THREE MILE ISLAND NUCLEAR STATION

STATION ADMINISTRATIVE PROCEDURE 1012

SHIFT RELIEF AND LOG ENTRIES

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Unit 1 Staff Recommends Approval

Approval NA Date —

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Unit 2 Staff Recommends Approval

Approval NA Date —

Cognizant Dept. Head

Unit 1 PORC Recommends Approval

C E Eastman Date 10/21/77

√ Chairman of PORC

PORC comments of — (date) included —

By — Date —

Unit 2 PORC Recommends Approval

J. J. Kelleher Date 10/18/77

√ Chairman of PORC

PORC comments of — (date) included —

By — Date —

203 101

Approval J. J. Toole Date 11/4/77

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TMI-55-A 11-74

THREE MILE ISLAND NUCLEAR STATION

ADMINISTRATIVE PROCEDURE #1012

SHIFT RELIEF AND LOG ENTRIES

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1.0 GENERAL

1.1 Purpose

This procedure establishes the requirements for shift relief and for recording station operating activities in logs or other controlled documents on a shift basis.

1.2 Scope

This procedure outlines the responsibilities of the on-duty and the on-coming shift personnel during shift relief. It also describes the various shift records and logs involved and the instructions required to maintain these records to conform to Technical Specifications and to assure the adherence to the requirements of FSAR.

1.3 References

a. Metropolitan Edison Technical Specification Section 6.5.

b. Appendix A, N.R.C. Safety Guide 33, Section A.

c. F.S.A.R. Volume 4 - 12 - 10 (Unit 1), 11, 12, 13 (Unit 2)

d. Hourly Log (Form 3042379)

e. Control Room Log

f. Shift Foreman Log

g. Radio Log - Form OD:4-ME

h. Met-Ed Co.'s Operating Instructions & Procedures applying to the use of the Mobile Radio System.

2.0 RESPONSIBILITIES

2.1 The Station/Unit Superintendent shall be responsible for the implementation of the recording of all data relative to the testing and operational status of the TMI Nuclear Station.

2.2 The Supervisor of Operations shall be responsible for the review, approval and storage of the logs and records. The supervisor of Operations (or his designee) shall review the

Control Room Log and the Shift Foreman's Log a minimum of once per week and document the review by initials or signature. The Supervisor of Operations shall institute action where necessary to correct any deficiencies in the recording techniques or significant operating abnormalities adverse to quality and determine the cause of such significant operating abnormalities which have occurred since his last review of the shift foreman's log. Significant abnormalities are defined as plant conditions which have potential for affecting the health and safety of the public.

2.3 The Shift Foreman shall be responsible for the review and sign off of the Shift Foreman's Log at the completion of each shift. He shall also make all the detailed entries in the Shift Foreman's Log.

2.4 The Control Room Operator shall be responsible for maintaining and signing off the Control Room Log. The control room operator shall be responsible for maintaining the Radio Log. (per par. 3.6).

2.5 The Supervisor-Quality Control shall be responsible for the surveillance and audit of all the subject documents.

3.0 REQUIREMENTS

3.1 General

3.1.1 Shift records are defined as Hourly Log, Control Room Log, Shift Foreman Log, Check off Lists, Recorder Charts and Computer Printouts that describe or record operating information and events. These records comprise the information that is necessary for evaluating operations or for analysis of previous operations.

3.1.2 All log entries, reports, chart notations, etc., must be legible, accurate, understandable and written in ink.

3.1.3 Upon assuming the duty, the operator(s) will record the time and date and make the appropriate notation indicating his knowledge of the plant status, e.g.

a. Hot Shutdown - as before

b. Cold Shutdown - as before

c. At Power - as before

d. Hot Standby - as before

3.1.4 All log entries shall be prefaced (in the left hand margin) with the time of entry in (24) twenty-four hour notation (e.g.-0800, 1300, 2400, etc.).

3.1.5 The individual responsible for maintaining logs must sign and date the portion or portions of the log which cover their shift assignment.

3.1.6 Upon completion of the duty, the operator will sign the log.

3.1.7 Each recording instrument shall be checked on the 11 to 7 shift for correct timing and legibility of marking.

3.1.8 Each chart shall be marked with the date, time, and instrument recorder name when replacing the chart paper. In addition, the variable speed recorder charts shall be marked to indicate any change in the chart speed.

3.1.9 If it becomes necessary to make any corrections whatsoever in the various logs, erasing is prohibited. A single line will be drawn through the incorrect information and the corrected information shall be recorded adjacent to or in a space available with reference to the deleted information. The individual making the entry shall initial the lined out information.

3.2 Hourly Log

3.2.1 This log will reflect plant parameters on an hourly basis. It will normally be prepared by the plant computer but can be manually prepared by the control room operator in the event that the computer is not functioning. If manual preparation is necessary it will be performed by the control room operators and auxiliary operators.

3.3 Control Room Log

3.3.1 This log will contain the following types of information:

a. Information concerning reactivity.

b. Alarms pertaining to reactor core conditions with detailed explanation.

c. Any abnormal condition of operation.

d. Releases of radioactive waste, gaseous or liquid.

This log is an official document required by F.S.A.R. and cannot be removed from the Control Room unless authorized by the Supervisor of Operations.

3.3.2 The 11 to 7 shift shall initiate their Control Room Operator's Log on a new page. It shall be prefaced with a brief description of the plant status, e.g.

a. At (80) Eighty Percent Power - MWT-/MWE

b. Rod Positions

c. Statements regarding unusual evolutions or alignments.

d. The following equipment is out of service (list).

3.3.3 All alarms that involve reactor core conditions shall be recorded by the operator along with an explanation or reason for the alarm e.g. T_{ave}, Reactor Coolant System, pressure, flow, or power.

3.3.4 All reactor startups - record time, T_{ave}, rod positions, primary pressure and boron concentrations (all normally taken at 10^{-8} amps on the Intermediate Range).

3.3.5 Reactor Shutdown - Record rod position, T_{ave}, time, Boron Concentration and reactor power prior to inserting rods for shutdown.

3.3.6 Plant Startup - Record the major events and time of occurrence, e.g., starting RCP's, starting turbine warmup, etc.

3.3.7 Plant Shutdown - Record the major steps in shutdown and the associated times.

3.3.8 Each system startup, significant status changes, and shutdowns shall be recorded. Also, record major

unit status changes such as opening of primary system, flooding of fuel transfer canal, etc. and the time of the event.

3.3.9 Equipment Malfunction - List the equipment and problem and any restriction placed on the plant.

3.3.10 Abnormal operation - Record any condition that causes principle primary or secondary parameters variation from normal.

3.3.11 Reactivity Changes - Record the addition or dilution of RCS Boron Concentration, assignment of rods to different groups, power changes, etc.

3.3.12 Reactor Trip & Turbine Trip - Record the conditions prior to the trip, cause of trip (if determined), corrective action taken and time of the events.

3.3.13 All significant power level changes in the power range shall be recorded.

3.3.14 Start and stop of any radioactive gaseous or liquid releases shall be recorded in the Control Room Log along with the release permit number.

3.3.15 Any abnormal valve line ups and equipment out of service, or returned to service shall be recorded.

3.3.16 Changes of position of any "defeat", or "by-pass" switches shall be recorded.

3.3.17 Accomplishment of testing - Record title and number of the test performed, and the start and completion times or time of suspension of the test. The performance of all periodic tests and inspections required by the Technical Specifications shall be recorded.

3.3.18 The above sections are not meant to be all inclusive but merely indicates the type of entries that should be made. When doubt exists, enter it in the log.

3.4 Control Room Log Prior to Initial Criticality

The following operations shall be recorded by the control room operator.

3.4.1 Execution of switching orders - Record order number and time as indicated on the switching order.

3.4.2 Placing equipment out of service or returning equipment to service Log the name and alphanumeric designator of the equipment, time of shutdown or return to service and reasons for shutdown or nature of work completed.

3.4.3 Accomplishing Test Function - Record the test number, title and time the test was started and completed.

3.4.4 Operating systems under direction of startup - List the system with a brief description, e.g., Jogging S.R. valves SR-V-2 and SR-V-6 for position indication checks.

3.4.5 Major Plant Status Changes - e.g., Filled C.W. Basin for Tower 1A, Filled Borated Water Storage Tank, De-Energized D.E.S. 4160 Bus, etc., also record the time of the event.

3.4.6 Completion and Turnover of Systems - e.g., Acceptance of a system by Met-Ed - Record the date with a description of the System and Systems' Boundaries.

3.5 Shift Foreman Log

3.5.1 This log will contain a summary of the station operation and major events that occur on each shift. Significant abnormalities which occur will be explained in greater detail than would be expected in the control room log.

3.5.2 The left hand side of the log should be reserved for changes in status of E.S. components, and major plant status changes at the discretion of the Shift Foreman.

3.5.3 When equipment covered by Tech Specs. is taken out of service, the reason, time, Tech. Spec. requirements and sample results (if applicable) will be noted on the left hand page of the Shift Foreman's Log. Additionally, all requirements for running, sampling and/or testing will also be noted, delineating times, when above must be accomplished.
(i.e.)

7/31/75 1100. Ran SP #1303-4.16 on 1B Diesel generator to prove its operability, removed 1A DG from service for oil ring inspection and repair. 1B DG must be tested daily until 1A DG is returned to service.

8/1/75 1100. Tested 1A DG in accordance with SP #1303-4.16. Test satisfactory.

When the equipment is returned to service the time/date shall also be noted on the left hand page of the S.F. Log.

3.5.4 Upon assuming the duty the Shift Foreman shall record in his log the plant conditions which exist.

a. Temperature (RCS)

b. Pressure (RCS)

c. Boron Concentration (RCS)

d. MWe Net

e. Rx Power

f. Control Rod Positions

3.5.5 Upon being releived the Shift Foreman will note that fact along with the time and sign his section of the log.

3.6 Radio Log

3.6.1 This log will contain the data which must be recorded to meet the requirements of the (FCC) Federal Communications Commissions' Rules and Regulations, such as (1) Log any contact with another base station and (2) Log entry made and signed by technician performing maintenance on the radio unit.

3.7 Shift Relief

3.7.1 All shift operations personnel shall be responsible for maintaining their duty station until properly relieved. The Shift Supervisor, Shift Foreman, Control Room Operators and Auxiliary Operators shall be relieved by qualified personnel only, e.g. those personnel who are properly licensed and properly informed of the plant status, operations in progress, and any special instructions which may be applicable. The relieving individual will discuss the plant status, operations in progress and special instructions with on-duty personnel so that he is adequately informed prior to assuming his shift duties.

3.7.2 The Control Room Operator will acknowledge his understanding and awareness of the changes in the plant status since his own last entry by signing the Control Room Log prior to assuming the shift duty.

3.7.3 During his shift the relieving individual shall insure adquate review of station logs, records, special instructions, etc., which have been generated since his last shift. The logs and records to be reviewed should include:

1. Shift Foreman Log
2. Control Room Log
3. Hourly Computer Log
4. Tagging Application Book
5. Equipment and Fuel Status Boards
6. TCN and SOP Books
7. Standing Order Book
8. Operations Memo Book
9. Preventative Maintenance Schedule Books
10. Revision Review Book

TMI DOCUMENTS

DOCUMENT NO: TM-0175

COPY MADE ON 5/7/79 OF DOCUMENT PROVIDED BY METROPOLITAN EDISON COMPANY.

PDA for
Wilda R. Mullinix, NRC

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