| PROCEDURE NUMBER | APPROVED | DATE |
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| *1.3.4 | J Martin | 6/30/83 |

VOLUME NAME
1 ADMINISTRATIVE PROCEDURES

SECTION
1.3 CONDUCT OF OPERATIONS

TITLE
*1.3.4 OPERATING DATA AND LOGS

1.3.4.1 Purpose

This procedure provides instructions to assure that plant operations are adequately recorded and the records are prepared, reviewed, and maintained in a meaningful manner.

The records are assembled on the graveyard shift daily and forwarded to the day shift manager for proper distribution and storage.

The minimum records included are:

A. Shift Manager's Log Book
B. Control Room Log Book
C. Radwaste Log Book
D. Fuel Handling Log Book
E. Daily and Shift Operating Records
F. Periodic Surveillance Records
G. Operating Data Log Sheets
H. Computer Logs
I. Recorder Charts

The Log Books will be duplicate logs. Each book will be a bound book having two identical sheets per page number. Each set of pages will be sequentially numbered. The set of pages will have a carbonless copy. The copy will be perforated so it can be removed for routing to Plant Management.

1.3.4.2 General Instructions for Record Participation

A. The logs will be the means by which operating information important to the following shifts and plant management is recorded. It is, therefore, essential that log entries be legible, accurate and complete.

B. A new page shall be started at the beginning of each graveyard shift.

C. All log entries shall be made in ink.

D. Erasures are not permitted. If an error is made, it shall be voided by a single line drawn through the entry and initialed by the person voiding the entry.

E. All entries in the Log Books shall be proceeded by a time and entered in chronological order. Any late entries are to be made in the log by identifying the entry with L.E. in the left hand margin. The time and date of when the entry should have been entered will be noted.

F. All log entries shall be entered in a timely manner. It shall normally be done immediately after the event occurred.

G. The Log Books will be identified by title, date started and finished, and volume number on the outside of the front cover.

H. The perforated duplicate pages of the Log Books for the previous 24 hour time duration will be removed at the beginning of each graveyard shift and routed to the Operations Manager for his review, distribution, and storage.

I. When completely filled out each Log Book shall be retained for reference in the Shift Manager's office, except for the Radwaste Log Book which shall be retained in the Radwaste Control Room. When no longer needed for this purpose, the Log Books shall be routed to the Plant's Record Storage File and processed per document guide in the Plant Administrative Procedure 1.6.4.

1.3.4.3 Specific Information for Record Preparation

A. Shift Manager's Log

The purpose of the Shift Manager's Log is to provide operational information important to the following shifts as well as plant management personnel. Although the extent and detail of the information logged will be determined and normally logged by the Shift Manager, the following should be included as a minimum:

1. Completion of a predetermined stamp at the start of each shift. If the predetermined stamp is not available, write in the following information:

   a. Shift and Date

   b. Shift Manager's Name

c. Names of all individuals on shift

d. Designate Fire Brigade Member

2. Any reduction in power and reason for same.

3. Status and authorization permit number of radioactive releases to the environs.

4. Timed entries for the following:

   a. Change of operating mode
   b. Start of control rod withdrawal for reactor startup
   c. Reactor criticality
   d. Reactor trip and cause for same
   e. Any technical specification limit exceeded or potential reportable occurrence including plant management notification.

5. Initiation and completion of surveillance testing.

6. Red arrow items -

   a. The purpose of this system is to provide a method of drawing attention to items where followup action is absolutely essential.

   b. Red arrow procedure -

      1) When the Shift Manager encounters a situation where he deems followup action is mandatory, he shall note this by placing a red arrow in the margin to the left of the log entry.

      2) When a red arrow item is closed, the Shift Manager closing the item will make a "red arrow" entry stating the reason or action for closing. He shall write the word "closed" above the red arrow and log the page number and date of the originating red arrow entry below it. The word "closed" shall then be written above the originating red arrow and log the page number and date of the closing entry written below it.

      3) Open red arrow items are identified by the lack of cross referenced log and page number and date written below the red arrow.

4) The open red arrow items shall be compiled and written in the Shift Manager's log each Monday on the graveyard shift. When compiling this list, the Shift Manager shall indicate the log and page number and date where each of the open red arrow items can be found.

5) The Operations Manager shall assist in expediting red arrow items requiring engineering, maintenance, or management action.

7. Any injury or sickness occurring on shift.

8. The names of extra personnel required for plant operation.

9. Any deviation from approved procedures as per PPM 1.2.4.

10. Any significant maintenance activity occurring on the shift.

11. Other information or events the Shift Manager feels may have operational or historical value.

The Shift Manager shall enter the name of his relief and sign the log at the end of each shift.

B. Control Room Log

The purpose of the control room log is to provide a complete and accurate account of plant operation to the following shifts as well as plant management personnel. Entries shall be of sufficient detail that any previous plant condition can be reconstructed from them. The Reactor Operator will normally be the individual making the entries into th Control Room Log Book. The control room log shall be the OFFICIAL plant operating record. The following should be entered as a minimum.

1. Completion of a predetermined stamp at the start of each shift. If the predetermined stamp is not available write in the following information:

   a. Shift and Date

   b. Control Room Supervisor's Name

   c. Name of all individuals on shift

2. Plant startups and shutdowns.

3. Significant power changes and the mechanism used to make the change.

4. Status changes in equipment, components, or structures that affect plant operation.

5. Initiation and completion of all surveillance tests.

6. Initiation and completion of all special tests.

7. Status and authorization permit number of radioactive releases to the environs.

8. All electrical switching.

9. Maintenance activities that affect operations.

10. Other events, alarms, and actions that control room operator feels may have operational or historical value.

The control room supervisor and the reactor operator shall enter the name of his relief and sign the log at the end of each shift.

C. Radwaste Log

The purpose of the radwaste log is to provide the following shifts as well as plant management personnel an accurate record of all radioactive waste systems operation. Entries shall be made by shift operating personnel. The Radwaste Operator will normally be that individual making the entries into the Radwaste Log Book. Entries shall include, but are limited to, the following:

1. Completion of a predetermined stamp at the start of each shift. If the predetermined stamp is not available write in the following information:

   a. Shift and Date

   b. Shift Support Supervisor's Name

   c. Name of Radwaste Operator(s)

2. All transfers of water from the radwaste system to the condensate storage or other plant systems.

3. Status changes in equipment or components that affect plant or radwaste system operation.

4. Any unusual increase in floor drain or equipment drain systems inventory.

5. Status and authorization permit number or radioactive releases to the environs.

6. Any other events or information the operator may feel to have operational significance.

7. Any significant maintenance activity which occurred during the shift.

8. The Shift Support Supervisor will use this log to identify and relay to other shifts any information he determines to be important.

9. Other information the Rad Waste Operator feels may have operational or historical value.

Upon making the last entry for his shift, the Shift Support Supervisor and assigned radwaste equipment operator shall enter the name of their respective relief and sign the log at the end of each shift.

D. Fuel Handling Log

The purpose of the fuel handling log is to provide following shifts and plant management personnel with information concerning all evolutions conducted on the refueling floor. The fuel handling log shall only be maintained during periods of refueling floor activity. The Senior Reactor Operator in charge of fuel handling will normally be the individual making entries into the Fuel Handling Log Book. At other times, it shall be stored in the Shift Manager's office.

1. Completion of a predetermined stamp at the start of each shift. If the predetermined stamp is not available write in the following information:

   a. Shift and Date

   b. Fuel Handling Supervisor's Name

   c. Names of all individuals on Refueling Crew

2. Any discrepancies found during the inspection of new fuel.

3. Any problem encountered with the movement of new fuel.

4. The installation or removal of any reactor component.

5. Identification of the number of fuel elements, control rods, and neutron sources handled during the shift. The detailed accountability of these items will be controlled per instructions in the Plant Procedures Manual, Volume 9.

6. Equipment failure and corrective action taken.

7. Any situation involving unusual radiation or contamination levels.

8. All evolutions involving the fuel cask and the shipping of fuel.

9. Other information the refueling supervisor feels may have operational or historical value.

The refueling supervisor shall enter the name of his relief and sign the log at the end of each shift.

E. Daily and Shift Operating Records

The purpose of these records is to ensure that the daily and shift surveillance testing required by the technical specifications are accomplished and documented, and that the results are satisfactory or appropriate action taken.

The daily and shift surveillance records shall contain the following column headings:

1. Technical specification reference
2. Monitored parameter
3. Instrument number
4. Parameter units of measurement
5. Technical specification limit
6. Normal value or range
7. Actual value
8. Comments

When filled out, the responsible operator shall initial the record below each "actual value" column.

Should any parameter fall outside the technical specification limit, the Shift Manager shall be immediately notified and that value circled in red with an explanation given in the Comments section.

The Shift Manager shall review the daily and shift operating records and sign them in the space provided.

The completed daily and shift operating records shall be forwarded to Operations Shift Manager for distribution and storage. When no longer needed in the active storage file, it shall be routed to the Plant's Record Storage File and process per the Document Guide in the Plant's Administrative Procedure 1.6.4.

F. Periodic Surveillance Records

See PPM 1.5.1, Technical Specification Surveillance Testing Program

G. Operating Data Logsheets

The purpose of operating data log sheets is to provide Operations personnel with periodic readings of important plant operating data. This data is important to Operations because it may indicate trends of developing equipment failures of improper operating practices. This data is also of value to the performance personnel in assessing long range trends of equipment operation and operating practices.

An operating data log sheet shall be maintained for the following plant areas:

1. Control Room
2. Reactor Building
3. Turbine Building
4. Radwaste Building
5. Diesel Generator Building
6. Service Building
7. Makeup Water Pumphouse
8. Circulating Water Pumphouse
9. Standby Service Water Pumphouses

The operating data logsheets shall contain the following column headings:

1. Monitored parameter and/or instrument number
2. Parameter unit of measurement
3. Low limit
4. Normal value
5. High limit
6. Actual value
7. Special information

The operating data logsheets shall be completed by Operations shift personnel.

Should any value fall outside the given high or low limits, the Shift Manager shall be notified and the value shall be circled in red with an explanation given in the Comments section.

When filled out, the responsible operator shall initial the logsheet below the "actual value" column.

The completed operating data logsheet shall be forwarded to the day shift manager for review. He shall investigate and determine the cause of any abnormal trends.

H. Computer Logs

The purpose of computer logs is to provide Operation personnel, Plant management, and the Technical Department with the necessary information to evaluate the performance of the reactor and balance of plant systems. All parameters logged by the computer shall be checked periodically by shift personnel.

Selected plant operating parameters will be logged by the process computer and printed out on an hourly and monthly basis. Other logs are printed out when required or on demand. During periods when the computer is out of service, selected plant parameters will be recorded by the operator.

Each day the computer logs shall be routed by the Operations Manager to the Technical Department for evaluation. After evaluation, the computer logs will be routed to the Plant's Record Storage File and processed per the Document Guide in the Plant's Administrative Procedure 1.6.4.

I. Recorder Charts

The purpose of recorder charts is to provide Operations and Management personnel with a permanent record of trends exhibited by specific plant parameters.

All operating charts shall be marked by the shift personnel responsible for the equipment at the beginning of each shift with the time, date, recorder name, and other pertinent information that shall make the chart more useful. Charts should be checked for timing to ensure chart indicated time corresponds with actual time. When practicable, any unusual trends, or transients, should be identified on the appropriate recorder chart. This identification should intersect at the recorder pen and consist of the event, date, and time to the nearest minute.

Chart paper will usually be replaced by the graveyard shift personnel when the end-of-chart indication is visible but can be done by any shift.

The date, time, recorder name, and parameters shall be marked on each new chart when installed or removed from it's recorder. In addition, when installing a new chart the following chart box label shall be filled out with Date/Time that the chart is put on and the recorders name.

| | |
|---|---|
| Date/Time Off | / |
| Date/Time On | / |
| Recorder Name | |

Upon removal of the chart, it shall be placed in its original box and the label filled out previously will be completed with time date off and placed on the outside of the box.

The chart will then be stored in the Control Room on the "This Week" shelf. Charts from the week before will be on the "Last Week" shelf. At the end of each week, Friday, the clerk will pick up all of "Last Week" charts and take them to Document Control.

The clerk will then place "This Week" placard on the empty shelf and place the "Last Week" placard on the shelf with the previous weeks charts in it.

J. The following records will be sent to Records Management to become a part of the plant file. The forms will be controlled per the Document Guide identified in PPM 1.6.4.

1. Shift Manager's Log
2. Control Room Log
3. Radwaste Log
4. Fuel Handling Log
5. Daily & Shift Operating Records
6. Periodic Surveillance Records
7. Operating Data Log Sheets
8. Computer Logs
9. Recorder Charts

1.3.4.5 Attachments

None