were not tapped gravity would cause the screw to fall out of the hole because it is oriented upside-down. An electrician confirmed that the connections are torqued.

Evaluated by: *R Casella /* Rick Casella Date: *12-12-13*

AG Porch / A G. Porch *12-12-13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

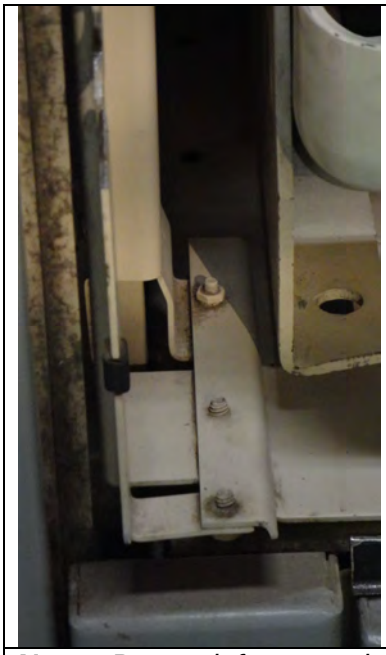
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-438 (Deferred Walkdown Checklist)

Equipment ID No. *71-11502* Equip. Class *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 11500) BKR 02*

Photographs



Note: *Bottom left connection configuration of 71-11502*

Note: *71-11502*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-438 (Deferred Walkdown Checklist)

Equipment ID No. *71-11502* Equip. Class *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 11500) BKR 02*

Note: *71L15*

Note: *Plate-to-plate connection without gap on top left corner of 71-11502*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-439 (Deferred Walkdown Checklist)

Equipment ID No. *71-11602* Equip. Class[8] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 11600) BKR 02*

Location: Bldg. *RB* Floor El. *300* Room, Area *Col 6 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   No discrepancies observed on welds.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Some mild surface corrosion observed.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No cracks observed.

[8] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-439 (Deferred Walkdown Checklist)

Equipment ID No. *71-11602* Equip. Class *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 11600) BKR 02*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-439 (Deferred Walkdown Checklist)

Equipment ID No. *71-11602* Equip. Class *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 11600) BKR 02*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
    Open panel inspection performed; no deficiencies observed.

Comments (Additional pages may be added as necessary)

Evaluated by: *R Casella /* Rick Casella Date: *12-19-13*

R Kester / *12-19-13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-439 (Deferred Walkdown Checklist)

Equipment ID No. *71-11602* Equip. Class *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 11600) BKR 02*

Photographs

Note: *71L16 switchgear*

Note: *71-11602*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

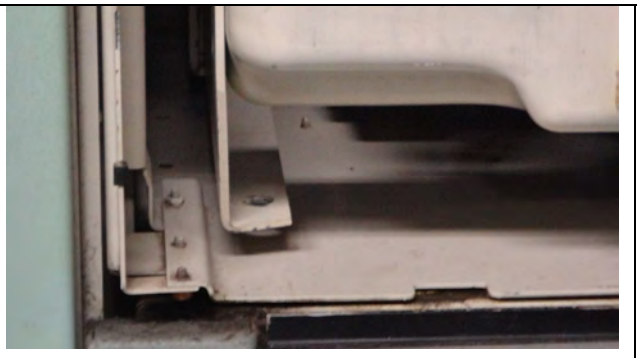
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-439 (Deferred Walkdown Checklist)

Equipment ID No. *71-11602* Equip. Class *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 11600) BKR 02*

Note: *71L16 base anchorage (welds)*



Note: *71-11602 cubicle connection*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-446 (Deferred Walkdown Checklist)

Equipment ID No. *71BAT-3A* Equip. Class[9] *15-Battery Racks*

Equipment Description *LPCI Inverter Battery*

Location: Bldg. *RB* Floor El. *344.6* Room, Area *Col 5.5 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☐
   (N/A – See SWEL1-446 Seismic Walkdown Checklist (9/30/12))

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   This a correction to the SWEL1-446 Checklist (dated 9/30/12). On the SWC it states "Panels need to be removed and anchorage of internal components needs to be checked." This is an error as there are no panels associated with 71BAT-3A; therefore, this statement shall be discarded.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-446 Seismic Walkdown Checklist (9/30/12))

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-446 Seismic Walkdown Checklist (9/30/12))

[9] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-446 (Deferred Walkdown Checklist)

Equipment ID No. *71BAT-3A* Equip. Class *15-Battery Racks*

Equipment Description *LPCI Inverter Battery*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-446 Seismic Walkdown Checklist (9/30/12))

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   This a correction to the SWEL1-446 Checklist (dated 9/30/12). On the SWC it states "Panels need to be removed and anchorage of internal components needs to be checked." This is an error as there are no panels associated with 71BAT-3A; therefore, this statement shall be discarded.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-446 Seismic Walkdown Checklist (9/30/12))

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-446 Seismic Walkdown Checklist (9/30/12))

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-446 Seismic Walkdown Checklist (9/30/12))

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    (N/A – See SWEL1-446 Seismic Walkdown Checklist (9/30/12))

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-446 (Deferred Walkdown Checklist)

Equipment ID No. *71BAT-3A* Equip. Class *15-Battery Racks*

Equipment Description *LPCI Inverter Battery*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☐ N☐ U☐

(N/A – See SWEL1-446 Seismic Walkdown Checklist (9/30/12))

Comments (Additional pages may be added as necessary)

This ia a supplemental Seismic Walkdown Checklist used to correct errors in SWEL1-446 referring to inaccessible panels in the original 71BAT3A Seismic Walkdown Checklist (dated 9/30/12) for items 2 and 6. There are no cabinets /panels in the "A" LPCI Battery room and any statements regarding panels were inadvertently included in the SWC write-up

Note: This Supplemental Seismic Walkdown Checklist (SWC) in conjunction with the Seismic Walkdown Checklist, dated 9/30/12, constitutes the complete Seismic Inspection Checklist for SWEL1-446 (71BAT-3A).

Evaluated by: *AG Porch /* A G. Porch Date: *2/7/13*

Chris Sawatzke / Chris Sawatzke *2/7/13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

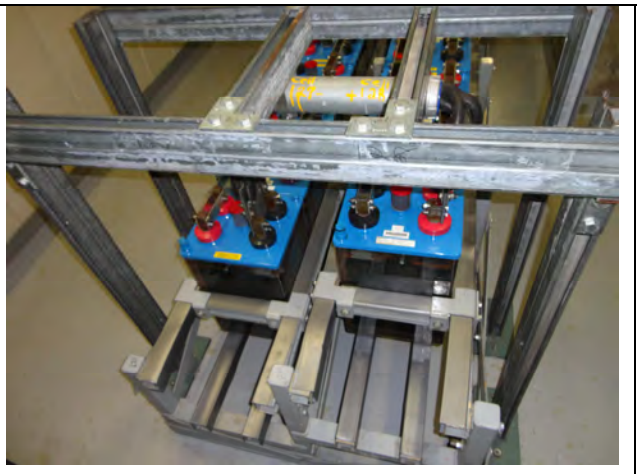
Seismic Walkdown Checklist (SWC) SWEL- 1-446 (Deferred Walkdown Checklist)

Equipment ID No. *71BAT-3A* Equip. Class *15-Battery Racks*

Equipment Description *LPCI Inverter Battery*

Photographs

Note: *71BAT-3A*



Note: *71BAT-3A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-446 (Deferred Walkdown Checklist)

Equipment ID No. *71BAT-3A* Equip. Class *15-Battery Racks*

Equipment Description *LPCI Inverter Battery*

Note: *71BAT-3A anchorage*

Note: *Overhead rail. 71BAT-3A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-448 (Deferred Walkdown Checklist)

Equipment ID No. *71BC-1A* Equip. Class[10] *Battery Chargers and Inverters*

Equipment Description *125VDC Station Battery Charger*

Location: Bldg. *BR* Floor El. *272* Room, Area *Col 12.5 Line E*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   See 10/30/12 walkdown results. No change.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   See 10/30/12 walkdown results. No change.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   See 10/30/12 walkdown results. No change.

[10] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-448 (Deferred Walkdown Checklist)

Equipment ID No. *71BC-1A* Equip. Class *Battery Chargers and Inverters*

Equipment Description *125VDC Station Battery Charger*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-448 (Deferred Walkdown Checklist)

Equipment ID No. *71BC-1A* Equip. Class *Battery Chargers and Inverters*

Equipment Description *125VDC Station Battery Charger*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
    Open panel inspection performed. See comments below.

Comments (Additional pages may be added as necessary)

Internal inspection of open panel and door performed. Observations as noted below:

- *2 of 4 screws mounting voltmeter 71VM-BAT-1APG to the north panel door of 71BC-1A are missing. Due to low mass of the component and low acceleration levels at Elev. 272 in the Turbine Building, the remaining 2 screws judged to be adequate with no adverse seismic condition in a design basis earthquake. The 'as-found" condition documented in CR-JAF-2014-02712. Engineering Input to Support Operability completed as CA#1 (Ref. EC 51239). The conclusion supports the initial assessment made "on the spot" during walkdown.*
- *Approximately 2" x 2" section of bottom lattice vent covering (southeast bottom corner of 71BC-1A) is damaged. There is no adverse seismic impact due to this condition. The screening remains ruggedly attached to component frame.*

Evaluated by: *R. Casella /* Rich Casella Date: *5/28/14*

B. Grabowski / *5/28/14*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

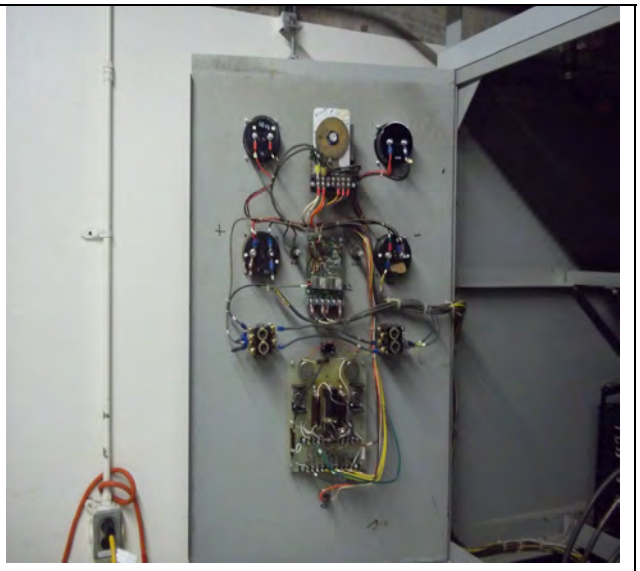
Seismic Walkdown Checklist (SWC) SWEL- 1-448 (Deferred Walkdown Checklist)

Equipment ID No. *71BC-1A* Equip. Class *Battery Chargers and Inverters*

Equipment Description *125VDC Station Battery Charger*

Photographs

Note: *General view of open panel at 71BC-1A*



Note: *Inside panel door of 71BC-1A showing component mountings*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

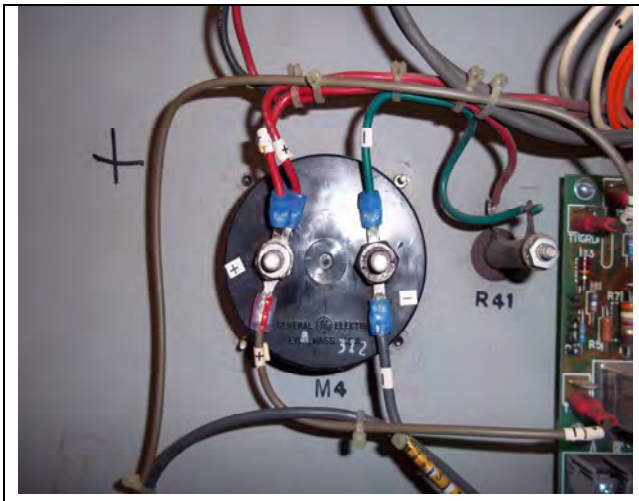
Sheet 5 of 5

Status: Y☒ N☐ U☐

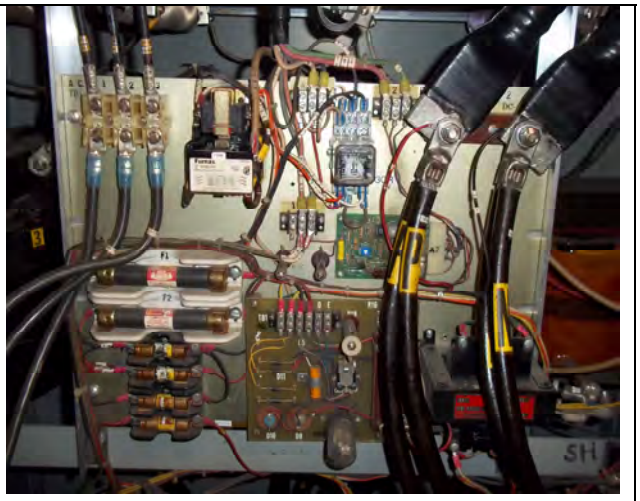
Seismic Walkdown Checklist (SWC) SWEL- 1-448 (Deferred Walkdown Checklist)

Equipment ID No. *71BC-1A* Equip. Class *Battery Chargers and Inverters*

Equipment Description *125VDC Station Battery Charger*



Note: *Mounting of voltmeter on door of 71BC-1A showing missing screws at the 4 o'clock and 10 o'clock positions*



Note: *Mounting of various internal components in 71BC-1A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL-1-450 (Deferred Walkdown Supplement)

Equipment ID No. ***71BCB-2A*** Equip. Class[11] *14 – Distribution Panels and Automatic Transfers Switches*

Equipment Description *Battery A Control Board*

Location: Bldg. *BR* Floor El. *272'* Room, Area *Col 13C*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☐

   (N/A – See SWEL-1-450 Seismic Walkdown Checklist (10/30/12))

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐

   See SWEL-1-450 Seismic Walkdown Checklist (10/30/12) and item 11 for final determination explanation

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-450 Seismic Walkdown Checklist (10/30/12))

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-450 Seismic Walkdown Checklist (10/30/12))

[11] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL-1-450 (Deferred Walkdown Supplement)

Equipment ID No. *71BCB-2A* Equip. Class *14 – Distribution Panels and Automatic Transfers Switches*

Equipment Description *Battery A Control Board*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-450 Seismic Walkdown Checklist (10/30/12))

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☐

   (N/A – See SWEL-1-450 Seismic Walkdown Checklist (10/30/12))

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-450 Seismic Walkdown Checklist (10/30/12))

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-450 Seismic Walkdown Checklist (10/30/12))

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-450 Seismic Walkdown Checklist (10/30/12))

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐

    (N/A – See SWEL-1-450 Seismic Walkdown Checklist (10/30/12))

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL-1-450 (Deferred Walkdown Supplement)

Equipment ID No. *71BCB-2A* Equip. Class *14 – Distribution Panels and Automatic Transfers Switches*

Equipment Description *Battery A Control Board*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

The internal compartments of 71BCB-2A were inspected for component- to-panel anchorage and panel-to-panel connections; all were inspected with the exception of the top two right* (facing 71BCB-2A) compartments. No loose, missing, degraded or corroded fasteners were identified; the hardware/ internal anchorage appeared in very good condition. No degraded or non-conforming conditions were identified.

*Note that the top two left compartment were opened and inspected. There was little to inspect regarding hardware as this is where the cable entries occurred, hence only two of the four were opened and inspected.

Comments (Additional pages may be added as necessary)

*This is a **supplemental** Seismic Walkdown Checklist used to pick-up the internal inspection that was not performed during the original seismic walkdown inspections. This inspection was done as a deferred activity. The data was obtained strictly by visual examination as it was not possible to break the plane of the cabinet covers. The checks outlined in September 20, 2012 (Draft) 2 "4.20 Guidance for Applying NRC Position on Opening Cabinets" was used in performing the inspection.*

Note: This Supplemental Seismic Walkdown Checklist (SWC) in conjunction with the Seismic Walkdown Checklist, dated 10/30/12, constitutes the complete Seismic Walkdown Checklist for SWEL-1-450 (71BCB-2A).

Evaluated by: *AG Porch/* Date: *6/21/13*

Bill Grabowski/ *6/21/13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL-1-450** (Deferred Walkdown Supplement)

Equipment ID No. *71BCB-2A* Equip. Class *14 – Distribution Panels and Automatic Transfers Switches*

Equipment Description *Battery A Control Board*

Photographs

Note: *71BCB-2A (71BCB-2A-B01) internals*

Note: *71BCB-2A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL-1- 450** (Deferred Walkdown Supplement)

Equipment ID No. *71BCB-2A* Equip. Class *14 – Distribution Panels and Automatic Transfers Switches*

Equipment Description *Battery A Control Board*

Note: *71BCB-2A upper conduit access panel internals*

Note: *71BCB-2a (71BCB-2A-A01) internals*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-452 (Deferred Walkdown Checklist)

Equipment ID No. *71BMCC-1* Equip. Class[12] *Motor Control Centers and Wall mounted contactors*

Equipment Description *Reactor Building West Crescent Motor Control Center*

Location: Bldg. *RB* Floor El. *242* Room, Area *Col 1 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   No bent, broken, or missing hardware. See discussion on welds Item #5.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Some mild, surface rust on weldments.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No concrete issues. The MCC is anchored to platform steel in Reactor Building West Crescent.

[12] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-452 (Deferred Walkdown Checklist)

Equipment ID No. *71BMCC-1* Equip. Class *Motor Control Centers and Wall mounted contactors*

Equipment Description *Reactor Building West Crescent Motor Control Center*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☒ N/A☐
   The MCC anchorage is not consistent with the SEWS for the clip angle to platform weldments at all 9 locations. See License Basis Evaluation (LBE) #4 discussion.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   See LBE #4.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-452 (Deferred Walkdown Checklist)

Equipment ID No. *71BMCC-1* Equip. Class *Motor Control Centers and Wall mounted contactors*

Equipment Description *Reactor Building West Crescent Motor Control Center*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

    An open panel internal inspection was performed. See comments below.

Comments (Additional pages may be added as necessary)

Open panel observations

- *An extra screw found inserted in lip of panel OA2 (left side). The panel lip is used to mount door hardware. Permission was received from Control Room for Electrician to unthread and remove screw. The screw in the "as-found" configuration did not represent an adverse seismic concern.*
- *Foreign Material – at base of BMCC (bottom compartment)in back, right side, small piece of gasket type material (approx. ¾" long). This small piece has negligible mass and is not an adverse seismic concern.*
- *Approx. last 12" of rubber edging is separated from the drip shield edge at top of the BMCC (in rear). This is judged to not be an adverse seismic concern.*
- *All internal components are securely fastened at each of the BMCC enclosures. Fasteners connecting adjacent bays are secure and all door mounting hardware is satisfactory.*

Anchorage

- *No adverse seismic concern. See further discussion in LBE #4.*

Evaluated by: *R. Casella /* Rich Casella Date: *6/23/14*

B. Grabowski / *6/23/14*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-452 (Deferred Walkdown Checklist)

Equipment ID No. *71BMCC-1* Equip. Class *Motor Control Centers and Wall mounted contactors*

Equipment Description *Reactor Building West Crescent Motor Control Center*

Photographs

Note: *General view of an open panel on 71BMCC-1*

Note: *Typical internal anchorage of 71BMCC-1 to base channel at each BMCC bay*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-452 (Deferred Walkdown Checklist)

Equipment ID No. *71BMCC-1* Equip. Class *Motor Control Centers and Wall mounted contactors*

Equipment Description *Reactor Building Motor Control Center*

Note: *View showing clip angles transferring load from BMCC to platform steel*

Note: *Closer detail of 4" x 4" I beam, clip angle, and platform steel*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-456 (Deferred Walkdown Checklist)

Equipment ID No. *71BMCC-6* Equip. Class[13] *Motor Control Centers and Wall mounted contactors*

Equipment Description *Reactor Building Motor Control Center*

Location: Bldg. *RB* Floor El. *272* Room, Area *Col 8 Line Y*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   During open panel inspection, observed screws in each corner of both bays connected to bottom channel. This configuration is consistent with SEWS documentation. No deviation observed.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion was observed on the anchorage.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No concrete cracks observed near the anchorage.

[13] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-456 (Deferred Walkdown Checklist)

Equipment ID No. *71BMCC-6* Equip. Class *Motor Control Centers and Wall mounted contactors*

Equipment Description *Reactor Building Motor Control Center*

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.) *Visible anchorage (screws mounting MCC to base channel and welding of MCC to base channel) is consistent with SEWS documentation.*	Y☒ N☐ U☐ N/A☐
6.	Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?	Y☒ N☐ U☐

Interaction Effects

7.	Are soft targets free from impact by nearby equipment or structures?	Y☒ N☐ U☐ N/A☐
8.	Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment?	Y☒ N☐ U☐ N/A☐
9.	Do attached lines have adequate flexibility to avoid damage?	Y☒ N☐ U☐ N/A☐
10.	Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects?	Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-456 (Deferred Walkdown Checklist)

Equipment ID No. *71BMCC-6* Equip. Class *Motor Control Centers and Wall mounted contactors*

Equipment Description *Reactor Building Motor Control Center*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? *Open panel inspection performed. No deficiencies observed except - subpanel, 71BMCC-6-OA1; fastener at top of plate with mounted sub-components has 1 nut with 1 thread less than full thread engagement. There is also a gap between a nut and the lock washer. CR-JAF-2013-06361 was generated to document and investigate the discrepancy.*	Y☐ N☒ U☐

Comments (Additional pages may be added as necessary)

The cabinet on the North side of 71BMCC-6 has 2 screws that connect I to the North side of 71BMCC-6-OB2 cubicle. The cabinet is supported independently from 71BMCC-6. The screws connecting from the cabinet to BMCC will not transfer load into 71BMCC-6 and will not result in any potentially adverse seismic condition.

See Attachment 1 for 71BMCC-6 layout sketch.

Performed inspection on 12-19-13 *R Kester /* [signature]

Evaluated by: *R Casella /* Rich Casella Date: *12-19-13*

R Kester / [signature] *1-2-14*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-456 (Deferred Walkdown Checklist)

Equipment ID No. *71BMCC-6* Equip. Class *Motor Control Centers and Wall mounted contactors*

Equipment Description *Reactor Building Motor Control Center*

Photographs

Note: *Screw without full thread engagement in 71BMCC-6-OA1 subpanel.*

Note: *Base anchorage of 71BMCC-6.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-456 (Deferred Walkdown Checklist)

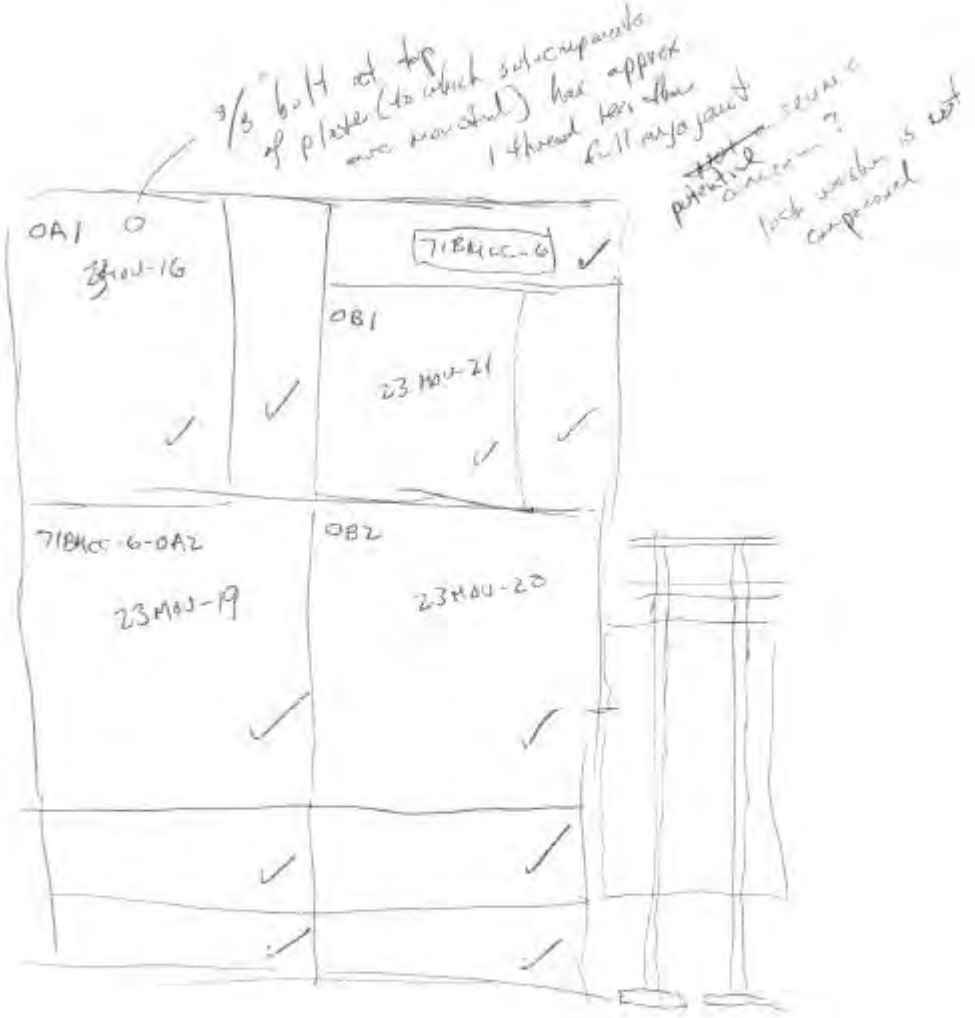
Equipment ID No. *71BMCC-6* Equip. Class *Motor Control Centers and Wall mounted contactors*

Equipment Description *Reactor Building Motor Control Center*

Note: *Screw connection between 71BMCC-6 and the cabinet on the North side.*

Note: *Plate with mounted sub-components in 71BMCC-6.*

Attachment 1



Electrician noted that bucket for 23HOU-16 might not be fully engaged w/ studs @ back.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-462 (Deferred Walkdown Supplement)

Equipment ID No. *71DSC-11561* Equip. Class[14] *Medium Voltage Metal-clad Switchgear*

Equipment Description *L15 Unit Substation Transf T-13 High Side Disc Switch* ***Lower Cabinet***

Location: Bldg. *RB* Floor El. *300* Room, Area *Col 2 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   Anchorage observed are fillet welds

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Mild surface oxidation at welds in front of panel

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Observed anchorage – front, exterior has 4 filet welds size 2” on 8” centers.
   Rear of panel at base can see burn marks at 2 locations which lineup with internal weld seam at the front of the panel.

[14] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-462 (Deferred Walkdown Supplement)

Equipment ID No. *71DSC-11561* Equip. Class[15] *Medium Voltage Metal-clad Switchgear*

Equipment Description *L15 Unit Substation Transf T-13 High Side Disc Switch*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒
   Performed during RO20 Walkdown

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☒
   Performed during RO20 Walkdown

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☒
   Performed during RO20 Walkdown

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Performed during RO20 Walkdown

[15] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-462 (Deferred Walkdown Supplement)

Equipment ID No. *71DSC-11561* Equip. Class[16] *Medium Voltage Metal-clad Switchgear*

Equipment Description *L15 Unit Substation Transf T-13 High Side Disc Switch*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Observed internals of upper panel through window slots – no adverse seismic conditions noted. Top panel was not opened.

All fasteners appear secure in lower panel

Viewed above bottom panel floor – no adverse conditions noted

No internal rust observed

All fasteners on side are secured

Evaluated by: *R Casella /* Rich Casella Date: *8/14/13*

C Sawatzke / Chris Sawatzke *8/14/13*

[16] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-462 (Deferred Walkdown Supplement)

Equipment ID No. *71DSC-11561* Equip. Class[17] *Medium Voltage Metal-clad Switchgear*

Equipment Description *L15 Unit Substation Transf T-13 High Side Disc Switch*

Photographs

Note: *Inside base of 71DSC-11561*

Note: *71DSC-11561 Internals*

[17] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-462 (Deferred Walkdown Supplement)

Equipment ID No. *71DSC-11561* Equip. Class[18] *Medium Voltage Metal-clad Switchgear*

Equipment Description *L15 Unit Substation Transf T-13 High Side Disc Switch*

Note: *71DSC-11561*

Note: *Base welds of 71DSC-11561*

[18] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-462 (Deferred Walkdown Supplement)

Equipment ID No. *71DSC-11561* Equip. Class[19] *Medium Voltage Metal-clad Switchgear*

Equipment Description *L15 Unit Substation Transf T-13 High Side Disc Switch* ***Upper Cabinet***

Location: Bldg. *RB* Floor El. *300* Room, Area *Col 2 Line R*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   No bent broken or missing components observed. Cabinet base is welded.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Only mild oxidation observed at bare metal locations.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No cracking in adjacent concrete floor was observed.

[19] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-462 (Deferred Walkdown Supplement)

Equipment ID No. *71DSC-11561* Equip. Class[20] *Medium Voltage Metal-clad Switchgear*

Equipment Description *L15 Unit Substation Transf T-13 High Side Disc Switch*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Performed during RO20 Walkdown

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   Performed during RO20 Walkdown

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   Performed during RO20 Walkdown

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    Performed during RO20 Walkdown

[20] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-462 (Deferred Walkdown Supplement)

Equipment ID No. *71DSC-11561* Equip. Class[21] *Medium Voltage Metal-clad Switchgear*

Equipment Description *L15 Unit Substation Transf T-13 High Side Disc Switch (Upper Panel)*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

Base Anchorage: The as-found base anchorage weld configuration exceeds the requirements specified on Drawing FE-38P. 3/16" fillet welds on 8" centers, 2 ½" long, front and back.

Upper Cabinet Internal Inspection: No missing or loose fasteners hardware found. No structural deficiencies observed.

Evaluated by: *Robert S. Kester /* Date: *9/4/14*

David F. Grimes / *9/4/14*

[21] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL- 1-462** (Deferred Walkdown Supplement)

Equipment ID No. *71DSC-11561* Equip. Class[22] *Medium Voltage Metal-clad Switchgear*

Equipment Description *L15 Unit Substation Transf T-13 High Side Disc Switch - Upper Cabinet*

Photographs

Note: *Inside upper cabinet of 71DSC-11561*

Note: *71DSC-11561 upper cabinet Internals*

[22] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-462 (Deferred Walkdown Supplement)

Equipment ID No. *71DSC-11561* Equip. Class[23] *Medium Voltage Metal-clad Switchgear*

Equipment Description *L15 Unit Substation Transf T-13 High Side Disc Switch – Upper Cabinet*

Note: *71DSC-11561 upper cabinet Internals*

Note: *71DSC-11561 upper cabinet Internals*

[23] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-470

Equipment ID No. *71INV-3A* Equip. Class[24] *16-Battery Chargers and Inverters*

Equipment Description *LPCI MOV Indep Power Supply A Inverter*

Location: Bldg. *RB* Floor El. *344.6* Room, Area *Col 5.5 Line P*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☐
   (N/A – See SWEL1-470 Seismic Walkdown Checklist (9/30/12))

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The cabinet to base are free of bent, broken, missing or loose hardware. No degradation was identified. Note that the cabinet to structural (tube) base and (tube) base to baseplates are addressed in SWEL 1-470 Checklist (dated 9/30/12).

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-470 Seismic Walkdown Checklist (9/30/12))

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-470 Seismic Walkdown Checklist (9/30/12))

[24] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-470

Equipment ID No. *71INV-3A* Equip. Class[25] *16-Battery Chargers and Inverters*

Equipment Description *LPCI MOV Indep Power Supply A Inverter*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-470 Seismic Walkdown Checklist (9/30/12))

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   The cabinet to base & cabinet to cabinet connecting hardware and the hardware used to mount components inside the cabinets are free of bent, broken, missing or loose hardware; no degradation was identified

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-470 Seismic Walkdown Checklist (9/30/12))

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-470 Seismic Walkdown Checklist (9/30/12))

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL1-470 Seismic Walkdown Checklist (9/30/12))

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    (N/A – See SWEL1-470 Seismic Walkdown Checklist (9/30/12))

[25] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-470

Equipment ID No. *71INV-3A* Equip. Class[26] *16-Battery Chargers and Inverters*

Equipment Description *LPCI MOV Indep Power Supply A Inverter*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐
    (N/A – See SWEL1-470 Seismic Walkdown Checklist (9/30/12))

Comments (Additional pages may be added as necessary)

*This is a **supplemental** Seismic Walkdown Checklist used to pick up the internal inspection that was not performed during the original seismic walkdown inspections. This inspection was done as a deferred activity. The data was obtained strictly by visual examination as it was not possible to break the plane of the cabinet doors. The checks outlined in September 20, 2012 (Draft) 2 "4.20 Guidance for Applying NRC Position on Opening Cabinets" was used in performing the inspection.*

Note: This Supplemental Seismic Walkdown Checklist (SWC) in conjuction with the Seismic Walkdown Checklist, dated 9/30/12, constitutes the complete Seismic Inspection Checklist for SWEL 1-470 (71INV-3A)

Evaluated by: *A Porch /* Date: *2 / 7 / 13*

C Sawatzke / *2 / 7 / 13*

[26] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-470

Equipment ID No. *71INV-3A* Equip. Class[27] *16-Battery Chargers and Inverters*

Equipment Description *LPCI MOV Indep Power Supply A Inverter*

Photographs

Note: *71INV-3A internals*

Note: *71INV-3A bottom cross members and bolting hardware*

[27] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-470

Equipment ID No. *71INV-3A* Equip. Class[28] *16-Battery Chargers and Inverters*

Equipment Description *LPCI MOV Indep Power Supply A Inverter*

Note: *71INV-3A cabinet side cross bracing and cabinet-to-cabinet connecting hardware*

Note: *71INV-3A internals*

[28] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 7

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-474 (Deferred Walkdown Checklist)

Equipment ID No. *71L25* Equip. Class[29] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12500)*

Location: Bldg. *EB* Floor El. *272* Room, Area *Col 18.5 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Visual inspection of fillet welds, plug welds, and "hat" members showed no evidence of cracking or broken hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   All visible anchorage was free of any corrosion categorized as greater than "mild surface oxidation."

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Shrinkage (hairline) cracks as follows: 2 in front of unit (west side), 1 on south side (runs east-west, starts min. of 2" south of southwest corner of 71L25), 1 at rear of unit (east side). Cracks stop at location of embedded steel for component anchorage. The shrinkage cracks have no impact on existing anchorage capacity.

[29] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 7

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-474 (Deferred Walkdown Checklist)

Equipment ID No. *71L25* Equip. Class[30] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12500)*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Based on review of SEWS for 71L25 and JAF File Dwg. 1.42-6, the visible anchorage included weld at south end of front of switchgear and plug welds at inside of two north most panels in rear of switchgear. Note: at center rear panel, appears to be 3 separate plug welds, not 1 as shown on dwg. 1.42-6. View of plug welds on front side of switchgear would require removal of the entire metal framing of the north cubicle which requires extensive work. The plug weld at the south rear panel is not visible due to a cable covering the area above the weld. It is concluded that sufficient visual inspection of anchorage has been performed.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No change from walkdown performed on 11/1/2012.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   No change from walkdown performed on 11/1/2012.

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   No change from walkdown performed on 11/1/2012.

[30] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 7

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-474 (Deferred Walkdown Checklist)

Equipment ID No. *71L25* Equip. Class[30] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12500)*

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

    No change from walkdown performed on 11/1/2012.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 7

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-474 (Deferred Walkdown Checklist)

Equipment ID No. *71L25* Equip. Class[31] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12500)*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Open panel inspection of 8 cubicles on front (west side) and 4 cubicles on rear (east side) of 71L25. No seismic conditions that could adversely affect the safety function of the switchgear were found. The following observations were noted.

Missing panel cover and screws not fully engaged – rear side, south panel. On south side (interior), cover plate on bottom half of terminal block strip is missing. Set of screws (6 to 8 total) intended to hold cover plate on are threaded into holes of adjoining metal surface. Several of the screws are not fully tightened, but all have full thread engagement through hole. Condition Report CR-JAF-2014-2209 initiated. Based on no load on screws and fully engaged, concluded that no adverse seismic condition exists.

Lower cover plate not screwed in at bottom – rear side, middle panel. Lower cover plate for terminal block strip is flared out at bottom 6" with no bottom screws. Not possible to attach cover plate at bottom due to number of cables protruding from bottom of cover plate. Sufficient capacity provided by remaining fastened screws. Low "g" levels in Electric Bay, no adverse seismic interaction will be created. Configuration acceptable "as-is."

[31] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 7

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-474 (Deferred Walkdown Checklist)

Equipment ID No. *71L25* Equip. Class[31] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12500)*

Comments (Additional pages may be added as necessary)

Foreign material (piece of rubber or plastic, approx. ½" x ½") found at base of cabinet 71-12502. No adverse seismic impact on component. Condition Report CR-JAF-2014-2210 initiated. Foreign material removed from cabinet.

Cabinet 71-12502 – set of 3 black brackets spanning width of cubicle near base. Each bracket appears to be mounted by 1 bolt near bottom. Adjacent bolt hole on each bracket has no attached hardware. The mounted bolts all appear to be secure. Reviewed similar breaker bucket in shop. Same configuration exists and noted that additional bolt secures the assembly near its top. Review of vendor manuals (Ref. G080-0562, G080-0564, G080-0570) with Senior Electrical Design Engineer did not show any details of this connection. Concluded that configuration is acceptable with no adverse seismic affect.

Cabinets 71-12508, 12510, 12506, 12504 – sub-bracket assembly connecting breaker switch to main cubicle frame includes vertical bracket mounted with 1 bolt on each side (north and south). No bolt inserted in lower vertical bracket hole. Typical for 4 cubicles. Review of 3 similar cubicles in electrical maintenance shop shows exact same configuration. Also noted additional bolts connecting bracket to frame in shop. Review of vendor manuals (same as above) with Senior Electrical Design Engineer did not show any details of this connection. Concluded that configuration is acceptable with no adverse seismic affect.

Evaluated by: *Rick Casella* / Rick Casella Date: *05-02-2014*

A. G. Porch / A G, Porch *05-02-2014*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 6 of 7

Status: Y☒ N☐ U☐

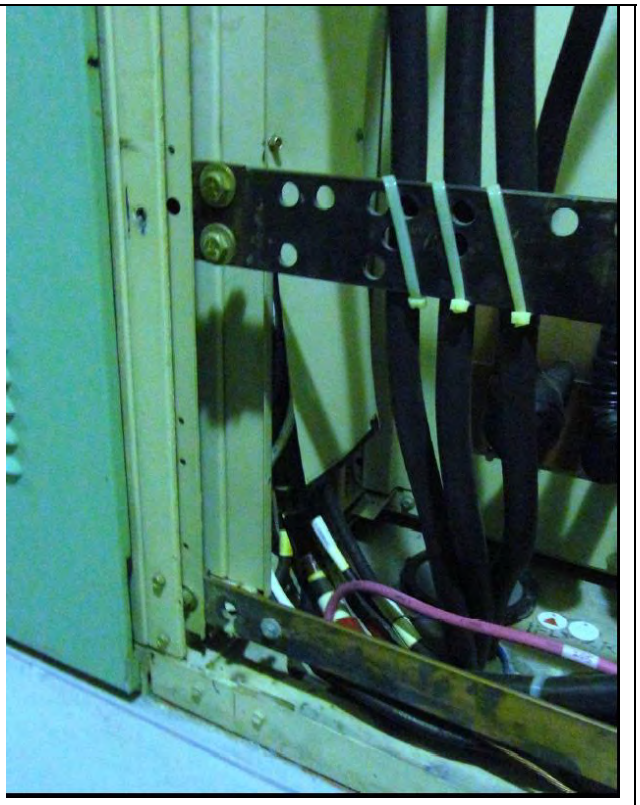
Seismic Walkdown Checklist (SWC) SWEL- 1-474 (Deferred Walkdown Checklist)

Equipment ID No. *71L25* Equip. Class[32] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12500)*

Photographs

Note: *Open Cubicle 71-12510*



Note: *Rear Middle Panel Anchorage*

[32] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 7 of 7

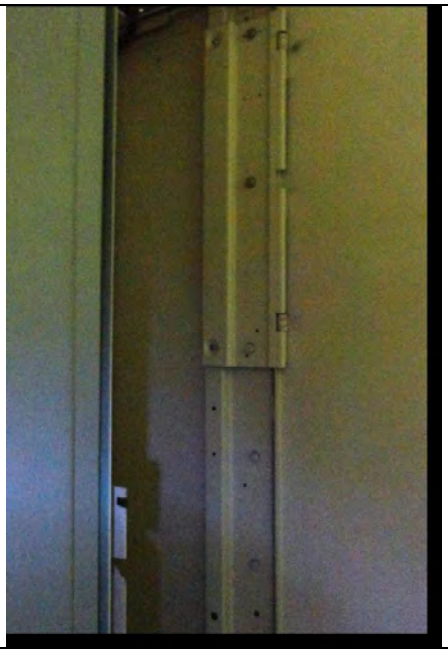
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-474 (Deferred Walkdown Checklist)

Equipment ID No. *71L25* Equip. Class[33] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12500)*

Note: *Fillet weld at Southwest corner*



Note: *Cubicle to Cubicle connection*

[33] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-475 (Deferred Walkdown Checklist)

Equipment ID No. *71L26* Equip. Class[34] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12600)*

Location: Bldg. *EB* Floor El. *272* Room, Area *Col 18.5 Line B*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐
   See 9/25/12 walkdown

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   See 9/25/12 walkdown

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   See 9/25/12 walkdown

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   See 9/25/12 walkdown
   No changes per 6/4/14 walkdown

[34] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-475 (Deferred Walkdown Checklist)

Equipment ID No. *71L26* Equip. Class[35] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12600)*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   See 9/25/12 walkdown

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   See 9/25/12 walkdown
   No adverse seismic conditions noted on 6/4/14 walkdown

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   See 9/25/12 walkdown. No changes.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   See 9/25/12 walkdown. No changes.
   Note: no masonry block wall in vicinity of 71626

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   See 9/25/12 walkdown. No changes.

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    See 9/25/12 walkdown. No changes.

[35] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-475 (Deferred Walkdown Checklist)

Equipment ID No. *71L26* Equip. Class[36] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12600)*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Visual inspection of open panels – 8 total opened.

All fasteners SAT, no seismic conditions found that could adversely affect safety function of 71L26.

Comments (Additional pages may be added as necessary)

Additional note as follows:

Cubicle 71-12602

At bottom of cubicle, 3 adjacent block brackets. In each bracket, bolt is installed in 1 of 2 bolt holes. This is a typical configuration found including "test" cubicle in shop. This configuration represents no adverse seismic impact.

Evaluated by: *R Casella/* Rick Casella Date: *6/4/14*

A Porch/ A C. Porch *6/4/14*

[36] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-475 (Deferred Walkdown Checklist)

Equipment ID No. *71L26* Equip. Class[37] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12600)*

Photographs

Note: Opened Panel 71-12602

Note: Subassembly Fasteners Within Panel

[37] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

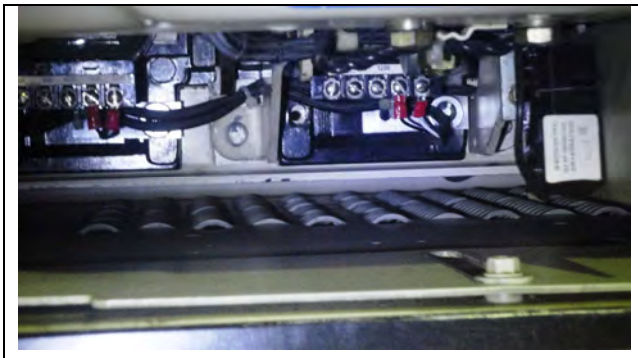
Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-475 (Deferred Walkdown Checklist)

Equipment ID No. *71L26* Equip. Class[38] *Low Voltage Switchgear and Breaker Panels*

Equipment Description *600V Switchgear Distribution (BUS 12600)*



Note:

Note:

[38] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-481 (Deferred Walkdown Supplement)

Equipment ID No. *71MCC-161* Equip. Class[39] *Motor Control Center*

Equipment Description *600V Motor Control Center BUS 116100*

Location: Bldg. *RB* Floor El. *272* Room, Area *Col 1.5 Line W*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   No bent, broken, missing, or loose anchorage hardware identified.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No anchorage corrosion observed.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No visible cracks in concrete near anchorage.

[39] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-481 (Deferred Walkdown Supplement)

Equipment ID No. *71MCC-161* Equip. Class[40] *Motor Control Center*

Equipment Description *600V Motor Control Center BUS 116100*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Missing screw noted in SEWS (Anchorage Caveat 9) has been replaced

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐
   See 10-31-12 walkdown

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐
   See 10-31-12 walkdown

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐
   See 10-31-12 walkdown

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    See 10-31-12 walkdown

[40] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-481 (Deferred Walkdown Supplement)

Equipment ID No. *71MCC-161* Equip. Class[41] *Motor Control Center*

Equipment Description *600V Motor Control Center BUS 116100*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Open panel inspection performed. The following observations are noted.

1) 71MCC-161-OA2 – top plate to side has misaligned hole with a skewed screw (top, NE). This is not an adverse seismic condition since the plate is fastened at 2 other locations and the plate is not loaded.

2) 71MCC-161-OE3 – transformer at the bottom of cubicle. The top, west side screw attaching the mounting plate to the panel is missing. This is not considered an adverse seismic condition since 3 of the 4 screws are secured to the transformer. Note: this is a spare cubicle and there are no leads going from the cubicle. (CR-JAF-2013-04995 and WO 363770 were initiated to install the screw)

Comments (Additional pages may be added as necessary)

Rear panel covers (20" x45" x 1/16")- total 10

Each panel secured by 16 screws.

The worst case is that 3 of the 16 screws (SW bottom plate) have a slight skew (head is not fully flat to the plate.) Not a seismic concern as each of the skewed screws are tight.

Evaluated by: *R Casella /* Rich Casella Date: *9-30-13*

AG Porch / A G. Porch *9-30-13*

[41] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-481 (Deferred Walkdown Supplement)

Equipment ID No. *71MCC-161* Equip. Class[42] *Motor Control Center*

Equipment Description *600V Motor Control Center BUS 116100*

Photographs

Note: *Anchorage of 71MCC-161*

Note: *71MCC-161-OA2 bolt that is slightly skewed*

[42] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-481 (Deferred Walkdown Supplement)

Equipment ID No. *71MCC-161* Equip. Class[43] *Motor Control Center*

Equipment Description *600V Motor Control Center BUS 116100*

Note: *71MCC-161-OC1 thru OC4 panels opened*

Note: *71MCC-161-OE3 missing screw)top right)*

[43] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-487 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-252* Equip. Class[44] *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 125200)*

Location: Bldg. *EB* Floor El. *272* Room, Area *Col 18 Line A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Visible anchorage is the panel welds to embedded steel. Weld size, length, and spacing meet minimum requirements as compared to SEWS for 71MCC-261.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   All visible anchorage is free of corrosion. Welds on exterior of panel or painted.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Paint chipped on both North and South sides of MCC. Not a structural issue. Visible shrinkage cracks in concrete beyond grouted perimeter of base anchorage.

[44] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-487 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-252* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 125200)*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   No adverse seismic conditions associated with anchorage.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☒
   No attached lines

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-487 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-252* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 125200)*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Comments (Additional pages may be added as necessary)

All panels on MCC were opened for inspection.

"D" column – Bottom, front base channel cut-out (consistent with SEWS for 71MCC-261), channel is installed at left and right side with fasteners in 4 corners secured. No deficiencies noted.

"C" column – Bottom, front base channel cut-out (consistent with SEWS for 71MCC-261). No deficiencies noted.

"B" column – Bottom, front base channel cut-out (consistent with SEWS for 71MCC-261). No deficiencies noted.

"A" column – Bottom, front base channel cut-out (consistent with SEWS for 71MCC-261). Panel OA4has slightly screw self-tapping screws at the right side attaching the top and bottom plates to the frame. Both screw connections are securely attached. No seismic adverse condition exists.

Evaluated by: *R Casella /* Rich Casella Date: *4-2-14*

R Kester / *4-2-14*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL- 1-487** (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-252* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 125200)*

Photographs

Note: *71MCC-252*

Note: *No lines attached to 71MCC-252*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

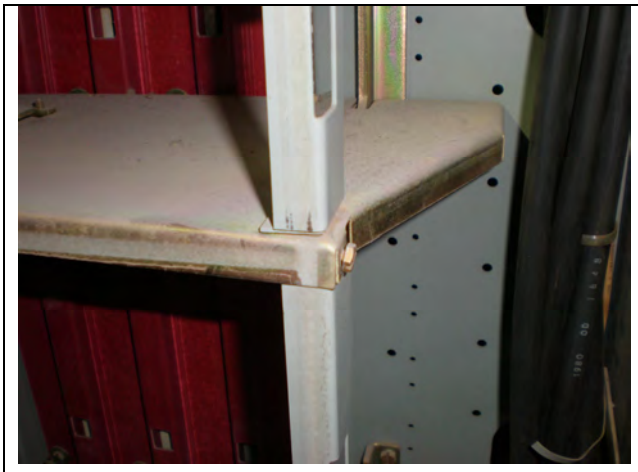
Sheet 5 of 5

Status: Y☒ N☐ U☐

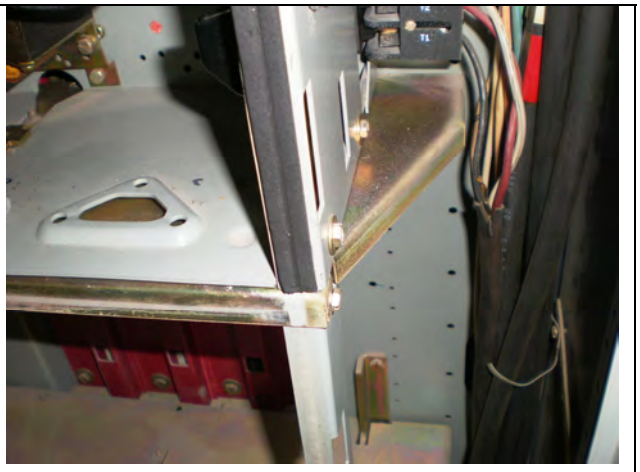
Seismic Walkdown Checklist (SWC) SWEL- 1-487 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-252* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 125200)*



Note: *Skewed screw on 71MCC-252 panel OA4*



Note: *Skewed screw on 71MCC-252 panel OA4*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-489 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-254* Equip. Class[45] *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 125400)*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 23 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Welds at the base of 71MCC-254 are to embedded steel. No visible discrepancies. Welds are consistent with plant documentation.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Welds are painted; no observed oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Some minor shrinkage cracks on the surface. The closest crack is approximately 5” from the outside edge of 71MCC-254.

[45] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-489 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-254* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 125400)*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   No adverse seismic conditions exist. Visible anchorage attaches to robust embedded steel.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-489 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-254* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 125400)*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

    An open cabinet inspection was performed. All panels were opened. At 3 locations (separate panels), 1 of 4 transformer to cubicle plate mounting screws were slightly skewed. The load carrying capacity is not affected. No condition adverse to safety during a seismic event was found.

Comments (Additional pages may be added as necessary)

All screws connecting 71MCC-254 to base channel were SAT.

Evaluated by: *R Casella /* Rick Casella Date: *12-12-13*

AG Porch / A G. Porch *12-12-13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

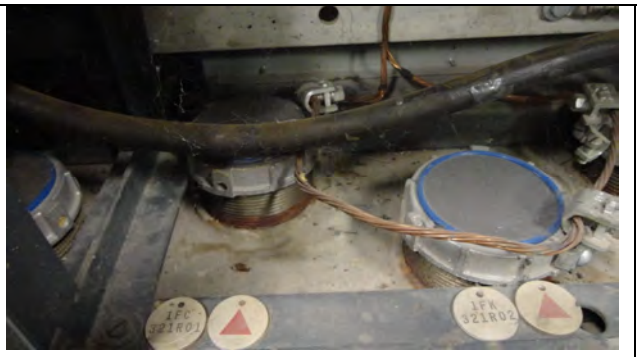
Seismic Walkdown Checklist (SWC) SWEL- 1-489 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-254* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 125400)*

Photographs

Note: *71MCC-254*



Note: *Base of motor control center 71MCC-254*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-489 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-254* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 125400)*

Note: *Cubicle in 71MCC-254*

Note: *Cubicle in 71MCC-254*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-491 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-262* Equip. Class[46] *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 126200)*

Location: Bldg. *EB* Floor El. *272* Room, Area *Col 18 Line B*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   Internal inspection (front panel covers removed) performed. Self-tapping screws were in-accordance with SEWS documentation. This supplements walkdown performed on 9/25/12.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Internal anchorage was free of corrosion. This supplements walkdown performed on 9/25/12.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Only visible hairline crack running in east-west direction at the north end of the MCC. No adverse seismic impact.

[46] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-491 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-262* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 126200)*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   Internal inspection showed self-tapping screws and configuration was consistent with SEWS for 71MCC-262 and 71MCC-261. This supplements walkdown performed on 9/25/12.
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   No change from walkdown performed on 9/25/12.
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐
   No change from walkdown performed on 9/25/12.
9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐
   No change from walkdown performed on 9/25/12.
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐
    No change from walkdown performed on 9/25/12.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-491 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-262* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 126200)*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Open panel inspection performed. All cubicle doors were opened including panels at top and bottom of MCC. All electrical sub-components were securely fastened. Fasteners connecting adjacent panel sections were all "satisfactory." Door hardware was "sat." Additional comments addressed below.

Comments (Additional pages may be added as necessary)

Vertical panels (Wireways) adjacent to cubicle columns were all opened. At some locations, wire-type ties were not connected to cable. This is not a credible adverse seismic concern because the cable does not have significant mass and can remain flexible during a seismic event. It is also isolated in the Wireway from sensitive relays, etc.

At all locations, the wire-type ties were securely attached to a small metal bar (approx. 6" x 0.5" x 3/32"). The other end of the bar was fastened to the MCC internal framing. At the end of the bar, a self-tapping screw was fastened to the bar, but not attached to the MCC internal framing. This is not a credible adverse seismic concern since there is no load on the screw fastened to the end of the bar. It will not fall out during a design seismic event. The bar, although supported only be one screw to the MCC internal framing, is configured such that it would have limited motion during a seismic event and would only contact cable. Since it is in the Wireway, the bar is isolated from sensitive sub-components such as relays.

A single self-tapping screw was missing from 1 of 8 cover plates on the rear of the MCC. Each cover plate is fastened to the MCC framing by 16 screws. The total weight of each 45" x 20" x 1/16" cover plate is approximately 16 lbs. Based on the bounding horizontal acceleration of 1.225g (Turbine Building Elev. 272) and 15 secure fasteners, the missing screw does not create an adverse seismic condition. Condition Report CR-JAF-2014-03814 was initiated to address this condition and Work Request 346638 was initiated to replace the missing screw.

Evaluated by: *R. Casella* Rick Casella Date: *7/29/14*

A.G. Porch A G. Porch *7/29/14*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-491 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-262* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 126200)*

Photographs

Note: *Internal anchorage showing self-tapping screws in accordance with SEWS for 71MCC-262*

Note: *Open cubicle for visual inspection on 71MCC-262*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-491 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-262* Equip. Class *Motor Control Centers and Wall-mounted Contactors*

Equipment Description *600V Motor Control Center (BUS 126200)*

Note: *Open cubicle for visual inspection on 71MCC-262*

Note: *71MCC-262 Wireway adjacent to the "OA" cubicle column. See wire wraps not attached to cable.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 6

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-493 (Deferred Walkdown Supplement)

Equipment ID No. *71MCC-264* Equip. Class[47] *Motor Control Center*

Equipment Description *600V Motor Control Center BUS 126400*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 25.5 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   No bent , broken, missing, or loose hardware

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion identified

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No visible cracks in concrete near anchorage

[47] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 6

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-493 (Deferred Walkdown Supplement)

Equipment ID No. *71MCC-264* Equip. Class[48] *Motor Control Center*

Equipment Description *600V Motor Control Center BUS 126400*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☒ N☐ U☐ N/A☐
   Yes, in accordance with SEWS documentation. An additional 3 screws into the front channel
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects – Completed during RO20 Walkdown

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐
9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐
10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐

[48] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 6

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-493 (Deferred Walkdown Supplement)

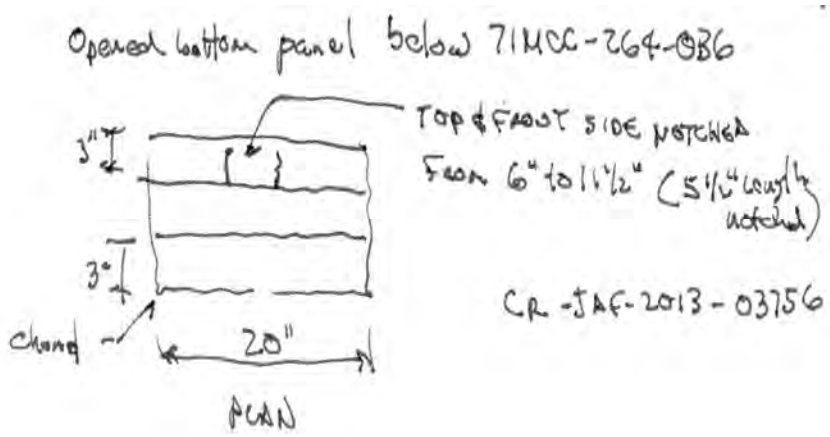
Equipment ID No. *71MCC-264* Equip. Class[49] *Motor Control Center*

Equipment Description *600V Motor Control Center BUS 126400*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

No missing or loose connections were found. No corrosion was found. Panel doors are properly fastened. There is a notch cut out of the rear base channel to accommodate clearance for a floor penetration (see below). The notch is not in the load path to the anchorage therefore, there is no adverse seismic condition.



[49] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 6

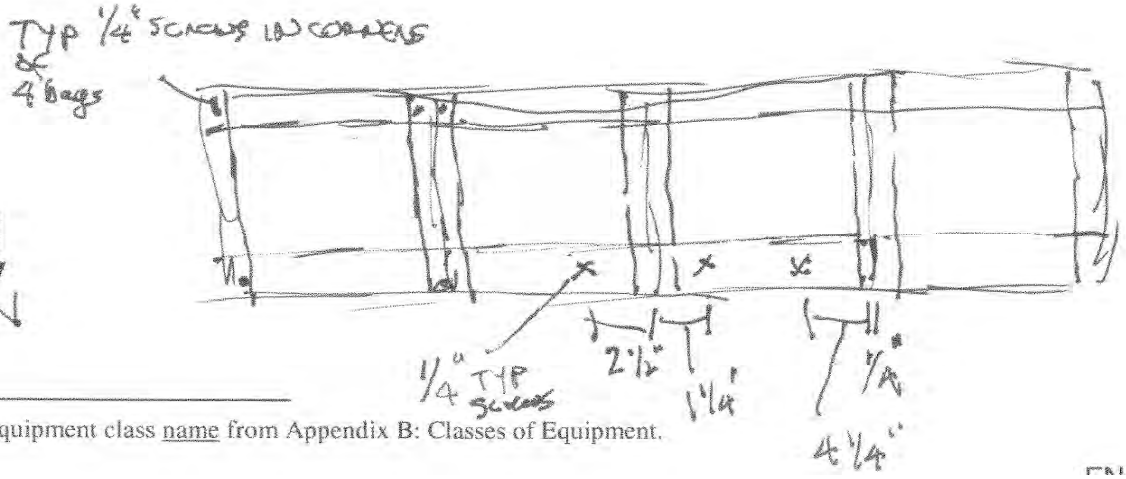
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-493 (Deferred Walkdown Supplement)

Equipment ID No. *71MCC-264* Equip. Class[49] *Motor Control Center*

Equipment Description *600V Motor Control Center BUS 126400*

Comments (Additional pages may be added as necessary)



er the equipment class name from Appendix B: Classes of Equipment.

Evaluated by: *R Casella* Rich Casella Date: *7-11-13*

C Sawatzke Chris Sawatzke *7-11-13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 6

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL- 1-493** (Deferred Walkdown Supplement)

Equipment ID No. *71MCC-264* Equip. Class[50] *Motor Control Center*

Equipment Description *600V Motor Control Center BUS 126400*

Photographs

Note: *71MCC-264 Base Anchorage*

Note: *71MCC-264 Base Anchorage*

[50] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 6 of 6

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-493

Equipment ID No. *71MCC-264* Equip. Class[51] *Motor Control Center*

Equipment Description *600V Motor Control Center BUS 126400*

Note: *71MCC-264 Open Panel*

Note: *71MCC-264 Notch in rear base channel*

[51] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-624 (Deferred Walkdown Checklist)

Equipment ID No. *93ECP-A* Equip. Class[52] *Instrument and Control Panels*

Equipment Description *Emergency Diesel Generator A Engine Control Panel*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 24*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   No bent, broken, missing, or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Some minor surface rust on bolts that attach the panel to the EDG platform. The rust is considered minor surface oxidation. All structural members are painted.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No visible cracks in the concrete near anchors.

[52] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-624 (Deferred Walkdown Checklist)

Equipment ID No. *93ECP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *Emergency Diesel Generator A Engine Control Panel*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Framed platform base is sufficiently welded but does not match drawing SK-E-471. Not a seismic concern.

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐
   See 10-29-12 walkdown

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐
   See 10-29-12 walkdown

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐
   See 10-29-12 walkdown

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    See 10-29-12 walkdown

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-624 (Deferred Walkdown Checklist)

Equipment ID No. *93ECP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *Emergency Diesel Generator A Engine Control Panel*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

    Open internal panel inspection of main panel and SDR shutdown relay panel

    All anchorage SAT

    Panel to panel fasteners SAT

    Sub-component mounting SAT

    Panel door hinge hardware SAT

Comments (Additional pages may be added as necessary)

CR-JAF-2013-04672 was initiated to address frame support weld configuration does not match drawing SKE-471

Evaluated by: *R Casella /* Rich Casella Date: *9-10-13*

A Porch / A G. Porch *9-10-13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

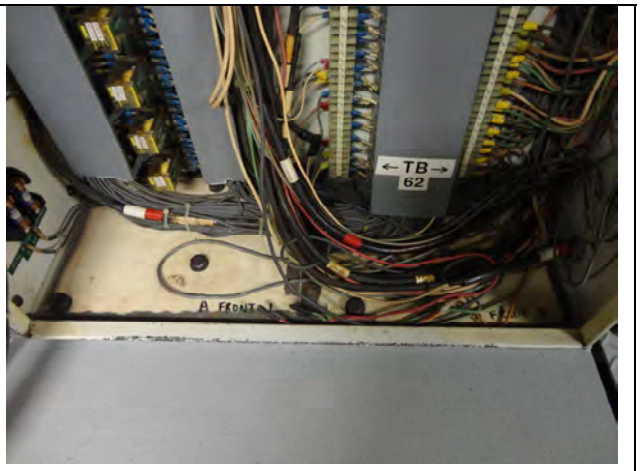
Seismic Walkdown Checklist (SWC) SWEL- 1-624 (Deferred Walkdown Checklist)

Equipment ID No. *93ECP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *Emergency Diesel Generator A Engine Control Panel*

Photographs

Note: *93ECP-A panel internals.*



Note: *93ECP-A anchorage from panel to platform.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

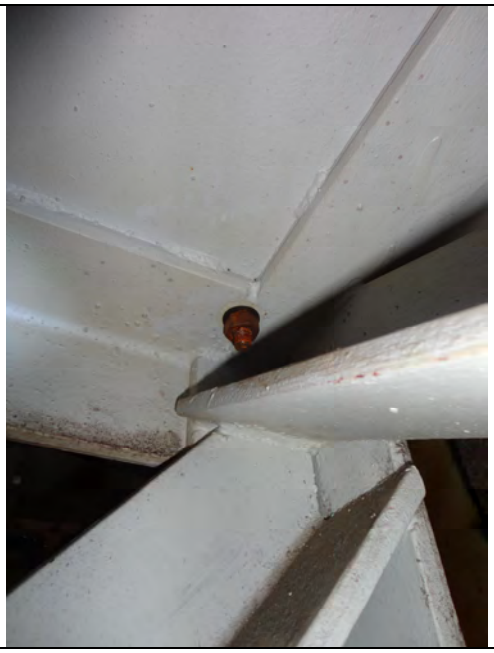
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL- 1-624** (Deferred Walkdown Checklist)

Equipment ID No. *93ECP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *Emergency Diesel Generator A Engine Control Panel*

Note: *View of 93ECP-A anchorage bolts from underneath the mounting platform.*



Note: *Framed platform welds for 93ECP-A.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-628 (Deferred Walkdown Checklist)

Equipment ID No. *93ECSP-A* Equip. Class[53] *Instrument and Control Panels*

Equipment Description *EDG A Engine Control Sub Panel*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 24*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   No bent, broken, missing, or loose anchorage hardware was found.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Baseplates are painted. No visual signs of corrosion on anchorage hardware.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No visible cracks on south and east sides. North and west sides of baseplate are adjacent to grouted surfaces.

[53] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-628 (Deferred Walkdown Checklist)

Equipment ID No. *93ECSP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *EDG A Engine Control Sub Panel*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐
   See 10-29-12 walkdown

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐
   See 10-29-12 walkdown

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐
   See 10-29-12 walkdown

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    See 10-29-12 walkdown

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-628 (Deferred Walkdown Checklist)

Equipment ID No. *93ECSP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *EDG A Engine Control Sub Panel*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

    Inspection of open panel –

    Panel door and attached components are securely fastened.

    South bolt (1 of 3) connecting 3/16" thick separation plate to small angle at rear of box has very slight skew. This is not an adverse seismic condition and bolt is performing its design function. Plate weight is less than 5 lbs and plate does not support any components.

    All other fasteners are secure and all bolted connections have full thread engagement.

Comments (Additional pages may be added as necessary)

Evaluated by: *R Casella /* Rich Casella Date: *9-9-13*

A Porch / A G. Porch *9-9-13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-628 (Deferred Walkdown Checklist)

Equipment ID No. *93ECSP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *EDG A Engine Control Sub Panel*

Photographs

Note: *93ECSP-A*

Note: *93ECSP-A Internals*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

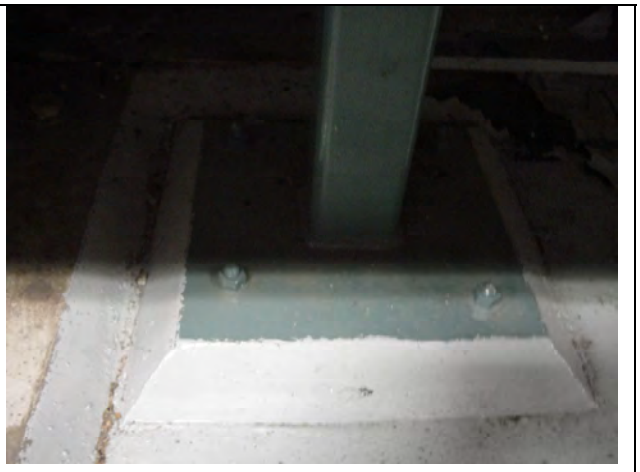
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-628 (Deferred Walkdown Checklist)

Equipment ID No. *93ECSP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *EDG A Engine Control Sub Panel*

Note: *Mounting bolts for 93ECSP-A*



Note: *Anchorage bolts for 93ECSP-A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 6

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-629 (Deferred Walkdown Supplement)

Equipment ID No. *93ECSP-B* Equip. Class[54] *20 – Instrument and Control Panels*

Equipment Description *EDG-B Engine Control Sub Panel*

Location: Bldg. *EG* Floor El. *272'* Room, Area *Col 26 Line A3*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☒ N☐
   (See SWEL-1-629 Seismic Walkdown Checklist (9/21/12))

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☒ U☐ N/A☐
   Sub Panel Box to Support Stand (Only): There are four ¼" hex head bolts that attach the panel box to the support (see Dwg. DSK-93A). The northwest and southeast bolt heads do not bear against the surface of the box since burrs were not removed when the holes were drilled and there may have been some deformation of the box when the holes were drilled as well.
   CR-JAF-2013-02475 was written to correct the deficiency. All other internal mounting hardware was identified as appearing tight with full thread engagement and SAT.
   The cabinet to base & cabinet to cabinet connecting hardware and the hardware used to mount components inside the cabinets are free of bent, broken, missing or loose hardware; no degradation was identified.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Internal anchorage is free of corrosion.

[54] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 6

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-629 (Deferred Walkdown Supplement)

Equipment ID No. *93ECSP-B* Equip. Class[54] *20 – Instrument and Control Panels*

Equipment Description *EDG-B Engine Control Sub Panel*

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-629 Seismic Walkdown Checklist (9/21/12))

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 6

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL-1-629 (Deferred Walkdown Checklist)

Equipment ID No. *93ECSP-B* Equip. Class *20 – Instrument and Control Panels*

Equipment Description *EDG-B Engine Control Sub Panel*

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.)
   (N/A – See SWEL-1-629 Seismic Walkdown Checklist (9/21/12))

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

   CR-JAF-2013-02475 was written and EC44534 was generated to add flat washers to the panel box's bolt connections and to provide further guidance for the box to support assembly. EC revises plant drawing #DSK-93A, adding notes regarding the installation of the fasteners attaching the sub panel box to its carbon steel mounting plate.

   (See SWEL-1-629 dated 9/21/12 for the write-up on the 3/8" Hilti anchor bolts of the sub-panel support to the concrete floor.)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL-1-629 Seismic Walkdown Checklist (9/21/12))

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL-1-629 Seismic Walkdown Checklist (9/21/12))

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐
   (N/A – See SWEL-1-629 Seismic Walkdown Checklist (9/21/12))

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    (N/A – See SWEL-1-629 Seismic Walkdown Checklist (9/21/12))

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 6

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL-1-629 (Deferred Walkdown Checklist)

Equipment ID No. *93ECSP-B* Equip. Class *20 – Instrument and Control Panels*

Equipment Description *EDG-B Engine Control Sub Panel*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☐ N☐ U☐

(N/A – See SWEL-1-629 Seismic Walkdown Checklist (9/21/12))

Comments (Additional pages may be added as necessary)

*This is a **supplemental** Seismic Walkdown Checklist used to pick-up the internal inspection that was not performed during the original seismic walkdown inspections. This inspection was done as a deferred activity. The data was obtained strictly by visual examination as it was not possible to break the plane of the cabinet covers. The checks outlined in September 20, 2012 (Draft) 2 "4.20 Guidance for Applying NRC Position on Opening Cabinets" was used in performing the inspection.*

Note: This Supplemental Seismic Walkdown Checklist (SWC) in conjunction with the Seismic Walkdown Checklist, dated 9/21/12, constitutes the complete Seismic Inspection Checklist for SWEL-1-629 (93ECSP-B).

Evaluated by: *AG Porch/* A G. Porch Date: *5-9-13*

Rick Casella/ Rick Casella *5-9-13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 6

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL-1-629** (Deferred Walkdown Checklist)

Equipment ID No. *93ECSP-B* Equip. Class *20 – Instrument and Control Panels*

Equipment Description *EDG-B Engine Control Sub Panel*

Photographs

Note: *93ECSP-B Internal panel and door instrument and cable mounting*

Note: *93ECSP-B panel to pedestal anchorage*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 6 of 6

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL-1-629** (Deferred Walkdown Checklist)

Equipment ID No. *93ECSP-B* Equip. Class *20 – Instrument and Control Panels*

Equipment Description *EDG-B Engine Control Sub Panel*

Note: *93ECSP-B bolt head not fully in contact with panel base plate for pedestal mounting*	**Note:**

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-636 (Deferred Walkdown Checklist)

Equipment ID No. *93EGP-A* Equip. Class[55] *Instrument and Control Panels*

Equipment Description *EDG A Generator Control Panel*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 24 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   The only visible anchorage is intermittent along the front and back of the panel. The visible anchorage matches the description provided in the SEWS evaluation for 93EGP-A.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   Welds are painted, no visible corrosion or oxidation.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Some floor cracks are in the vicinity of embedded plates. No adverse seismic impact.

[55] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-636 (Deferred Walkdown Checklist)

Equipment ID No. *93EGP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *EDG A Generator Control Panel*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐
   Soft targets are free from impact by nearby equipment or structures.

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐
   See 10-29-12 walkdown

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐
   See 10-29-12 walkdown

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    See 10-29-12 walkdown

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-636 (Deferred Walkdown Checklist)

Equipment ID No. *93EGP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *EDG A Generator Control Panel*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Open cabinet inspection – opened 4 front and rear panels

South end – approximately 25" of channel member (approx. 3" x 1 ¼") cut out due to interference with 3 electrical floor penetrations. This is determined not to be an adverse seismic concern based on the back side plate being spot welded up the side and both north and south plates are welded together with intermittent square groove welds.

All mounting of sub-components SAT

Door hardware hinges and latching screws are SAT

Comments (Additional pages may be added as necessary)

No additional anchorage was visible from the open panel inspection.

CR –JAF-2013-04634 was initiated to address the removed section of the channel at base of unit.

Evaluated by: *R Casella /* Rich Casella Date: *9-10-13*

A Porch / A G. Porch *9-10-13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-636 (Deferred Walkdown Checklist)

Equipment ID No. *93EGP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *EDG A Generator Control Panel*

Photographs

Note: *93EGP-A*

Note: *Missing channel section and front internals of 93EGP-A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-636 (Deferred Walkdown Checklist)

Equipment ID No. *93EGP-A* Equip. Class *Instrument and Control Panels*

Equipment Description *EDG A Generator Control Panel*

Note: *Front panel door internal mounting of 93EGP-A*

Note: *Rear internals of 93EGP-A*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL-1-637 (Deferred Walkdown Supplement)

Equipment ID No. *93EGP-B* Equip. Class[56] *20 – Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator B Control Panel*

Location: Bldg. *EG* Floor El. *272'* Room, Area *Col 26 Line A1*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☐

   (N/A – See SWEL-1-637 Seismic Walkdown Checklist (9/27/12))

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐

   The four front panel covers were opened and all component fasteners and panel to panel fasteners were in place and appear tight and with full thread engagement. There was no added visibility associated with the anchorage of the panel to the concrete floor other than what was reported in the SWEL-1-637 SWC from 9-27-12.

   CR-JAF-2013-2458 was initiated to document that a 24" piece of the bottom, internal, C-shape frame was removed (most likely during original installation to avoid an interference with floor penetrations (see attached photos and reference dwg. #1.12-98)).

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐

   All visible internal fasteners were free of corrosion.

   Note that the external fasteners (welds) are documented on SWEL-1-637 dated 9/27/12.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-637 Seismic Walkdown Checklist (9/27/12))

[56] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL-1-637 (Deferred Walkdown Checklist)

Equipment ID No. *93EGP-B* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator B Control Panel*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-637 Seismic Walkdown Checklist (9/27/12))

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

   The cabinet to base & the hardware used to mount components inside the cabinets are free of bent, broken, missing or loose hardware; no degradation was identified. (See SWEL-1-637 Seismic Walkdown Checklist (9/27/12) for external anchorage.)

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-637 Seismic Walkdown Checklist (9/27/12))

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-637 Seismic Walkdown Checklist (9/27/12))

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐

   (N/A – See SWEL-1-637 Seismic Walkdown Checklist (9/27/12))

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐

    (N/A – See SWEL-1-637 Seismic Walkdown Checklist (9/27/12))

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL-1-637 (Deferred Walkdown Checklist)

Equipment ID No. *93EGP-B* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator B Control Panel*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☐ N☐ U☐

(N/A – See SWEL-1-637 Seismic Walkdown Checklist (9/27/12))

Comments (Additional pages may be added as necessary)

*This is a **supplemental** Seismic Walkdown Checklist used to pick-up the internal inspection that was not performed during the original seismic walkdown inspections. This inspection was done as a deferred activity. The data was obtained strictly by visual examination as it was not possible to break the plane of the cabinet covers. The checks outlined in September 20, 2012 (Draft) 2 "4.20 Guidance for Applying NRC Position on Opening Cabinets" was used in performing the inspection.*

Note: This Supplemental Seismic Walkdown Checklist (SWC) in conjunction with the Seismic Walkdown Checklist, dated 9/27/12, constitutes the complete Seismic Walkdown Checklist for SWEL-1-637 (93EGP-B).

Evaluated by: *AG Porch/* A G. Porch Date: *5/08/13*

Rick Casella/ Rick Casella *5/08/13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL- 1-637** (Deferred Walkdown Checklist)

Equipment ID No. *93EGP-B* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator B Control Panel*

Photographs

Note: *93EGP-B Upper internal instrument and cable mounting*

Note: *93EGP-B Lower internal instrument and cable mounting*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL- 1-637** (Deferred Walkdown Checklist)

Equipment ID No. *93EGP-B* Equip. Class *20 – Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator B Control Panel*

Note: *93EGP-B upper door internal instrument and cable mounting*

Note: *93EGP-B C channel section removed to leave clearance for floor penetrations*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-640 (Deferred Walkdown Checklist)

Equipment ID No. *93FPAC* Equip. Class[57] *Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator A and C Forced Paralleling Panel*

Location: Bldg. *EG* Floor El. *272* Room, Area *Col 24.5 Line A*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   No visible bent, broken, missing, or loose hardware.

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No visible corrosion evident.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   No visible cracks in concrete.

[57] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-640 (Deferred Walkdown Checklist)

Equipment ID No. *93FPAC* Equip. Class *Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator A and C Forced Paralleling Panel*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☐
   See 10-26-12 walkdown

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☐
   See 10-26-12 walkdown

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☐
   See 10-26-12 walkdown

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☐ N☐ U☐
    See 10-26-12 walkdown

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-640 (Deferred Walkdown Checklist)

Equipment ID No. *93FPAC* Equip. Class *Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator A and C Forced Paralleling Panel*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

Open panel inspection –

Door is appropriately hinged. No loose latch hardware.

Anchorage to wall is not visible with panel open.

All visible internal connections of sub-components appear SAT

Attached conduit is adequately fastened (i.e. threaded) to the box.

Welds connecting the top and bottom sheet metal plates to side plates appear SAT

All contacts (electrical) appear SAT. 1 missing contact screw. There is no cable (wire) at location of missing contact screw; therefore, it is not required and is not a seismic concern (cable).

Comments (Additional pages may be added as necessary)

Evaluated by: *R Casella /* Rich Casella Date: *9-9-13*

A Porch / A G. Porch *9-9-13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

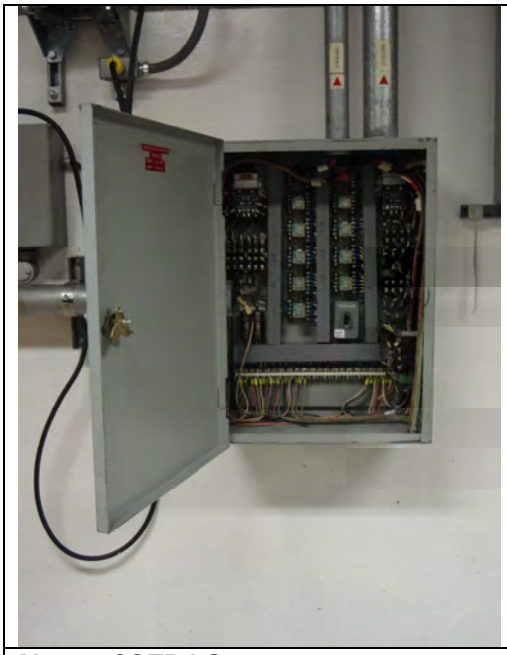
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-640 (Deferred Walkdown Checklist)

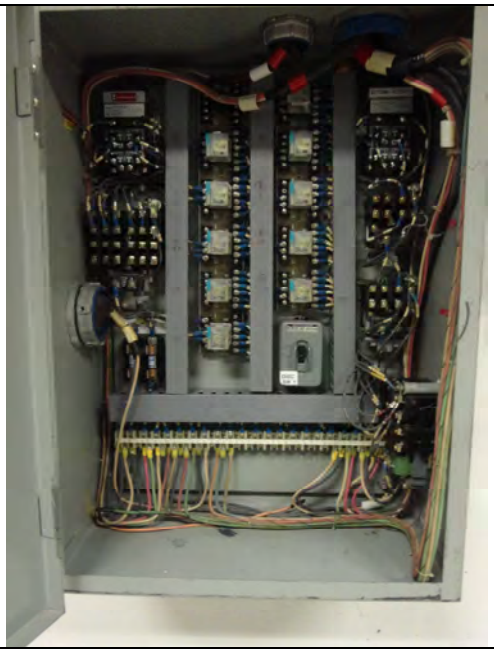
Equipment ID No. *93FPAC* Equip. Class *Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator A and C Forced Paralleling Panel*

Photographs



Note: *93FPAC*



Note: *93FPAC internals.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

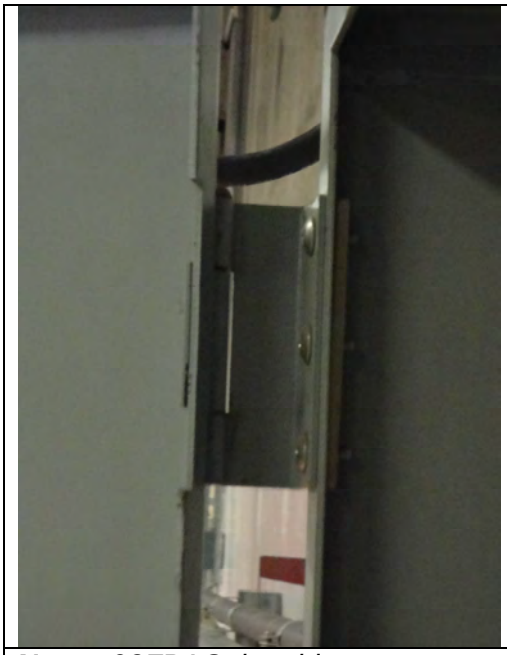
Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 1-640(Deferred Walkdown Checklist)

Equipment ID No. *93FPAC* Equip. Class *Instrumentation and Control Panels*

Equipment Description *Emergency Diesel Generator A and C Forced Paralleling Panel*



Note: *93FPAC door hinges.*

Note: *93FPAC panel wall anchorage.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 2-10 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-131-OD1* Equip. Class[58] *1 – Motor Control Centers*

Equipment Description *19P-1A(M) Fuel Pool Cooling Pump A Motor*

Location: Bldg. *RB* Floor El. *326.9* Room, Area *Col 3 Line P*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☒ N☐ U☐ N/A☐
   MCC anchorage is typical with 4-¼" screws in each corner of each bay. Screws attach to channel sections. All are "SAT"

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☒ N☐ U☐ N/A☐
   No corrosion was found at anchorage.

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☒ N☐ U☐ N/A☐
   Hairline crack running west at north end of MCC. Less than 1/16" width. No concern.

[58] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 2-10 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-131-OD1* Equip. Class *1 – Motor Control Centers*

Equipment Description *19P-1A(M) Fuel Pool Cooling Pump A Motor*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☒ N☐ U☐
   Exterior intermittent fillet welds at base of MCC are typical of other inspected MCCs. Conditions are "SAT".

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☒ N☐ U☐ N/A☐

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☒ N☐ U☐ N/A☐

9. Do attached lines have adequate flexibility to avoid damage? Y☒ N☐ U☐ N/A☐

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 2-10 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-131-OD1* Equip. Class *1 – Motor Control Centers*

Equipment Description *19P-1A(M) Fuel Pool Cooling Pump A Motor*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

    Open panel inspection performed. All screwed connections are secure. Visible connections between buckets are secure. Door hinges & hardware are SAT.

Comments (Additional pages may be added as necessary)

Set of 2 relays on bottom right of cubicle secured to plate with 1 screw. No indication of any missing fasteners. This is not an adverse seismic condition.

On rear of unit, 12 separate panels are each fastened to the MCC by 16 self tapping screws. One screw is missing from the bottom panel at the north end of 71MCC-131. There is no adverse seismic condition created by the missing screw. Work Request 00345996 and CR-JAF-2014-03720 initiated to address this condition. There are no other missing screws on any of the other rear panels.

Evaluated by: *Rick Casella/* Rick Casella Date: *7/23/14*

Bill Grabowski/ *7/23/14*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

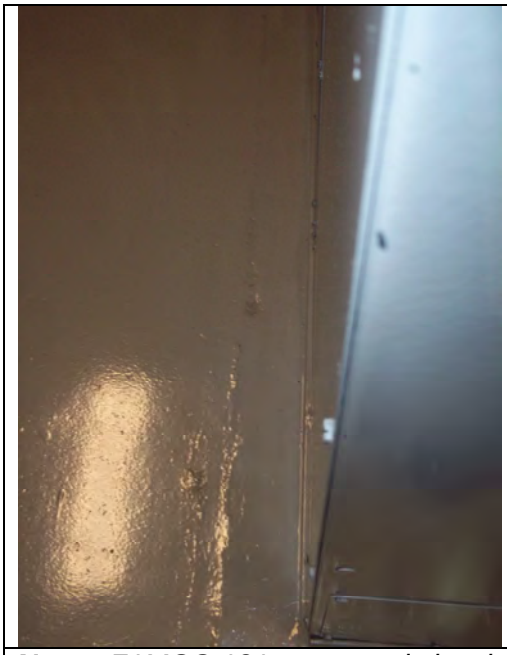
Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 2-10 (Deferred Walkdown Checklist)

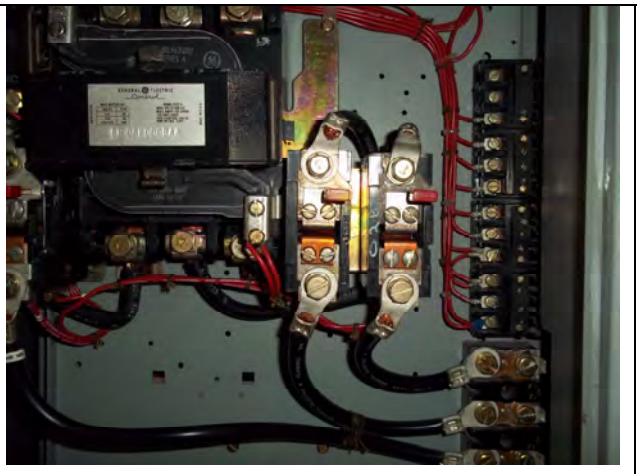
Equipment ID No. *71MCC-131-OD1* Equip. Class *1 – Motor Control Centers*

Equipment Description *19P-1A(M) Fuel Pool Cooling Pump A Motor*

Photographs



Note: *71MCC-131 rear panel showing missing screw*



Note: *Set of two relays mounted to framing inside the OD1 cubicle.*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL- 2-10 (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-131-OD1* Equip. Class *1 – Motor Control Centers*

Equipment Description *19P-1A(M) Fuel Pool Cooling Pump A Motor*

Note: *Overall view of open 71MCC-131-OD1 cubicle.*

Note: *71MCC-131 internal panel showing proper configuration with three screws holding rear plate at bottom to frame*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 1 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL-2-013 (Deferred Walkdown Supplement)

Equipment ID No. ***71MCC-120-OE1*** Equip. Class[59] *1– Motor Control Centers Switches*

Equipment Description *Decay Heat Removal SFP Water Pump A Motor*

Location: Bldg. *YD* Floor El. *272'* Room, Area *Outside, Near SE corner of RB*

Manufacturer, Model, Etc. (optional but recommended)

Instructions for Completing Checklist

This checklist may be used to document the results of the Seismic Walkdown of an item of equipment on the SWEL. The space below each of the following questions may be used to record the results of judgments and findings. Additional space is provided at the end of this checklist for documenting other comments.

Anchorage

1. Is the anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? Y☐ N☒

2. Is the anchorage free of bent, broken, missing or loose hardware? Y☐ N☐ U☐ N/A☒
   71MCC-120-OA1, OB1, OB2 (South Cabinet) – Anchorage not visible
   71MCC-120-OC1, OC2, OD1, OD2, OE1, OE2 (2nd from south) – Anchorage not visible
   71MCC-120-OF1, OF2, OF3, OG1 (3rd from south) – Anchorage not visible
   71MCC-120-OH1, OJ1 (4th from south) – Anchorage not visible

3. Is the anchorage free of corrosion that is more than mild surface oxidation? Y☐ N☐ U☐ N/A☒
   Anchorage not visible

4. Is the anchorage free of visible cracks in the concrete near the anchors? Y☐ N☐ U☐ N/A☒
   Anchorage not visible

[59] Enter the equipment class name from Appendix B: Classes of Equipment.

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 2 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) SWEL-2-013(Deferred Walkdown Checklist)

Equipment ID No. *71MCC-120-OE1* Equip. Class *1 – Motor Control Centers*

Equipment Description *Decay Heat Removal SFP Water Primary Pump A Motor*

5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Y☐ N☐ U☐ N/A☒

6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Y☐ N☐ U☒

   Anchorage not visible

Interaction Effects

7. Are soft targets free from impact by nearby equipment or structures? Y☐ N☐ U☐ N/A☒

   This item addressed in RO20 walkdown

8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Y☐ N☐ U☐ N/A☒

   This item addressed in RO20 walkdown

9. Do attached lines have adequate flexibility to avoid damage? Y☐ N☐ U☐ N/A☒

   This item addressed in RO20 walkdown

10. Based on the above seismic interaction evaluations, is equipment free of potentially adverse seismic interaction effects? Y☒ N☐ U☐

    This item addressed in RO20 walkdown

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 3 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL-2-013** (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-120-OE1* Equip. Class *1– Motor Control Centers*

Equipment Description *Decay Heat Removal SFP Water Pump A Motor*

Other Adverse Conditions

11. Have you looked for and found no other seismic conditions that could adversely affect the safety functions of the equipment? Y☒ N☐ U☐

All exterior door hinges intact

All connections to adjacent panels are intact with full thread engagement. See additional comments below

Comments (Additional pages may be added as necessary)

Some hinge surface rust at bottom of panel

71MCC-120-OH1 breaker pedal assist detached and laying at base of cabinet with hex head screwdriver between the outer door and sub-panel doors – will not impact any soft targets (housekeeping) – not a seismic concern.

71MCC-120-OE1 opened for internal inspection – No loose connections, fasteners, or wires were found. Door hinges are securely fastened.

Item labeled #49 inside lower right side of panel 71MCC-120-OE1 is attached by 1 screw to the panel. However, it is also connected to a box next to it by 2 screws at 3 different locations- not an adverse seismic condition since the two boxes act as a single mass that is rigidly connected to the OE1 panel.

Evaluated by: *AG Porch/* A G. Porch Date: *7/23/13*

R Casella/ Rich Casella *7/23/13*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 4 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL-2-013** (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-120-OE1* Equip. Class *1 – Motor Control Centers*

Equipment Description *Decay Heat Removal SFP Water Primary Pump A Motor*

Photographs

Note: *Item #49 at lower right of panel of 71MCC-120-OE1*

Note: *Rust at base of panel 71MCC-120-OE1*

ATTACHMENT 9.6 **SEISMIC WALKDOWN CHECKLIST FORM**

Sheet 5 of 5

Status: Y☒ N☐ U☐

Seismic Walkdown Checklist (SWC) **SWEL-2- 013** (Deferred Walkdown Checklist)

Equipment ID No. *71MCC-120-OE1* Equip. Class *1 – Motor Control Centers*

Equipment Description *Decay Heat Removal SFP Water Primary Pump A Motor*

Note: *71MCC-120-OE1 Internals*

Note: *Upper internals of panel 71MCC-120-OE1*

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