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Procedure Checklist Questions	Response(Yes/NA)
Checklist and/or blanks initiated,signed,dated or filled in NA as appropriate?	Yes
Required attachments included?	Yes
Charts,graphs,datasheets,etc.attached,dated,identified,and marked?	NA
Calibrated test equipment,if used,checked out/in and references to this procedure?	NA
Procedure requirement met?	Yes

Performed By(Printed Name and Signature): MICHAEL WILLIAMSON (MWILLI9)
Date:2021-09-30

Approved By(Printed Name and Signature): MICHAEL HERSHKOWITZ (I38862)
Date:2021-10-25

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2.0 SECTION II - EHU AND INSTRUMENT CABINET INSPECTIONS,
TEMPORARY HEATER INSTALLATION AND OUTSIDE EQUIPMENT
ACTIONS

NOTE

- Attachment steps may be performed in any order..... ☐ ✓
- Items in Attachment 1 Section 2.0 should be performed closer to the
September 30 date and will be scheduled by the On-Line Schedule. ☐ ✓
- PLP-401 'Equipment in Use' Tags are to be installed on temporary heaters to
preclude inadvertent removal. Each tag should state 'AP-301 Compensatory
Measure for Cold Weather. Do Not Remove Without SM Approval' and be
added to the PLP-401 Log at Y:\Operations\OldShared\TEMP_PWR_AP-
401_EM-005_LOG\TempPower.xlsm..... ☐ ✓
- When installing temporary heaters, only one 30 kw or two 18 kw heaters, at
most, may be installed at any one 480V power outlet. ☐ ✓
- Placement of temporary heaters shall comply with AD-EG-ALL-1523,
Temporary Ignition Source Control (including separation distances) **AND**
drawing 7-S-9517, Seasonal HVAC Equipment Installations. ☐ ✓

1. **Perform** the applicable steps below for the following outside
instrument cabinets:..... h
 - a. **Shut** any ventilation louvers..... h
 - b. **Check** the internal heaters/lights operating. {7.1.5} h
Cabinets are located as follows:

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**2.0 SECTION II - EHU AND INSTRUMENT CABINET INSPECTIONS,
TEMPORARY HEATER INSTALLATION AND OUTSIDE EQUIPMENT
ACTIONS (continued)**

Table 1, Instrument Cabinets

Cabinet	Location	Initial	Cabinet	Location	Initial
T1-C15	T-261-AV7	A	T1-C1	T-286-AV27	A
T1-C23	T-261-AV14	A	T1-C4	T-286-AP27	A
T1-C22	T-261-AP19	A	T1-C6	T-286-AP35	A
T1-C24	T-261-AV27	A	T1-C17	T-286-AV40	A
T1-C10	T-261-AP27	A	T1-C2	T-286-AM36	A ① h
T1-C12	T-261-AV30	A	T1-C8	T-286-AK42	A
T1-C26 [Note 2] ✓	T-261-AV40	A	T1-C7-RPS-IV	T-286-AH36Z	A
T1-C19	T-261-AV35	A ②	T1-C21-RPS-III	T-291-AH36Z	A h
T1-C20	T-261-AV40	A	T1-C18	T-286-AA40	A
T1-C13	T-261-AV40	A	T1-C5	T-286-AF27	A
T1-C14	T-261-AP42	A	Y1-C9	NSW PMP A	A
T1-C3	T-261-AK40	A	Y1-C10	CWP A	A ③ h
T1-C16	T-261-AK40	A	Y21-C6	CTMU	N/A ④ D
T1-C11	T-242-AF27	A	Y21-C7-ESF-A	ESW PUMP A	N/A ④ D
T1-C25	T-261-AF19	A	Y21-C8-ESF-B	ESW PUMP B	N/A ④ D
T1-C9	T-261-AF19	A	Y21-C1	ESWSS	A
T1-C28 [Note 1] ✓	T-265-AP9	A	Y1-C3	MD FIRE PMP	A
Diesel Driven Fire Pump 1&4 NNS Inst Cab	ESWSS	A			

Note 1: T1-C28 light fixture is not wired

Note 2: Heater not installed.

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TEMPORARY HEATER INSTALLATION AND OUTSIDE EQUIPMENT
ACTIONS (continued)

2. Perform ORT-1415. {7.1.6} AK

a. **Check** work orders have been initiated for any inoperable heaters and that these work orders have 'AP-301 Component' stated in the designator, SEC WR added, and are Priority Level 2. TKS (5) h

b. **IF** any EUH is anticipated to be inoperable after October 30, **THEN perform** the following: N/A (5) h

(1) **Identify** contingencies for maintaining room temperatures above freezing. Such contingencies may include temporary heaters to be installed or permanent H&V systems to be operated to maintain temperature. N/A

(2) **List** any such EUHs, the contingency plans and any associated work orders in the Comments section. N/A

c. **IF** any permanent plant H&V unit is operated for freeze protection **OR** temperature maintenance, **THEN ensure** that a Caution Tag is placed on the control switch TKS

d. **IF** a temporary heater is installed, **THEN place** a PLP-401 'Equipment in Use' Tag on the power cable per the Note on Page 4..... AK

e. **IF** a temporary heater is installed, **THEN ensure** placement of the heater complies with AD-EG-ALL-1523 (including separation distances) **AND** drawing 7-S-9517, Seasonal HVAC Equipment Installations. AK

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NOTE	
• In the past there has been a need to install a temporary heater(s) in the ASI pump room. This has been evaluated under EC 94965.	<input type="checkbox"/> ✓
• Historical Meteorological Data for the area shows winter temperatures will be below 32°F AND remain there for greater than 12 hours, therefore the heaters required to be installed for this condition will be installed as part of the cold weather preparations.....	<input type="checkbox"/> ✓
• Additional temporary heaters may be installed as conditions warrant per Attachment 2 Step 6.....	<input type="checkbox"/> ✓
• Placement of temporary heaters shall comply with AD-EG-ALL-1523, Temporary Ignition Source Control (including separation distances) AND drawing 7-S-9517, Seasonal HVAC Equipment Installations.	<input type="checkbox"/> ✓

3. **Install** the following Temporary Heaters since outside temperature is expected to go below 32°F **AND** remain there for greater than 12 hours:.....

Turbine Building

- **Install** temporary heater in the Turbine Bldg 255' elev. North near 1CE-1057 (Feed Pump Seal Drain To Condenser Control Valve). See EC 401531. (Affects Generation)
- **Install** temporary heater in the Turbine Bldg 261' elev. North near 1CO-E031 (Portable Breathing Air Compressor). Concern is condensate may freeze and hamper the ability of the compressor to function properly.(BOP) See EC 401531 and EC 411055.
- **Install** temporary heaters in the Turbine Bldg 261' Elev. West near FI-01CE-1920A (Condenser Vacuum Pump A Effluent Flow Ind) **AND** FI-01CE-1920B (Condenser Vacuum Pump B Effluent Flow Ind.). Concern is glass tube for flow Indicator may crack from internal water freezing. See EC 401531. (BOP).....

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TEMPORARY HEATER INSTALLATION AND OUTSIDE EQUIPMENT
ACTIONS (continued)

Turbine Building (continued)

- **Ensure** a Work Order (PMID/RQ 20733-02) is scheduled to **install** a temporary heater in the Turbine Bldg 261' elev. Southeast near 1SFD-E030 (TB, EL 261 (LFDCP-9-1) to prevent spurious alarms by November 20. Installed internal heaters cannot cope with extreme temperatures. (Safety Related) See EC 401531 and AR 148743..... A
- **Install** temporary heater in the Turbine Bldg 261' elev. Southeast near 1SFD-E037 (TB, EL 261 (LFDCP-9-2). Installed internal heaters cannot cope with extreme temperatures. (Safety Related) See EC 411055 A
- **Install** temporary heater in the Turbine Bldg 261' elev. Southeast near 1SFD-E017 (TB-Transformer Yard) LFDCP-11. Installed internal heaters cannot cope with extreme temperatures. (Safety Related) See EC 411055 A
- **Install** temporary heater in the Turbine Bldg 261' elev. Northwest near 1CAB-T1-C12 (Instrument Cabinet). Cabinet contains various pressure switches, indicators, and transmitters for Condensate and Feedwater systems. (Safety Related) See EC 411055 A
- **Install** temporary heater in the Turbine Bldg 261' elev. Northwest near 1CAB-T1-C26 (Instrument Cabinet). Cabinet contains multiple pressure and flow transmitters for the Feedwater system. (Safety Related) See EC 411055..... A
- **Install** temporary heater outside the Turbine Bldg 261' elev. Southeast near LG-01HY-4198 (TB Hydrogen Oily Water Drain Tank Level Indicator). (BOP) See EC 401531 A

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ACTIONS (continued)

NSW Structure

- **Install** temporary heater near 1MP-65 (Cooling Tower Make-Up Flow Line Pressure Test Isol). This is a small pressure test point and vent valve off of the Cooling Tower Make-up level control valve bypass line. (BOP) See EC 411055 S(JP)

ESW Structure

- **Install** temporary heater near 1CAB-Y21-C6 (Instrument Cabinet). Cabinet contains multiple pressure switches and indicators for the CTMU and CMTMU Screen Wash systems. (Safety Related) See EC 411055 S(JP)
- a. **Install** a PLP-401 'Equipment in Use' Tag on the heater power cable per the Note on Page 4. S(JP)
- b. **Ensure** placement of the heater complies with AD-EG-ALL-1523 (including separation distances) **AND** drawing 7-S-9517, Seasonal HVAC Equipment Installations. S(JP)
- c. **List** the location for each temporary heater installed as contingency for cold weather in Table 2, Temporary Heater Locations. h
- 4. **Close** the following dampers in the EDG Unit 2 Corridor, : ✓
 - DG-D9-1 (Isolation Damper Diesel Generator Bldg Unit 2 Corridor) ✓
 - DG-D10-1 (Isolation Damper Diesel Generator Bldg Unit 2 Corridor) ✓
- 5. **Direct** Chemistry to **perform** the following: ✓
 - a. **Ensure** adequacy of enclosures **AND** heaters for outside chemical addition systems. h

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ACTIONS (continued)

- b. **Ensure** adequacy of enclosure **AND** heater for surface water composite sampler at the main dam spillway. h
 - c. **Install** PLP-401 'Equipment in Use' Tags on heater power supplies per the Note on Page 4. h
 6. **Ensure** a Work Order is scheduled to check that the Turbine Building Pre-action Sprinkler System has been drained prior to cold weather (PMID/RQ 40422-01), **AND** drain if required. h
 7. **Ensure** ONE of the following for Warehouse 6 Dry-pipe Sprinkler System: D
 - System is aligned for normal operation and pressurized per OP-149, Section 8.3, Resetting Dry Pipe Sprinkler System in Warehouse #6 D
 - OR
 - System is drained and isolated with equipment protection clearance in place NIA^D
8. **Ensure** the Diesel Fire Pump keep warm system is FUNCTIONAL. The engine coolant heater maintains the coolant temperature at least 120°F. The engine should be warm to the touch in the water jacket areas. DS
9. **Drain** Fuel Oil Storage Tank diked areas to prevent ice buildup. AR
10. **Drain** the Aux Boiler Fuel Oil Tanks in-tank foam injection lines per PMID/RQ 40422-02 (Model WO 1128166). AR
11. After reviewing the Temporary Modification Log, **check** that any temporary plant support equipment or instrumentation is protected from freezing temperatures. D

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ACTIONS (continued)**

Comments: (List any discrepancies noted and work orders initiated)

① WR 20209934

② WR 20209935

③ WR 20210059, temporary heater installed 9/28/21

④ EC 416918 in progress, expected to be restored by OCT 30TH 2021.

Sections of Attachment performed:

Section I Section II

(circle Section performed)

- ⑤ Intake Structure heaters without power due to EC 416918 in progress. Power restoration scheduled for 10/4/21 per WO 20454424-26. Heaters to be tested with October ORT-1415. Inoperable heaters being addressed per winter readiness assessment.

Attachment Performed by:

<u>Initial</u>	<u>Name (Print)</u>	<u>Initial</u>	<u>Name (Print)</u>
K	Kevin Ruez	A	S. McDade
D	D. BURNETT	B	Bryan Baker
TKS	Mark Speight	A	Aaron Tubb
L	Lewis	S	Scotty Williamson
		(JP)	Jessie Pike

Completed By:

 Lewis

9/30/21

Date

Reviewed By:

 Tim English

9/30/21

Date

Reviewed By:

Online Manager Print / Sign

Date

After receiving the final review signature, this Attachment becomes a QA Record.

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