1. Title: Pressure Test Heating Circuits Day Out

2. Purpose (include purpose of SOP): Requests to reflect an acceptable HSL value for pressure test heating circuits.

3. Attach procedure to this form written according to the following format:
   A. Limitations and Precautions
   1. Nuclear Safety
   2. Environmental Safety
   3. Personnel Safety
   4. Equipment Protection
   B. Prerequisites
   C. Procedure

   Attached

4. Generated by: Signature Date: 4/9/79

5. Duration of SOP: Shall be no longer than 90 days from the effective date of the SOP or (a) or (b) below, whichever is first.
   (a) SOP will be cancelled by incorporation into existing or new permanent procedure submitted by: Signature
   (b) SOP is not valid after: (Fill in circumstances which will result in SOP being cancelled)

6. (a) Is the procedure Nuclear Safety Related?
   If "yes", complete Nuclear Safety Evaluation. (Side 2 of this Form) 
   Yes ☐ No ☐

   (b) Does the procedure affect Environmental Protection?
   If "yes", complete Environmental Evaluation. (Side 2 of this Form) 
   Yes ☐ No ☐

   (c) Does the procedure affect radiation exposure to personnel?
   Yes ☐ No ☐

   NOTE: If all answers are "no", the change may be approved by the Shift Supervisor. If any questions are answered "yes", the change must be approved by the Unit Superintendent.

7. Review and Approval
   Approved - Shift Supervisor: Signature Date: 4/9/79
   Reviewed - List members of POR C conducted: Signature Date: 4/9/79
   Approved - Unit Superintendent: Signature Date: 4/9/79

8. SOP is Cancelled
   Shift Supervisor/Shift Foreman: Signature Date: 132 116
Title: Pressurizer Heater Cable dry out

Purpose: To Attempt To dry out the Pressurizer Heater Cables To eliminate the Grounded Condition on certain Heater Group

Attach procedure to this form written according to the following format.

A. Limitations and Precautions
   1. Nuclear Safety
   2. Environmental Safety
   3. Personnel Safety
   4. Equipment Protection

B. Prerequisites

C. Procedure

4. Generated by: Date: 4/7/79

Expiration of SOP Shall be no longer than 90 days from the effective date of the SOP or (a) or (b) below - whichever occurs first.

(a) SOP will be cancelled by incorporation into existing or new permanent procedure submitted by

(b) SOP is not valid after: (fill in circumstances which will result in SOP being cancelled)

6. (a) Is the procedure Nuclear Safety Related?
   If "yes," complete Nuclear Safety Evaluation. (Side 2 of this Form) Yes ☐ No ☐

(b) Does the procedure affect Environmental Protection?
   If "yes," complete Environmental Evaluation. (Side 2 of this Form) Yes ☐ No ☐

(c) Does the procedure affect radiation exposure to personnel? Yes ☐ No ☐

NOTE: If all answers are "no," the change may be approved by the Shift Supervisor. If any questions are answered "yes," the change must be approved by the Unit Superintendent.

7. Review and Approval
   Approved - Shift Supervisor 4/8/79
   Reviewed - List members of PORE contacted 4/8/79
   Approved - Unit Superintendent 4/8/79

8. SOP is Cancelled
   Date: 4/8/79

9. [Signature] Shift Supervisor/Shift Foreman
AP-1001  
Three Mile Island Nuclear Station

Figure 1001-8  
Nuclear Safety/Environmental Impact Evaluation

SOP No. 

1. Title 

2. Nuclear Safety Evaluation

Does this SOP:

* (a) increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety?  yes  no

* (b) create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report?  yes  no

* (c) reduce the margin of safety as defined in the basis for any technical specification?  yes  no

Details of Evaluation  (Explain why answers to above questions are "no". Attach additional pages if required.)

Evaluation By  ________________ Date  ________________

3. Environmental Impact Evaluation

Does this SOP:

(a) possibly involve a significant environmental impact?  yes  no

* (b) have a significant adverse effect on the environment?  yes  no

* (c) involve a significant environmental matter or question not previously reviewed and evaluated by the N.R.C.?  yes  no

Details of Evaluation

Evaluation By  ________________ Date  ________________

* NOTE: If these questions are "yes", the change must receive N.R.C. approval.

4. Review  (PORC review of evaluation is required only when requested by the Station Superintendent/Unit Superintendent. If this review is made, the PORC must consist of two off-site members.)

1.  

2. 

Off-Site Member  

PORC Chairman Signature  

Date  132 118

5. Approval

Station Superintendent/Unit Superintendent  

Date  


A Precautions & Limitations

1. Nuclear Safety
2. Environmental Safety
3. Personal Safety

4. Follow AP 1004. All tags on equipment for人民医院 or Electromagnetic Equipment

Equipment Protected
5. Follow the Lead of AP 1002

B Preparatory Equipment Required

1. Welding Machine

C Procedures

This procedure is general for drying out the pressure pipe, cable. The following steps should be followed for each circuit group to be dried out:

- Remove the conductors from the circuit breaker
- Tie φC and φB together
- Connect φA and the φC, φB legs to the welding machine
- Turn the welding machine on and monitor the output current to ensure no more than 20 Amp is placed on the system.
5. After 30 minutes turn the welding machine off and measure the leads. Record the results.

6. If the reading is less than 200,000Ω on any phase, continue to dry the cable.

7. Repeat steps 4, 5, and 6 a maximum of 5 times until a minimum of 200,000Ω is reached. If 200,000Ω cannot be achieved the fifth time decline the data invalid.

8. When the 200,000Ω reading is reached, reconnect the closing the isolation transformer as shown on the attached sketch and B5R ECM 347500.

9. Record current readings on the low side of the transformer after energizing heater.

10. If the ground resistance reading is 1.0Ω or greater, install 80 amp Amphenol magnetic breaker without isolation transformer.

11. Following re-energization, take voltage to ground readings to determine that it is grounded.
Voltage readings indicate that only one phase lead has a direct path to ground.
Voltage reading indicates that only one phase lead has a connected path to ground.
Typical Original Configuration

Typical Modification to Add

Dist. Panel

Isolation Transformers Pigtails Splices

L1

L2

L3

Transformer

3-4 Int

480V 3phi 50 60 Hz

Isolation Transformer

Isolation Transformer

Isolation Transformer

Typical Original Configuration