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August 5, 1994
JAFP-94-0389

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Division of Reactor Safety
U.S. Nuclear Regulatory Commission
Region 1
475 Allendale Road
King of Prussia, PA 19406-1414

SUBJECT: **Inspection Report No. 50-333/94-13 Response**

Dear Mr. Meyer:

While observing the simulator portion of the licensed operator requalification operating test, the inspectors expressed concern regarding operator performance in the areas of emergency plan implementation and maintenance of broad plant oversight during emergency reactor plant conditions. Although operator performance was determined to be effective, our use of the shift supervisor to direct both emergency operating procedure activities and emergency plan actions appeared to inhibit the shift supervisor's ability to maintain a broad perspective of plant operation and make timely event classifications. Based upon these observations, you requested that we establish our expectations on the responsibilities of the shift supervisor, assistant shift supervisor, and STA and provide these expectations to you in a written response.

NYPA conducted a review of expectations in responding to plant emergency conditions and have concluded that the operator's ability to implement the emergency plan in a timely manner and maintain a broad plant perspective is dependent upon clearly defined responsibilities which are reinforced through training and evaluation. As a result of this review, it was determined that plant procedures establish the current distribution and definition of shift responsibilities during emergency conditions as follows:

- **Shift Supervisor (SS)** - He maintains the broadest perspective of operational conditions affecting the safety of the plant as a matter of highest priority at all times. He does not become totally involved in any single operation in times of emergency. He is responsible for safe plant operation and has the authority to initiate actions to meet this responsibility, normally issuing directions for plant operation through the Senior Nuclear Operator (SNO). Commands may be issued directly to personnel during abnormal conditions. He implements the

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emergency plan, acting as the emergency director during the initial stages of an event and performs classification of emergency events as soon as possible. It is the primary responsibility, however, to act in accordance with applicable operating procedures and emergency operating procedures to assure that automatic plant response and engineered safety features perform in their intended manner. The classification of emergency conditions shall not interfere with this primary responsibility. He has command decision responsibility and authority.

- **Assistant Shift Supervisor (ASS)** - Assumes Control Room command when designated by the Shift Supervisor. Assumes the responsibilities and authority of the Shift Supervisor if he becomes incapacitated. Ensures the plant is operated in accordance with approved procedures, unless immediate and unforeseen action is required to ensure equipment or personnel safety. Provides back-up function for the Shift Supervisor, Senior Nuclear Operator and Nuclear Control Operator (NCO) during emergency or abnormal conditions while maintaining a broad overview of plant conditions.
- **Shift Technical Advisor (STA)** - He maintains a broad overview of operation conditions affecting plant safety, providing independent assessment and corrective action recommendations to the Shift Supervisor. Provides on-shift engineering and accident assessment expertise to the operating crew. He identifies abnormalities or plant parameters that may represent a challenge to critical safety functions, or could result in degradation of the level of plant safety. He assists in determining emergency classifications and assesses plant parameters during and following an accident to ascertain the potential for core damage.

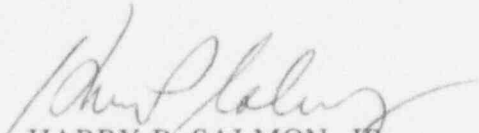
NYPA feels this assignment of responsibilities is satisfactory to provide the operating shifts the ability to maintain a broad plant overview during emergency conditions and to perform timely emergency plan classifications. However, improvements are under evaluation in two areas. First, during conduct of simulator training, more emphasis will be placed on timely emergency event classification with continued emphasis on performing actions necessary to stabilize the plant. The use of the STA in ensuring timely emergency classifications will be improved. Second, to bring us more in-line with common industry practice, training is being conducted which assigns direction of the EOPs to the Assistant Shift Supervisor (command responsibility). NYPA will continue to evaluate the effectiveness of this training to ensure consistency with best industry standards.

The above operational responsibilities and authorities are outlined in an Operations Department Standing Order, ODSO-1 (attached). The JAF Emergency Plan Implementing Procedure, IAP-2 (attached), outlines the Shift Supervisor's responsibilities as Emergency Director.

The inspection report also identified a perceived weakness in the corrective action process for generic operator performance deficiencies. This process was reviewed and corrective actions have been identified to strengthen the program.

If you should have any questions regarding our program improvement plans, please contact Mr. Robert Barrett, General Manager of Operations at (315) 349-6011.

Very truly yours,



HARRY P. SALMON, JR.
RESIDENT MANAGER

Attachments: ODSO-1, Operations Department Standing Order
IAP-2, Emergency Plan Implementing Procedure

cc: M. Colomb
R. Barrett
D. Topley
R. Locy
W. Cook, USNRC
J. Gray (WPO)
W. A. Josiger (WPO)
USNRC Document Control Desk

Attachment 1
Commitment Status
JAFP-94-0389

Number	Commitment	Due Date
NONE	NONE	NONE

EMERGENCY PLAN IMPLEMENTING PROCEDURE

IAP-2

CLASSIFICATION OF EMERGENCY CONDITIONS*

1.0 PURPOSE

The purpose of this procedure is to provide a means of classifying an event at the JAFNPP into one of four emergency classifications and to specify the actions necessary to implement the JAFNPP Emergency Plan.

2.0 REFERENCES

- 2.1 NUREG-0654 - "Criteria for the Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants." (see NOTE on page 2a)
- 2.2 EPA-400-R-92-001, May 1992, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents."

3.0 INITIATING EVENTS

- 3.1 An unusual occurrence has taken place at or near the station.

4.0 PROCEDURE

NOTE: Emergency conditions are divided into the following classes :

Unusual Event - An Unusual Event is a condition characterized by an event or events that are in process or have occurred which indicate a potential degradation of the level of safety of the plant or require transportation of an injured and contaminated individual or individuals from the site to a hospital.

Alert - An Alert is a condition characterized by an event or events which are occurring or have occurred that involve actual or potential substantial degradation of the level of plant safety.

Site Area Emergency - A Site Area Emergency is a condition characterized by events that are in process or have occurred involving actual or probable major failures of plant functions needed for the protection of the public.

General Emergency - A General Emergency is a condition characterized by events that have occurred or are occurring involving actual or imminent substantial core degradation or melting with a potential for loss of containment integrity.

4.1 Classification

- 4.1.1 The Shift Supervisor shall use the Emergency Classification Guide Flowchart, Figure IAP-2.1, to select event categories related to plant events or conditions.

- 4.1.2 For each category selected, the Shift Supervisor shall refer to the applicable tab of the Emergency Action Levels, Figure IAP-2.2, and review the initiating conditions, emergency action levels, and the associated emergency classification flowcharts for each emergency class.
- 4.1.3 Based on results of the review in step 4.1.2, the Shift Supervisor shall determine the most severe emergency classification and record this classification and time in Shift Supervisor's log.

NOTES

The initial classification of an emergency condition shall be made as soon as possible following the event or combination of events to ensure that proper protective and corrective actions are taken. The initial classification of an emergency condition will normally be made by the Shift Supervisor. It is the primary responsibility of the Shift Supervisor, however, to act in accordance with applicable Operating Procedures, and Emergency Operating Procedures to assure that automatic plant response and Engineered Safety Features (including the Reactor Protection System) perform in their intended manner. The classification of emergency conditions shall not interfere with this primary responsibility.

An event that occurs and ends in a very short period of time, or an event that occurs and goes unnoticed until after the event has occurred, must still be classified and proper notifications made. The Emergency Plan should be used as appropriate in these circumstances, however, all required notifications per EAP-1.1 must be completed.

- 4.1.4 The Shift Supervisor shall initiate IAP-1 EMERGENCY PLAN IMPLEMENTATION.

4.2 Reclassification

- 4.2.1 If reclassification to a higher level is necessary, the Emergency Director (or Shift Supervisor when performing the Emergency Director functions) shall repeat the classification steps shown above ensuring that this information is recorded in the Shift Supervisor's log. (Use the Emergency Classification Guide Flow Chart Figure IAP-2.1 as a guide.)
- 4.2.2 De-escalation in an emergency classification would only be needed if the event had been over classified on the basis of its potential, which did not occur. Otherwise, the classification should shift to Recovery or the event be terminated after the emergency phase has been mitigated.

5.0 ATTACHMENTS

- 5.1 Figure IAP-2.1, Emergency Classification Guide Flow Chart
- 5.2 Figure IAP-2.2, Emergency Action Levels

NEW YORK POWER AUTHORITY
JAMES A. FITZPATRICK NUCLEAR POWER PLANT
OPERATIONS DEPARTMENT STANDING ORDER

OPERATING STAFF RESPONSIBILITIES AND AUTHORITIES*
ODSO-1
REVISION 23

REVIEWED BY: PLANT OPERATING REVIEW COMMITTEE

MEETING NO. 93-170

DATE 12/22/93

APPROVED BY: Roger A. Long
RESPONSIBLE PROCEDURE OWNER

DATE 12/21/93

APPROVED BY: Robert J. Baudett
RESIDENT MANAGER

DATE 12/21/93

EFFECTIVE DATE: December 28, 1993

FIRST ISSUE

FULL REVISION

LIMITED REVISION

***** * * INFORMATIONAL USE * * *****	***** * * TSR * * *****
***** * * ADMINISTRATIVE * * *****	

PERIODIC REVIEW DUE DATE 3/4/95

REVISION SUMMARY SHEET

REV. NO.	REASON FOR CHANGE
23	Add to responsibilities of Shift Supervisor, Shift Technical Advisor, and Engineer On Shift to initiate Expedited Setpoint Changes per MCM-8.
22	<ol style="list-style-type: none">1. Add Note at Step 6.5.13 to Reference Tech Spec Section 6.2.2.4 guidelines. (ACTS Item 8839, QA Audit 778)2. Revise Step 5.5 and Attachment 2 to Tag Issue Area. The Work Control Center has been relocated to Administrative Building.3. Revise Steps 6.5.6 and 6.7.1 to reflect that the SS normally issues directions for plant operation through the SNO.4. Change responsibility to review the Operations Department Surveillance Test Schedule from the Operations Coordinator to Assistant Operations Manager. (Paul Brozenich)5. Revise STA responsibilities to reflect NRC Information Notice 93-31, Implementation of Engineering Expertise on Shift. (R. Barrett)
21	<ol style="list-style-type: none">1. Revise to reflect Reactor Analyst Supervisor and Fire Protection Supervisor as reporting to Technical Services Manager.2. Delete requirement for Reactor Engineer to perform 1/M plots during reactor startup. Monitoring both count rate doubling and 1/M plots is not required during reactor startup. (ACTS Item 7995, SOER-88-02)3. Add responsibility for Licensed and Journeyman Operators, SS, ASS, SNC, and NCO to conduct On the Job Training (OJT) and On the Job Evaluations (OJE) per ODSO-24. (R. Locy, P. Brozenich)

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1.0 PURPOSE

To define the responsibilities and authorities of Operations Department personnel.

2.0 APPLICABILITY

Operations Department personnel, as shown on Attachment 1.

3.0 REFERENCES**3.1 Performance References**

None

3.2 Developmental References

- 3.2.1 EAP-2, Personnel Injury*
- 3.2.2 EAP-3, Fire*
- 3.2.3 EAP-9, Search and Rescue Operations*
- 3.2.4 ODSO-24, On-Shift Operator Training
- 3.2.5 ODSO-30, NRC License Maintenance*
- 3.2.6 AOP-28, Operation During Plant Fires*
- 3.2.7 AOP-43, Plant Shutdown From Outside The Control Room*
- 3.2.8 AP-14.02, Combustibles & Flammable Material Control*
- 3.2.9 WACP-10.1.33, Hot Work Permits*
- 3.2.10 ANSI 18.7 - 1972, Administrative Controls of Nuclear Power Plants
- 3.2.11 ANSI/ANS-3.2 - 1982, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants
- 3.1.12 ACTS Item 7995, delete requirement to monitor 1/M plots during reactor startup. (SOER-88-02)
- 3.1.13 ACTS Item 8839, reference Tech Spec 6.2.2.4 guidelines. (QA Audit 788, Recommendation 788-4)
- 3.1.14 MCM-8, Setpoint Control

4.0 REQUIREMENTS

- 4.1 Tech Spec Section 6.3, Plant Staff Qualifications
- 4.2 Tech Spec Table 6.2-1, Minimum Shift Manning Requirements
- 4.3 FSAR Chapter 13, Conduct of Operations
- 4.4 10CFR50.54 Conditions of License, Section 50.54(m)(2)(iv)
- 4.5 NUREG 0737, Clarification of TMI Action Requirements
- 4.6 Regulatory Guide 1.114, (Rev.2) Guidance to Operators at the Controls and to Senior Operators in the Control Room of a Nuclear Power Plant
- 4.7 NRC Policy Issue SECY-84-355 dated September 10, 1984, Final Policy Statement on Engineering Expertise on Shift
- 4.8 **Commitments:**
 - 4.8.1 ACTS Item 4984, Ensure Scheduling of STs Requiring Entire Shift Crew Not Be Done On Peak Hours.
 - 4.8.2 NRC Information Notice 92-47, Intentional Bypassing of Automatic Actuation of Plant Protective Features (JTS-92-0800, OER# 920483)
 - 4.8.3 NRC Information Notice 93-81, Implementation of Engineering Expertise on Shift

5.0 DEFINITIONS

↓COM4.8.3

5.1 Accident Assessment:

An evaluation of plant conditions and immediate actions needed to be taken while an event is in progress.

↓COM4.8.3

5.2 Active Role In Shift Activities:

A role that includes the following:

- Review shift logs
- Participate in shift turnover activities
- Maintain awareness of plant configuration and status
- Participate in shift crew training

5.3 Back-Up Function:

To independently observe and confirm the actions and decisions of other personnel on shift during emergency or abnormal conditions. This oversight and cross-check will reinforce the decision making process, and provide a more thorough and comprehensive implementation of corrective actions. The ASS performs the back-up function for the SS, SNO and NCO.

5.4 Command Decision Authority:

The authority to initiate actions required to carry out Command Decision Responsibility.

5.5 Command Decision Responsibility:

The responsibility to ensure the plant is operated safely and within the limitations of administrative and regulatory requirements.

5.6 Control Room:

The area of the plant within the security boundary, as shown on Attachment 2, that contains the following:

- Main Control Panels ("horseshoe" area and back panels)
- Shift Supervisor's Office
- Tag Issue Area
- Control Room Kitchen
- Control Room Restroom
- Operations Office

5.7 Control Room Command:

The designated Senior Reactor Operator who is responsible for ensuring immediate actions are initiated during transient or accident conditions as specified by plant procedures. The designated person is required to be in the Control Room and knowledgeable of plant conditions.

The SRO with Control Room Command will normally remain in the following areas of the Control Room:

- Main Control Panels
- Shift Supervisor's Office
- Tag Issue Area

Leaving this area to enter the Operations Office, Control Room Restroom, or Control Room Kitchen for short periods of time is permissible. The time spent outside of the normal area shall be minimized.

5.8 Fire Brigade:

Consists of the following:

- Assistant Shift Supervisor or Senior Nuclear Operator
- Two operators
- Two security guards

5.9 Fire Brigade Leader:

Qualified individual who directs the actions of the Fire Brigade. The Assistant Shift Supervisor or Senior Nuclear Operator will act as Fire Brigade Leader.

5.10 First Aid Team:

Consists of the following:

- Assistant Shift Supervisor or Senior Nuclear Operator
- An operator
- A security guard
- A RES technician

5.11 Search and Rescue Team:

Consists of the following:

- Assistant Shift Supervisor or Senior Nuclear Operator
- Two operators
- Two security guards

5.12 Senior Reactor Operator/Shift Technical Advisor (SRO/STA):

A Shift Supervisor or Assistant Shift Supervisor who meets or exceeds the minimum requirements of Tech Spec Section 6.3.2.

5.13 Shift Technical Advisor (STA):

An on-shift engineer who meets or exceeds the minimum requirements of Tech Spec Section 6.3.2.

6.0 RESPONSIBILITIES

6.1 All Operators

NOTE: The following responsibilities and authorities apply to the "on-shift" operators.

- 6.1.1 Remain aware of plant conditions and equipment status.
- 6.1.2 Monitor plant response and equipment performance.
- 6.1.3 Notify the Control Room operators of abnormal operating conditions and equipment malfunctions.

6.2 Operations Manager

- 6.2.1 Ensure safe operation of the plant.
- 6.2.2 Ensure plant operations are conducted in compliance with administrative and regulatory requirements.
- 6.2.3 Direct the activities of all Operations Department personnel.
- 6.2.4 Designate a qualified relief to assume Command Decision Responsibility and authority from the Shift Supervisor if required.
- 6.2.5 Ensure Operations Department procedures are developed and periodically reviewed.
- 6.2.6 Ensure a sufficient number of qualified Operations Department personnel are available to safely conduct plant operations.
- 6.2.7 Ensure budgetary resources are provided to conduct operations in a safe manner.
- 6.2.8 Implement and resolve ACTS, JRIP, and Business Plan open items as assigned.
- 6.2.9 Maintain a Senior Reactor Operator License.

6.3 Assistant Operations Manager

- 6.3.1 Report to the Operations Manager.
- 6.3.2 Assume the responsibility and authority of the Operations Manager when the Operations Manager is absent.
- 6.3.3 Ensure plant operations are conducted in compliance with administrative and regulatory requirements.
- 6.3.4 Monitor and direct the activities of operating shift personnel as directed by the Operations Manager.
- 6.3.5 Ensure the following department procedures are developed and periodically reviewed:
- Operating Procedures
 - Abnormal Operating Procedures
 - Emergency Operating Procedures
 - Annunciator Response Procedures
 - Operations Department Standing Orders
 - Temporary Operating Procedures
 - Surveillance Test Procedures
- ↓COM4.8.1
- 6.3.6 Schedule surveillance tests when operator distraction due to other tasks is minimized. This is accomplished by performing tests during other than peak operator demand hours, which normally occurs on day shift.
- 6.3.7 Review plant equipment deficiencies and coordinate repair efforts.
- 6.3.8 Assist in the preparation of outage schedules.
- 6.3.9 Perform operational and administrative tasks as assigned by the Operations Manager.
- 6.3.10 Implement and resolve ACTS, JRIP, and Business Plan open items as assigned.
- 6.3.11 Maintain a Senior Reactor Operator License.
- 6.3.12 Ensure the Operations Department Surveillance Test Schedule is reviewed.

6.4 Operations Support General Supervisor

- 6.4.1 Report to the Operations Manager, or Assistant Operations Manager.
- 6.4.2 Assume the responsibility and authority of the Assistant Operations Manager when the Assistant Operations Manager is absent.
- 6.4.3 Fulfill the position of Shift Supervisor or Assistant Shift Supervisor as assigned.
- 6.4.4 Ensure the following supervisory personnel are performing their duties efficiently and in compliance with plant procedures:
 - Operations Training Coordinator
 - Radwaste Supervisor
 - Operations Coordinator
 - Day-Shift SRO
- 6.4.5 Ensure Radwaste Facility operating procedures are developed and periodically reviewed.
- 6.4.6 Ensure the Radwaste Facility is operated in a safe and efficient manner, such that the health and safety of the general public is not jeopardized.
- 6.4.7 Develop a long term strategy for the handling, processing, storage and disposal of radioactive waste materials.
- 6.4.8 Ensure budgetary resources are provided for radioactive waste processing and disposal.
- 6.4.9 Assist RES to implement methods to minimize the generation of radioactive waste.
- 6.4.10 Implement and resolve ACTS, JRIP, and Business Plan open items as assigned.
- 6.4.11 Maintain a Senior Reactor Operator License.

6.5 Shift Supervisor (SS)

NOTE: The following responsibilities and authorities apply to the "on-shift" Shift Supervisor and are defined as Licensed Duties.

- 6.5.1 Report to the Operations Manager, or Assistant Operations Manager.
- 6.5.2 Has Command Decision Responsibility.
- 6.5.3 Has Command Decision Authority.
- 6.5.4 Has Control Room Command.
- 6.5.5 Function as the senior person on shift and direct shift activities.
- 6.5.6 Normally issue directions for plant operation through the SNO. Commands may be issued directly to personnel during abnormal conditions.
- 6.5.7 Initiate a reactor shutdown when it is determined that the safety of the reactor is in jeopardy, or when operating parameters exceed any of the reactor protection setpoints and an automatic shutdown does not occur.
- 6.5.8 Ensure plant operations are conducted in compliance with administrative and regulatory requirements.
- 6.5.9 Authorize equipment releases.
- 6.5.10 Immediately return to the Control Room and direct activities during accident or abnormal conditions.
- 6.5.11 Maintain the broadest perspective of operational conditions affecting the safety of the plant as a matter of highest priority at all times. Do not become totally involved in any single operation in times of emergency.
- 6.5.12 Notify the responsible Department Manager, or contact the on-call Supervisor, if support personnel are required.

(Subsection 6.5 continued on next page)

6.5 (Cont)

NOTE 1: Administrative staffing requirements can exceed Tech Spec minimum requirements.

NOTE 2: In the event of illness or unexpected absence, up to 2 hours is allowed to restore the shift crew or Fire Brigade to the minimum complement.
(Tech Spec 6.2.2.4)

6.5.13 Ensure an adequate number of qualified personnel are on shift to perform a plant shutdown from outside the Control Room per AOP-43, and man the Fire Brigade.

↓COM4.8.1

6.5.14 Ensure surveillance tests are scheduled when operator distraction due to other tasks is minimized. This is accomplished by performing tests during other than peak operator demand hours, which normally occurs on day shift. Ensure an adequate number of personnel are available to support testing. If required, call out additional personnel or suspend activities which interfere with the test.

6.5.15 Maintain an active Senior Reactor Operator License.

6.5.16 Conduct On the Job Training (OJT) and On the Job Evaluations (OJE) per ODSO-24.

6.5.17 Initiate Expedited Setpoint Changes per MCM-8.

6.6 Assistant Shift Supervisor (ASS)

NOTE: The following responsibilities and authorities apply to the "on-shift" Assistant Shift Supervisor and are defined as Licensed Duties.

- 6.6.1 Report to the Shift Supervisor.
- 6.6.2 Direct and coordinate the activities of Operations Department shift personnel.
- 6.6.3 Assume Control Room Command when designated by the Shift Supervisor.
- 6.6.4 Assume the responsibilities and authority of the Shift Supervisor if the Shift Supervisor becomes incapacitated. Immediately notify the Operations Manager.
- 6.6.5 Initiate a reactor shutdown when it is determined that the safety of the reactor is in jeopardy, or when operating parameters exceed any of the reactor protection setpoints and an automatic shutdown does not occur.
- ↓COM4.8.2
- 6.6.6 Ensure the plant is operated in accordance with approved procedures, unless immediate and unforeseen action is required to ensure equipment or personnel safety.
- 6.6.7 Ensure plant operations are conducted in compliance with administrative and regulatory requirements.
- 6.6.8 Return to the Control Room when plant conditions vary from routine, or as directed by the Shift Supervisor.
- 6.6.9 If qualified, report to the scene of a fire and assume the duties of Fire Brigade Leader.
- 6.6.10 Monitor and supervise plant operations outside of the Control Room.
- 6.6.11 Provide Back-Up Function for the SS, SNO and NCO during emergency or abnormal conditions.

(Subsection 6.6 continued on next page)

6.6 (Cont)

- 6.6.12 Act as the Operations Department representative in the Work Control Center. This responsibility and authority includes:
- Issue work permits, work tracking forms, and other forms of work authorization.
 - Sign for the Shift Supervisor.
 - Ensure the Shift Supervisor is cognizant of all authorized work.
- 6.6.13 Perform tasks as assigned by the Shift Supervisor.
- 6.6.14 Assist in on-shift training of Operations Department personnel.
- 6.6.15 Maintain an active Senior Reactor Operator License.
- 6.6.16 Conduct On the Job Training (OJT) and On the Job Evaluations (OJE) per ODSO-24.

6.7 Senior Nuclear Operator (SNO)

NOTE: The following responsibilities and authorities apply to the "on-shift" Senior Nuclear Operator and are defined as Licensed Duties.

- 6.7.1 Take direction from the person having Command Decision Responsibility and Authority.
- 6.7.2 Initiate a reactor shutdown when it is determined that the safety of the reactor is in jeopardy, or when operating parameters exceed any of the reactor protection setpoints and an automatic shutdown does not occur.
- ↓COM4.8.2
- 6.7.3 Ensure the plant is operated in accordance with approved procedures, unless immediate and unforeseen action is required to ensure equipment or personnel safety.
- 6.7.4 Ensure plant operations are conducted in compliance with administrative and regulatory requirements.
- 6.7.5 Direct and coordinate activities of all Operations Department shift personnel of a lower grade.
- 6.7.6 Monitor and direct activities outside of the Control Room, as required.
- 6.7.7 Return to the Control Room when plant conditions vary from routine, or as directed by the Shift Supervisor.
- 6.7.8 If the ASS is not available or is not qualified Fire Brigade Leader, report to the scene of a fire and assume the duties of Fire Brigade Leader.
- 6.7.9 Assume the duties and responsibilities of the Nuclear Control Operator as required by plant conditions. These conditions can include:
- Core alterations
 - Fuel movements
 - License requirements
 - Plant emergencies
- 6.7.10 Maintain an active Senior Reactor Operator or Reactor Operator License.
- 6.7.11 Conduct On the Job Training (OJT) and On the Job Evaluations (OJE) per ODSO-24.

6.8 Nuclear Control Operator (NCO)

NOTE: The following responsibilities and authorities apply to the "on-shift" Nuclear Control Operator and are defined as Licensed Duties.

- 6.8.1 Take direction from the person having Command Decision Responsibility and Authority, normally through the Senior Nuclear Operator.
- 6.8.2 Initiate a reactor shutdown when it is determined that the safety of the reactor is in jeopardy, or when operating parameters exceed any of the reactor protection setpoints and an automatic shutdown does not occur.
- 6.8.3 Ensure immediate operator actions are initiated during emergency conditions.

NOTE: Physical layout and panel FPP obstruct view of control panels from certain areas of the SS Office. Panel audible alarms are not obstructed.

- 6.8.4 Remain in the "Surveillance Area" of the Control Room as identified in Attachment 2.
- A. While in the SS Office, line of sight of control panels shall be maintained. Areas within the SS Office where line of sight of control panels is obstructed shall be avoided.
- B. The time spent in the SS Office shall be limited to official business and activities required to support plant operation, such as:
- Discussions with, or receiving direction from, the Shift Supervisor
 - Obtain or file paperwork, such as STs or PTRs

- 6.8.5 Monitor and control reactor and secondary plant systems from the Control Room, and initiate prompt corrective action to mitigate the consequences of unanticipated plant conditions.

↓COM4.8.2

- 6.8.6 Ensure the plant is operated in accordance with approved procedures, unless immediate and unforeseen action is required to ensure equipment or personnel safety.
- 6.8.7 Maintain an active Senior Reactor Operator or Reactor Operator License.
- 6.8.8 Conduct On the Job Training (OJT) and On the Job Evaluations (OJE) per ODSO-24.

6.9 Radwaste Supervisor

- 6.9.1 Report to the Operations Support General Supervisor.
- 6.9.2 May assume the responsibility and authority of the Operations Support General Supervisor when designated.
- 6.9.3 Ensure the Radwaste Facility is operated in a safe and efficient manner, such that the health and safety of the general public is not jeopardized.
- 6.9.4 Monitor radioactive waste input and coordinate activities to identify and eliminate sources of waste.
- 6.9.5 Ensure radioactive waste material is stored in a manner that minimizes personnel exposure.
- 6.9.6 Assist RES to develop procedures and implement methods to minimize the generation of radioactive waste.
- 6.9.7 Review radwaste equipment deficiencies and coordinate repair activities.
- 6.9.8 Ensure qualified personnel are available for the operation of Radwaste Building facilities.
- 6.9.9 Ensure radioactive waste processing and handling procedures are developed and periodically reviewed.
- 6.9.10 Schedule radioactive waste shipments.
- 6.9.11 Ensure radioactive waste shipments meet applicable laws and regulations.
- 6.9.12 Implement and resolve ACTS, JRIP, and Business Plan open items as assigned.

6.10 Reactor Analyst Supervisor

- 6.10.1 Report to the Technical Services Manager.
- 6.10.2 Ensure Reactor Analyst Procedures are developed and periodically reviewed.
- 6.10.3 Maintain control of all Special Nuclear Material on site.
- 6.10.4 Assist the Shift Supervisor to ensure core thermal limits are not exceeded.
- 6.10.5 Advise the Shift Supervisor of actions necessary to achieve optimum reactor performance.
- 6.10.6 Review and analyze the results of the calculated estimated critical rod patterns (ECPS) as compared to the actual critical rod pattern.
- 6.10.7 Implement and resolve ACTS, JRIP, and Business Plan open items as assigned.

6.11 Operations Training Coordinator

- 6.11.1 Report to the Operations Support General Supervisor.
- 6.11.2 Ensure Operations Department shift personnel qualifications are maintained current.
- 6.11.3 Develop a training schedule for Operations Department shift personnel.
- 6.11.4 Ensure operator training is conducted and documented per ODSO-24.
- 6.11.5 Review Operations Department training programs and ensure course content meets department needs.
- 6.11.6 Periodically attend all Operations Department training and provide recommendations to Training Department.

6.12 Operations Coordinator

- 6.12.1 Report to the Operations Support General Supervisor.
- 6.12.2 Develop and issue Operator Aids as required.
- 6.12.3 Initiate Operations Department procedure revisions.
- 6.12.4 Resolve Operations Department procedure revision requests.
- 6.12.5 Present Operations Department procedures to PORC.
- 6.12.6 Resolve procedural deficiencies as assigned by the Assistant Operations Manager.
- 6.12.7 Provide the Assistant Operations Manager with a monthly procedure biennial review status.
- 6.12.8 Implement and resolve ACTS, JRIP, and Business Plan open items as assigned.
- 6.12.9 Maintain a Senior Reactor Operator or Reactor Operator license.

6.13 Day Shift SROs

- 6.13.1 Report to the Operations Support General Supervisor.
- 6.13.2 Review modifications for impact on plant operations and initiate procedure changes as required.
- 6.13.3 Review Operating Experience issues and initiate recommended corrective actions.
- 6.13.4 Perform procedure reviews as assigned.
- 6.13.5 Perform duties as directed by the Operations Support General Supervisor.
- 6.13.6 Take assigned actions to assist in completing ACTS items.
- 6.13.7 Provide supervision and direction to operating crews for large scale trouble shooting evolutions, such as locating condenser air in-leakage.

6.14 Shift Technical Advisor or Senior Reactor Operator/Shift Technical Advisor

NOTE: Responsibilities and authorities apply to the dedicated Shift Technical Advisor or Senior Reactor Operator/Shift Technical Advisor.

- 6.14.1 Report directly to the Assistant Operations Manager and, by virtue of being a member of the operating crew, act under functional control of the Shift Supervisor.
- ‡COM4.8.3
- 6.14.2 Provide on-shift engineering and Accident Assessment expertise to the operating crew.
- 6.14.3 Review plant status and assess the implication of abnormal conditions.
- 6.14.4 Be available to the Control Room within 10 minutes from the onset of an abnormal condition to provide Accident Assessment.
- 6.14.5 Research and evaluate jumper and lifted lead requests, temporary modifications, and work requests as directed by the Shift Supervisor.
- 6.14.6 Assist in determining proper tagging requirements.
- 6.14.7 Remain aware of plant configuration and status.
- 6.14.8 Evaluate the effectiveness of procedures in terms of terminating or mitigating accidents, and make recommendations when changes are needed.
- 6.14.9 Assist in evaluating the operability of plant equipment to comply with Tech Specs.
- 6.14.10 Identify abnormalities or plant parameters that may represent a challenge to critical safety functions, or could result in degradation of the level of plant safety.
- 6.14.11 Provide independent assessment and corrective action recommendations to the Shift Supervisor.
- 6.14.12 Assist in determining emergency classifications.
- 6.14.13 Assess plant parameters during and following an accident to ascertain the potential for core damage.

↓COM4.8.3

6.14.14 Assume an Active Role In Shift Activities.

↓COM4.8.3

6.14.15 Shall not be assigned concurrent roles or tasks, such as communicator or Fire Brigade Leader, during abnormal or emergency conditions.

6.14.16 Following a transient, participate in the Post Transient Review to thoroughly evaluate the transient, initiating causes, plant response, and effects of the transient.

6.14.17 Initiate Expedited Setpoint Changes per MCM-8.

6.15 Engineer On Shift

6.15.1 Report directly to the Assistant Operations Manager and, by virtue of being a member of the operating crew, act under functional control of the Shift Supervisor.

6.15.2 Review plant status and assess the implication of abnormal conditions.

6.15.3 Research and evaluate jumper and lifted lead requests, temporary modifications, and work requests as directed by the Shift Supervisor.

6.15.4 Assist in determining proper tagging requirements.

6.15.5 Remain aware of plant configuration and status.

6.15.6 Evaluate the effectiveness of procedures in terms of terminating or mitigating accidents, and make recommendations when changes are needed.

6.15.7 Assist in evaluating the operability of plant equipment to comply with Tech Specs.

6.15.8 Identify abnormalities or plant parameters that may represent a challenge to critical safety functions, or could result in degradation of the level of plant safety.

6.15.9 Assist in plant shutdown from outside the Control Room per AOP-43.

6.15.10 Complete Shift Turnover Checklist per ODSO-4.

6.15.11 Initiate Expedited Setpoint Changes per MCM-8.

6.16 Reactor Engineer

- 6.16.1 Report to the Reactor Analyst Supervisor.
- 6.16.2 Perform duties as assigned by the Reactor Analyst Supervisor.
- 6.16.3 Be present in the Control Room during rod movements from the all rods in condition until reactor criticality is achieved.

6.17 Auxiliary Operators

NOTE: Responsibilities and authorities apply to the "on-shift" Auxiliary Operators.

- 6.17.1 Report to the Senior Nuclear Operator.
- 6.17.2 Monitor and operate plant systems and equipment.
- 6.17.3 Perform duties as directed by the Senior Nuclear Operator.

↓COM4.8.2

- 6.17.4 Ensure the plant is operated in accordance with approved procedures, unless immediate and unforeseen action is required to ensure equipment or personnel safety.

6.18 Radwaste Building Auxiliary Operators

NOTE: Responsibilities and authorities apply to the "on-shift" Radwaste Building Auxiliary Operators.

- 6.18.1 Report to the Senior Nuclear Operator or Radwaste Supervisor.
- 6.18.2 Monitor and operate Radwaste Building systems and equipment.
- 6.18.3 Perform duties as directed by the Senior Nuclear Operator.
- 6.18.4 Ensure equipment is operated in accordance with approved procedures, unless immediate and unforeseen action is required to ensure equipment or personnel safety.

6.19 Fire Protection Supervisor

- 6.19.1 Report to the Technical Services Manager.
- 6.19.2 Ensure Fire Protection and Prevention Procedures are developed and periodically reviewed.
- 6.19.3 Maintain fire protection pre-plans.
- 6.19.4 Provide Operations Department interface with Fire Protection Engineering and update Fire Protection manuals.
- 6.19.5 Provide technical direction to the Fire Brigade during plant fire emergencies and rescues in accordance with the emergency plan.
- 6.19.6 Provide technical assistance to the Shift Supervisor to evaluate fire system surveillance test performance.
- 6.19.7 Conduct plant inspections to evaluate potential fire hazards.
- 6.19.8 Conduct plant inspections and evaluate accumulated transient combustible control per WACP-10.1.10.
- 6.19.9 Ensure hot work site inspections are performed per WACP-10.1.33.
- 6.19.10 Attend and observe Operations Department fire fighting training.
- 6.19.11 Conduct unannounced fire drills.
- 6.19.12 Direct compensatory fire watch personnel when plant conditions require these watches to be established.
- 6.19.13 Implement and resolve ACTS, JRIP, and Business Plan open items as assigned.

6.20 Fire Brigade Leader

- 6.20.1 Report to the Shift Supervisor, or Emergency Director.
- 6.20.2 Carry out the duties and responsibilities as specified in:
 - EAP-3
 - AOP-28

6.21 Fire Brigade

Report to the scene of a fire or emergency and carry out actions as directed by the Fire Brigade Leader.

6.22 First Aid Team

- 6.22.1 Report to the Shift Supervisor, or Emergency Director.
- 6.22.2 Carry out the duties specified in EAP-2.

6.23 Search and Rescue Team

- 6.23.1 Report to the Shift Supervisor, or Emergency Director.
- 6.23.2 Carry out the duties specified in EAP-9.

6.24 Operations General Clerk

- 6.24.1 Report to the Operations Manager.
- 6.24.2 Draft, type, distribute, and control department procedures, correspondence, and Daily Report.
- 6.24.3 Develop Operations Department schedules and other management aids.
- 6.24.4 Develop Operations Department office procedures.
- 6.24.5 Maintain the department files.
- 6.24.6 Procure office supplies as required.
- 6.24.7 Conduct administrative inspections and audits as directed by the Operations Manager.
- 6.24.8 Maintain personnel files.
- 6.24.9 Perform general secretarial duties such as answering phones and preparing travel arrangements for Operations Department personnel.
- 6.24.10 Train temporary clerks assigned to Operations Department.

6.25 Local Leak Rate Supervisor (LLRS)

- 6.25.1 Performed duties as assigned by the Operations Manager.
- 6.25.2 Coordinate local leak rate testing.
- 6.25.3 Determine acceptability criteria of each individual leak rate test.
- 6.25.4 Update total leakage calculations.
- 6.25.5 Ensure local leak rate test panels and other necessary equipment are available and in proper working order for leak rate testing.

6.26 Core Alterations SRO

- 6.26.1 Assigned by the Operations Manager.
- 6.26.2 Directly supervise core alterations, including fuel loading and transfer. The Core Alterations SRO shall not be assigned any other duties during this time.
- 6.26.3 Maintain an active Senior Reactor Operator License, or an active Senior Operator License limited to fuel handling.

6.27 Licensed and Journeyman Operators

Conduct On the Job Training (OJT) and On the Job Evaluations (OJE) per ODSO-24.

7.0 SPECIAL INSTRUCTIONS

- 7.1 Except during Cold Shutdown or Refuel conditions, an STA or SRO/STA is required on shift. (Tech Spec Table 6.2-1).
- 7.2 The Nuclear Control Operator should have an unobstructed view of and access to the "horseshoe" area control panels in order to be able to initiate prompt corrective action during abnormal conditions. The NCO should not normally leave this area unless required to respond to an emergency condition.
- 7.3 Only the Operations Manager may designate a qualified relief to assume Command Decision Responsibility and Authority from the Shift Supervisor.
- 7.4 The Shift Supervisor shall only perform administrative tasks, such as authorizing time sheets and meal tickets, after being relieved from shift duties.
- 7.5 The dedicated STA is the only member of the shift crew not assigned specific roles or tasks during emergencies. The STA's duties and responsibilities are intended to allow the STA to step back and "see the big picture", to anticipate where the event is headed, and to make appropriate recommendations.

8.0 PROCEDURE

None

9.0 ATTACHMENTS

1. OPERATIONS DEPARTMENT ORGANIZATION
2. CONTROL ROOM LAYOUT

ATTACHMENT 1

OPERATIONS DEPARTMENT ORGANIZATION

