

AP 1001

Three Mile Island Nuclear Station  
Special Operating Procedure

SIDE 1

Figure 1001-8

SOP No. 3-36  
(From SOP Log Index)

*NRC*

Unit No. 2

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

REVISION 1

Date \_\_\_\_\_

1. Title Incore Thermocouple Noise Analysis Rev. 1

2. Purpose (include purpose of SOP) Analyze noise on TC pairs without interference from open-circuit interrogation pulses.

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 R. BENSEL Date \_\_\_\_\_

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

Approved - Shift Supervisor [Signature] AA/5

Reviewed - List members of POBC contacted RW Benseel 4-4-79 Date

JF Pauls 4/4/79 Date

TACORNO 4/4/79 Date

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

8. SOP is Cancelled

\_\_\_\_\_  
Shift Supervisor/Shift Foreman

130 230  
Date

originator Zigler

AP 1001

Three Mile Island Nuclear Station  
Special Operating Procedure

SIDE 1

Form 1001-8

SOP No. 2-36  
(From SOP Log Index)

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

Unit No. 2

Date \_\_\_\_\_

1. Title In-Core Thermocouple Noise Analysis

2. Purpose (include purpose of SOP)  
Investigate the use of in-core thermocouple noise analysis to better understand the status of the core.

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* CONTROLLED COPY  
CONTROL ROOM  
FILE COPY

Generated by J. Paulice Date 4-3-79

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

Approved - Shift Supervisor B. Hechen Date 4-3-79

Reviewed - List members of PORC contacted James L. Paulice Date 4/3/79

J.E. Muck 4/3/79 RWB Bensch (Vice Chairman) 4/3/79

Eric 4/3/79 Eric 4-3-79

Approved - Unit Superintendent Eric Date 4/3/79

8. SOP is Cancelled

Shift Supervisor/Shift Foreman

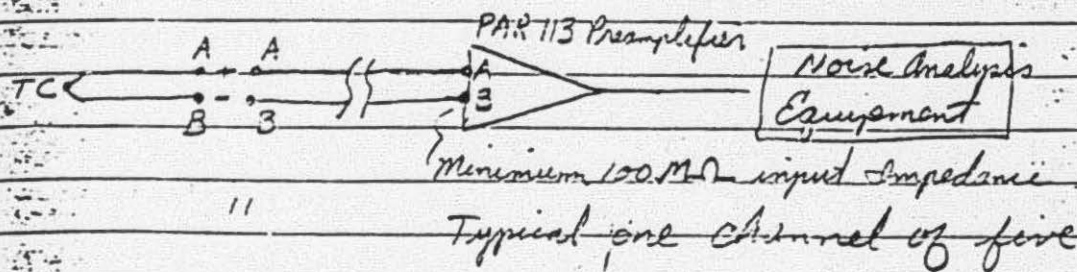
Date 4-30-79

## In-Core Thermocouple Noise Analysis 4/3/79

Objective: Investigate the use of in-core thermocouple noise analysis to better understand the status of the core.

## Procedure:

1. Hook up noise analysis equipment to thermocouple instrument cabinet.
- \* 2. Determine loading effects of noise analysis equipment on thermocouples listed in step 2, by scanning with plant computer before and after signal hookup.
3. Perform noise analysis on thermocouples  
 - IM-4E-TE, IM-3F-TE, IM-9E-TE, IM-10D-TE,  
 and IM-11E-TE.
4. Disconnect noise analysis equipment



\* Test will be discontinued if loading is observed. 23E

Addendum to Thermocouple Noise Analysis SOP 4/4/79  
Procedure step 5. 236

Objective: Analyze noise on TC pairs without interference from "open-circuit interrogation pulse"

- Procedure:
1. Perform computer scan of TC's to be used and so get initial reading.
  2. Disconnect a pair of TC's from terminal block in TC cabinet.
  3. Perform noise analysis on TC's as disconnected from computer interrogation pulse for 30 minutes.
  4. Reconnect TCs to terminals in cabinet.
  5. Perform computer scan of TC's included and so establish proper reconnection.

disconnect these wires for duration of test - - - to idlent computer

