

AP 1001

Three Mile Island Nuclear Station

SIDE 1

Figure 1001-8

Special Operating Procedure

SOP No. 2-80
(From SOP Log Index)

NOTE: Instructions and guidelines in AP 1001 must be followed when completing this form.

Rev. 1

Unit No. 2

Date _____

1. Title Reassign Heating Cable Day out

2. Purpose (include purpose of SOP) Reassign to Reflector and Acceptable MISC VALUE to OPERATOR PRESSION HEATING

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

Attached

B. Prerequisites

C. Procedure

4. Generated by W. White; A. Smedley 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 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

W. White 4/9/79 Approved - Shift Supervisor A. Smedley 4-9-79 Date

B. W. Dyer 4/9/79 Approved - List members of PORC contacted, R. W. Bernal 4/9/79 Date

A. A. Ax 4/9/79 N. J. Valby 4/9/79 J. D. Pator 4/9/79 Date

J. A. B... 4/9/79 T. P. Warren 4/9/79 Date

Approved - Unit Superintendent J. T. Schlegel 4/9/79 Date

8. SOP is Cancelled

Shift Supervisor/Shift Foreman Date 132 116

AP 1001
Form 1001-8

Three Mile Island Nuclear Station
Special Operating Procedure

SIDE 1
SOP No. 2-80
(From SOP Log Index)

NOTE: Instructions and guidelines in AP 1001 must be followed when completing this form.

6Pg
(Broughton
Group)

Unit No. 2
Date _____

1. Title Pressurizer Heater Cable dry out

2. Purpose (include purpose of SOP) To Attempt To dry out The Pressurizer Heater Cables To eliminate The Grounded Condition on certain groups That That exists on certain Heater Groups

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

4. Generated by Paul J. Shager Date 4/8/79

Duration of SOP - Shall be no longer than 90 days from the effective date of the SOP or (a) or (b) below - whichever occur 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 [Signature] 4/8/79 Date 4/8/79

Reviewed - List members of PORC contacted

<u>[Signature]</u>	<u>4/8/79</u>	Date
<u>[Signature]</u>	<u>4/8/79</u>	Date
<u>[Signature]</u>	<u>4/8/79</u>	Date
<u>[Signature]</u>	<u>4/8/79</u>	Date

Approved - Unit Superintendent [Signature] 4/8/79 Date 4/8/79

8. SOP is Cancelled

Shift Supervisor/Shift Foreman _____ Date 432 117

"EVALUATION"

AP-1001

Three Mile Island Nuclear Station

SIDE 2

Figure 1001-B

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 affect 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 contain two off-site members.)

1. _____

2. _____

Off-Site Members

PORC Chairman Signature

132 118

Date

5. Approval

Station Superintendent/Unit Superintendent

Date

A. PRECAUTIONS & LIMITATIONS

- (1) NUCLEAR SAFETY
- (2) ENVIRONMENTAL SAFETY
- (3) PERSONNEL SAFETY

(a) FOLLOW AP 1002, ALL TAGGING PROCEDURES FOR TAGGING OF ELECTRICAL EQUIPMENT

(1) EQUIPMENT PROTECTION

(a) FOLLOW THE RULES OF AP 1002

B. Prerequisite/Equipment Required

1. Welding Machine

C. Procedure

This procedure is generic for drying out the pressure in heater cables. The following steps should be followed for each heater group to be dried out.

~~Remove the cables from the circuit breaker~~

1. Remove the conductors from the circuit breaker
2. Tie ϕC and ϕB together
3. Connect ϕA and the $\phi C, \phi B$ legs to the welding machine
4. Turn the welding machine on and monitor the output current

to INSURE NO MORE THAN 20 AMPS IS
PULSED ON THE SYSTEM

① 5. AFTER 30 MINUTES turn the winding machine OFF AND MEASURE the LEAKS.
RECORD THE RESULTS

(6) IF THE READINGS ARE LESS THAN 200,000 Ω ON ANY PHASE CONTINUE TO DRY THE CABLES

(7) REPEAT STEPS 4, 5 AND 6 A MAXIMUM OF 5 TIMES UNTIL A MINIMUM OF 200,000 Ω IS REACHED, IF 200,000 Ω CAN NOT BE ACHIEVED THE FIFTH TIME DECLINE THE LEAKS IMMEDIATELY

(8) WHEN THE 200,000 Ω READING IS REACHED RECONNECT THE CABLES VIA THE ISOLATION TRANSFORMER AS SHOWN ON THE ATTACHED SKETCH AND BSJR ECM 3475004

(9) RECORD CURRENT DRAWING ON THE LOW SIDE OF THE TRANSFORMER AFTER ENERGIZING HEATER

(10) IF THE GROUND RESISTANCE READINGS ARE 1.0 $m\Omega$ OR GREATER, INSTALL 80 AMP THERMAL MAGNET BREAKER WITH OUT ISOLATION TRANSFORMER

132 120

(11) FOLLOWING RE-ENERGIZATION, TAKE VOLTAGE TO GROUND READINGS TO DETERMINE PHASE ϕ TO GROUND

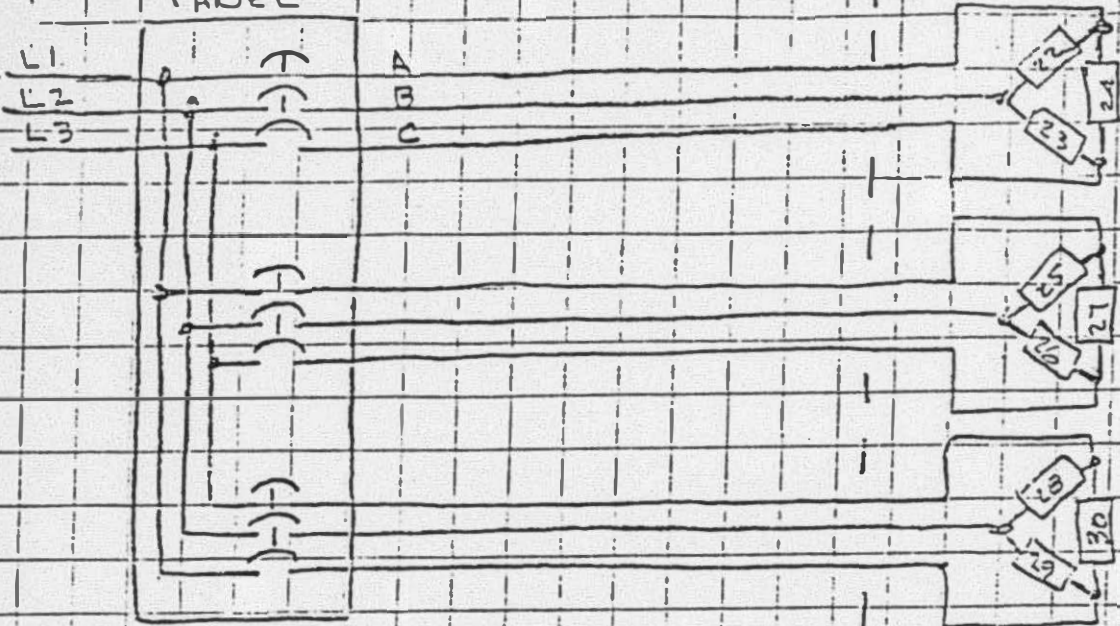
VOLTAGE READING INDICATED ~~THE~~ ~~ONLY~~ ~~ONE~~
THAT ONLY ONE
PHASE LEAD HAS A LEAKAGE PATH TO GROUND

VOLTAJE READING INDICATED ~~FOR~~ ^{THAT} ONLY ONE
PHASE LEAD ~~LEAD~~ ^{LEADS} A LEAKAGE PATH TO GROUND

DIST. PANEL

GPOSC
4/6/79

INSIDE PRESSURIZER

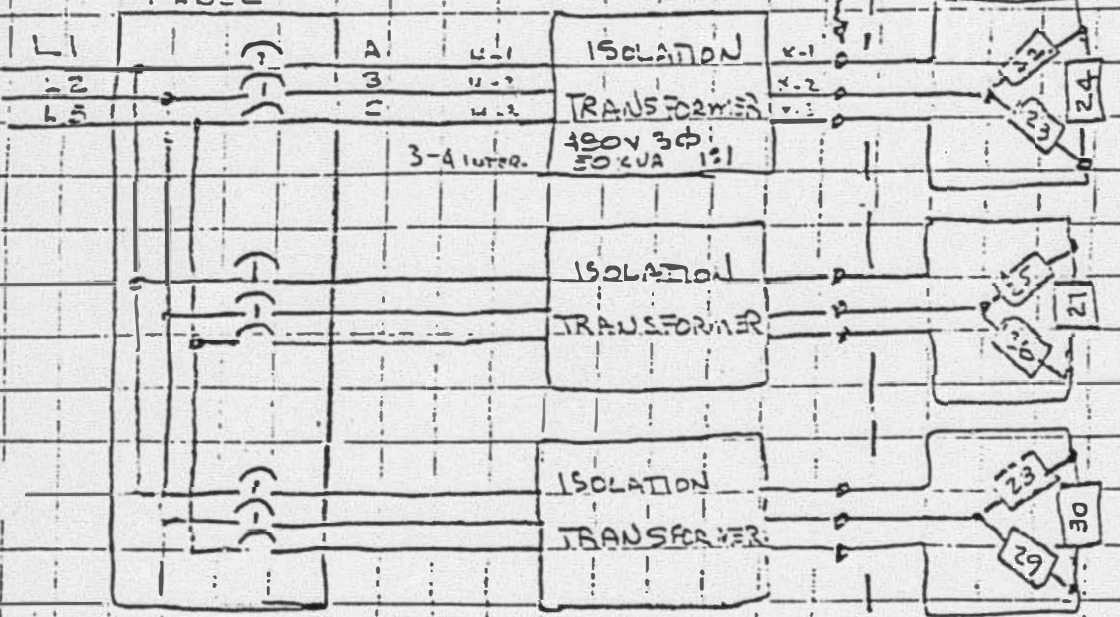


TYPICAL ORIGINAL CONFIGURATION

Doc 2-80

TYPICAL MODIFICATION TO ADD

DIST. ISOLATION TRANSFORMERS PIG-TAIL SPLICES UP



1132 823