

# C

## Seismic Walkdown Checklists (SWCs)

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Table C-1 provides a description of each item, anchorage verification confirmation, a list of Area Walk-By Checklists associated with each item, comments, and page numbers of each Seismic Walkdown Checklist.

**Table C-1. Summary of Seismic Walkdown Checklists**

ID	DESCRIPTION	Anchorage Configuration Confirmed?	Area Walk-by	Comments	Page
1A21-460V	MCC 1A21 460V,3PH,3W,60HZ FOR TURBINE BUILDING	Y	9	Bus Outage	
1A21A-460V	MCC 1A21A 460V,3P,3W,60HZ FOR REACTOR BUILDING	Y	8		C- 8
1A21B-460V	MCC 1A21B 460V,3P,3W,60HZ FOR REACTOR BUILDING	Y	7	Bus Outage	
1A23-460V	MCC 1A23 460V,3PH,3W,60HZ FOR REACTOR BUILDING	Y	9	Bus Outage	
1A2-460V	460V UNIT SUBSTATION 1A2 FOR REACTOR BUILDING	N	11	Equipment always energized. Opening of doors will introduce undue safety and operational hazard	
1A2-460V XF	USS 1A2-460V TRANSFORMER 4160-480V/277V 3PH 60HZ	Y	11		C- 11
1C	4160V BUS 1C SWITCHGEAR	N/A	28	Bus Outage	
305-125\06-15	SCRAM ACCUMULATOR-H2O	N/A	13		C - 15
305-125\06-19	SCRAM ACCUMULATOR-H2O	N/A	13		C - 18
305-125\26-11	SCRAM ACCUMULATOR-H2O	N/A	8		C - 21
305-125\26-19	SCRAM ACCUMULATOR-H2O	N/A	8		C - 24
6R	MAIN CONTROL RM PANEL 6R REACTOR PROTECTION CH.1	Y	27		C - 27
7R	MAIN CONTROL RM PANEL 7R REACTOR PROTECTION CH.2	Y	27		C - 29
BATTERY BANK C	VITAL BANK 'C' STATION BATTERY (LEAD ACID)	Y	25		C - 31
BTCHG C1	'C' STATION BATTERY SOLID STATE STATIC CHARGER C1	Y	26		C - 37
CIP-3	CONTINUOUS INSTRUMENT PNL NO.3 208/120V,3PH,4W,60HZ	Y	12		C - 40

ID	DESCRIPTION	Anchorage Configuration Confirmed?	Area Walk-by	Comments	Page
CV-305-126\10-31	CRD INLET SCRAM VALVE (North)	N/A	13		C - 44
CV-305-126\10-39	CRD INLET SCRAM VALVE (North)	N/A	13		C - 47
CV-305-126\30-03	CRD INLET SCRAM VALVE (South)	N/A	8		C - 50
CV-305-126\30-07	CRD INLET SCRAM VALVE (South)	N/A	8		C - 53
CV-305-127\06-15	CRD OUTLET SCRAM VALVE (North)	N/A	13		C - 56
CV-305-127\22-31	CRD OUTLET SCRAM VALVE (North)	N/A	13		C - 59
CV-305-127\30-03	CRD OUTLET SCRAM VALVE (South)	N/A	8		C - 62
CV-305-127\30-07	CRD OUTLET SCRAM VALVE (South)	N/A	8		C - 65
DC-C 125V	125VDC POWER PANEL DC-C CENTER 'C'	Y	26	Bus Outage	
DC-F	125VDC POWER PANEL DC-F	Y	12		C - 68
DG-1 BATTERY BANK	DIESEL GENERATOR UNIT #1 STARTING BATTERIES	N	1		C - 72
DG-1 BATTERY CHARGER	DIESEL GENERATOR UNIT #1 BATTERY CHARGER	N	1		C - 75
DG-1 SWGR	DIESEL GENERATOR #1 UNIT SWITCHGEAR	Y	1		C - 78
DPIS-IB0005A1	EMERGENCY CONDENSER NE01A HIGH SYSTEM FLOW SWITCH	Y	6		C - 81
DPT-6-IA0091B	FUEL ZONE LEVEL 'B' WIDE RANGE LEVEL TRANSMITTER	Y	6		C - 84
ER18A	CORE SPRAY/AUTO DEPRESS'N SYSTEM RELAY LOGIC PANEL	Y	12		C - 87
FN-56-4	"A" 480 SWGR RM SUPPLY FAN	Y	14		C - 90

Table C-1 Page 2 of 6

ID	DESCRIPTION	Anchorage Configuration Confirmed?	Area Walk-by	Comments	Page
FN-732-1	USS 1A2-460V TRANSFORMER COOLING FAN	Y	16		C - 93
FN-732-2	USS 1A2-460V TRANSFORMER COOLING FAN	Y	16		C - 96
FN-732-3	USS 1A2-460V TRANSFORMER COOLING FAN	Y	16		C - 99
H-18-1C	AUGMENTED SPENT FUEL POOL HEAT EXCHANGER(NN02-C)	Y	21	SWEL 2	C - 102
H-21-1A	CONTAINMENT SPRAY SYS HEAT EXCHANGER 1-1	Y	13		C - 105
IP-4	120VAC INSTRUMENT PANEL 4 - 208/120V,3PH,4W	Y	12		C - 108
IT-4A	TRANSFORMER FROM MCC 1A2-460V TO IP-4	Y	12		C - 112
LI-18-170	SKIMMER SURGE TANK'A'FUEL POOL LEVEL INDICATOR	N/A	20	SWEL 2	C - 116
LIS-RE0018A	REACTOR VESSEL LOW LEVEL INDICATING SWITCH	Y	15		C - 119
LIS-RE0018C	REACTOR VESSEL LOW LEVEL INDICATING SWITCH	Y	15		C - 121
LS-53B	SPENT FUEL POOL LOW WATER LEVEL SWITCH	Y	20	SWEL 2	C - 123
LS-862-10B	LO-LO LEVEL (START NORMAL PUMP) ON TANK T-39-003	N/A	1		C - 126
LS-862-10C	HI-HI LEVEL(PUMP CUT-OFF) ON TANK T-39-003	N/A	1		C - 129
LSP-1A2	LOCAL SHUTDOWN PANEL- USS 1A2 PUMP/BREAKER CONTROL	Y	16		C - 132
LT-RE0005B	REACTOR VESSEL LOW WATER LEVEL REACTOR SCRAM	Y	17		C - 135
M-39-1	EMERGENCY DIESEL GENERATOR #1	Y	1		C - 137
P-18-1B	SPENT FUEL POOL COOLING PUMP (NN01-B)	Y	21	SWEL 2	C - 140
P-18-1C	AUGMENTED SPENT FUEL POOL PUMP (NN01-C)	Y	21	SWEL 2	C - 143
P-20-1A	CORE SPRAY PUMP NZ01-A	Y	18		C - 146
P-20-1A (NZ01A)	CORE SPRAY PUMP "A" - SYS. I	Y	18		C - 149
P-20-2A	CORE SPRAY BOOSTER PUMP NZ03-A	Y	6		C - 152
P-3-3A	EMERGENCY SERVICE WATER PUMP 1-1 (52A)	Y	4		C - 155

Table C-1 Page 3 of 6

ID	DESCRIPTION	Anchorage Configuration Confirmed?	Area Walk-by	Comments	Page
P-39-13	FUEL OIL PUMP TO DAY TANK T-39-3	N	1		C - 158
P-39-17	DIESEL GENERATOR UNIT #1 ENGINE DRIVEN FUEL PUMP	N	1		C - 161
P-39-19	M-39-1 LEFT BEARING COOLING WATER PUMP	N/A	1		C - 164
P-39-25	AC TURBO LUBE OIL PUMP	N	2		C - 167
PI-18-82	AUGMENTED SFP COOLING PMP NN01-C DISCHARGE PRESSURE	N/A	21	SWEL 2	C - 170
PI-305-131\06-15	ACCUMULATORS GAS PRESSURE INDICATOR	N/A	13		C - 173
PI-305-131\26-03	ACCUMULATORS GAS PRESSURE INDICATOR	N/A	8		C - 176
PS-1	480/120VAC TRANSFORMER TO PROTECTION SYS PANELS 1&2	N	24		C - 179
PS-18-79	ASFP COOLING PUMP NN01-C LOW SUCTION PRESSURE TRIP	N/A	21	SWEL 2	C - 182
PS-IA0083A	EMRV NR108A HIGH PRESSURE SWITCH	Y	15		C - 185
PS-IA0083C	EMRV NR108C HIGH PRESSURE SWITCH	Y	17		C - 187
PS-RE0017A	LOW REACTOR PRESS. SWITCH READIES CORE SPRAY VALVES	Y	15		C - 189
PS-RV0046A	DRYWELL HIGH PRESSURE SWITCH-AUTO STARTS PUMPS	Y	6		C - 191
RK-1	REACTOR PROTECTION SYSTEM 1A,2A INSTRUMENT RACK A,B	Y	15		C - 194
RK-3	INSTRUMENT RACK RECIRC'N PUMP REACTOR PROTECTION	Y	6		C - 196
RK-411-1	MSIV'S SOLENOID AIR VALVE & EQUIPMENT MOUNTING RACK	N/A		Outage	
ROTARY INVERTE RAC	AC GENERATOR FOR 120V AC SUPPLY FOR CIP-3	Y	5		C - 199
SO-305-117\06-15	CHANNEL I SCRAM AIR PILOT SOLENOID VALVE(GROUP 1) (North)	N/A	13		C - 202
SO-305-117\06-19	CHANNEL I SCRAM AIR PILOT SOLENOID VALVE(GROUP 2) (North)	N/A	13		C - 205

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ID	DESCRIPTION	Anchorage Configuration Confirmed?	Area Walk-by	Comments	Page
SO-305-117\30-03	CHANNEL I SCRAM AIR PILOT SOLENOID VALVE(GROUP 2) (South)	N/A	8		C - 208
SO-305-117\30-07	CHANNEL I SCRAM AIR PILOT SOLENOID VALVE(GROUP 3) (South)	N/A	8		C - 211
SO-305-120\06-15	DIRECTIONAL FLOW CONTROL WITHDRAW SOLENOID VALVE (North)	N/A	13		C - 214
SO-305-120\30-03	DIRECTIONAL FLOW CONTROL WITHDRAW SOLENOID VALVE (South)	Y	8		C - 217
SO-305-121\06-15	DIRECTIONAL FLOW CONTROL INSERT SOLENOID VALVE (North)	N/A	13		C - 220
SO-305-121\06-19	DIRECTIONAL FLOW CONTROL INSERT SOLENOID VALVE (South)	N/A	13		C - 223
T-39-2	DIESEL GENERATOR FUEL OIL STORAGE TANK	Y	3		C - 226
T-39-3	DIESEL GENERATOR UNIT #1 FUEL OIL DAY TANK	N	1		C - 230
T-39-5	M-39-1 COOLING WATER TANK	N	1		C - 233
TI-18-267	ASFP HEAT EXCHANGER NN02C OUTLET TEMPERATURE	N	21	SWEL 2	C - 236
V-1-10	MAIN STEAM LINE 'B' OUTLET ISOLATION VALVE(NS04-B)	N/A		Outage	
V-1-106	MAIN STEAM LINE 'A' DRAIN VALVE	N/A		Outage	
V-1-160	SAFETY RELIEF VALVE NR28D (SOUTH HEADER)	N/A		Outage	
V-1-164	SAFETY RELIEF VALVE NR28H (NORTH HEADER)	N/A		Outage	
V-1-173	ELECTROMATIC RELIEF VALVE NR108-A(SOUTH HEADER)	N/A		Outage	
V-1-175	ELECTROMATIC RELIEF VALVE NR108-C(NORTH HEADER)	N/A		Outage	
V-1-177	ELECTROMATIC RELIEF VALVE NR108-E(SOUTH HEADER)	N/A		Outage	
V-15-120	SOUTH SCRAM DISCHARGE HDR VENT VALVE(NC53-A)	N/A	8		C - 239
V-15-133	NORTH SCRAM DISCHG VOLUME DRAIN VALVE(NC52-A)	N/A	13		C - 242
V-16-1	CU INLET ISOLATION VALVE FROM REACTOR VESSEL	N/A		Outage	

Table C-1 Page 5 of 6

ID	DESCRIPTION	Anchorage Configuration Confirmed?	Area Walk-by	Comments	Page
V-1-7	MAIN STEAM LINE'A' OUTLET ISOLATION VALVE(NS03-A)	N/A		Outage	
V-17-1	SDC LOOP 'A' PUMP SUCTION VALVE	N/A	22		C - 245
V-17-212	SDC LOOP'A' OUTLET HEADER VENT VALVE	N/A	23		C - 248
V-18-112	ASFP COOLING PUMP NN01-D CASING VENT VALVE	N/A	21	SWEL 2	C - 251
V-18-1266	FUEL POOL MAKEUP ISOLATION VALVE	N/A	21	SWEL 2	C - 254
V-18-19	AUGMENTED FUEL POOL COOLING OUTLET VALVE	N/A	21	SWEL 2	C - 257
V-18-2	AUGMENTED SPENT FUEL POOL SYSTEM INLET VALVE	N/A	21	SWEL 2	C - 260
V-18-3	SFP COOLING PUMP (NN01-A) SUCTION ISOLATION VALVE	N/A	21	SWEL 2	C - 263
V-18-47	DRAIN FROM REACTOR WELL BACK TO FUEL POOL PUMPS	N/A	21	SWEL 2	C - 266
V-18-74	AUGMENTE FUEL POOL CLG PUMP NN01-D DISCHARGE VALVE	N/A	21	SWEL 2	C - 269
V-18-80	PI-18-88 ISOLATION VALVE	N/A	21	SWEL 2	C - 272
V-18-81	PS-18-0080 ISOLATION ROOT VALVE	N/A	21	SWEL 2	C - 275
V-18-88	AUGMENTED FPC SYSTEM VENT VALVE	N/A	21	SWEL 2	C - 278
V-18-92	AUGMENTED FUEL POOL CLG THROTTLE VALVE	N/A	21	SWEL 2	C - 281
V-20-12	CORE SPRAY PUMP DISCHARGE VALVE(SYSTEM I)	N/A	6		C - 284
V-20-15	"A" CONTAINMENT ISO. VALVE - SYS. I	N/A	6		C - 287
V-20-3	CORE SPRAY PUMP "A" SUCTION VALVE FROM TORUS	N/A	18		C - 290
V-21-75	CONTAINMENT ISOLATION FOR TORUS WATER CLEAN-UP	N/A	19		C - 293
V-39-109	EDG1 PRIMING PUMP SUCTION VALVE	N	1		C - 296
V-39-110	EDG1 PRIMING PUMP DISCHARGE VALVE	N	1		C - 299
V-39-2	ISOLATION VALVE FOR TANK T-39-002 OUTLET	N/A	3		C - 302
VACP-1	120V VITAL AC POWER PANEL 208/120V,3PH,4W,60HZ	Y	10		C - 305
VACP-1 XF	120V VITAL AC POWER PANEL TRANSFORMER 480/208/120V	Y	10		C - 308

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Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1A21A-460V

Equipment Class: (1) Motor Control Centers

Equipment Description: MCC 1A21A 460V,3P,3W,60HZ FOR REACTOR BUILDING

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 08

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

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



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1A21A-460V

Equipment Class: (1) Motor Control Centers

Equipment Description: MCC 1A21A 460V,3P,3W,60HZ FOR REACTOR BUILDING

**Interaction Effects**

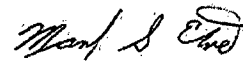
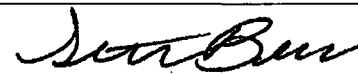
- |   |     |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures?   | Yes |
| 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? | Yes |
| 9. Do attached lines have adequate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

**Other Adverse Conditions**

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

**Comments**

External Anchorage was completed during online walk down. External anchorage as documented in SQ-OC-1A2A-460V-MCC  
External Supports are consistent with Calculation C-1302-732-5320-014 Rev 0

Evaluated by:		Mark S. Etre	Date:	10/10/2012
		Seth W. Baker		10/10/2012

Status:  Y  N  U

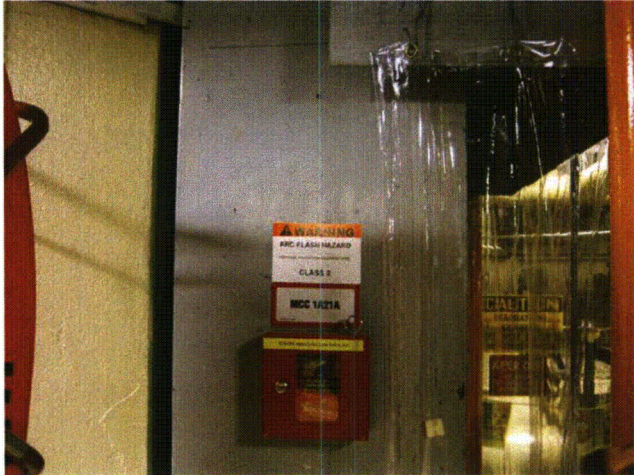
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1A21A-460V

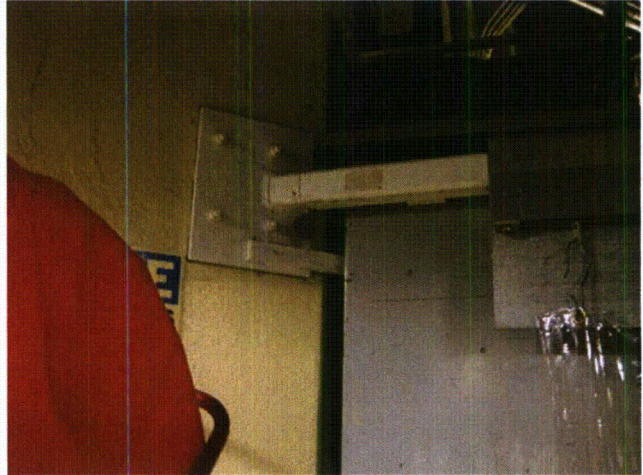
Equipment Class: (1) Motor Control Centers

Equipment Description: MCC 1A21A 460V,3P,3W,60HZ FOR REACTOR BUILDING

**Photos**



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IMG\_0975



IMG\_0976



IMG\_0978

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: 1A2-460V XF

Equipment Class: (4) Transformers

Equipment Description: USS 1A2-460V TRANSFORMER 4160-480V/277V 3PH 60HZ

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 11

Manufacturer/Model:

#### Instructions for Completing Checklist

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#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1A2-460V XF

Equipment Class: (4) Transformers

Equipment Description: USS 1A2-460V TRANSFORMER 4160-480V/277V 3PH 60HZ

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

External Anchorage was completed during online walk down. See Seismic Qualification SQ-OC-1A2-XFMR-USS Rev 0

Nearby masonry block Wall is braced. Calculation C-1302X-322C-A06 qualifies the Oyster Creek safety-related masonry walls for seismic to address NRC IE Bulletin 80-11.

Evaluated by: Mark S. Etre Mark S. Etre Date: 10/10/2012

Seth W. Baker Seth W. Baker 10/10/2012

Status:  Y  N  U

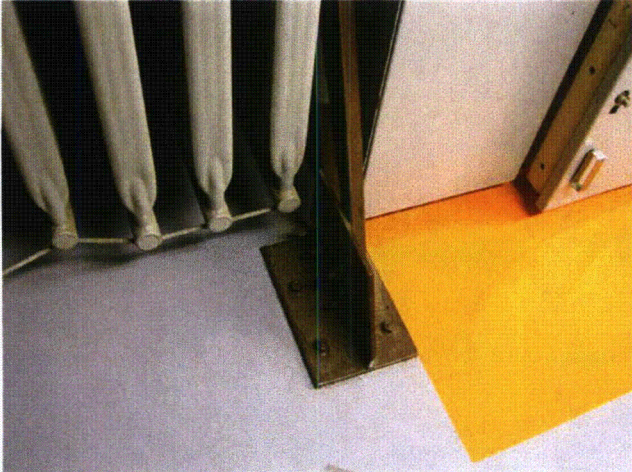
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1A2-460V XF

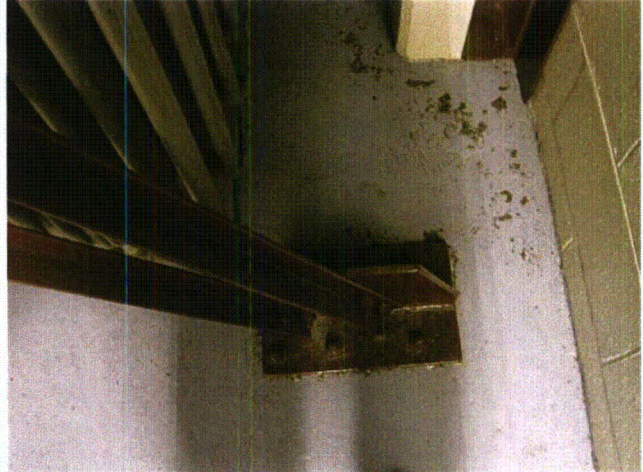
Equipment Class: (4) Transformers

Equipment Description: USS 1A2-460V TRANSFORMER 4160-480V/277V 3PH 60HZ

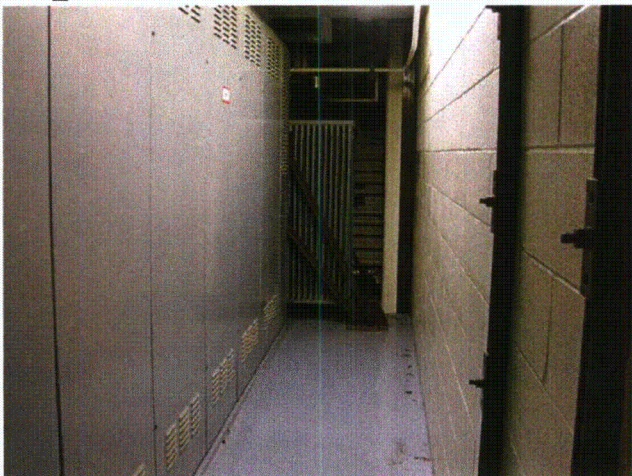
**Photos**



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IMG\_0864



IMG\_0869

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 1A2-460V XF

Equipment Class: (4) Transformers

Equipment Description: USS 1A2-460V TRANSFORMER 4160-480V/277V 3PH 60HZ

**SQUG SEWS**

**EBASCO SERVICES INCORPORATED**

Two World Trade Center, New York, N.Y. 10048

**EBASCO**

April 29, 1981

GPU Services Incorporated  
Attention: Mr. Leon Caribbean  
100 Interpace Parkway  
Parsippany, NJ 07054

Dear Leon:

Re: OYSTER CREEK NUCLEAR STATION  
FINAL SUBMITTAL OF MASONRY WALL  
EVALUATION CALCULATION BOOKS

I am sending to you, together with this letter, 20 volumes of calculation books and 11 volumes of computer output. This will mark the end of our involvement for the re-evaluation of the Safety-Related Concrete Masonry Walls as required by NRC IE Bulletin 80-11.

Should you have any questions regarding the calculations and sketches, please do not hesitate to call. We will be glad to help.

Very truly yours,

*E. Odar*  
E Odar  
Assistant Chief Civil Engineer

GW:d1

cc: K D Chiu  
G Wu

C1302X322CA06 VOL 1, 19810427, REEVALUATION OF CONCRETE MASONRY WALL NRC IE BULLETIN 80-11 GENERAL

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: 305-125\06-15

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SCRAM ACCUMULATOR-H2O

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 13

Manufacturer/Model:

#### Instructions for Completing Checklist

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#### Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 305-125\06-15

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SCRAM ACCUMULATOR-H2O

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See Calculation C-1302-225-E310-049, Rev. 0

See Calculation C-1302-225-E310-050, Rev. 0

See drawing BR 4059, sheet 3

Equipment was verified as consistent with SQ-OC-HCU-305-XX-XX, Rev. 1



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

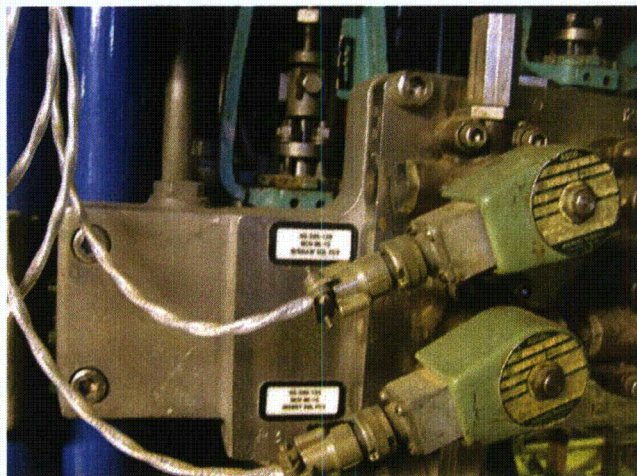
Equipment ID No.: 305-125\06-15

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SCRAM ACCUMULATOR-H2O

Evaluated by: *Mark S Etre* Mark Etre Date: 10/15/12  
*Seth Baker* Seth Baker 10/15/12

**Photos**



IMG\_0756

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 305-125\06-19

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SCRAM ACCUMULATOR-H2O

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 13

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 305-125\06-19

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SCRAM ACCUMULATOR-H2O

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

Calculation C-1302-225-E310-049, Rev. 0

See Calculation C-1302-225-E310-050, Rev. 0

See drawing BR 4059, sheet 3

Equipment was verified as consistent with SQ-OC-HCU-305-XX-XX, Rev. 1

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

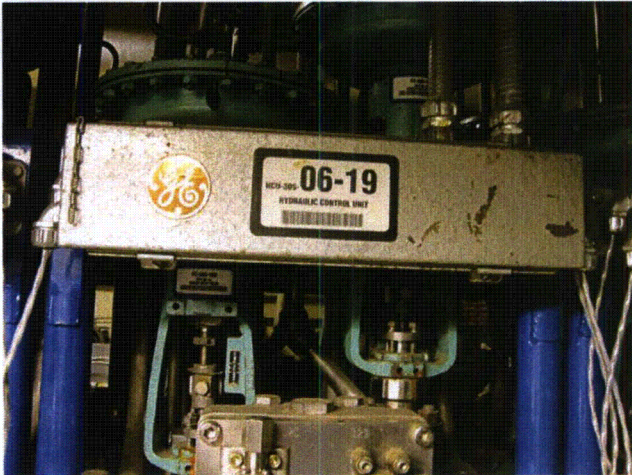
Equipment ID No.: 305-125\06-19

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SCRAM ACCUMULATOR-H2O

Evaluated by: Mark Etre Mark Etre Date: 10/15/12  
Seth Baker Seth Baker 10/15/12

**Photos**



IMG\_0749

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: 305-12526-11

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SCRAM ACCUMULATOR-H2O

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 08

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 305-125\26-11

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SCRAM ACCUMULATOR-H2O

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

Accumulator was missing label.

See Calculation C-1302-225-E310-049, Rev. 0

See Calculation C-1302-225-E310-050, Rev. 0

See drawing BR 4059, sheet 3

Equipment was verified as consistent with SQ-OC-HCU-305-XX-XX, Rev. 1

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

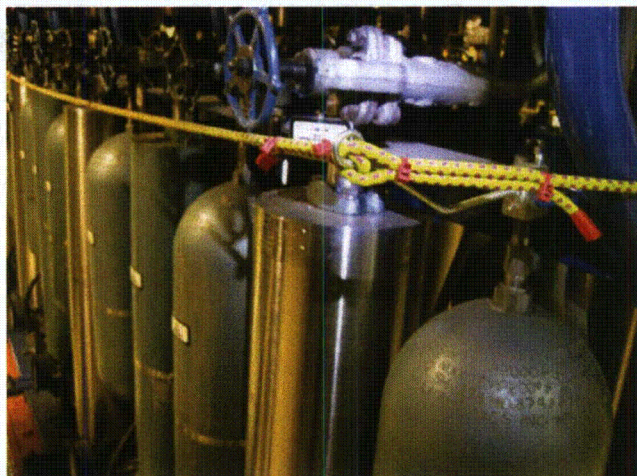
Equipment ID No.: 305-125\26-11

Equipment Class: (21) Tanks and Heat Exchangers

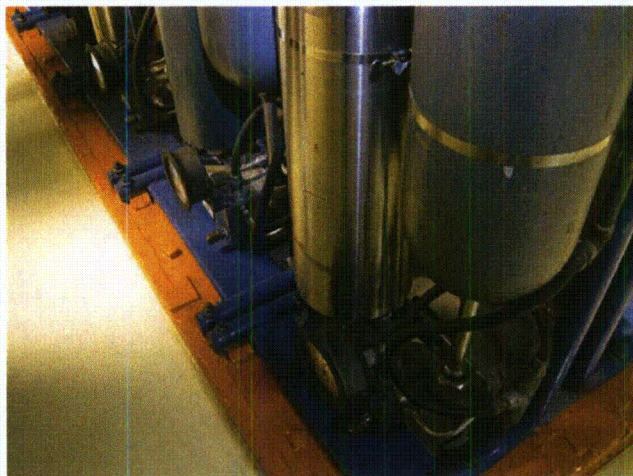
Equipment Description: SCRAM ACCUMULATOR-H2O

Evaluated by: Mark Etre Mark Etre Date: 10/15/12  
Seth Baker Seth Baker 10/15/12

**Photos**



IMG\_0783



IMG\_0784

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: 305-125126-19

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SCRAM ACCUMULATOR-H2O

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 08

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 305-125\26-19

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SCRAM ACCUMULATOR-H2O

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See Calculation C-1302-225-E310-049, Rev. 0

See Calculation C-1302-225-E310-050, Rev. 0

See drawing BR 4059, sheet 3

Equipment was verified as consistent with SQ-OC-HCU-305-XX-XX, Rev. 1

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 305-125\26-19

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: SCRAM ACCUMULATOR-H2O

Evaluated by: *Mark S Etre* Mark Etre Date: 10/15/12  
*Seth Baker* Seth Baker 10/15/12

**Photos**



IMG\_0829



IMG\_0830

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: 6R

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

Equipment Description: MAIN CONTROL RM PANEL 6R REACTOR PROTECTION CH.1

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): TB, 46.00 ft, 27

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 6R

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

Equipment Description: MAIN CONTROL RM PANEL 6R REACTOR PROTECTION CH.1

**Interaction Effects**

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

**Other Adverse Conditions**

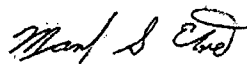
11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

**Comments**

See SQ-OC-6R Rev 03

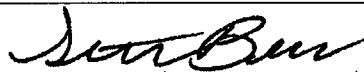
Able to verify accessible anchorage in (inside) back of cabinet. Interior inspection completed during online walkdown.

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 7R

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

Equipment Description: MAIN CONTROL RM PANEL 7R REACTOR PROTECTION CH.2

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): TB, 46.00 ft, 27

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: 7R

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

Equipment Description: MAIN CONTROL RM PANEL 7R REACTOR PROTECTION CH.2

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See SQ-OC-7R Rev 02

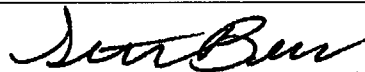
Able to verify accessible anchorage in (inside) back of cabinet. Interior inspection completed during online walkdown.

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BATTERY BANK C

Equipment Class: (15) Batteries on Racks

Equipment Description: VITAL BANK 'C' STATION BATTERY (LEAD ACID)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): TB, 23.00 ft, 25

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BATTERY BANK C

Equipment Class: (15) Batteries on Racks

Equipment Description: VITAL BANK 'C' STATION BATTERY (LEAD ACID)

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See SQ-OC-BATTERY BANK C Rev 01

Tech Eval A2057072-08 Rev 0, concluded that the 0.5" gap on the end rails is acceptable.

Evaluated by: Mark S Etre Mark Etre Date: 10/10/12  
Seth Baker Seth Baker 10/10/12



Status:  Y  N  U

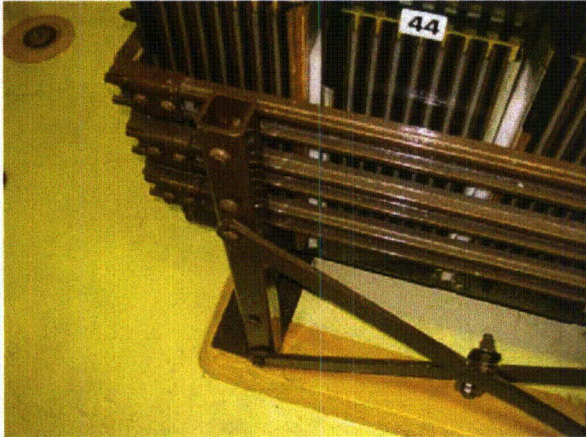
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BATTERY BANK C

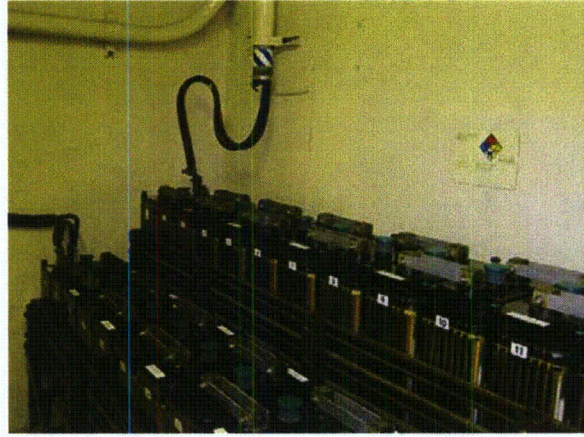
Equipment Class: (15) Batteries on Racks

Equipment Description: VITAL BANK 'C' STATION BATTERY (LEAD ACID)

**Photos**



IMG\_1052



IMG\_1053



IMG\_1055



IMG\_1058



IMG\_1062

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BATTERY BANK C  
 Equipment Class: (15) Batteries on Racks  
 Equipment Description: VITAL BANK 'C' STATION BATTERY (LEAD ACID)

**SQUG SEWS**

PAGE 0001

E C R Printout

ECR NUMBER: OC 04-00923 000 ECR TYPE: IEC

ASSIGNED ORG: OWSP PRINT DATE/TIME: 11/04/04 06:11  
 ASSIGNED INDV: BEFFERMAN, MARVIN REQUIRED DATE: 11/10/04  
 INITIATOR: KALENAK ECR STATUS: APPVD  
 REQUEST ORG: OWSP STATUS DATE: 11/04/04  
 A/R NO: A2008592 INIT. DATE: 11/03/04  
 PROJECT NO: \_\_\_\_\_ A/R STATUS: ASIGND

A/R SUBJECT: 204 12642: REPLACEMENT OF "C" STATION BATTERIES

=====

**A. IDENTIFICATION:**

SYSTEM: 735 COMP ID: OC 1 735 E BT C STATION BATTERIES  
 INIT OPER: \_\_\_\_\_ QA CLASS: \_\_\_\_\_ POTL REPT: \_\_\_\_\_  
 TECH SPEC: \_\_\_\_\_ REQD IN MODES: \_\_\_\_\_  
 PAGES ATTACHED: Y NO. OF PAGES: 3 ID/DATE: MPB0 11/03/04

**PROBLEM DESCRIPTION and PROPOSED DISPOSITION:**

INSTALLED STATION "C" BATTERIES, GNB MODEL NCX-1200, HAVE BEEN REPLACED BY GNB MODEL NCN-17. THE ORIGINAL AND REPLACEMENT BATTERIES WERE FURNISHED BY NUCLEAR LOGISTICS INC. (NLI). THIS IEC WILL RECONCILE DIFFERENCES IN THE TWO MODELS USING THE REPLACEMENT EVALUATION PROVIDED BY NLI (CALC. # ERC-53, REV. 1).

**B. EVALUATION:**

50.59 REVIEW REQD: N ORIG 50.59 REVIEW AFFECTED: \_\_\_\_\_ 50.59 SE REQD: \_\_\_\_\_  
 REPORTABLE: N DATE/TIME: \_\_\_\_\_  
 STATION PROC/PROGRAM REVIEW COMPLT: \_\_\_\_\_ CAUSE: I  
 FINAL OPERABILITY: \_\_\_\_\_ COMP: \_\_\_\_\_ SYSTEM: \_\_\_\_\_ PLANT: \_\_\_\_\_  
 SSV NAME: \_\_\_\_\_ SSV DATE/TIME: \_\_\_\_\_  
 SCHED CODE/WINDW: \_\_\_\_\_  
 ADVANCED WORK AUTH: \_\_\_\_\_ FINAL DISP: \_\_\_\_\_ INTERIM DISP: \_\_\_\_\_

**APPROVED DISPOSITION:**

DESCRIPTION AND SCOPE  
 \*\*\*\*\*

NOTE1: IT IS UNACCEPTABLE TO PROCESS AN IEC THAT EVALUATES CHANGES TO FIT/FORM/FUNCTION AND PROCESS/LOGIC/PARAMETERS OUTSIDE OF DESIGN TOLERANCES OR PRE-ENGINEERED SOLUTIONS. THESE CHANGES INCLUDE, BUT ARE NOT LIMITED TO COMPLEX PIPE ROUTING, SEISMIC CALCULATIONS, SETPOINTS, PROCESS PARAMETERS, POWER REQUIREMENTS, ELECTRICAL LOADING, MONITORING, AND OPERATIONS OR LICENSING/DESIGN CRITERIA. THESE CHANGES WILL BE PROCESSED OR SUPPLEMENTED BY DESIGN ENGINEERING THROUGH AN APPROVED DESIGN CHANGE

04-00923, Rev 0, 20041104, BLANKET AR FOR ITEM EQUIVALENCY EVAL (IEEIEC)

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BATTERY BANK C

Equipment Class: (15) Batteries on Racks

Equipment Description: VITAL BANK 'C' STATION BATTERY (LEAD ACID)

\*\*\* ACTION REQUEST \*\*\* PAGE: 01

A/R TYPE : CM ECR A/R NUMBER : A2057072  
 REQUEST ORG : OEPE A/R STATUS : ASIGND  
 REQUEST DATE : 10MAR03 STATUS DATE : 03NOV04  
 REQUESTED BY : HECK, MICHAEL LAST UPDATE : 20NOV04  
PRINT DATE : 20NOV04

---

EVALUATION NBR: 08 ORIG DATE ASSIGNED: \_\_\_\_\_  
 EVALUATING ORG: QEDM EVAL DUE DATE: 18NOV04  
 EVAL ASIGND TO: NIQI, SUJIT DATE ASSIGNED: 06OCT04  
 EVAL REQUEST ORG: OEPE  
 EVAL REQUESTOR: HECK, MIKE EVAL STATUS : COMPLT  
 EVAL RETURNED BY: RAY, F.H.

IMPORTANCE CODE: OEAP SCHEDULE CODE: \_\_\_\_\_ DATE FIXED: \_\_\_\_\_

EVAL DESC: PERFROM SQUG WALKDOWN OF NEW C BATTERY AFTER INSTALLATION.  
 ADD TO YOUR SCHEDULE. FHR FHR1 06OCT04  
 ENGINEERING RESPONSE: SNN1 18NOV04  
 REASON FOR EVALUATION/SCOPE: SNN1 18NOV04  
SQUG WALK DOWN OF THE 'C' BATTERY WAS PERFORMED AND SNN1 18NOV04  
IT WAS NOTED DURING WALK DOWN THAT THERE IS SNN1 18NOV04  
APPROXIMATELY 1/2 INCH GAP BETWEEN THE HORIZONTAL SNN1 18NOV04  
RAIL AND THE BATTERY CELLS. THE SEISMIC SNN1 18NOV04  
QUALIFICATION OF THE BATTERY WITH THE RACK WAS SNN1 18NOV04  
PERFORMED AT THE WYLE LABORATORIES AND IS SNN1 18NOV04  
DOCUMENTED IN REFERENCE 1. THE SEISMIC TESTING WAS SNN1 18NOV04  
PERFORMED WITHOUT ANY GAP BETWEEN THE BATTERY CELLS SNN1 18NOV04  
AND THE RACK HORIZONTAL RAILS. REASON FOR THIS SNN1 18NOV04  
EVALUATION IS TO JUSTIFY SEISMIC QUALIFICATION OF SNN1 18NOV04  
THE BATTERY AND THE BATTERY RACK WITH THE 1/2-INCH SNN1 18NOV04  
GAP. SNN1 18NOV04  
THIS RESPONSE WILL BE PROVIDED IN THE FORM OF A SNN1 18NOV04  
TECHNICAL EVALUATION PREPARED IN ACCORDANCE WITH SNN1 18NOV04  
CC-AA-309-101 REV 7. SNN1 18NOV04  
 DETAILED EVALUATION: SNN1 18NOV04  
THE BATTERY RACK IS LOCATED AT TURBINE BUILDING EL. SNN1 18NOV04  
23'-6". THE RACK IS A PRIMARILY BOLTED STRUCTURE SNN1 18NOV04  
AND IS BOLTED TO THE FLOOR (REFERENCE 2) PROVIDES SNN1 18NOV04  
THE PLAN, SECTIONS AND DETAILS OF THE RACK. FROM SNN1 18NOV04  
REFERENCE 3 DAMPING VALUE FOR BOLTED STRUCTURE IS SNN1 18NOV04  
7% FOR SSE. THE PEAK ACCELERATIONS AT THAT SNN1 18NOV04  
LOCATION FOR 7% DAMPING FROM REFERENCE 4 IS 0.35G SNN1 18NOV04  
IN THE HORIZONTAL DIRECTIONS AND 0.24G IN THE SNN1 18NOV04  
VERTICAL DIRECTION. THE BATTERY CELLS ARE MADE OF SNN1 18NOV04  
PLASTIC (REFERENCE 5). FROM REFERENCE 6, SNN1 18NOV04  
COEFFICIENT OF FRICTION BETWEEN STEEL AND SNN1 18NOV04  
POLYSTYRENE OR BAKELITE IS 0.3. THE WEIGHT OF THE SNN1 18NOV04  
BATTERY CELL IS 269 POUNDS (REFERENCE 5). THERE SNN1 18NOV04  
ARE 15 CELLS PER RACK. THE LENGTH OF THE RACK IS SNN1 18NOV04  
APPROXIMATELY 10 FEET (REFERENCE 2). TOTAL WEIGHT SNN1 18NOV04  
OF THE CELLS IS 15 X 269 = 4035 POUNDS. THEREFORE, SNN1 18NOV04  
HORIZONTAL FORCE ON THE RACK DUE TO HORIZONTAL SNN1 18NOV04

A2057072 E08, Rev NA, 20041120, PERFORM SQUG WALKDOWN OF NEW C BATTERY

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BATTERY BANK C

Equipment Class: (15) Batteries on Racks

Equipment Description: VITAL BANK 'C' STATION BATTERY (LEAD ACID)

ERMS - Department Transmittal

Page 2 of 4

**Doc Number: SQ-OC-BATTERY BANK C**

**Sheet:**

Date: 10/17/2011

Mjr Rev: 000

Mnr Rev:

Dept Trans: D177718

Facility: OYS

SRRS ID: 3A.114

Doc Type: SQB

Sub Type:

Addl Type:

DocTitle:

DIVISION C BATTERIES



0900e54e814d1c8f

<http://edmsapp.exeloncorp.com/erms/dept/deptrans/print>

10/21/2011

SQ-OC-BATTERY BANK C, Rev 001, 20111017, DIVISION C BATTERIES

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BTCHG C1

Equipment Class: (16) Inverters

Equipment Description: 'C' STATION BATTERY SOLID STATE STATIC CHARGER C1

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): TB, 23.00 ft, 26

Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BTCHG C1

Equipment Class: (16) Inverters

Equipment Description: 'C' STATION BATTERY SOLID STATE STATIC CHARGER C1

**Interaction Effects**

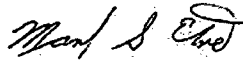
7. Are soft targets free from impact by nearby equipment or structures? Yes
8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
9. Do attached lines have adequate flexibility to avoid damage? Yes
10. Based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

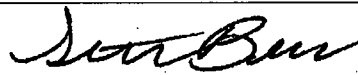
**Other Adverse Conditions**

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

**Comments**

See SQ-OC-BT CHG C1 & C2 Rev 00

Evaluated by:  Mark Etre Date: 10/10/12

 Seth Baker 10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: BTCHG C1

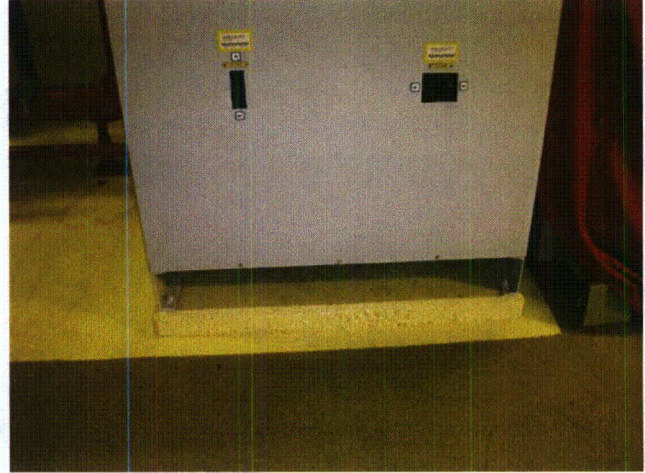
Equipment Class: (16) Inverters

Equipment Description: 'C' STATION BATTERY SOLID STATE STATIC CHARGER C1

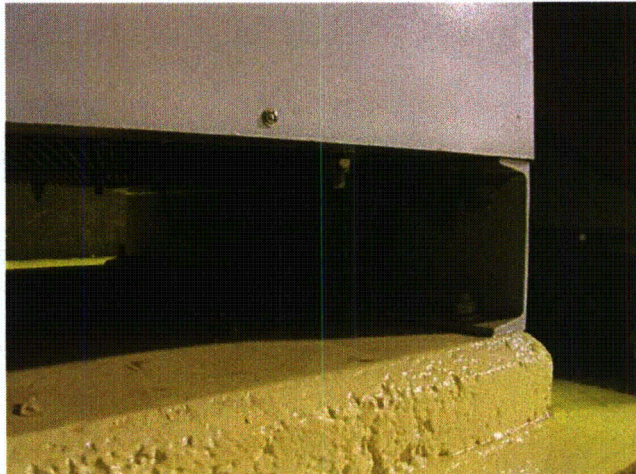
**Photos**



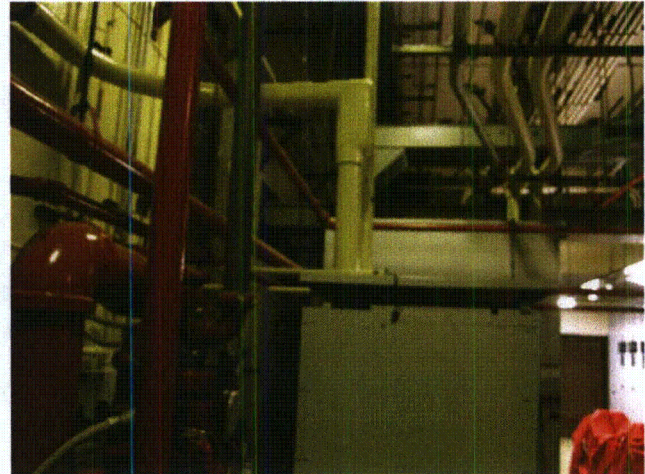
MG\_1068



MG\_1069



MG\_1072



MG\_1073

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CIP-3

Equipment Class: (14) Distribution Panels

Equipment Description: CONTINUOUS INSTRUMENT PNL NO.3 208/120V,3PH,4W,60HZ

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 12

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CIP-3

Equipment Class: (14) Distribution Panels

Equipment Description: CONTINUOUS INSTRUMENT PNL NO.3 208/120V,3PH,4W,60HZ

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See Seismic Qualification SQ-OC-CIP-3 Rev 0

Calculation C-1302X-322C-A06 qualifies the Oyster Creek safety-related masonry walls for seismic to address NRC IE Bulletin 80-11.

Evaluated by: Mark S Etre Mark Etre Date: 10/10/12  
Seth Baker Seth Baker 10/10/12

Status:  Y  N  U

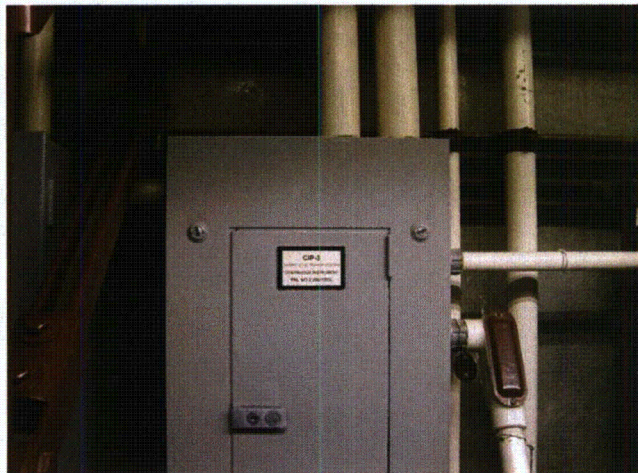
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CIP-3

Equipment Class: (14) Distribution Panels

Equipment Description: CONTINUOUS INSTRUMENT PNL NO.3 208/120V,3PH,4W,60HZ

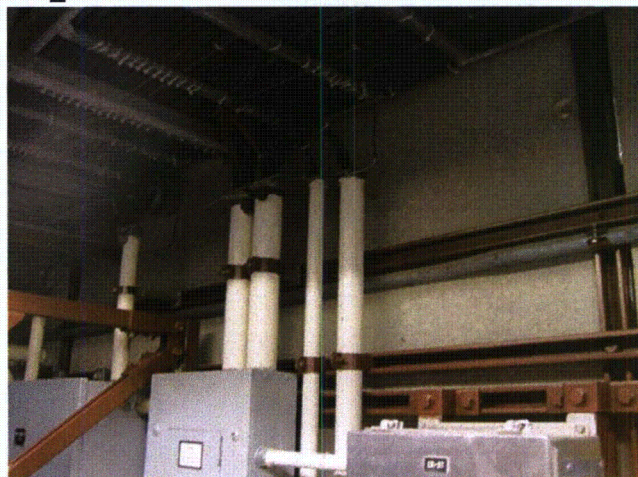
**Photos**



MG\_0874



MG\_0875



MG\_0879

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CIP-3

Equipment Class: (14) Distribution Panels

Equipment Description: CONTINUOUS INSTRUMENT PNL NO.3 208/120V,3PH,4W,60HZ

**SQUG SEWS**

**EBASCO SERVICES INCORPORATED**

Two World Trade Center, New York, N.Y. 10048

**EBASCO**

April 29, 1981

GPU Services Incorporated  
Attention: Mr. Leon Garibian  
100 Interpace Parkway  
Parsippany, NJ 07054

Dear Leon:

Re: OYSTER CREEK NUCLEAR STATION  
FINAL SUBMITTAL OF MASONRY WALL  
EVALUATION CALCULATION BOOKS

I am sending to you, together with this letter, 20 volumes of calculation books and 11 volumes of computer output. This will mark the end of our involvement for the re-evaluation of the Safety-Related Concrete Masonry Walls as required by NRC IE Bulletin 80-11.

Should you have any questions regarding the calculations and sketches, please do not hesitate to call. We will be glad to help.

Very truly yours,

*E Odar*  
E Odar  
Assistant Chief Civil Engineer

GW:d1

cc: K D Chiu  
G Wu

C1302X322CA06 VOL 1, 19810427, REEVALUATION OF CONCRETE MASONRY WALL NRC IE BULLETIN 80-11 GENERAL

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: CV-305-126\10-31

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (North)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 13

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-126\10-31

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (North)

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See Calculation's C-1302-225-E310-049, Rev. 0 and C-1302-225-E310-050, Rev. 0

SQ-OC-HCU-305-XX-XX, Rev 1

Evaluated by:

*Mark S Etre*

Mark Etre

Date: 10/10/12

*Seth Baker*

Seth Baker

10/10/12

Status:  Y  N  U

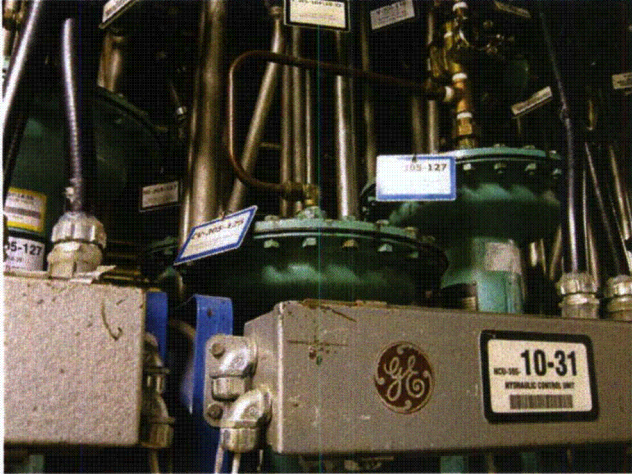
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-126\10-31

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (North)

**Photo**



IMG\_0731

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-126\10-39

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (North)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 13

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-126\10-39

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (North)

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

In-line equipment.

See Calculation's C-1302-225-E310-049, Rev. 0 and C-1302-225-E310-050, Rev. 0

SQ-OC-HCU-305-XX-XX, Rev 1

Evaluated by: Mark S Etre Mark Etre Date: 10/10/12  
Seth Baker Seth Baker 10/10/12



Status:  Y  N  U

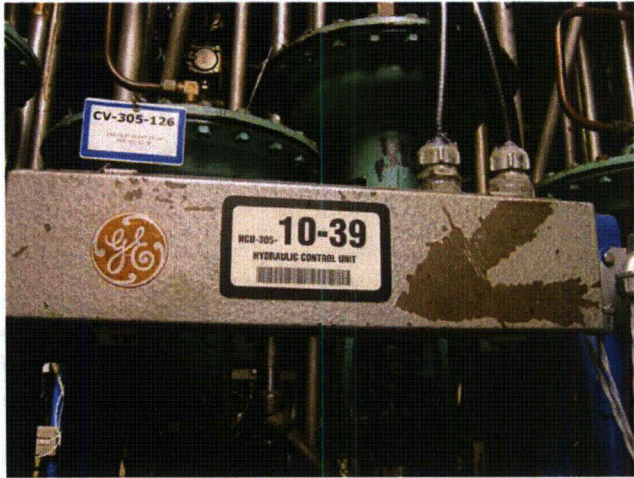
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-126\10-39

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (North)

**Photo**



IMG\_0734

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: CV-305-126\30-03

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (South)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 08

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-126\30-03

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (South)

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

In-line equipment.

See Calculation's C-1302-225-E310-049, Rev. 0 and C-1302-225-E310-050, Rev. 0

SQ-OC-HCU-305-XX-XX, Rev 1

Evaluated by: Mark S Etre Mark Etre Date: 10/10/12

Seth Baker Seth Baker 10/10/12

Status:  Y  N  U

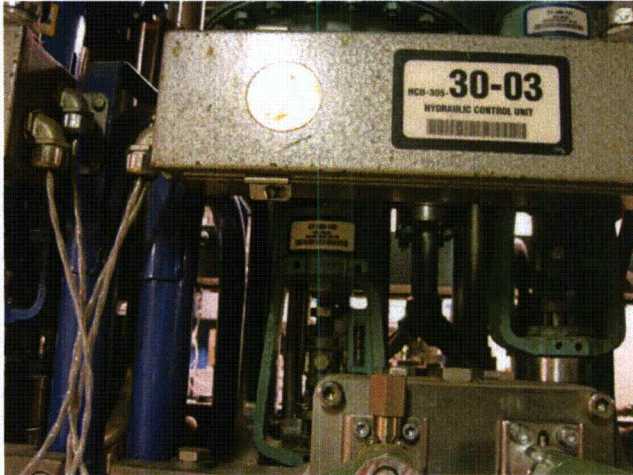
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-126\30-03

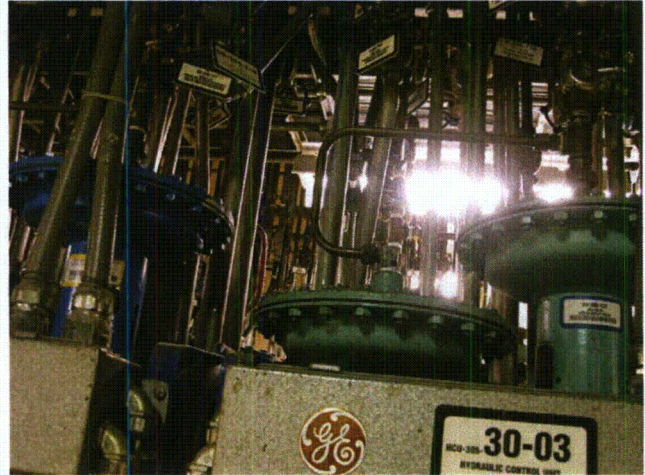
Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (South)

**Photos**



MG\_0805



MG\_0806

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-126\30-07

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (South)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 08

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

- |  |                |
|--|----------------|
| 1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)?  | No             |
| 2. Is the anchorage free of bent, broken, missing or loose hardware?   | Not Applicable |
| 3. Is the anchorage free of corrosion that is more than mild surface oxidation?  | Not Applicable |
| 4. Is the anchorage free of visible cracks in the concrete near the anchors?   | Not Applicable |
| 5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) | Not Applicable |
| 6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions?  | Yes            |

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-126\30-07

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (South)

**Interaction Effects**

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

**Other Adverse Conditions**

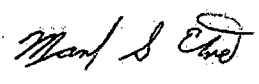

- |  |     |
|--|-----|
| 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? | Yes |
|--|-----|

**Comments**

In-line equipment.

See Calculation's C-1302-225-E310-049, Rev. 0 and C-1302-225-E310-050, Rev. 0

SQ-OC-HCU-305-XX-XX, Rev 1

Evaluated by:		Mark Etre	Date:	10/10/12
		Seth Baker		10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-126\30-07

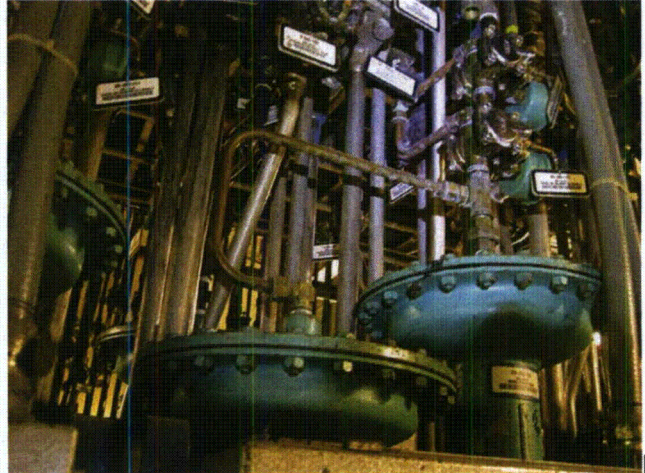
Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD INLET SCRAM VALVE (South)

**Photos**



MG\_0788



MG\_0789

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-127\06-15

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (North)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 13

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-127\06-15

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (North)

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See Calculation's C-1302-225-E310-049, Rev. 0 and C-1302-225-E310-050, Rev. 0

SQ-OC-HCU-305-XX-XX, Rev 1

Evaluated by:

*Mark S Etre*

Mark Etre

Date: 10/10/12

*Seth Baker*

Seth Baker

10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-127\06-15

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (North)

**Photo**



IMG\_0743

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: CV-305-127\22-31

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (North)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 13

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-127\22-31

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (North)

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

In-line equipment.

See Calculation's C-1302-225-E310-049, Rev. 0 and C-1302-225-E310-050, Rev. 0

SQ-OC-HCU-305-XX-XX, Rev 1

Evaluated by: Mark S Etre Mark Etre Date: 10/10/12

Seth Baker Seth Baker 10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-127\22-31

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (North)

**Photo**



IMG\_0738

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-127\30-03

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (South)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 08

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-127\30-03

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (South)

**Interaction Effects**

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

**Other Adverse Conditions**


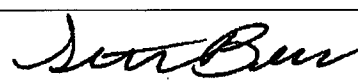
- |  |     |
|--|-----|
| 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? | Yes |
|--|-----|

**Comments**

In-line equipment.

See Calculation's C-1302-225-E310-049, Rev. 0 and C-1302-225-E310-050, Rev. 0

SQ-OC-HCU-305-XX-XX, Rev 1

Evaluated by:		Mark Etre	Date:	10/10/12
		Seth Baker		10/10/12

Status:  Y  N  U

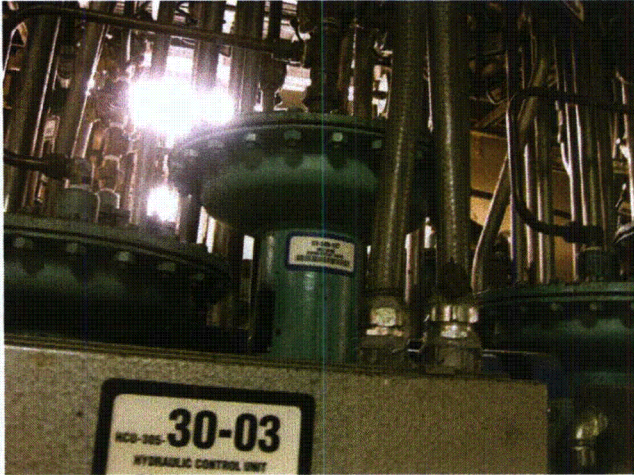
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-127\30-03

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (South)

**Photo**



IMG\_0811



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-127\30-07

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (South)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 08

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-127\30-07

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (South)

**Interaction Effects**

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

**Other Adverse Conditions**

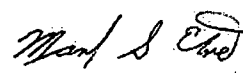
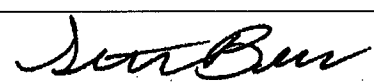
- |  |     |
|--|-----|
| 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? | Yes |
|--|-----|

**Comments**

In-line equipment.

See Calculation's C-1302-225-E310-049, Rev. 0 and C-1302-225-E310-050, Rev. 0

SQ-OC-HCU-305-XX-XX, Rev 1

Evaluated by:		Mark Etre	Date:	10/10/12
		Seth Baker		10/10/12

Status:  Y  N  U

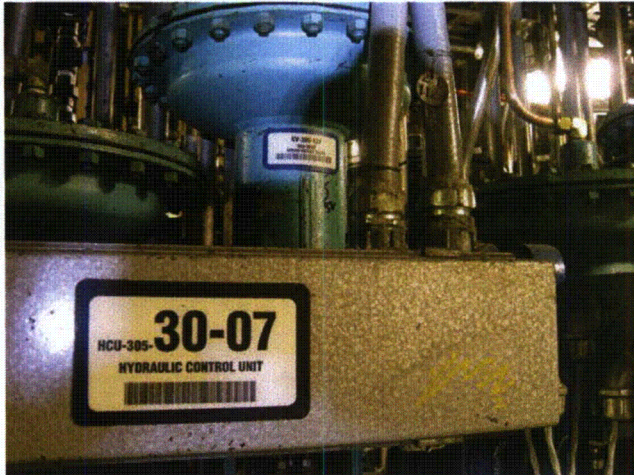
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: CV-305-127\30-07

Equipment Class: (7) Fluid-Operated Valves

Equipment Description: CRD OUTLET SCRAM VALVE (South)

**Photo**



IMG\_0794

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DC-F

Equipment Class: (14) Distribution Panels

Equipment Description: 125VDC POWER PANEL DC-F

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 12

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DC-F

Equipment Class: (14) Distribution Panels

Equipment Description: 125VDC POWER PANEL DC-F

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See Seismic Qualification No. SQ-OC-DC-F, Rev 000

Unsecured thermometer above panel was resolved by Operations and is being tracked by IR 1406823.

Calculation C-1302X-322C-A06 qualifies the Oyster Creek safety-related masonry walls for seismic to address NRC IE Bulletin 80-11.

Evaluated by:

*Mark S Etre*

Mark Etre

Date: 10/10/12

*Seth Baker*

Seth Baker

10/10/12

Status:  Y  N  U

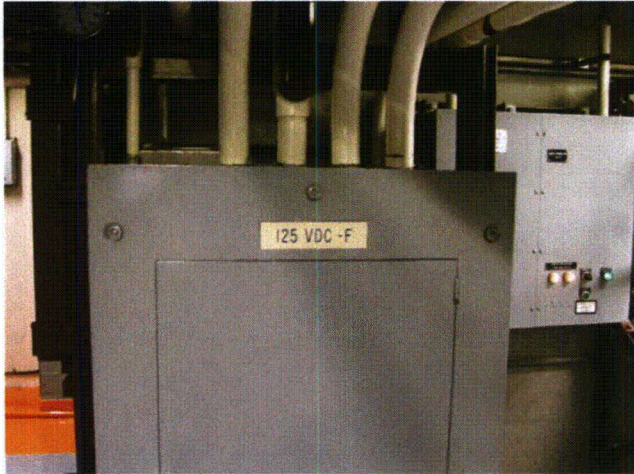
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DC-F

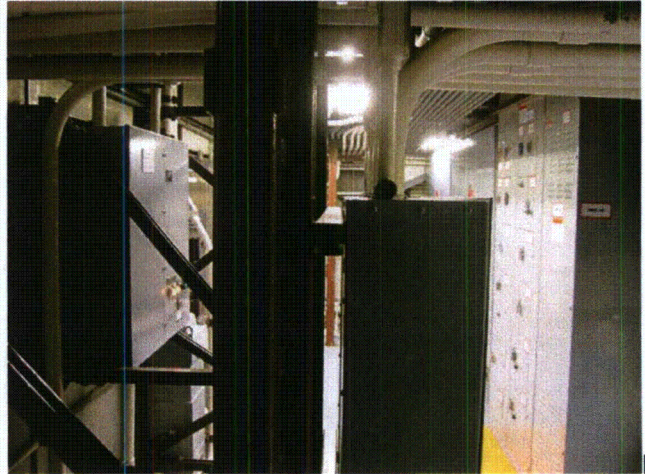
Equipment Class: (14) Distribution Panels

Equipment Description: 125VDC POWER PANEL DC-F

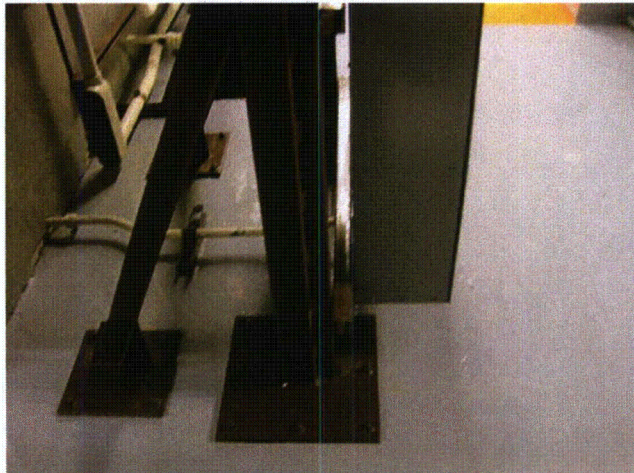
**Photos**



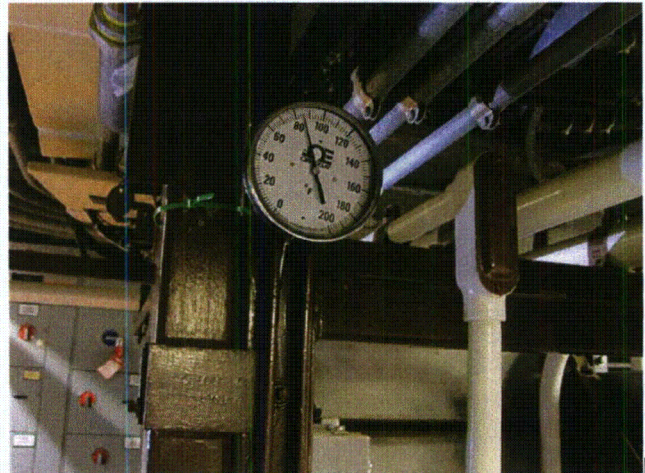
MG\_0895



MG\_0896



MG\_0897



MG\_0904

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DC-F

Equipment Class: (14) Distribution Panels

Equipment Description: 125VDC POWER PANEL DC-F

**SQUG SEWS**

**EBASCO SERVICES INCORPORATED**

Two World Trade Center, New York, N.Y. 10048

**EBASCO**

April 29, 1981

GPU Services Incorporated  
Attention: Mr. Leon Garibian  
100 Interpace Parkway  
Parsippany, NJ 07054

Dear Leon:

Re: OYSTER CREEK NUCLEAR STATION  
FINAL SUBMITTAL OF MASONRY WALL  
EVALUATION CALCULATION BOOKS

I am sending to you, together with this letter, 20 volumes of calculation books and 11 volumes of computer output. This will mark the end of our involvement for the re-evaluation of the Safety-Related Concrete Masonry Walls as required by NRC IE Bulletin 80-11.

Should you have any questions regarding the calculations and sketches, please do not hesitate to call. We will be glad to help.

Very truly yours,

*E Odar*  
E Odar  
Assistant Chief Civil Engineer

CW:d1

cc: K D Chiu  
G Wu

C1302X322CA06 VOL 1, 19810427, REEVALUATION OF CONCRETE MASONRY WALL NRC IE BULLETIN  
80-11 GENERAL

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG-1 BATTERY BANK

Equipment Class: (15) Batteries on Racks

Equipment Description: DIESEL GENERATOR UNIT #1 STARTING BATTERIES

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): DG BLDG, 23.00 ft, 01

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG-1 BATTERY BANK

Equipment Class: (15) Batteries on Racks

Equipment Description: DIESEL GENERATOR UNIT #1 STARTING BATTERIES

**Interaction Effects**

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

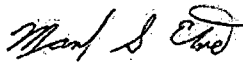
**Other Adverse Conditions**

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

**Comments**

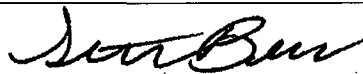
See SQ-OC-M-39-001 Rev 06

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

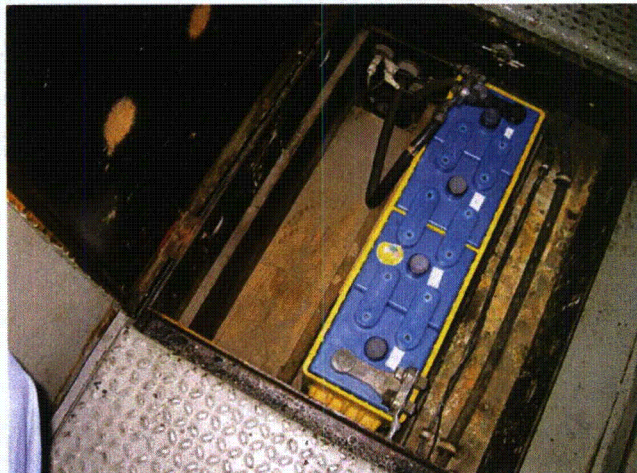
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG-1 BATTERY BANK

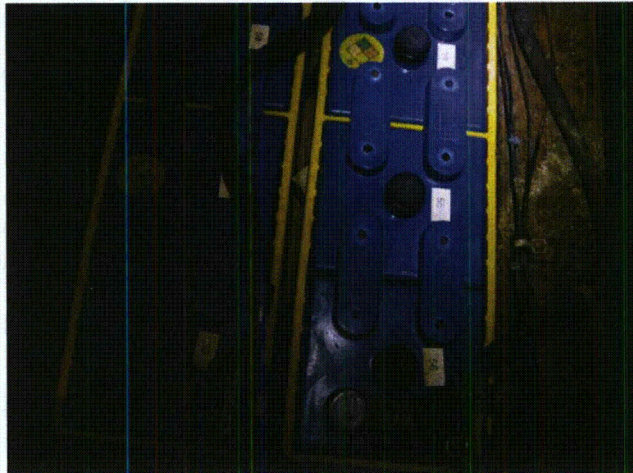
Equipment Class: (15) Batteries on Racks

Equipment Description: DIESEL GENERATOR UNIT #1 STARTING BATTERIES

**Photos**



MG\_1145



MG\_1149

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG-1 BATTERY CHARGER

Equipment Class: (16) Inverters

Equipment Description: DIESEL GENERATOR UNIT #1 BATTERY CHARGER

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): DG BLDG, 23.00 ft, 01

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Yes
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Yes
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Yes
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG-1 BATTERY CHARGER

Equipment Class: (16) Inverters

Equipment Description: DIESEL GENERATOR UNIT #1 BATTERY CHARGER

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

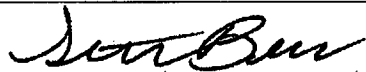
See SQ-OC-M-39-001 Rev 06

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG-1 BATTERY CHARGER

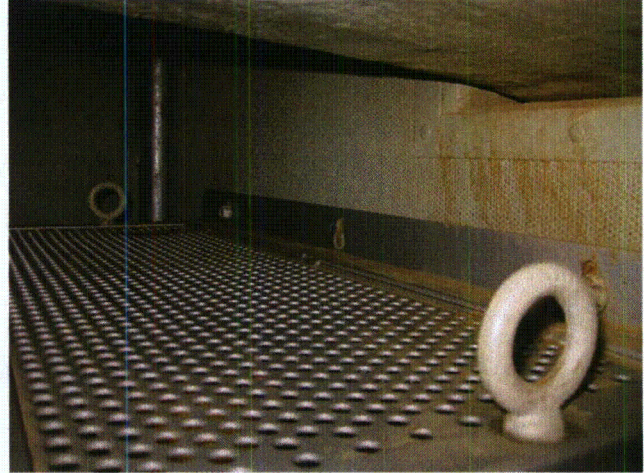
Equipment Class: (16) Inverters

Equipment Description: DIESEL GENERATOR UNIT #1 BATTERY CHARGER

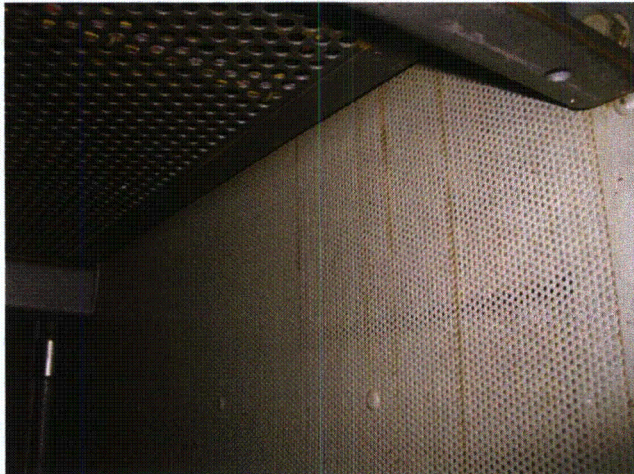
**Photos**



MG\_1184



MG\_1185



MG\_1186

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: DG-1 SWGR

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

Equipment Description: DIESEL GENERATOR #1 UNIT SWITCHGEAR

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): DG BLDG, 23.00 ft, 01

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG-1 SWGR

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

Equipment Description: DIESEL GENERATOR #1 UNIT SWITCHGEAR

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See Seismic Qualification No. SQ-OC-DG-1-SWGR

Evaluated by: Mark S. Etre Mark Etre Date: 10/10/12

Seth Baker Seth Baker 10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DG-1 SWGR

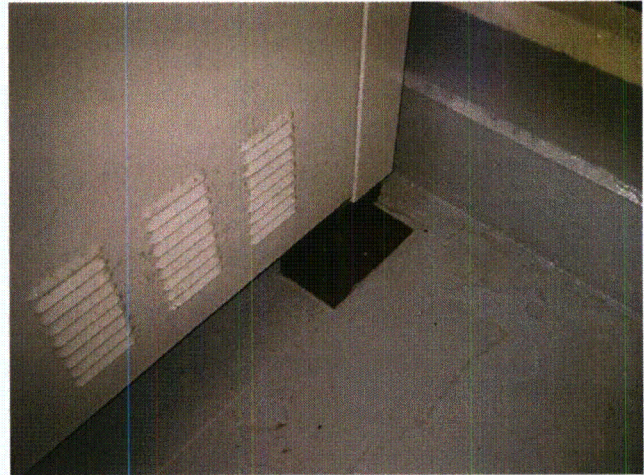
Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: DIESEL GENERATOR #1 UNIT SWITCHGEAR

**Photos**



MG\_1190



MG\_1195



MG\_1196



Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: DPIS-IB0005A1

Equipment Class: (18) Instruments on Racks

Equipment Description: EMERGENCY CONDENSER NE01A HIGH SYSTEM FLOW SWITCH

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 51.00 ft, 06

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DPIS-IB0005A1

Equipment Class: (18) Instruments on Racks

Equipment Description: EMERGENCY CONDENSER NE01A HIGH SYSTEM FLOW SWITCH

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See SQUG SEWS (SQ-OC-RK03) Rev 000

Evaluated by: Mark S. Etre Mark Etre Date: 10/10/12  
Seth Baker Seth Baker 10/10/12

Status:  Y  N  U

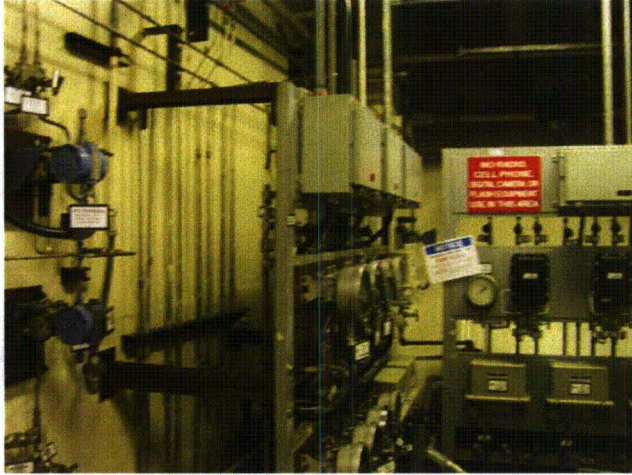
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DPIS-IB0005A1

Equipment Class: (18) Instruments on Racks

Equipment Description: EMERGENCY CONDENSER NE01A HIGH SYSTEM FLOW SWITCH

**Photo**



IMG\_0680

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DPT-6-IA0091B

Equipment Class: (18) Instruments on Racks

Equipment Description: FUEL ZONE LEVEL 'B' WIDE RANGE LEVEL TRANSMITTER

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 51.00 ft, 06

Manufacturer/Model: \_\_\_\_\_

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DPT-6-IA0091B

Equipment Class: (18) Instruments on Racks

Equipment Description: FUEL ZONE LEVEL 'B' WIDE RANGE LEVEL TRANSMITTER

**Interaction Effects**

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

**Other Adverse Conditions**

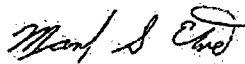
11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

**Comments**

See SQUG SEWS (SQ-OC-RK03) Rev 000

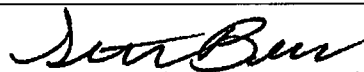
See Seismic Qualification SQ-OC-DPT-6-IA0091B Rev 0

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

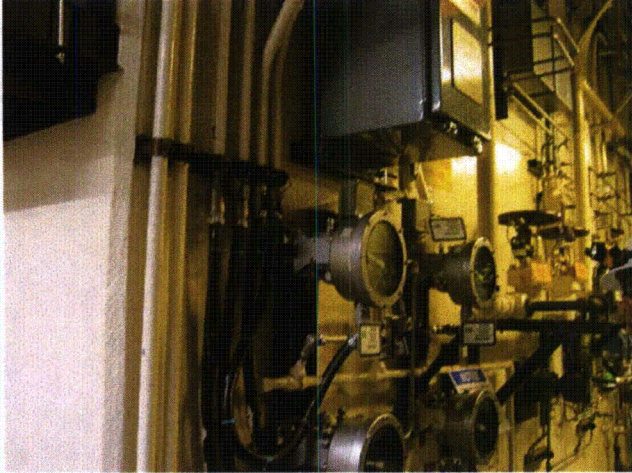
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: DPT-6-IA0091B

Equipment Class: (18) Instruments on Racks

Equipment Description: FUEL ZONE LEVEL 'B' WIDE RANGE LEVEL TRANSMITTER

**Photos**



IMG\_0688

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: ER18A

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

Equipment Description: CORE SPRAY/AUTO DEPRESS'N SYSTEM RELAY LOGIC PANEL

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 12

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: ER18A

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

Equipment Description: CORE SPRAY/AUTO DEPRESS'N SYSTEM RELAY LOGIC PANEL

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See Seismic Qualification SQ-OC-ER-18A Rev 1

Calculation C-1302X-322C-A06 qualifies the Oyster Creek safety-related masonry walls for seismic to address NRC IE Bulletin 80-11.

Evaluated by: Mark Etre Mark Etre Date: 10/10/12  
Seth Baker Seth Baker 10/10/12



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: ER18A

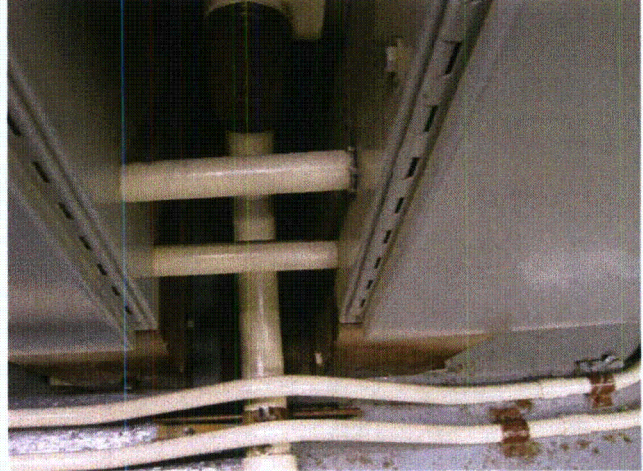
Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: CORE SPRAY/AUTO DEPRESS'N SYSTEM RELAY LOGIC PANEL

**Photos**



MG\_0907



MG\_0908



MG\_0910

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FN-56-4

Equipment Class: (9) Fans

Equipment Description: "A" 480 SWGR RM SUPPLY FAN

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 14

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FN-56-4

Equipment Class: (9) Fans

Equipment Description: "A" 480 SWGR RM SUPPLY FAN

**Interaction Effects**

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

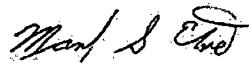
**Other Adverse Conditions**

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

**Comments**

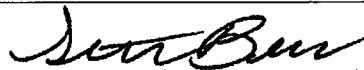
See SQ-OC-FN-56-0004 Rev 00

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

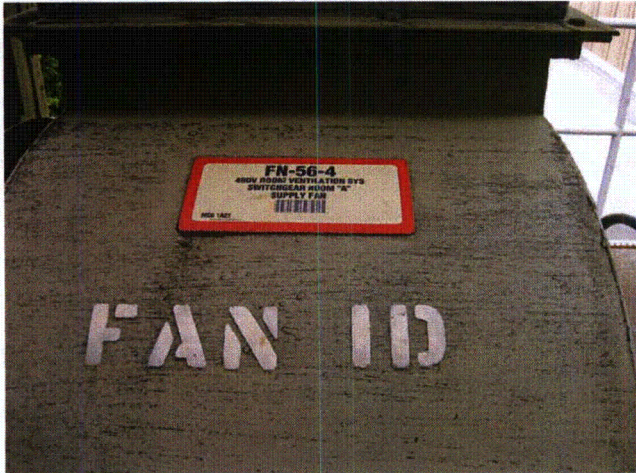
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FN-56-4

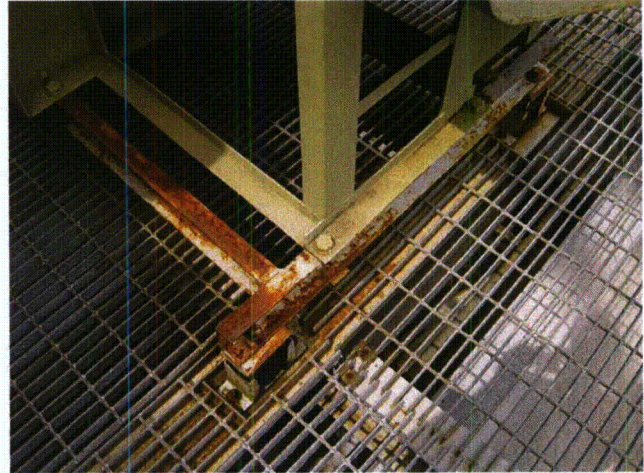
Equipment Class: (9) Fans

Equipment Description: "A" 480 SWGR RM SUPPLY FAN

**Photos**



MG\_0981



MG\_0982

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FN-732-1

Equipment Class: (9) Fans

Equipment Description: USS 1A2-460V TRANSFORMER COOLING FAN

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 16

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FN-732-1

Equipment Class: (9) Fans

Equipment Description: USS 1A2-460V TRANSFORMER COOLING FAN

**Interaction Effects**

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

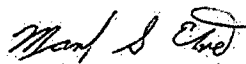
**Other Adverse Conditions**

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

**Comments**

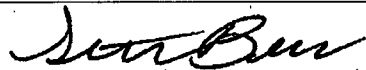
See SQ-OC-ER-732-092 Rev 00

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FN-732-1

Equipment Class: (9) Fans

Equipment Description: USS 1A2-460V TRANSFORMER COOLING FAN

**Photo**



IMG\_1001

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FN-732-2

Equipment Class: (9) Fans

Equipment Description: USS 1A2-460V TRANSFORMER COOLING FAN

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 16

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FN-732-2

Equipment Class: (9) Fans

Equipment Description: USS 1A2-460V TRANSFORMER COOLING FAN

**Interaction Effects**

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

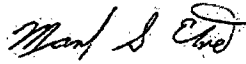
**Other Adverse Conditions**

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

**Comments**

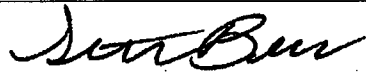
See SQ-OC-ER-732-092 Rev 00

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

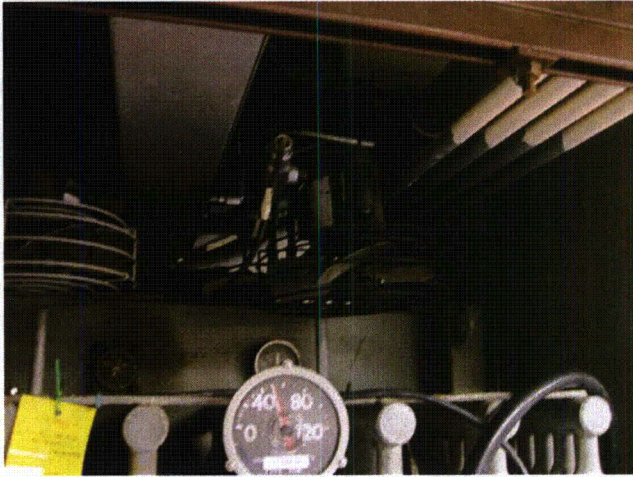
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FN-732-2

Equipment Class: (9) Fans

Equipment Description: USS 1A2-460V TRANSFORMER COOLING FAN

**Photo**



IMG\_1002

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: FN-732-3

Equipment Class: (9) Fans

Equipment Description: USS 1A2-460V TRANSFORMER COOLING FAN

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 16

Manufacturer/Model: \_\_\_\_\_

#### Instructions for Completing Checklist

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

#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FN-732-3

Equipment Class: (9) Fans

Equipment Description: USS 1A2-460V TRANSFORMER COOLING FAN

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See SQ-OC-ER-732-092 Rev 00

Evaluated by: Mark S Etre Mark Etre Date: 10/10/12

Seth Baker Seth Baker 10/10/12

Status:  Y  N  U

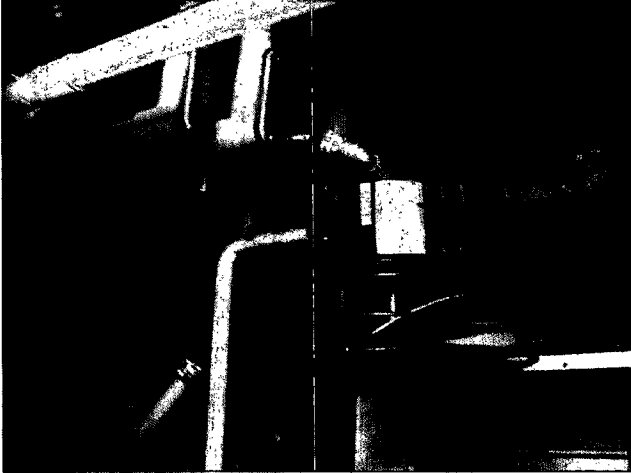
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: FN-732-3

Equipment Class: (9) Fans

Equipment Description: USS 1A2-460V TRANSFORMER COOLING FAN

**Photo**



IMG\_1005

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: H-18-1C

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: AUGMENTED SPENT FUEL POOL HEAT EXCHANGER(NN02-C)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 75.00 ft, 21

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: H-18-1C

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: AUGMENTED SPENT FUEL POOL HEAT EXCHANGER(NN02-C)

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See Augmented Spent Fuel Pool Cooling System Qualification. C-1302-251-5320-009, Dated 6/11/1984.

Evaluated by:

Mark S Etre Mark Etre Date: 10/10/12  
Seth Baker Seth Baker 10/10/12

Status:  Y  N  U

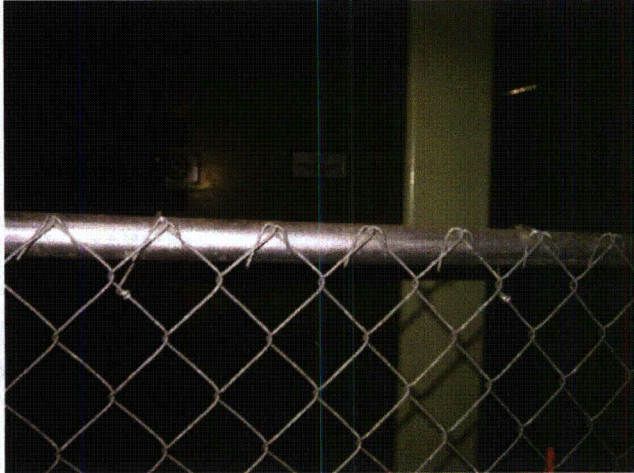
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: H-18-1C

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: AUGMENTED SPENT FUEL POOL HEAT EXCHANGER(NN02-C)

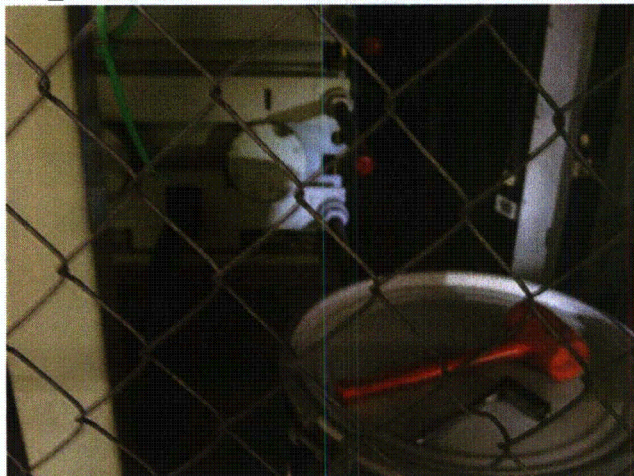
**Photos**



MG\_1246



MG\_1247



MG\_1248



Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: H-21-1A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: CONTAINMENT SPRAY SYS HEAT EXCHANGER 1-1

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 13

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: H-21-1A

Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: CONTAINMENT SPRAY SYS HEAT EXCHANGER 1-1

**Interaction Effects**

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

**Other Adverse Conditions**

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

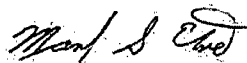
**Comments**

Supports are consistent with Calculation C-1302-241-E310-107 Rev 0

Surface Oxidation on Bolts at the Base Plates. The degraded bolts had previously been identified in 2000 and is being tracked by IR 1403183. Gusset plates were added to the Heat Exchanger base to make up for the deficient bolts. The gusset plate modifications are detailed in Calculation C-1302-241-E310-107 Rev 0  
Movable security barrier adjacent to the Heat Exchanger is chained to the column and chalked.

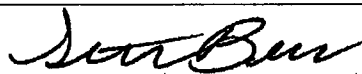
See Seismic Qualification SQ-OC-H-21-001A Rev 0

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: H-21-1A

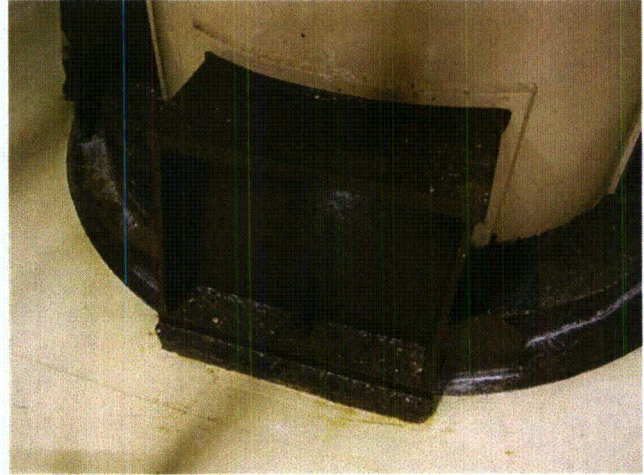
Equipment Class: (21) Tanks and Heat Exchangers

Equipment Description: CONTAINMENT SPRAY SYS HEAT EXCHANGER 1-1

**Photos**



MG\_0704



MG\_0706



MG\_0711



MG\_0720

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: IP-4

Equipment Class: (14) Distribution Panels

Equipment Description: 120VAC INSTRUMENT PANEL 4 - 208/120V,3PH,4W

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 12

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: IP-4

Equipment Class: (14) Distribution Panels

Equipment Description: 120VAC INSTRUMENT PANEL 4 - 208/120V,3PH,4W

**Interaction Effects**

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

**Other Adverse Conditions**

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

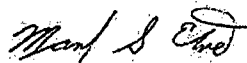
**Comments**

See Seismic Qualification SQ-OC-IP-4, Rev 000

Verification of anchorage by feeling bolts in Unistrut

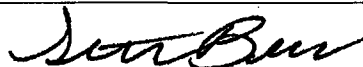
Calculation C-1302X-322C-A06 qualifies the Oyster Creek safety-related masonry walls for seismic to address NRC IE Bulletin 80-11.

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: IP-4

Equipment Class: (14) Distribution Panels

Equipment Description: 120VAC INSTRUMENT PANEL 4 - 208/120V,3PH,4W

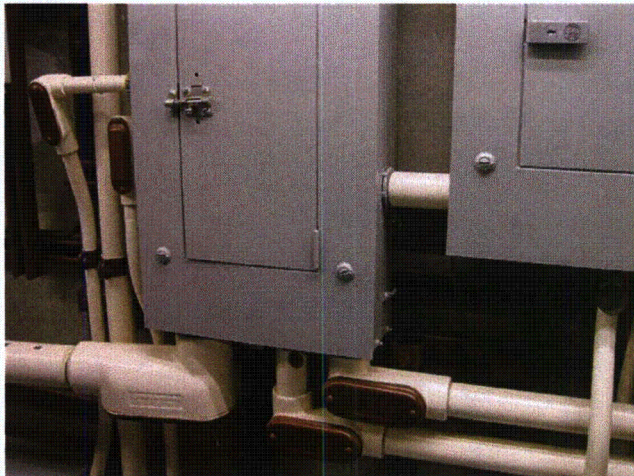
**Photos**



MG\_0883



MG\_0884



MG\_0885

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: IP-4

Equipment Class: (14) Distribution Panels

Equipment Description: 120VAC INSTRUMENT PANEL 4 - 208/120V,3PH,4W

**SQUG SEWS**

**EBASCO SERVICES INCORPORATED**

Two World Trade Center, New York, N.Y. 10048

**EBASCO**

April 29, 1981

GPU Services Incorporated  
Attention: Mr. Leon Garibian  
100 Interpace Parkway  
Parsippany, NJ 07054

Dear Leon:

Re: OYSTER CREEK NUCLEAR STATION  
FINAL SUBMITTAL OF MASONRY WALL  
EVALUATION CALCULATION BOOKS

I am sending to you, together with this letter, 20 volumes of calculation books and 11 volumes of computer output. This will mark the end of our involvement for the re-evaluation of the Safety-Related Concrete Masonry Walls as required by NRC IE Bulletin 80-11.

Should you have any questions regarding the calculations and sketches, please do not hesitate to call. We will be glad to help.

Very truly yours,

*E Odar*  
E Odar  
Assistant Chief Civil Engineer

GW:d1

cc: K D Chiu  
G Wu

C1302X322CA06 VOL 1, 19810427, REEVALUATION OF CONCRETE MASONRY WALL NRC IE BULLETIN  
80-11 GENERAL

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: IT-4A

Equipment Class: (4) Transformers

Equipment Description: TRANSFORMER FROM MCC 1A2-460V TO IP-4

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 12

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: IT-4A

Equipment Class: (4) Transformers

Equipment Description: TRANSFORMER FROM MCC 1A2-460V TO IP-4

**Interaction Effects**

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

**Other Adverse Conditions**

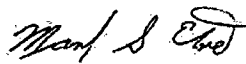
11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

**Comments**

See Seismic Qualification SQ-OC-IT-4A Rev 0

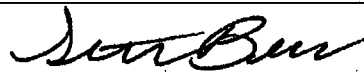
Calculation C-1302X-322C-A06 qualifies the Oyster Creek safety-related masonry walls for seismic to address NRC IE Bulletin 80-11.

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

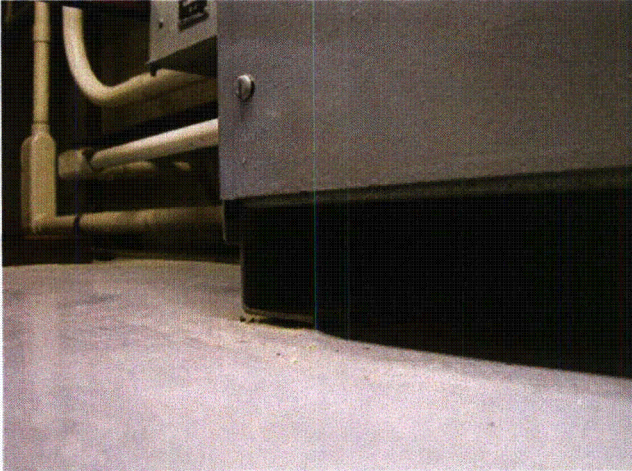
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: IT-4A

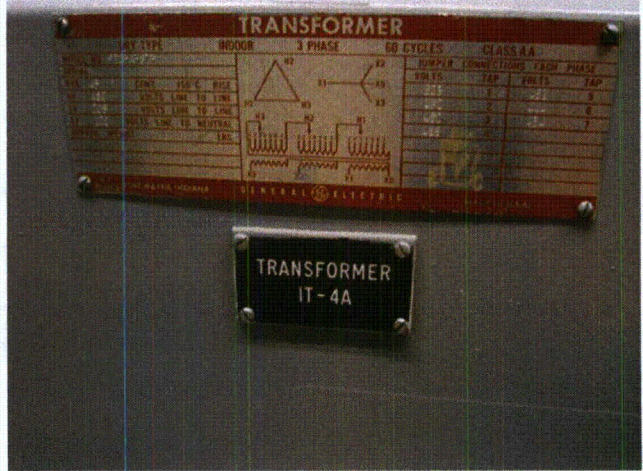
Equipment Class: (4) Transformers

Equipment Description: TRANSFORMER FROM MCC 1A2-460V TO IP-4

**Photos**



MG\_0888



MG\_0891



MG\_0893

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: IT-4A

Equipment Class: (4) Transformers

Equipment Description: TRANSFORMER FROM MCC 1A2-460V TO IP-4

**SQUG SEW**

**EBASCO SERVICES INCORPORATED**

Two World Trade Center, New York, N.Y. 10048

**EBASCO**

April 29, 1981

GPU Services Incorporated  
Attention: Mr. Leon Garibian  
100 Interpace Parkway  
Parsippany, NJ 07054

Dear Leon:

Re: OYSTER CREEK NUCLEAR STATION  
FINAL SUBMITTAL OF MASONRY WALL  
EVALUATION CALCULATION BOOKS

I am sending to you, together with this letter, 20 volumes of calculation books and 11 volumes of computer output. This will mark the end of our involvement for the re-evaluation of the Safety-Related Concrete Masonry Walls as required by NRC IE Bulletin 80-11.

Should you have any questions regarding the calculations and sketches, please do not hesitate to call. We will be glad to help.

Very truly yours,

*E Odar*  
E Odar  
Assistant Chief Civil Engineer

GW:d1

cc: K D Chiu  
G Wu

C1302X322CA06 VOL 1, 19810427, REEVALUATION OF CONCRETE MASONRY WALL NRC IE BULLETIN 80-11 GENERAL

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: LI-18-170

Equipment Class: (18) Instruments on Racks

Equipment Description: SKIMMER SURGE TANK'A'FUEL POOL LEVEL INDICATOR

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 119.00 ft, 20

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LI-18-170

Equipment Class: (18) Instruments on Racks

Equipment Description: SKIMMER SURGE TANK'A'FUEL POOL LEVEL INDICATOR

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

In-Line/Free Standing

See VM-OC-0157 Rev 4

Dresser Part Number 60-1379AS-02I 15

Evaluated by:

*Mark S Etre*

Mark Etre

Date: 10/10/12

*Seth Baker*

Seth Baker

10/10/12

Status:  Y  N  U

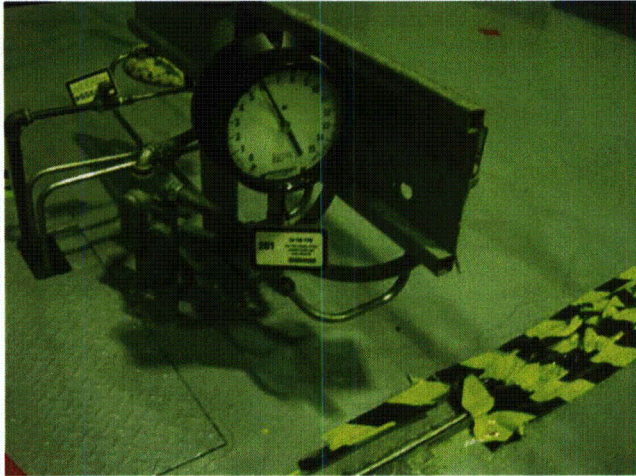
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LI-18-170

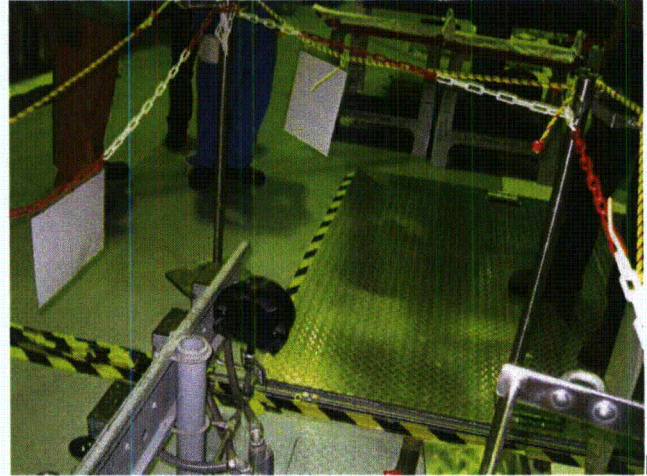
Equipment Class: (18) Instruments on Racks

Equipment Description: SKIMMER SURGE TANK'A'FUEL POOL LEVEL INDICATOR

**Photo**



MG\_1229



MG\_1231

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: LIS-RE0018A

Equipment Class: (18) Instruments on Racks

Equipment Description: REACTOR VESSEL LOW LEVEL INDICATING SWITCH

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 51.00 ft, 15

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LIS-RE0018A

Equipment Class: (18) Instruments on Racks

Equipment Description: REACTOR VESSEL LOW LEVEL INDICATING SWITCH

**Interaction Effects**

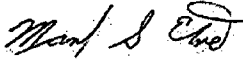

- |   |     |
|---|-----|
| 7. Are soft targets free from impact by nearby equipment or structures?   | Yes |
| 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? | Yes |
| 9. Do attached lines have adequate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

**Other Adverse Conditions**

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

**Comments**

See SQ-OC-RK01 Rev 02

Evaluated by:		Mark Etre	Date:	10/15/12
		Seth Baker		10/15/12



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LIS-RE0018C

Equipment Class: (18) Instruments on Racks

Equipment Description: REACTOR VESSEL LOW LEVEL INDICATING SWITCH

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 51.00 ft, 15

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LIS-RE0018C

Equipment Class: (18) Instruments on Racks

Equipment Description: REACTOR VESSEL LOW LEVEL INDICATING SWITCH

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See SQ-OC-RK01 Rev 02

Evaluated by: Mark S Etre Mark Etre Date: 10/15/12

Seth Baker Seth Baker 10/15/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LS-53B

Equipment Class: (18) Instruments on Racks

Equipment Description: SPENT FUEL POOL LOW WATER LEVEL SWITCH

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 119.00 ft, 20

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LS-53B

Equipment Class: (18) Instruments on Racks

Equipment Description: SPENT FUEL POOL LOW WATER LEVEL SWITCH

**Interaction Effects**

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

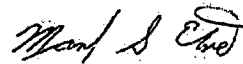
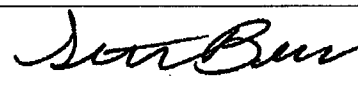
**Other Adverse Conditions**

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

**Comments**

See VM-OC-5740 Rev 1

Mercoid PG-3-P1

Evaluated by:	 Mark Etre	Date:	10/10/12
	 Seth Baker		10/10/12

Status:  Y  N  U

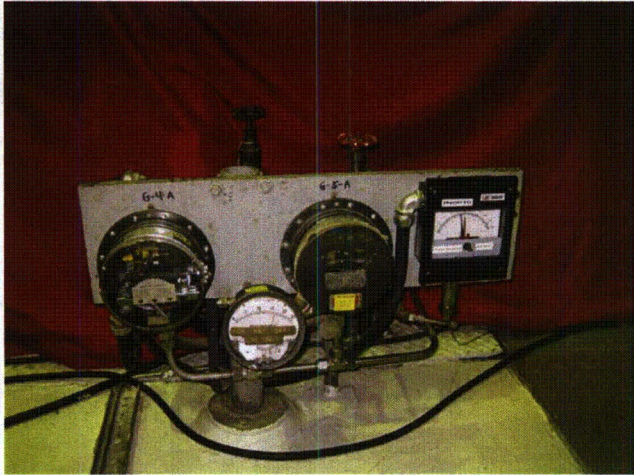
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LS-53B

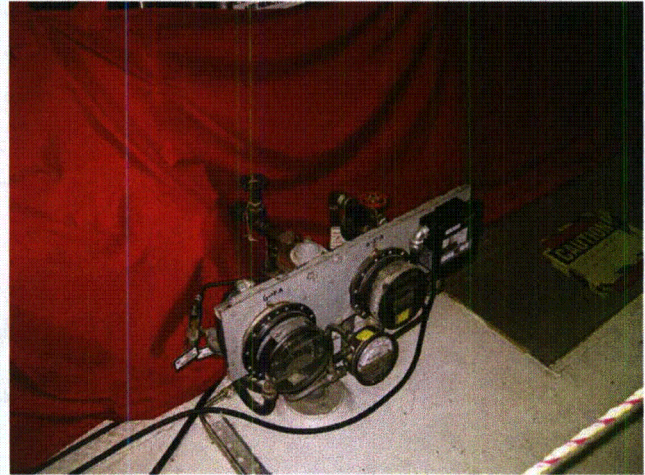
Equipment Class: (18) Instruments on Racks

Equipment Description: SPENT FUEL POOL LOW WATER LEVEL SWITCH

**Photos**



MG\_1237



MG\_1238

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: LS-862-10B

Equipment Class: (0) Other

Equipment Description: LO-LO LEVEL (START NORMAL PUMP) ON TANK T-39-003

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): DG BLDG, 23.00 ft, 01

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LS-862-10B

Equipment Class: (0) Other

Equipment Description: LO-LO LEVEL (START NORMAL PUMP) ON TANK T-39-003

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See SQ-OC-M-39-001 Rev 06

In-Line equipment

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

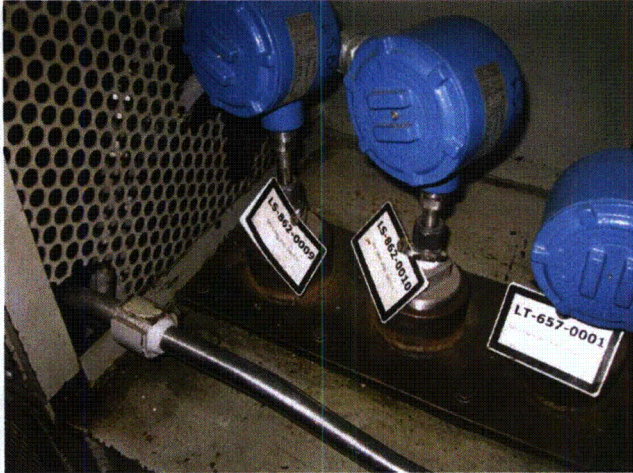
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LS-862-10B

Equipment Class: (0) Other

Equipment Description: LO-LO LEVEL (START NORMAL PUMP) ON TANK T-39-003

**Photo**



IMG\_1141



Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LS-862-10C

Equipment Class: (0) Other

Equipment Description: HI-HI LEVEL(PUMP CUT-OFF) ON TANK T-39-003

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): DG BLDG, 23.00 ft, 01

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

1. Is anchorage configuration verification required (i.e., is the item one of the 50% of SWEL items requiring such verification)? No
  
2. Is the anchorage free of bent, broken, missing or loose hardware? Not Applicable
  
3. Is the anchorage free of corrosion that is more than mild surface oxidation? Not Applicable
  
4. Is the anchorage free of visible cracks in the concrete near the anchors? Not Applicable
  
5. Is the anchorage configuration consistent with plant documentation? (Note: This question only applies if the item is one of the 50% for which an anchorage configuration verification is required.) Not Applicable
  
6. Based on the above anchorage evaluations, is the anchorage free of potentially adverse seismic conditions? Yes

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LS-862-10C

Equipment Class: (0) Other

Equipment Description: HI-HI LEVEL(PUMP CUT-OFF) ON TANK T-39-003

**Interaction Effects**

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

**Other Adverse Conditions**


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

**Comments**

See SQ-OC-M-39-001 Rev 06

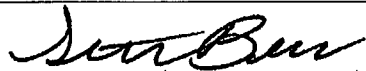
In-Line equipment

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

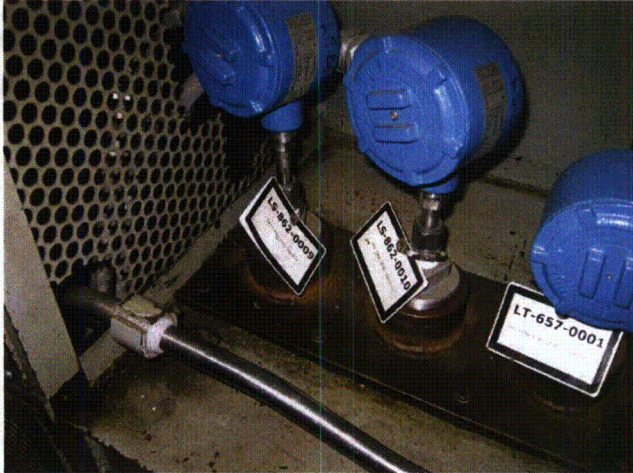
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LS-862-10C

Equipment Class: (0) Other

Equipment Description: HI-HI LEVEL(PUMP CUT-OFF) ON TANK T-39-003

**Photo**



IMG\_1141

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LSP-1A2

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

Equipment Description: LOCAL SHUTDOWN PANEL- USS 1A2 PUMP/BREAKER CONTROL

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 23.00 ft, 16

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LSP-1A2

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

Equipment Description: LOCAL SHUTDOWN PANEL- USS 1A2 PUMP/BREAKER CONTROL

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See SQ-OC-LSP-1A2 Rev 02

Evaluated by: Mark S Etre Mark Etre Date: 10/10/12  
Seth Baker Seth Baker 10/10/12

Status:  Y  N  U

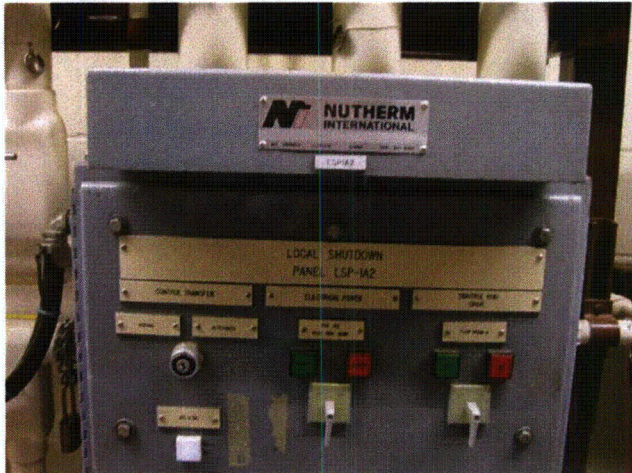
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LSP-1A2

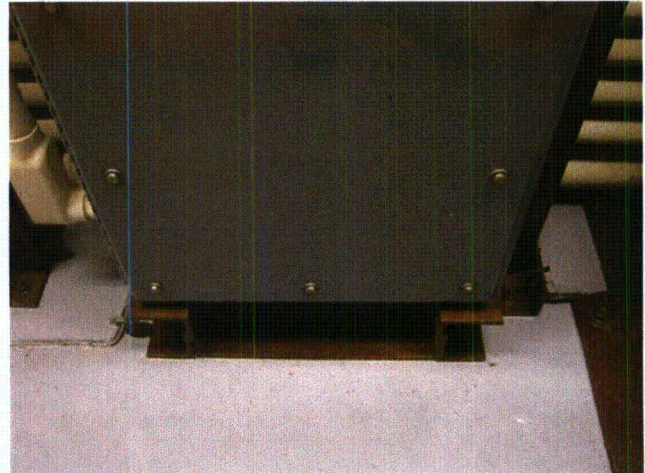
Equipment Class: (20) Instrumentation and Control Panels and Cabinets

Equipment Description: LOCAL SHUTDOWN PANEL- USS 1A2 PUMP/BREAKER CONTROL

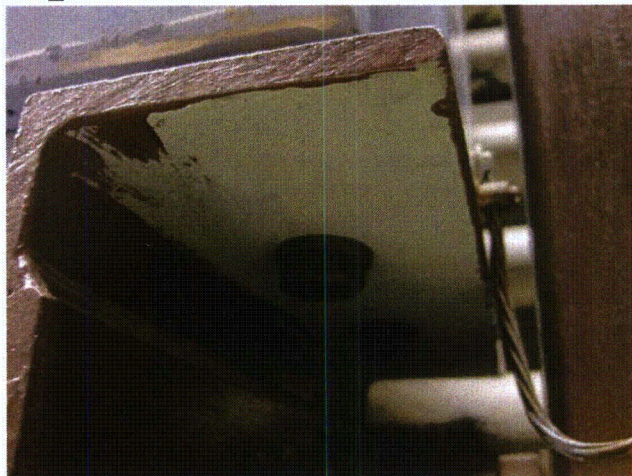
**Photos**



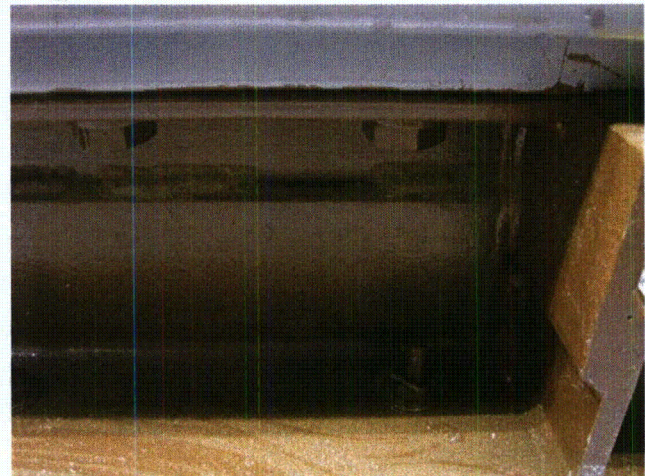
MG\_1009



MG\_1010



MG\_1011



MG\_1015

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: LT-RE0005B

Equipment Class: (18) Instruments on Racks

Equipment Description: REACTOR VESSEL LOW WATER LEVEL REACTOR SCRAM

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 51.00 ft, 17

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: LT-RE0005B

Equipment Class: (18) Instruments on Racks

Equipment Description: REACTOR VESSEL LOW WATER LEVEL REACTOR SCRAM

**Interaction Effects**

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

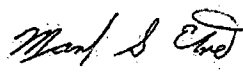
**Other Adverse Conditions**

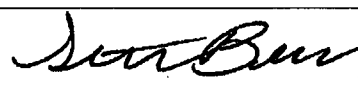
11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? Yes

**Comments**

See SQ-OC-RK02 Rev 00

Horizontal Hairline linear indications (Cracks) on Drywell exterior behind RK02. Acceptable per review of the guidelines of ACI-349 guidelines.

Evaluated by:  Mark Etre Date: 10/10/12

 Seth Baker 10/10/12



Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: M-39-1

Equipment Class: (17) Engine-Generators

Equipment Description: EMERGENCY DIESEL GENERATOR #1

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): DG BLDG, 23.00 ft, 01

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: M-39-1

Equipment Class: (17) Engine-Generators

Equipment Description: EMERGENCY DIESEL GENERATOR #1

**Interaction Effects**

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

**Other Adverse Conditions**

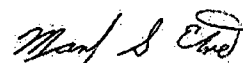
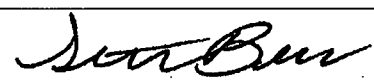
- |  |     |
|--|-----|
| 11. Have you looked for and found no adverse seismic conditions that could adversely affect the safety functions of the equipment? | Yes |
|--|-----|

**Comments**

See SQ-OC-M-39-001 Rev 06

C-1302-157-5320-006, Rev. 0 qualifies the unanchored Diesels.

Base Corrosion is being tracked by the Plant.

Evaluated by:		Mark Etre	Date:	10/10/12
		Seth Baker		10/10/12

Status:  Y  N  U

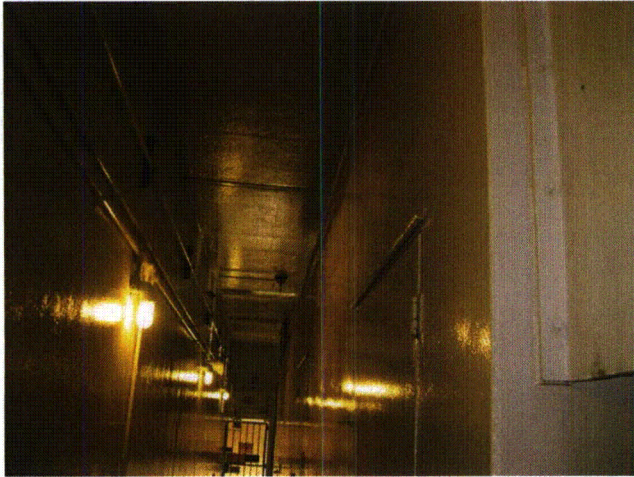
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: M-39-1

Equipment Class: (17) Engine-Generators

Equipment Description: EMERGENCY DIESEL GENERATOR #1

**Photo**



IMG\_1134

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: P-18-1B

Equipment Class: (5) Horizontal Pumps

Equipment Description: SPENT FUEL POOL COOLING PUMP (NN01-B)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 75.00 ft, 21

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: P-18-1B

Equipment Class: (5) Horizontal Pumps

Equipment Description: SPENT FUEL POOL COOLING PUMP (NN01-B)

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See drawing W-65107-R4

Evaluated by:

*Mark S. Etre*

Mark Etre

Date: 10/10/12

*Seth Baker*

Seth Baker

10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: P-18-1B

Equipment Class: (5) Horizontal Pumps

Equipment Description: SPENT FUEL POOL COOLING PUMP (NN01-B)

**Photo**



IMG\_1255

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: P-18-1C

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUGMENTED SPENT FUEL POOL PUMP (NN01-C)

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 75.00 ft, 21

Manufacturer/Model:

**Instructions for Completing Checklist**

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

**Anchorage**

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: P-18-1C

Equipment Class: (5) Horizontal Pumps

Equipment Description: AUGMENTED SPENT FUEL POOL PUMP (NN01-C)

**Interaction Effects**


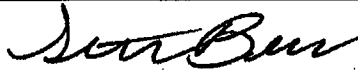
- 7. Are soft targets free from impact by nearby equipment or structures? Yes
  
- 8. Are overhead equipment, distribution systems, ceiling tiles and lighting, and masonry block walls not likely to collapse onto the equipment? Yes
  
- 9. Do attached lines have adequate flexibility to avoid damage? Yes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

**Other Adverse Conditions**

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

**Comments**

See Augmented Spent Fuel Pool Cooling System Qualification. C-1302-251-5320-008, Rev 1

Evaluated by:  Mark Etre Date: 10/10/12  
 Seth Baker 10/10/12



Status:  Y  N  U

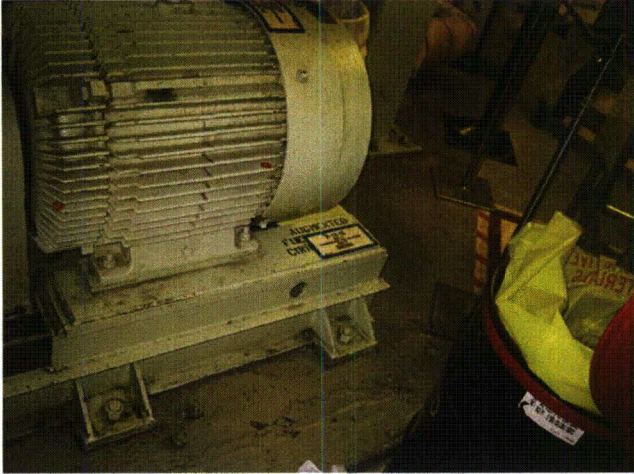
**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: P-18-1C

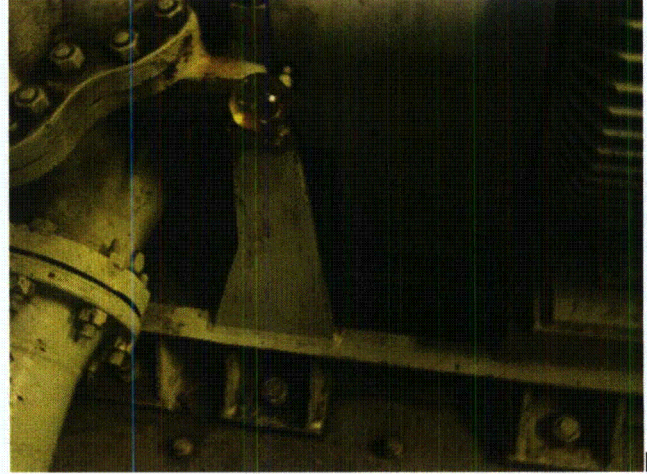
Equipment Class: (5) Horizontal Pumps

Equipment Description: AUGMENTED SPENT FUEL POOL PUMP (NN01-C)

**Photos**



MG\_1290



MG\_1291



MG\_1293

Status:  Y  N  U

### Seismic Walkdown Checklist (SWC)

Equipment ID No.: P-20-1A

Equipment Class: (5) Horizontal Pumps

Equipment Description: CORE SPRAY PUMP NZ01-A

Project: Oyster Creek SWEL

Location (Bldg, Elev, Room/Area): RB, 19.00 ft, 18

Manufacturer/Model:

#### Instructions for Completing Checklist

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

#### Anchorage

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

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: P-20-1A

Equipment Class: (5) Horizontal Pumps

Equipment Description: CORE SPRAY PUMP NZ01-A

**Interaction Effects**

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

**Other Adverse Conditions**

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

**Comments**

See Drawing X-8X21AL86X6-A

See Drawing 4074-5 Sheet 2

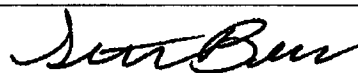
See Seismic Qualification SQ-OC-P-20-001A Rev 1

Evaluated by:



Mark Etre

Date: 10/10/12



Seth Baker

10/10/12

Status:  Y  N  U

**Seismic Walkdown Checklist (SWC)**

Equipment ID No.: P-20-1A

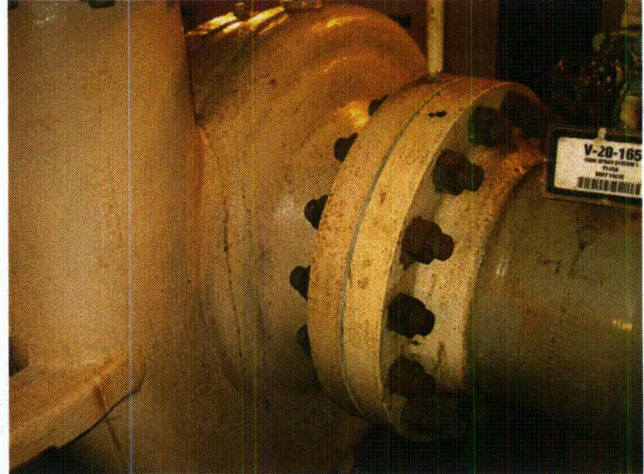
Equipment Class: (5) Horizontal Pumps

Equipment Description: CORE SPRAY PUMP NZ01-A

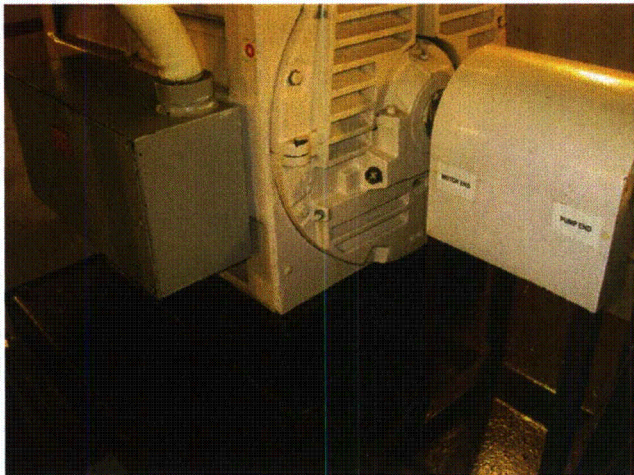
**Photos**



MG\_1021



MG\_1023



MG\_1024