Sheet 2

AP 1001 Rev 8
re 1001-8

Three Mile Island Nuclear Station
Special Operating Procedure

SOP No. [illegible] (From SOP Log Index)

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

Unit No. [illegible]

Date _____

1. Title Ex-Core Det. Noise Analysis & Wide...

2. Purpose (Include purpose of SOP) Perform rout. & [illegible] Analysis of Uncompensated Ex-Core Ion Chambers To Assure Proper Detector Core Compensation.

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

Generated by Wm. Gamble Date 9-6-79

5. Duration of SOP - Shall be no longer than 30 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 N/A ☐
   (Fill in circumstance 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] 9/6/79 Date

   Reviewed – List members of PORC contacted [signature] 9/6/79 Date

   [signature] 9/6/79 Date

   [signature] Date

   Approved – Unit Superintendent [signature] Date

8. SOP is Cancelled

   _____ Shift Supervisor/Shift Foreman _____ Date 130 308

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e. Turn on the power supply feeding the detector.
f. Record the picoammeter readings.
g. Measure the noise voltage and take spectrum analysis with the dual chamber analyzer.
h. Turn off the power supply feeding the detector.
i. Disconnect the picoammeter from the ~~detector~~ connectors and restore the connectors on the connection box.
j. Turn on the power supply feeding the detector
k. Perform steps a through i for each detector.
K. Verify Circuit Is Restored Properly.

3. REFERENCES

a. B+W #54, "Procedure for Out of Core NI Measurement in the NI/RPS Cabinets

4. ATTACHMENTS

a. Reference a

5. LIMITS AND PRECAUTIONS

a. Notify the Shift Supervisor prior to performing this procedure, and obtain his approval.

6. PROCEDURE

a. For NI-1,2,3,4,5,6,7,or 8, as desired, verify the output of the high voltage power supply for the detector by observing the meter on the front of the module, ~~or measuring the output voltage~~. (Output of jack is divided by 1000).

b Turn off the power supply feeding the selected detector.

c. Remove the connector from the connector box (at the back of the linear amplifier) and connect it to a picoammeter. CAUTION: H.V. present on the detector. Current flow through the picoammeter should be to ground (cabinet frame). To measure the top and bottom chambers, connect both connectors to a picoammeter.

d. Connect a noise amplifier to the picoammeter for noise analysis.

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