

07-25-91

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION
ADMINISTRATIVE PROCEDURE

AP-4.0

REVISION 18

ADMINISTRATION OF OPERATIONS

TECHNICAL SPECIFICATION REQUIRED

FOR INFORMATION ONLY

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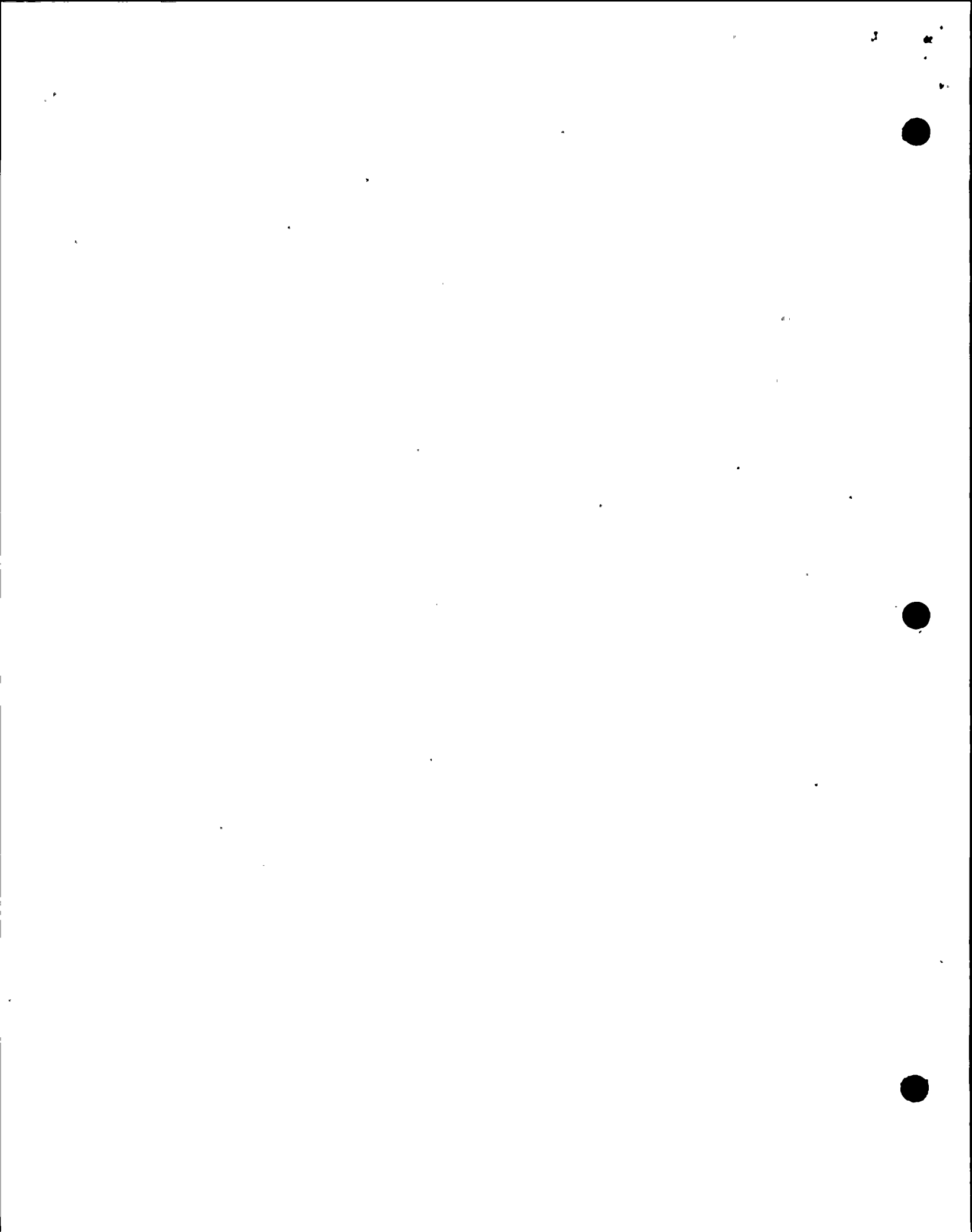
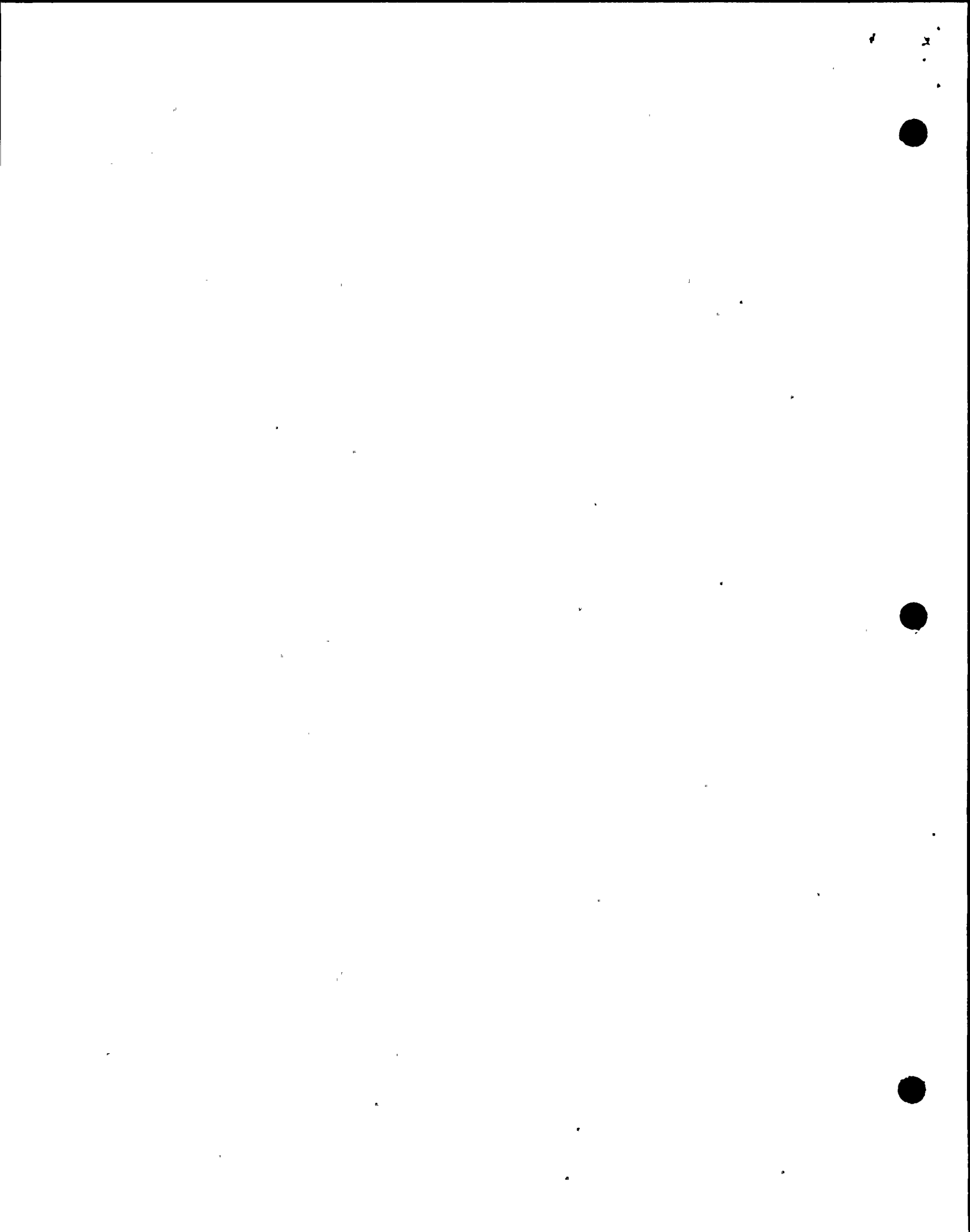


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1.0 PURPOSE
(NCTS 1&2)

To establish the responsibilities and controls necessary for the safe, reliable, and efficient administration of Operations at Nine Mile Point Nuclear Station.

1.1 Applicability

This procedure applies to Operations Branch personnel reporting either directly or indirectly to the Station 1 or 2 Manager Operations.

2.0 REFERENCES AND COMMITMENTS

2.1 Licensee Documentation

2.1.1 QATR-1, Quality Assurance Program Topical Report for Nine Mile Point Nuclear Station Operations

2.1.2 Station 1 and 2 Technical Specifications

2.1.3 Station 1 Final Safety Analysis Report (FSAR), Section XIII, Conduct of Operations

2.1.4 Station 2 Updated Safety Analysis Report (USAR), Chapter 13, Conduct of Operations

2.2 Standards, Regulations, and Codes

2.2.1 10CFR Part 50, Domestic Licensing of Production and Utilization Facilities

2.2.2 10CFR Part 55, Operators Licenses

2.2.3 10CFR50.54, Conditions of Licenses

2.2.4 10CFR50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors

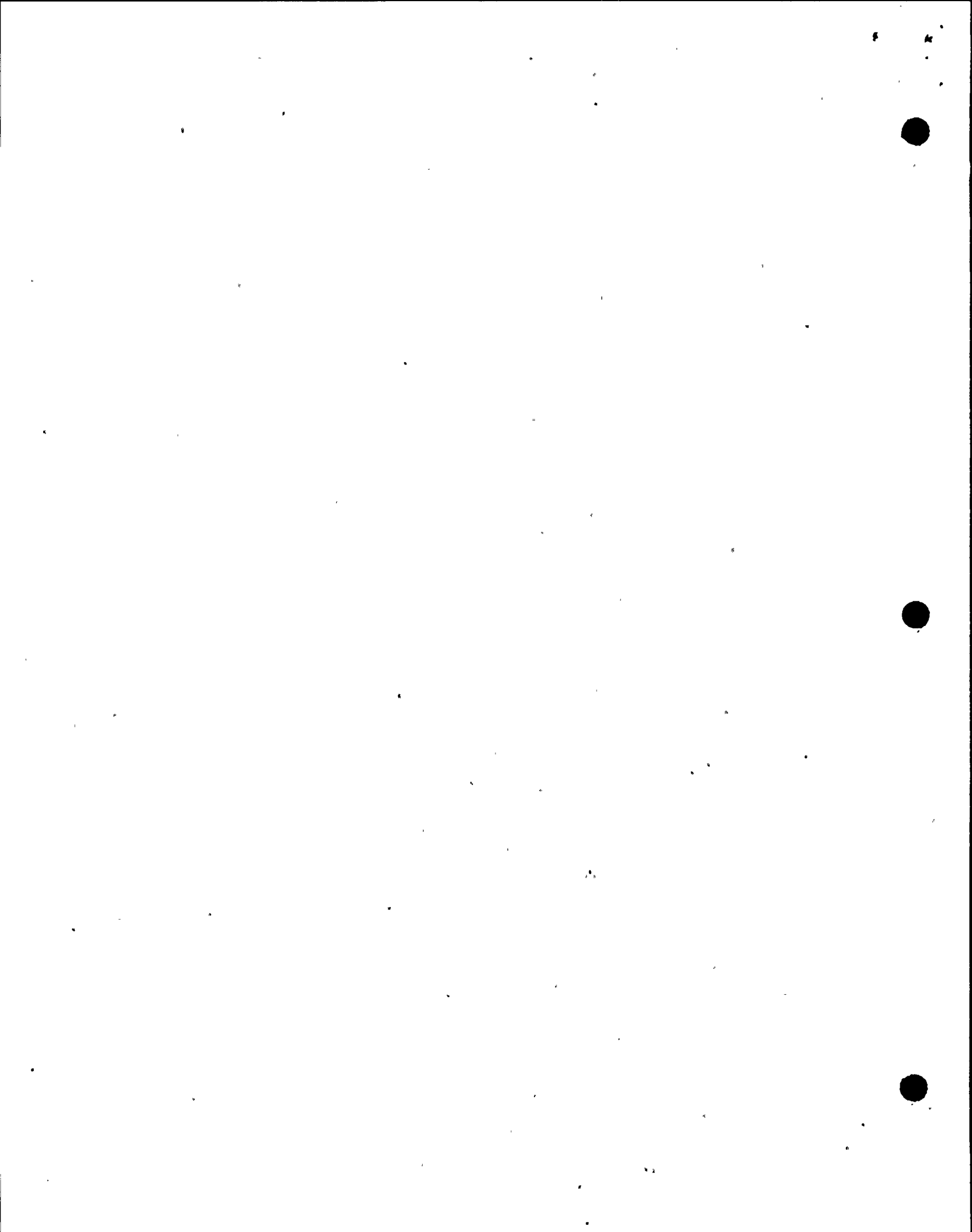
2.2.5 ANSI/ANS-3.2-1982, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

2.2.6 ANSI-ASME NQA-1-1983, Quality Assurance Program Requirements for Nuclear Facilities

2.2.7 ANSI/ASME NQA-2-1983, Quality Assurance Requirements for Nuclear Power Plants

2.2.8 INPO 84-021, Conduct of Operations, July 1984

2.2.9 INPO 85-017, Guidelines for the Conduct of Operations at Nuclear Power Stations, June 1985



2.2.10 NUREG 1.114, Revision 1, Guidance on Being Operator at the Controls of a Nuclear Power Plant

2.3 Policies, Programs, and Procedures

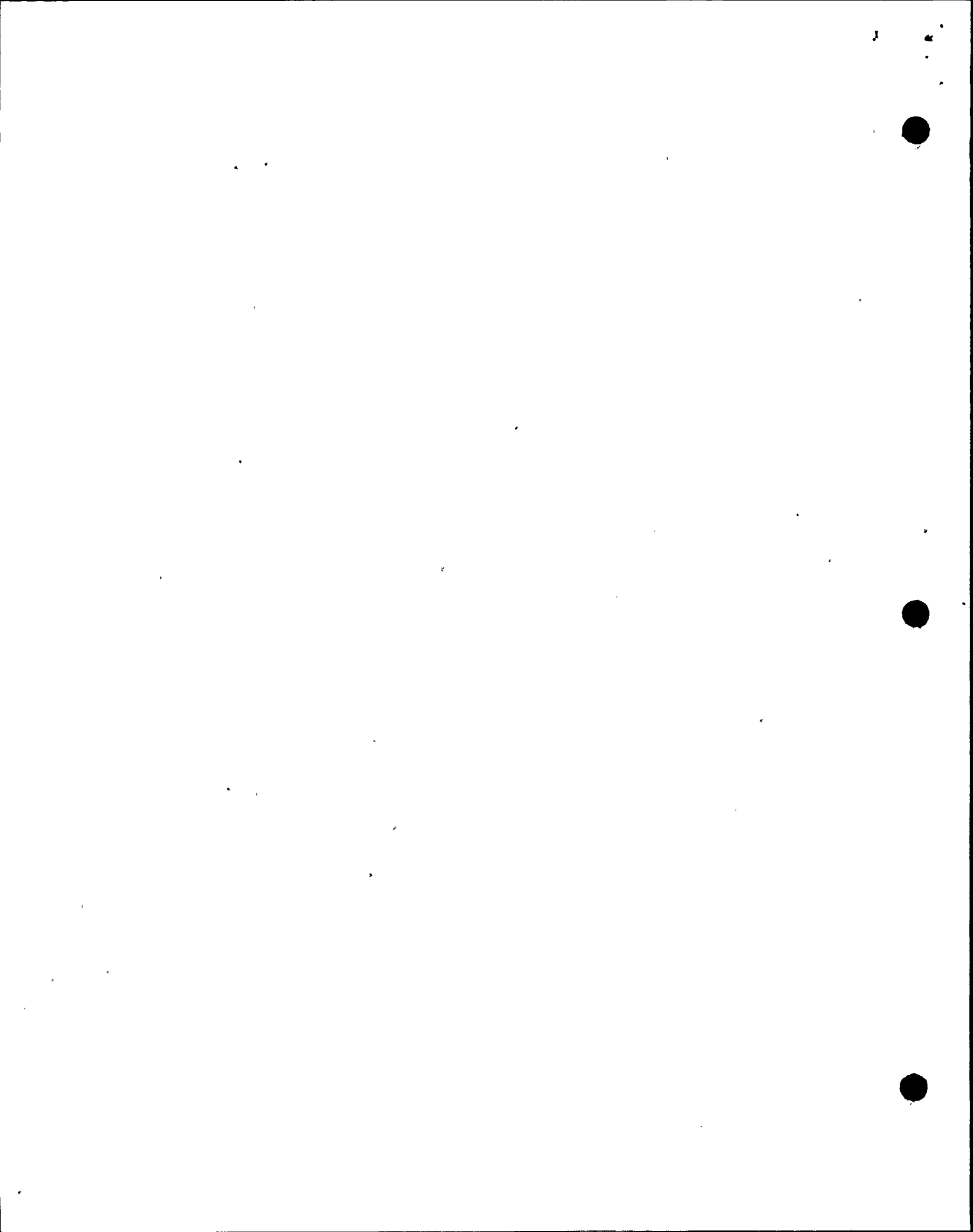
- 2.3.1 NIP-ECA-01, Deviation Event Report
- 2.3.2 AP-1.1, Composition and Responsibility of Nuclear Generation Organization
- 2.3.3 AP-2.0, Procedure Use and Control
- 2.3.4 AP-3.2, Industrial Health and Safety
- 2.3.5 AP-4.2, Control of Equipment Markups
- 2.3.6 AP-4.3, Control of Overtime
- 2.3.7 AP-9.0, Administration of Training
- 2.3.8 AP-9.1, Site Task Qualification Program
- 2.3.9 AP-10.1, Management of Station Records
- 2.3.10 AP-12.1, Fitness for Duty During an Unscheduled Call-out
- 2.3.11 S-SUP-6, Control of Operator Aids

2.4 Supplemental References

- 2.4.1 Niagara Mohawk Accident Prevention Rules
- 2.4.2 Site Emergency Plan and Implementing Procedures

2.5 Commitments

<u>Sequence Number</u>	<u>Commitment Number</u>	<u>Description</u>
1	1953	Improve Control Room operating practices.
2	1541	Conduct of Operations.
3	001065-03	Superintendent Operations shall ensure EOP training requirements are met.
4	503479-50	Management personnel shall observe certain training sessions.
5	503461	Administrative Controls for Equipment Status Log.



2.5 (Cont)

<u>Sequence Number</u>	<u>Commitment Number</u>	<u>Description</u>
6	OP.2-2	Enhance "At-the-Controls" operator responsibilities.
7	700130(Task 5)	MOV backseating controls.

3.0 DEFINITIONS

3.1 Personnel - Generic term that refers to both station personnel and external organization personnel.

3.2 Site - The term "site" refers to Stations 1 and 2 including the contiguous property of Niagara Mohawk Power Corporation surrounding Stations 1 and 2.

4.0 PRIMARY RESPONSIBILITIES

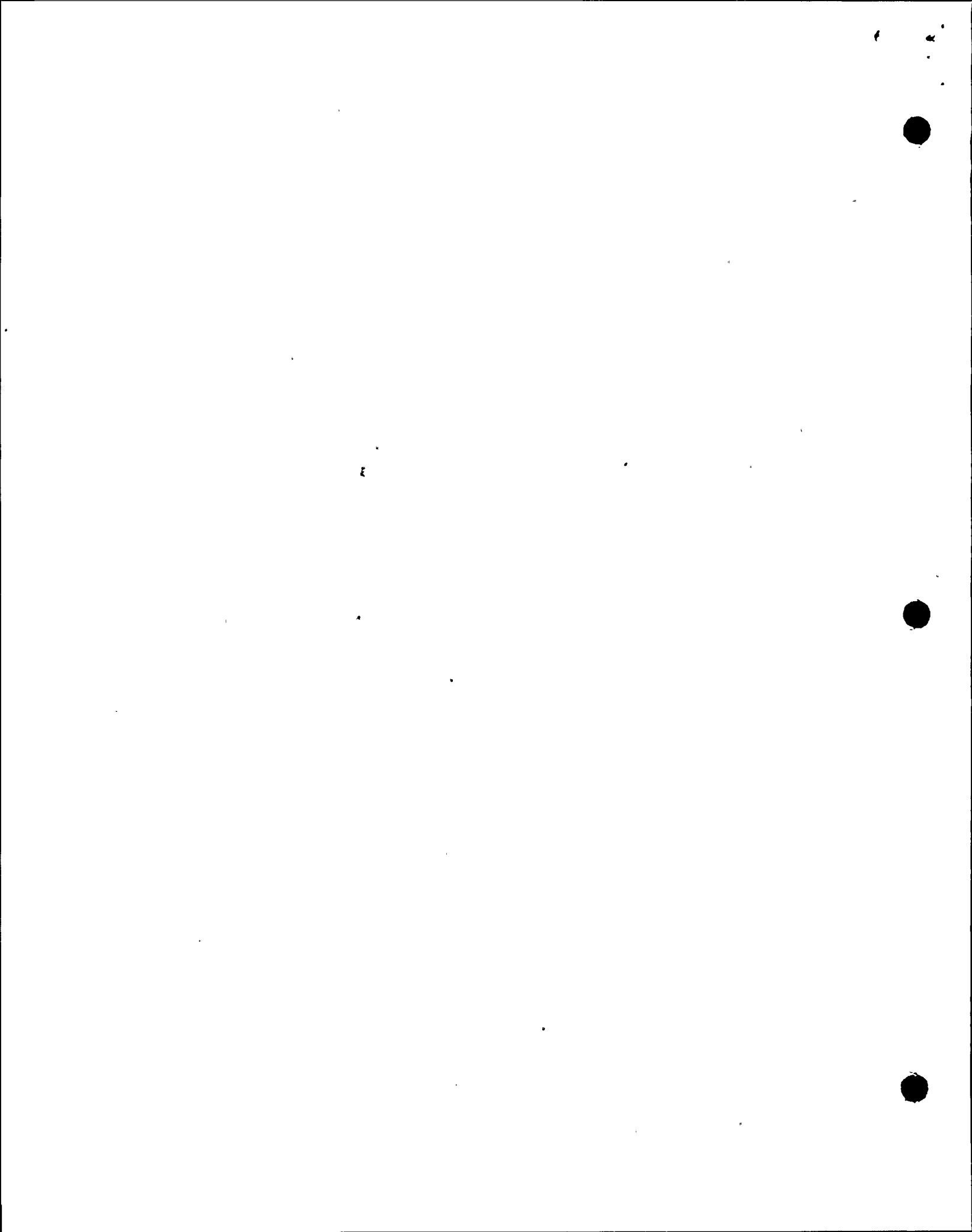
The Manager Operations is responsible for the content and maintenance of this procedure.

5.0 PROCEDURE

5.1 Operations Personnel Responsibilities

5.1.1 Manager Operations

- a. Reports directly to the Plant Manager.
- b. Establishes and maintains the Operations Branch organization and staff.
- c. Provides overall guidance and direction to the Operations Branch in cooperation with other branch/section heads.
- d. Develops, implements, and coordinates programs and policies that ensure safe and reliable station operations.
- e. Obtains Plant Manager approval to commence a reactor startup.
- f. Designates activities performed by the Reactor Engineering, Operations Support (includes Fire Protection), and Radwaste sections.

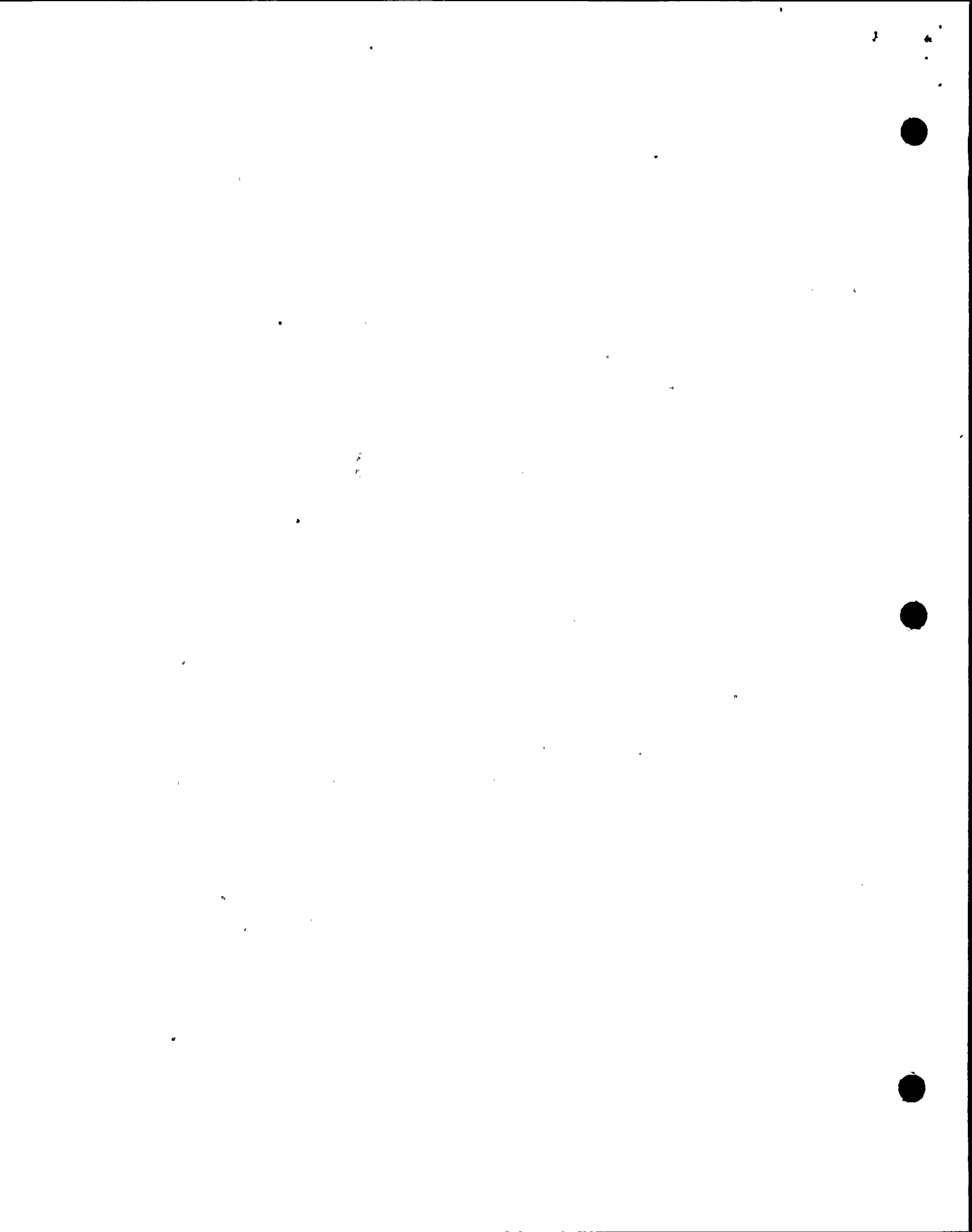


5.1.1 (Cont)

- g. Ensures branch personnel are properly trained and qualified.
- h. Provides guidance and direction to direct reports to ensure required quality and quantity of work is achieved and approved operating procedures and practices are followed.
- i. Maintains familiarity with the requirements of regulatory agencies relative to plant operations. Prepares or supervises the preparation of the necessary reports for these agencies, as directed.
- j. When assigned, may act as Plant Manager in the Plant Manager's absence.
- k. Ensures performance of reactor engineering, reactor core management, nuclear fuel accountability, storage, utilization, and disposition.
- l. Establishes Operation Branch goals and objectives to support station goals.

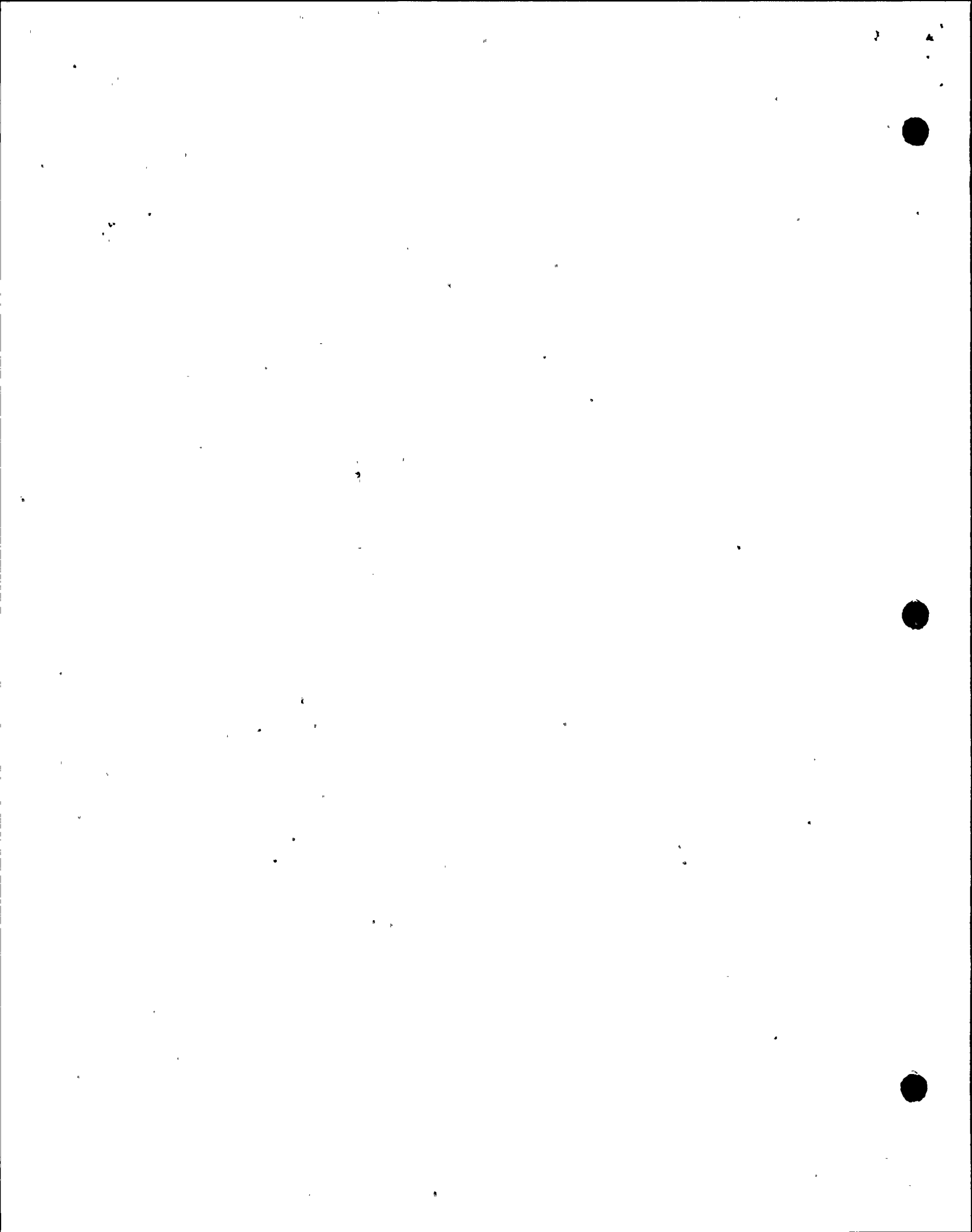
5.1.2 General Supervisor Operations

- a. Reports directly to the Manager Operations.
- b. Holds an NRC Senior Reactor Operator (SRO) license for the specific station assigned.
- c. Responsible for directing the actions of the operating shift through the on-duty SSS.
- d. Functioning as the Manager Operations in the absence of the Manager Operations, as required.
- e. Establishes and regularly reviews required operating logs and records.
- f. Supervises the preparation of operating reports to ensure completeness, accuracy, and timeliness.
- g. Develops performance standards for supervised personnel as a means of evaluating performance.
 - 1. Keeps Manager Operations informed of qualifications and performance of personnel.
 - 2. Makes appropriate recommendations concerning personnel showing outstanding or substandard performance.



5.1.2 (Cont)

- h. Monitors development and implementation of On-the-Job Training (OJT) programs and provides guidance and direction to the Nuclear Training Department to ensure:
 - 1. Content of training and retraining programs (including Emergency Plan and Emergency Operating Procedures) for operating personnel provides a highly qualified and efficient operating force.
 - 2. Qualified replacement personnel are available when vacancies occur.
- i. Ensure supervised personnel receive training in appropriate radiological protection practices, procedures, and ALARA principles.
- j. Promotes safe working conditions and practices by ensuring supervised personnel receive required instructions concerning industrial safety.
- k. Ensures strict adherence to company and plant security provisions and procedures.
- l. Promotes good housekeeping by periodically inspecting areas assigned to the Operations Branch.
- m. Maintains familiarity with company/union agreements and interpretations. Ensures company/union agreements are properly administered.
- n. Ensures performance of assigned surveillance activities in accordance with approved surveillance schedule.
- o. Ensures equipment status control is maintained.
- p. Ensures startup and operational testing is performed correctly.
- q. May issue written Station Shift Supervisor Instructions.
- r. May sign and date Station Shift Supervisor Instructions.
- s. Ensures Operations memorandums used to transmit information or instructions for conduct of operations of an intermediate to long-term nature are NOT used as a substitute for written procedures or procedure changes/revisions.

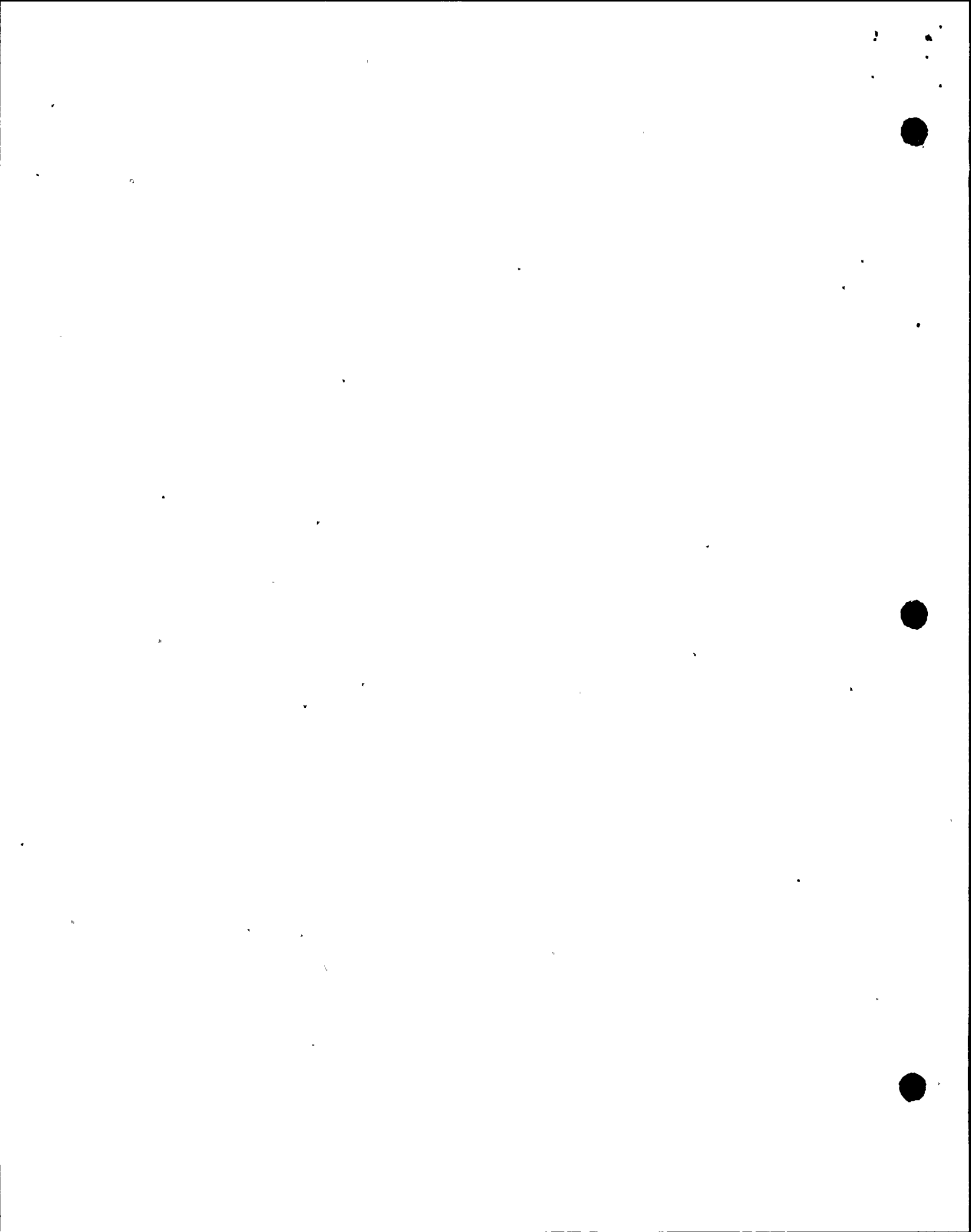


5.1.3 Supervisor Operations

- a. Reports directly to the General Supervisor Operations.
- b. Holds an NRC Senior Reactor Operator (SRO) License for the specific station assigned.
- c. Performs the duties of the SSS when required and when SRO License is active.
- d. May issue written Station Shift Supervisor Instructions.
- e. May sign and date Station Shift Supervisor Instructions.

5.1.4 Station Shift Supervisor (SSS)

- a. As a matter of highest priority, maintains a broad perspective of operational conditions affecting safety of the station.
- b. Maintains an NRC Senior Reactor Operator (SRO) License for the specific station assigned.
- c. Directs shut down of the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
- d. Provides full supervisory control of station operations subject to the general supervision of the General Supervisor Operations. Implements Station Shift Supervisor Instructions, as applicable.
- e. Relinquishes shift control only when properly relieved by a qualified replacement.
- f. Maintains accurate logs and records of operations activities, station status, and equipment status.
- g. Coordinates the activities of other organizations to accomplish the operating objectives for the shift.
- h. Authorizes the removal or return to service of equipment and systems from maintenance, testing, or operational activities.
- i. Monitors the mental and physical condition of operating shift personnel.
- j. Maintains the status of active equipment markups.



5.1.4 (Cont)

- k. Periodically tours the plant to monitor housekeeping, material condition, and work practices.
- l. Conducts shift briefings.

5.1.5 Assistance Station Shift Supervisor (ASSS)

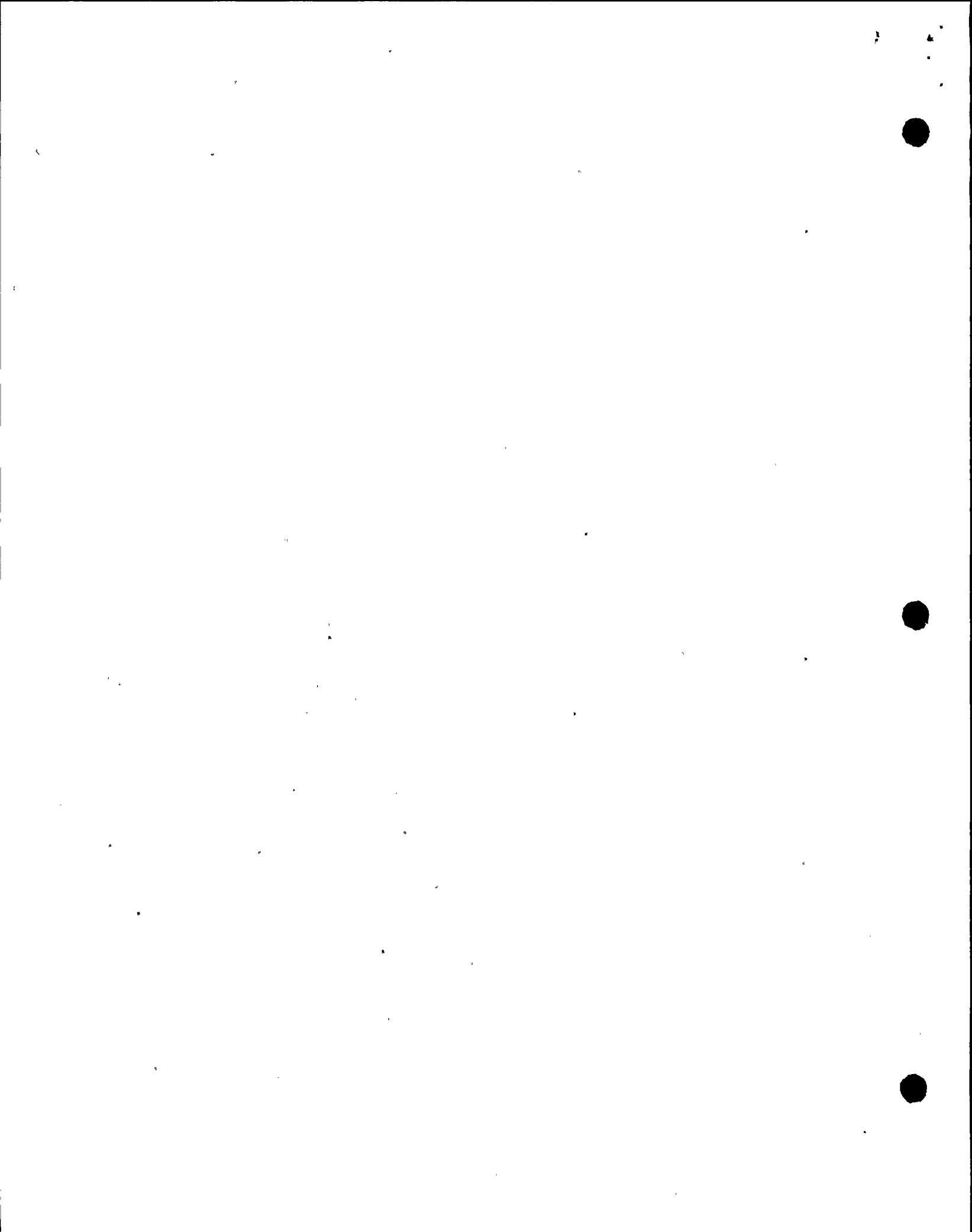
- a. Maintains an active NRC Senior Reactor Operator (SRO) license for the specific station assigned.
- b. When assigned as the SRO in charge of the Control Room, maintains full supervisory control of station operations subject to the general supervision of the SSS.
- c. Assumes the duties and responsibilities of the Shift Technical Advisor (STA), when required.

5.1.6 Chief Shift Operator (CSO)

- a. Maintains an NRC Reactor Operator (RO) license for the specific station assigned.
- b. Shuts down the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
- c. Performs duties or directs activities associated with the safe operation of assigned station.
- d. Maintains order and minimizes unnecessary personnel in the Control Room.

NOTE: When responding to alarms or in the event of an emergency affecting the safety of operations, the operator at the controls may momentarily be absent from the defined surveillance area in order to verify the receipt of an annunciator alarm or initiate immediate corrective action, provided the operator remains within the confines of the Control Room.

- e. Remains continuously present and alert "at-the-controls" for the duration of the assigned shift, unless properly relieved by a qualified replacement.
- f. Should not get involved in detailed step-by-step work of procedures and Preventive Maintenance (PMs).



5.1.6 (Cont)

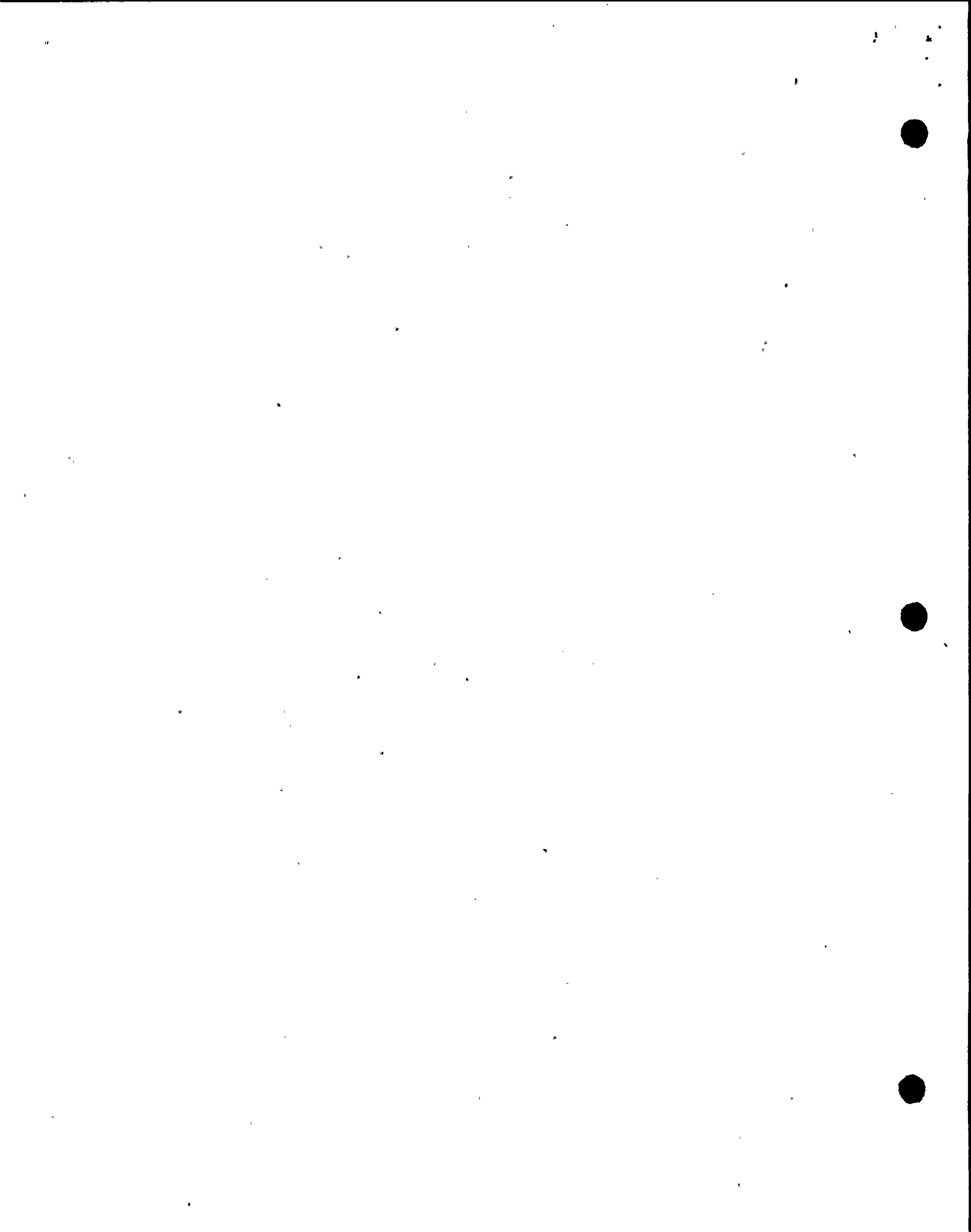
- (NCTS 6) g. As the "at-the-controls" reactor operator, is continuously aware of system and plant status and performs panel walkdowns to assess operation.
- h. If coordination cannot be accomplished, the CSO has the authority and the responsibility to stop work or reprioritize work to be done.
- i. Delegates work and coordinates personnel in the Control Room and the plant.
- j. Maintains control of active equipment markups.

5.1.7 Licensed Reactor Operators (RO)

- a. Maintains an NRC Reactor Operator (RO) license for the specific station assigned.
- b. With concurrence from the CSO, manipulates the controls that directly affect the reactivity or power level of the reactor.
- c. Shuts down the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
- d. Remains aware of the operation of mechanisms and apparatus that may indirectly affect the reactivity or power level of the reactor.
- (NCTS 6) e. When assigned as "at-the-controls" reactor operator, remain continuously aware of system and plant status and perform panel walkdown to assess operation.

5.1.8 Operations Branch Shift Personnel

- a. Remain alert and present at the site until properly relieved.
- b. Assume responsibility for monitoring instrumentation and controls located within assigned areas.
- c. Remain aware of, and responsible for, the station status while on shift.
- d. Perform timely and proper actions to ensure the safe and efficient operation of the station.

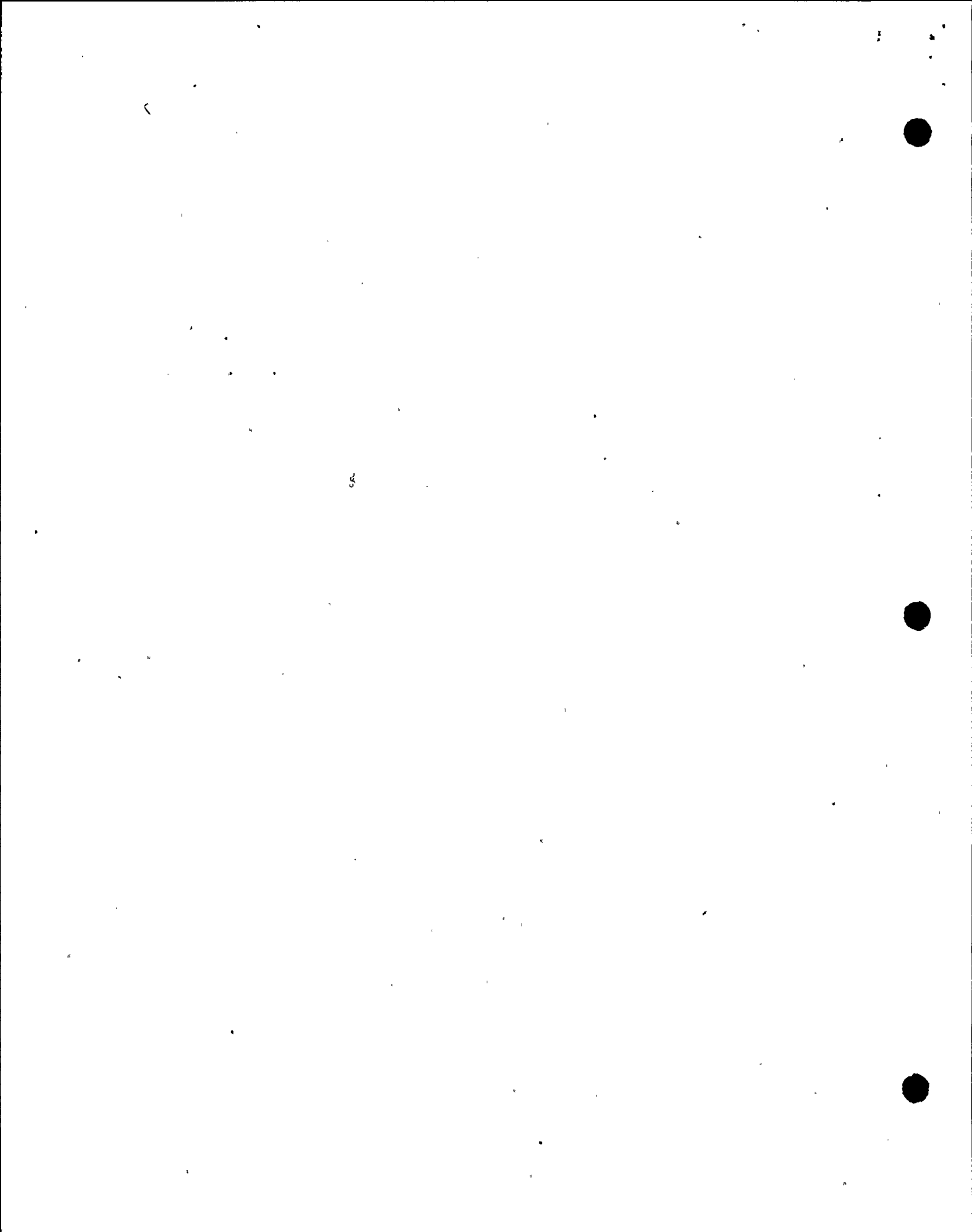


5.1.8 (Cont)

- e. Base operating actions and responses upon indications provided by appropriate instruments and alarms, unless such indications are proven to be incorrect.
- f. Inform the Control Room, and receive permission, before manipulating valves, controls, or instruments which could affect reactor operation or station performance.

5.1.9 Shift Technical Advisor (STA)

- a. Remains in the Control Room during transients or emergencies and observe plant information displays.
- b. Makes objective evaluations of plant operations and advises or assists plant supervision in correcting conditions that may compromise the safety of operations.
- c. Observes the operation of Emergency Core Cooling Systems and confirms availability of components of the Emergency Core Cooling Systems which were not activated by the effects of the transient.
- d. Immediately reports abnormalities to the SSS and provides assistance in formulating a plan for appropriate corrective action.
- e. Monitors applicable procedures and operator activities for possible errors and advises and SSS of appropriate corrective actions.
- f. During emergencies, observes critical parameters and determines if there is adequate core cooling, including availability of a heat sink for the coolant system.
- g. Makes qualitative assessment of the plant parameters during and following an accident in order to ascertain whether core damage has occurred.
- h. In the event critical parameters become unavailable due to instrument failure, performs calculations or determines, through other appropriate means, approximate values for the parameters in question.
- i. Evaluates the effectiveness of plant procedures in terms of terminating or mitigating accidents and makes recommendations when changes are needed.



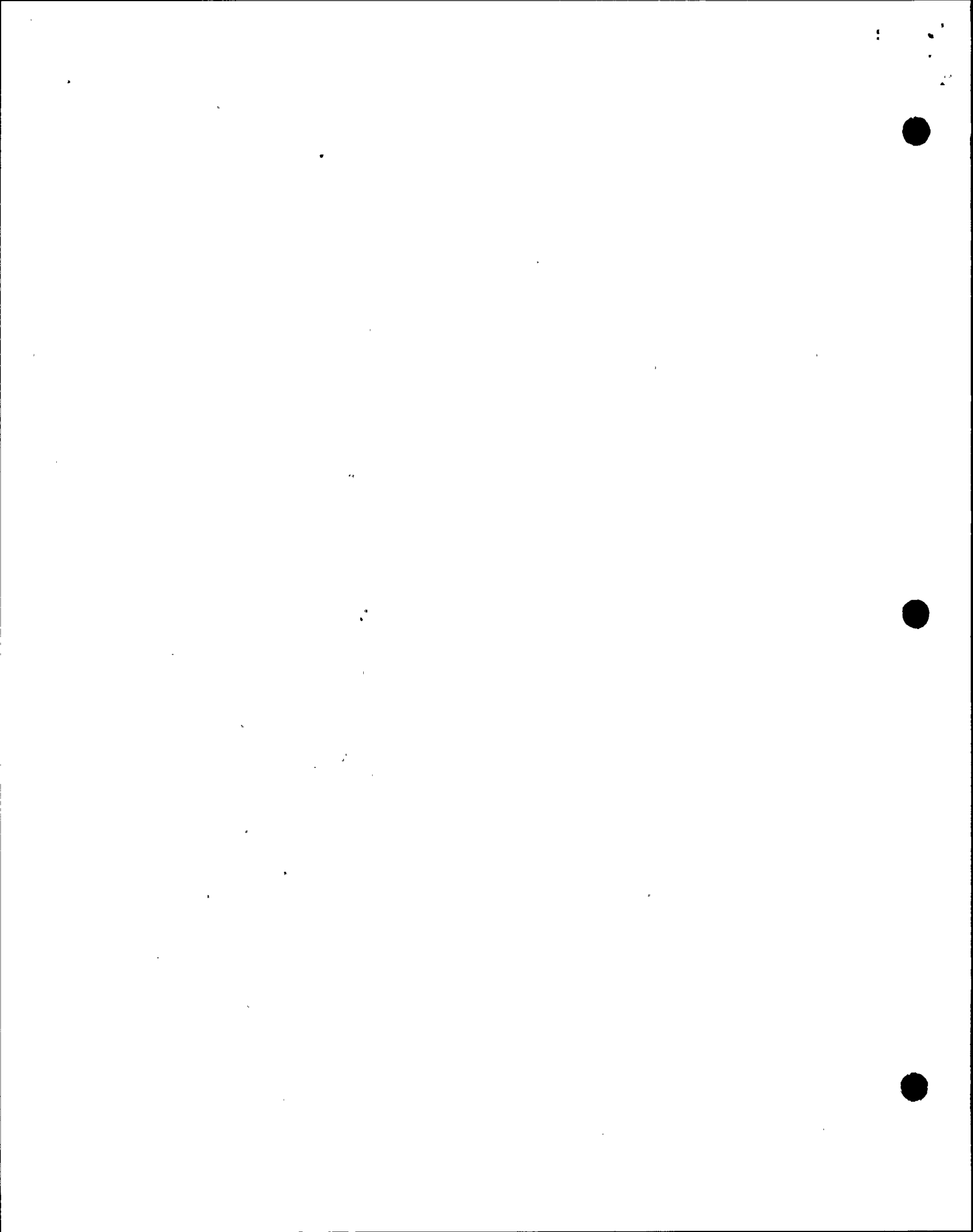
5.1.9 (Cont)

- j. Monitors other Control Room displays not directly related to the transient to note abnormal values, undesirable trends, or normal conditions.

NOTE: A significant part of STA responsibility is ensuring the health and safety of the public is protected by appropriate automatic and manual response, as well as appropriate implementation of the emergency plan. However, this does not preclude the STA from assisting the SSS in reading the EOPs during severe transients when prompt actions in more than one EOP are concurrently required, as the EOPs by design require operators to maintain an overall perspective of plant status.

5.1.10 Supervisor Reactor Engineering

- a. Reports directly to the Manager Operations.
- b. Ensures routine and special surveillance on the reactor core are performed.
- c. Ensures proper implementation of the Reactivity Management Program.
- d. During steady state conditions, power changing, and flux shaping maneuvers:
 - 1. Provides control rod position recommendations and instructions to the SSS for approval.
 - 2. Conducts prescribed surveillances and tests.
 - 3. Provides information to the SSS and operating personnel to document compliance with Technical Specifications and reactor fuel operating and warranty requirements.
- e. Provides recommendations and technical support to the SSS and operating personnel during all planned reactivity changes. A designee of the Supervisor Reactor Engineering may provide such recommendations and support.
- f. Functions as the Special Nuclear Material Custodian.

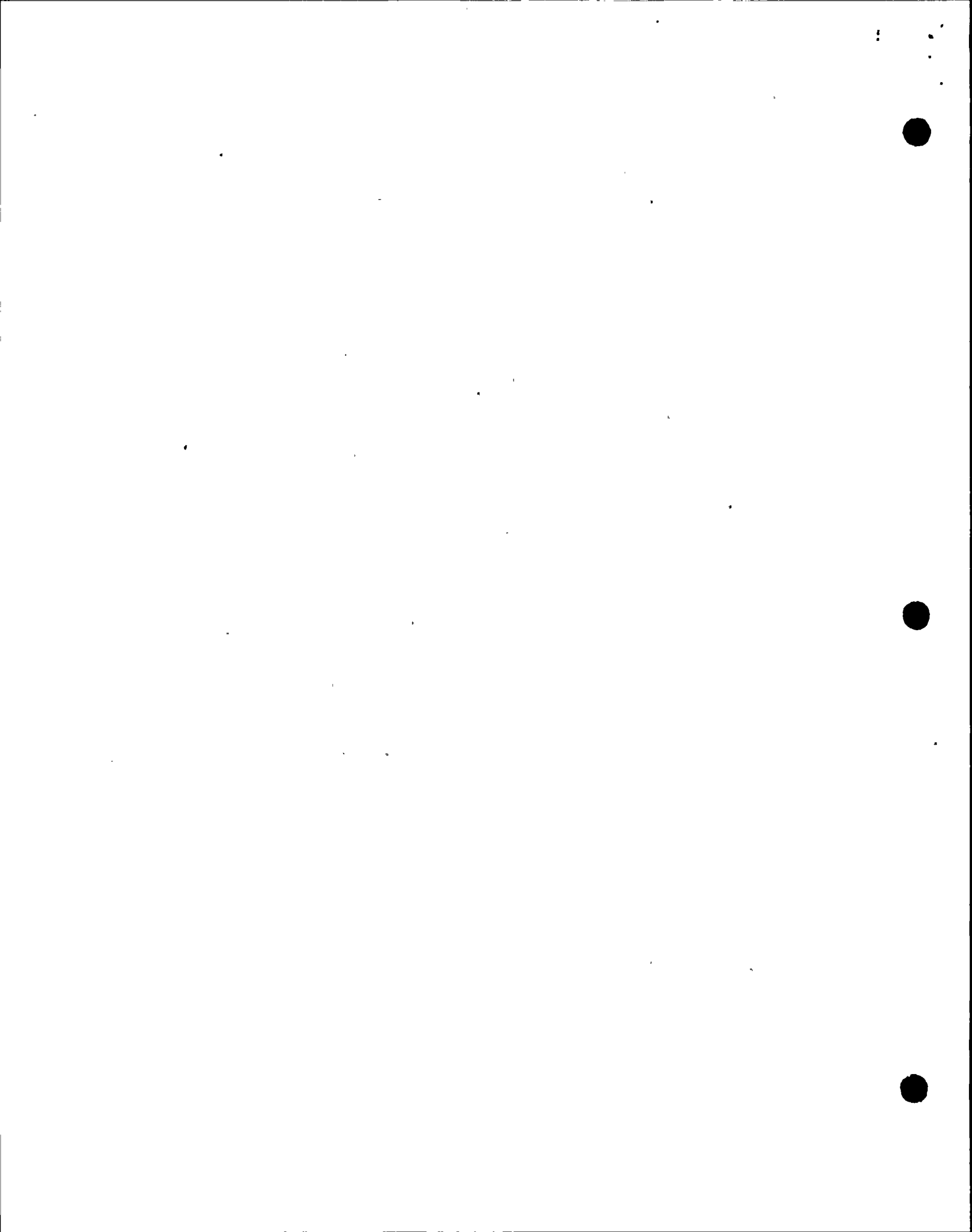


5.1.11 General Supervisor Operations Support

- a. Reports directly to the Manager Operations.
- b. Ensures special reports are prepared.
- c. Ensure investigations are conducted and reviewed.
- d. Ensures routine administrative functions of the Operations Branch are performed.
- e. Ensures unit operations are coordinated with other unit organizations to ensure timely completion of required operations, maintenance, modification, surveillance, and testing.
- f. Ensures special projects are properly executed.
- g. Ensures appropriate level of technical and engineering support is provided to the Operations Branch.
- h. Ensures direction of the Station Fire Department is provided for day-to-day activities associated with implementation of the Fire Protection Program.
- i. Ensures personnel comply with the Fire Protection Program and procedures.
- j. Provides guidance and direction to Nuclear Training to ensure content of training and retraining program (including Emergency Plan and Emergency Operating Procedures) provides a highly qualified and efficient operating force.
- k. Promotes good housekeeping by periodically inspecting areas assigned to the Operations Support Section.
- l. Maintains familiarity with company/union agreements and interpretations.
- m. Ensures company/union agreements are properly administered.

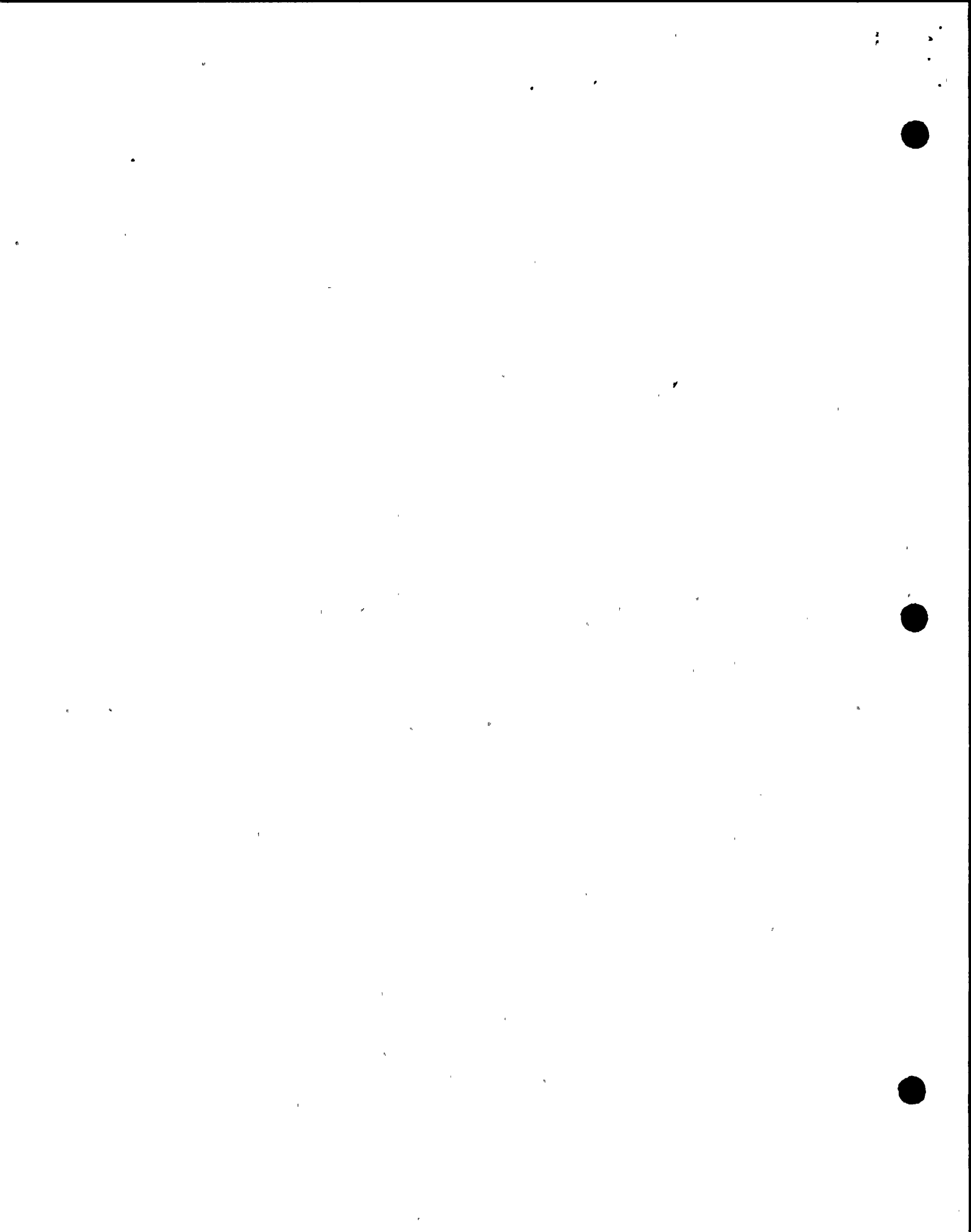
5.1.12 General Supervisor Radwaste Operations

- a. Reports directly to the Manager Operations.
- b. Establishes and maintains the Radwaste Operations Section organization and staff.
- c. Provides overall guidance and direction to the Radwaste Operations Section in cooperation with other section heads.



5.1.12 (Cont)

- d. Ensures Section personnel are properly trained and qualified.
- e. Provides guidance and direction to ensure:
 - 1. Required quality and quantity of work is achieved; AND
 - 2. Approved operating procedures and practices are followed
- f. Maintains familiarity with the requirements of regulatory agencies relative to Radwaste Operations. Prepares or supervises the preparation of the necessary reports for these agencies, as directed.
- g. Establishes and regularly reviews required operating logs and records.
- h. Monitors development and implementation of On-the-Job Training (OJT) programs.
- i. Provides guidance and direction to Nuclear Training to ensure content of training and retraining program (including Emergency Plan and Emergency Operating Procedures) provides a highly qualified and efficient operating force.
- j. Ensures supervised personnel receive training in appropriate radiological protection practices, procedures, and ALARA principles.
- k. Promotes safe working conditions and practices by ensuring supervised personnel receive required instructions concerning industrial safety.
- l. Ensures strict adherence to company and plant security provisions and procedures.
- m. Promotes good housekeeping by periodically inspecting areas assigned to the Radwaste Operations Section.
- n. Maintains familiarity with company/union agreements and interpretations.
- o. Ensures company/union agreements are properly administered.
- p. Ensures proper processing, packaging, and disposal of radioactive waste.



5.1.13 Supervisor Radwaste Operations

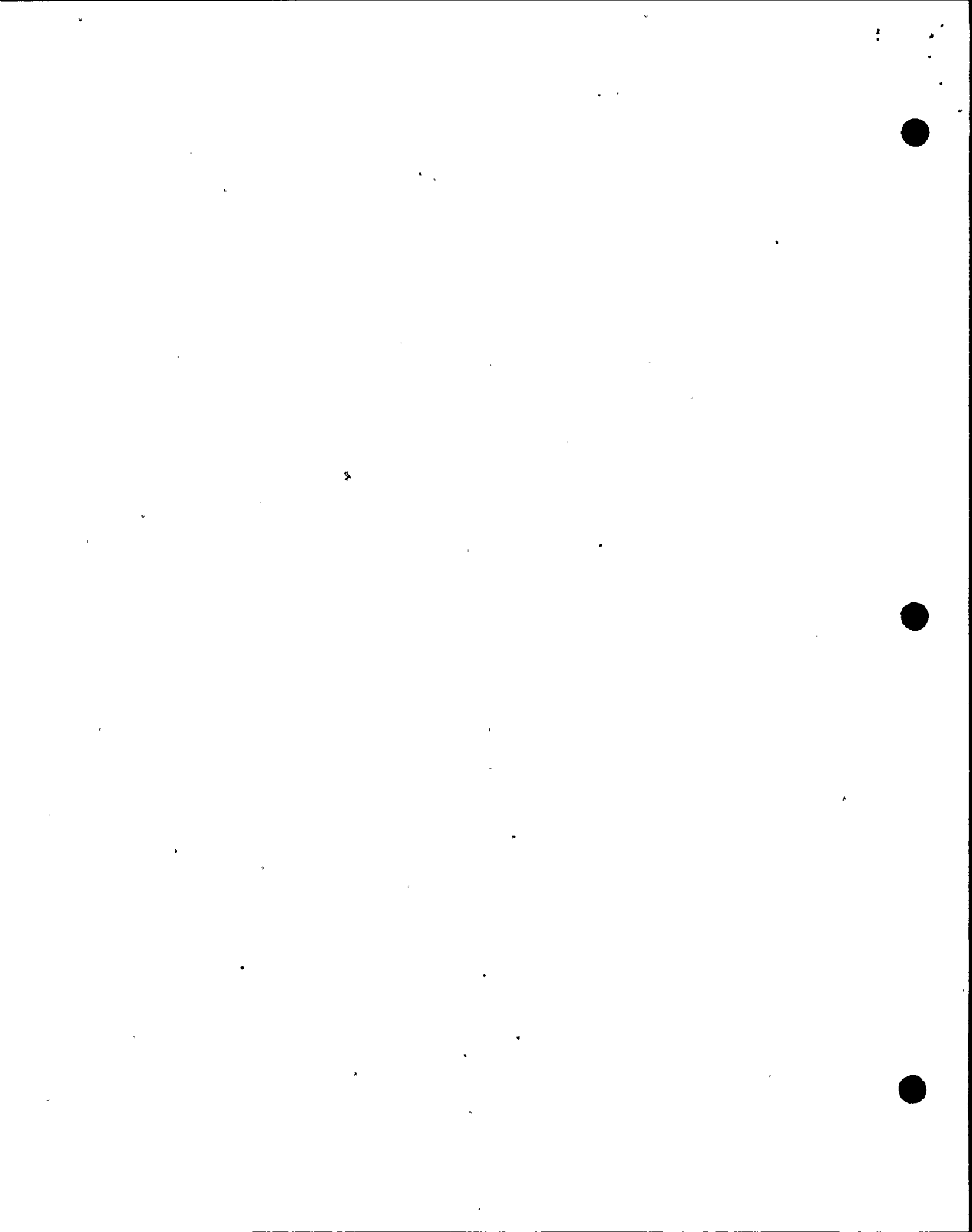
- a. Reports directly to the General Supervisor Radwaste Operations.
- b. When assigned, functions as the General Supervisor Radwaste Operations.

5.1.14 Shift Emergency Plan Coordinator (SEPC) (Unit 2)

- a. During normal plant operations:
 1. Reports to the Control Room (within 10 minutes) upon activation of station alarm.
 2. Remains available to the Control Room by normal plant communications.
 3. Participates in shift turnover.
 4. Remains aware of existing plant conditions, Limiting Conditions for Operation (LCO), out-of-service equipment, and Emergency Core Cooling System (ECCS) status.
 5. Reviews the schedule for activities, surveillances, and maintenance.
 6. Maintains awareness of plant conditions pertaining to evolutions throughout the shift.
- b. When the Site Emergency Plan is activated:
 1. Reports to the Control Room.
 2. Assists the SSS with implementation of the Site Emergency Plan.

5.2 Operating Shift Complement

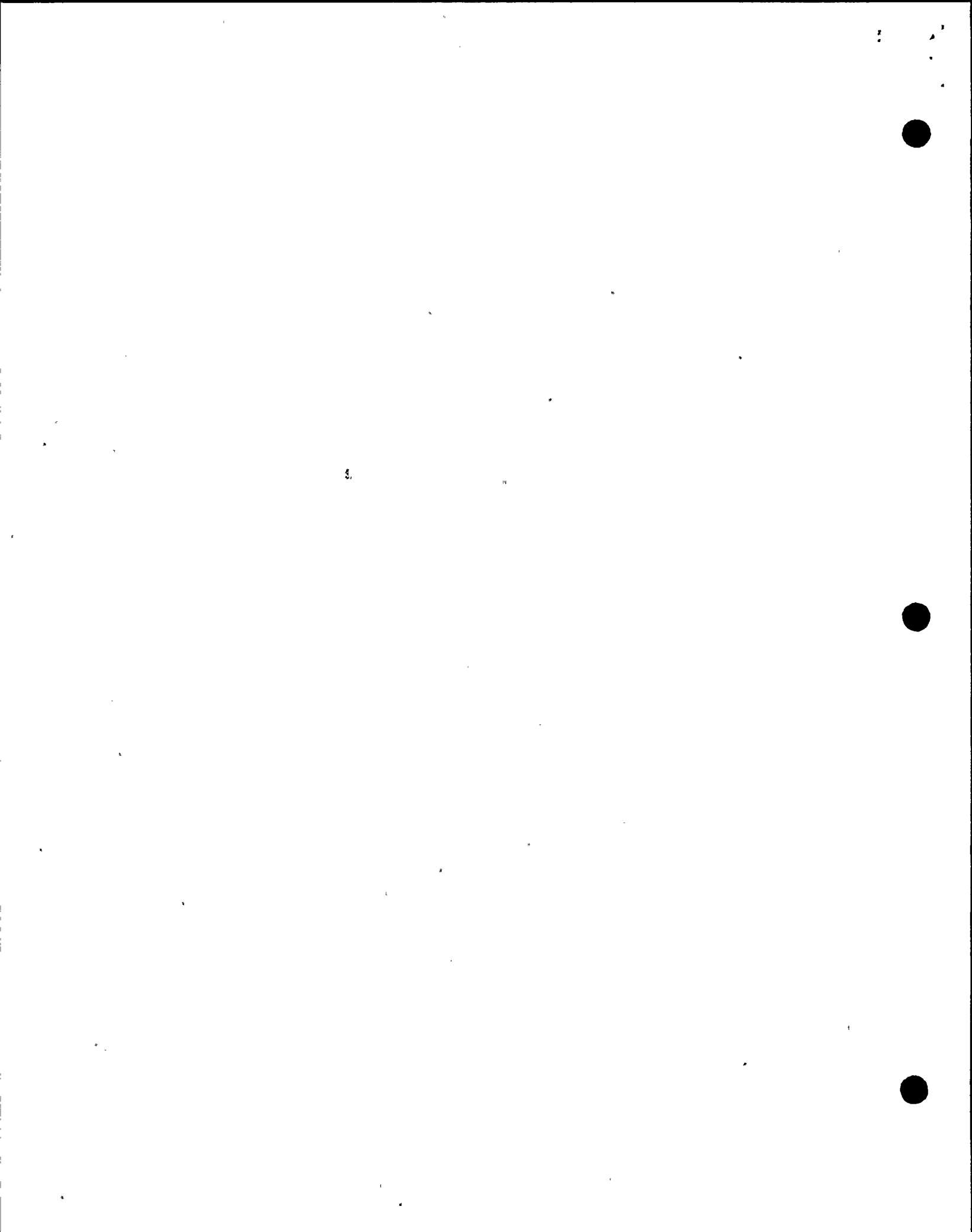
- 5.2.1 The General Supervisor Operations shall ensure minimum operating shift complements are established and maintained in accordance with:
- a. Technical Specifications, Section 6.2.2 for specified modes of operation; AND
 - b. The Site Emergency Plan
- 5.2.2 The Station Shift Supervisor (SSS) or Assistant Station Shift Supervisor (ASSS) shall have the authority to call in off-duty personnel from any department, as necessary, to supplement or replace personnel.



5.3

Operating Shift Schedules and Assignments

- 5.3.1 The Operations General Supervisors/Supervisors shall:
- a. Prepare shift schedules and allocate operational tasks between shifts/personnel.
 - b. Designate tasks and schedule activities to be performed by Operations, Reactor Engineering, Operations Support, and Operations Radwaste personnel.
 - c. Ensure Operations Section personnel receive and maintain the required training, certifications, and licenses for assigned positions.
- 5.3.2 The SSS or ASSS shall remain in the Control Room during power operation.
- 5.3.3 The SSS and ASSS/STA shall remain in the Control Room whenever the Site Emergency Plan is activated.
- 5.3.4 The SSS or the ASSS are considered to be in the Control Room when in the following locations:
- a. Main Control Room
 - b. SSS office (Units 1 and 2)
 - c. Control Room kitchen (Unit 1)
 - d. Control Room laboratory (Unit 1)
 - e. Auxiliary Control Room (Unit 1)
 - f. Interior of duplex panels (Unit 1)
 - g. Operations Clerk Office and adjacent hallway (Unit 1)
 - h. Operations Clerk Office (Unit 2)
- 5.3.5 During normal power operations, the Senior Reactor Operator (SRO) in the Control Room may be either the SSS or the ASSS.
- 5.3.6 During power operation when the Site Emergency Plan is activated, the ASSS shall assume the position of Shift Technical Advisor and NOT serve as the Control Room SRO.
- 5.3.7 When assigned as the Control Room SRO, the ASSS shall assume full authority for station operations subject to the general supervision of the SSS. The ASSS shall NOT relinquish this position in the Control Room except when relieved by a qualified replacement.



- 5.3.8 When a portion of station operations has been delegated to an SRO other than the SSS (i.e., refueling activities):
- a. A division of duties shall be clearly established, AND
 - b. A single SRO shall assume overall control.
- 5.3.9 The SSS and the ASSS should avoid becoming personally involved in manipulative tasks or details of operation of any one portion of the station in order to retain a comprehensive perspective of the general station condition.
- 5.3.10 The Chief Shift Operator (CSO) assigned to each shift shall:
- a. Perform associated CSO duties and responsibilities unless relieved in accordance with Section 5.4 of this procedure.
 - b. Perform duties and assume responsibilities associated with the "at-the-controls" reactor operator, unless relieved in accordance with Step 5.3.12 of this procedure.
- 5.3.11 (NCTS 6) The "at-the-controls" reactor operator shall:
- a. Remain in the "at-the-controls" area in the Control Room.
 - b. Perform periodic panel walkdowns to assess Operations.
- 5.3.12 Any relief of the "at-the-controls" reactor operator during the assigned shift shall include:
- a. A review of current plant status AND
 - b. Documentation of relief in the Control Room Log.
- 5.3.13 Except in an extreme emergency for operations potentially affecting station process systems, personnel shall first obtain permission to proceed from the SSS.

5.4 Shift Relief and Changeover

- 5.4.1 The General Supervisor Operations shall prepare and update a shift turnover checklist to be reviewed and signed by on-coming shift personnel. As a minimum, the turnover checklists shall document the following, as applicable:
- a. Status of tests or special operations in progress
 - b. Special valve/switch line-ups



2



5.4.1 (Cont)

- c. Review of changes in status and locations of jumpers and blocks as reflected in the Temporary Modification Log
- d. Acknowledgment of instructions from the General Supervisor Operations
- e. Review of changes in equipment status as reflected in the Equipment Status Log

5.4.2 On-coming Operations shift personnel shall relieve the off-going shift in the Control Room or other assigned work station, as applicable.

5.4.3 The SSS, ASSS, CSO, and Control Room Operators shall read applicable log books from the date shift duty was last performed. The SSS and CSO shall sign below the last entry of the applicable log book.

5.4.4 Operations personnel shall:

- a. Include additional pertinent information regarding station status in a verbal exchange between the on-coming and off-going shifts.
- b. Perform shift turnover in accordance with branch/section instructions.

5.5 Notifications of Absences and Call-outs

5.5.1 Personnel expecting to be late or unable to report for work at the scheduled time shall, at the earliest opportunity, inform the SSS or the ASSS of the situation.

5.5.2 The SSS or ASSS shall make the necessary arrangements for obtaining replacements or holding over on-shift personnel.

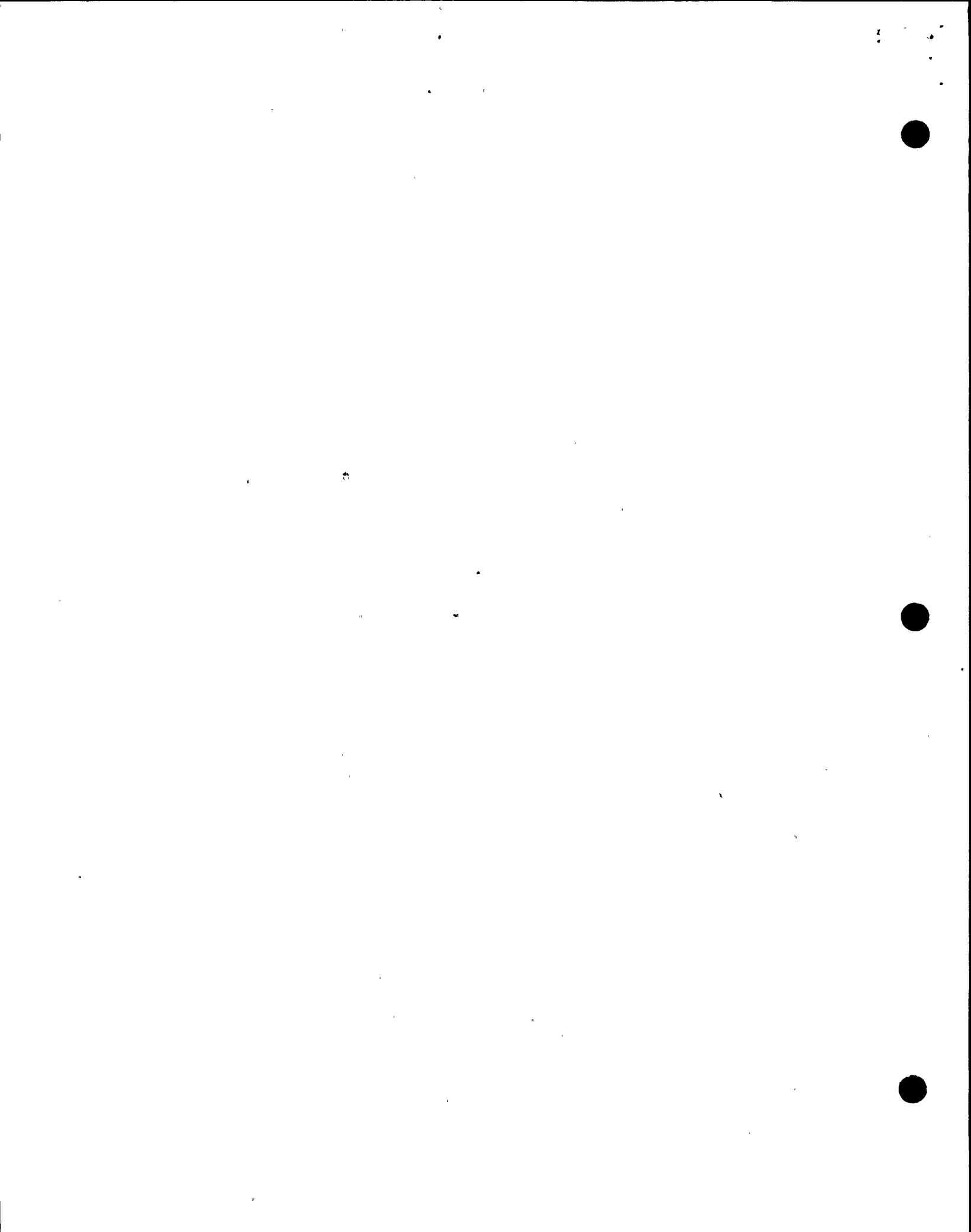
5.5.3 The SSS or ASSS may call out required personnel, regardless of discipline or department, or ensure the safe and efficient operation of the station.

5.5.4 The SSS shall ensure ROs working more than eight continuous hours at the control board are relieved every four hours.

5.6 Training

5.6.1 The Manager Operations shall ensure Operations personnel are properly trained and qualified for assigned duties.

5.6.2 The General Supervisor Operations shall ensure Emergency (NCTS 3) Operating Procedure (EOP) training requirements are met.



5.6.3 The General Supervisor Operations shall, in conjunction with Nuclear Training, ensure the Operations Branch Training Program:

- a. Is scheduled and coordinated
- b. Is accomplished by one or more of the following:
 - 1. On-shift formal instruction by qualified instructors or supervisors
 - 2. Regularly scheduled license qualification, requalification, and Non-Licensed Operation Training (NLOT)
 - 3. Required reading
- c. Training records of personnel are maintained

5.6.4 The General Supervisor Operations ensures active license tracking is controlled.

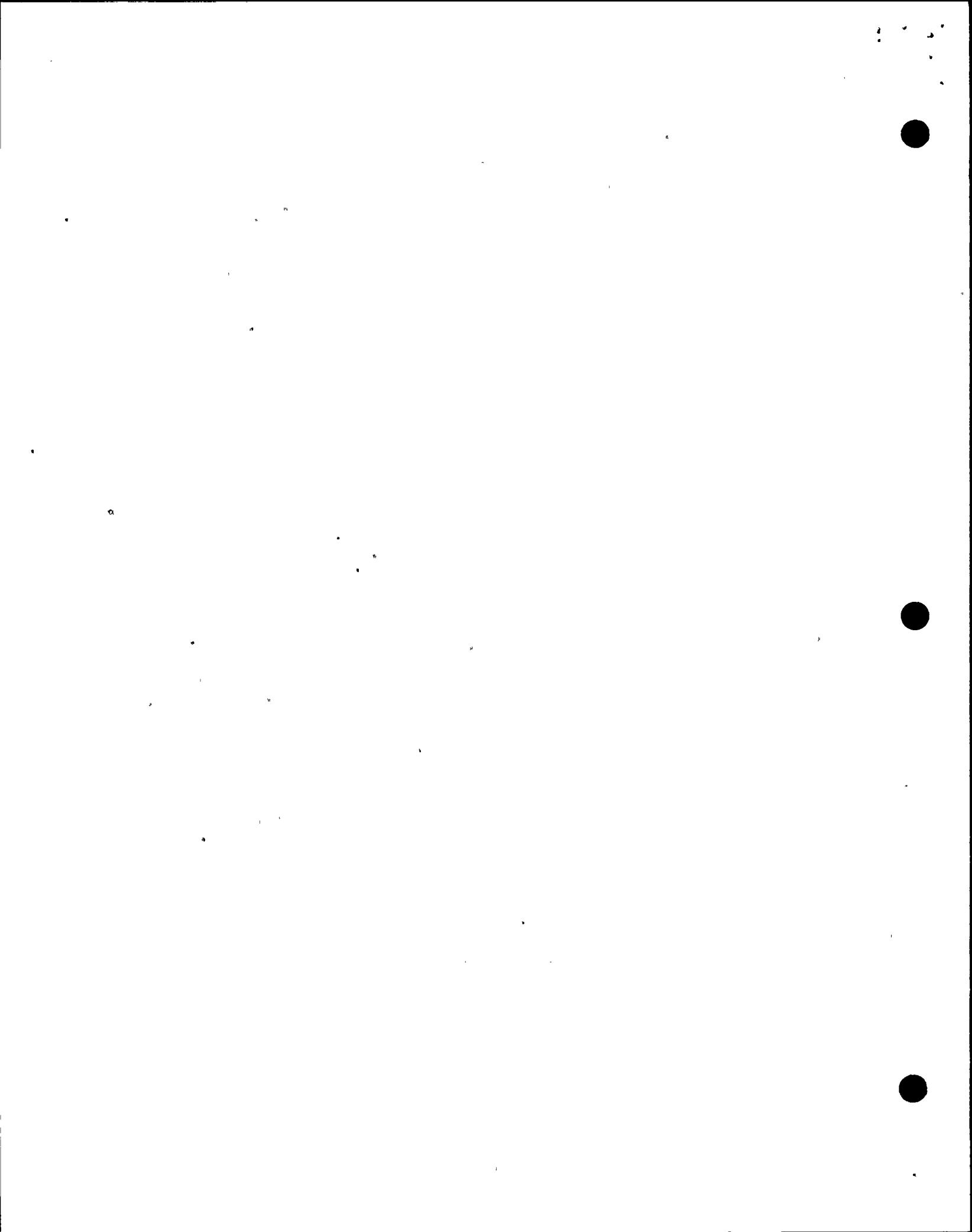
5.6.5 Operations Management personnel shall observe training (NCTS 4) during each Requalification Cycle which includes Simulator Training.

5.7 Control of System Configuration

5.7.1 Systems are normally in service in accordance with approved Operating Procedure requirements; specifically valve lineups, power board/breaker lineups and instrumentation requirements.

5.7.2 If a component is discovered to be, or suspected to be out of the normal position as described in the appropriate procedures:

- a. Personnel discovering the potentially abnormal situation shall:
 - 1. Not alter the situation; AND
 - 2. Immediately notify the SSS; OR
 - 3. To prevent immediate personnel or equipment damage, take appropriate action, then immediately notify the SSS.
- b. The SSS shall:
 - 1. Review the impact to system operation, operability requirements, and reportability



5.7.2.b (Cont)

2. Determine the correct configuration of the system or component.
3. Direct action, as necessary, to restore the system or component to proper configuration.
4. If required, initiate a Deviation Event Report (DER) in accordance with NIP-ECA-01, Deviation Event Report.

5.7.3 If a change to a system configuration is required that is NOT within the scope of an approved Operating, Surveillance, or Special Test procedure, the SSS shall:

- a. If the altered system configuration is intended to be in service, initiate a change to the appropriate procedure reflecting the altered configuration; OR
- b. If the altered system configuration is NOT to be in service, then control is in accordance with AP-4.2, Control of Equipment Markups. Specifically, off normal positioned valves, breakers, control switches are tagged with:
 1. Yellow hold out tags (for equipment protection or other administrative reasons); OR
 2. Red or blue markup tags (for personnel protection)

5.8 Key Control

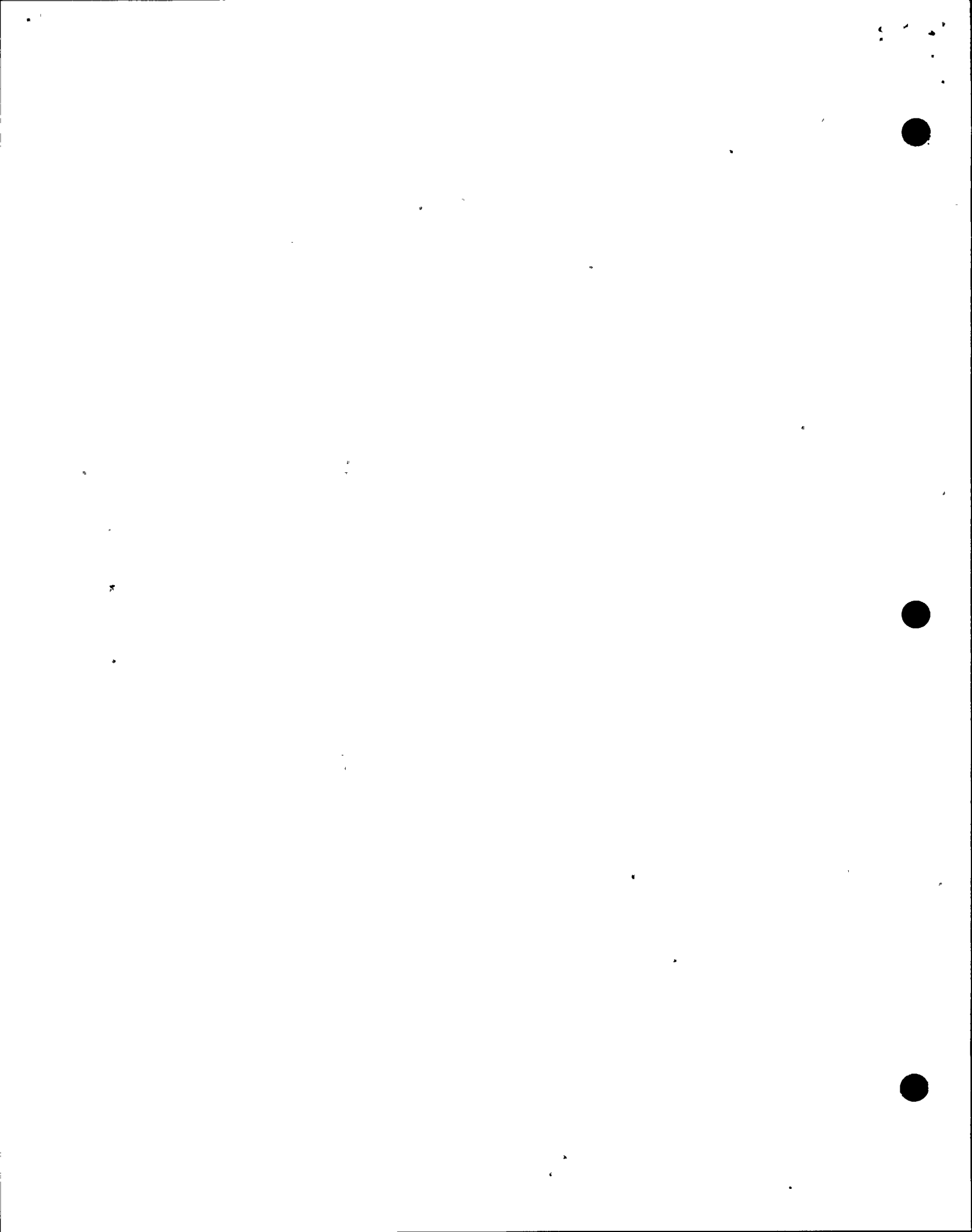
5.8.1 The SSS shall maintain:

- a. A list of key controlled items and areas under the authority of the Operations Branch
- b. Control of controlled keys until issue

NOTE: H-keys are controlled by the Radiation Protection Department.

5.8.2 The SSS or ASSS shall:

- a. Grant permission for issue of a controlled key.
- b. Maintain issuance of controlled keys.



5.8.3 "On-duty" personnel issued certain controlled keys for the performance of normal and emergency duties within an area of responsibility shall:

- a. Maintain control of the keys; AND
- b. Prevent unauthorized personnel from possessing or using controlled keys.

5.9 Communications and Directions

5.9.1 Operations personnel shall:

- a. Ensure communications and directions are clear, concise, explicit, and understandable.
- b. Provide verification, whenever possible, for complex directions and those that include numbers by having the person repeat back the instruction or issue written instructions.
- c. Upon completion of a directed action, require a response back to the controlling station stating the exact action that has taken place.
- d. Perform communication requirements in accordance with branch/section instructions.

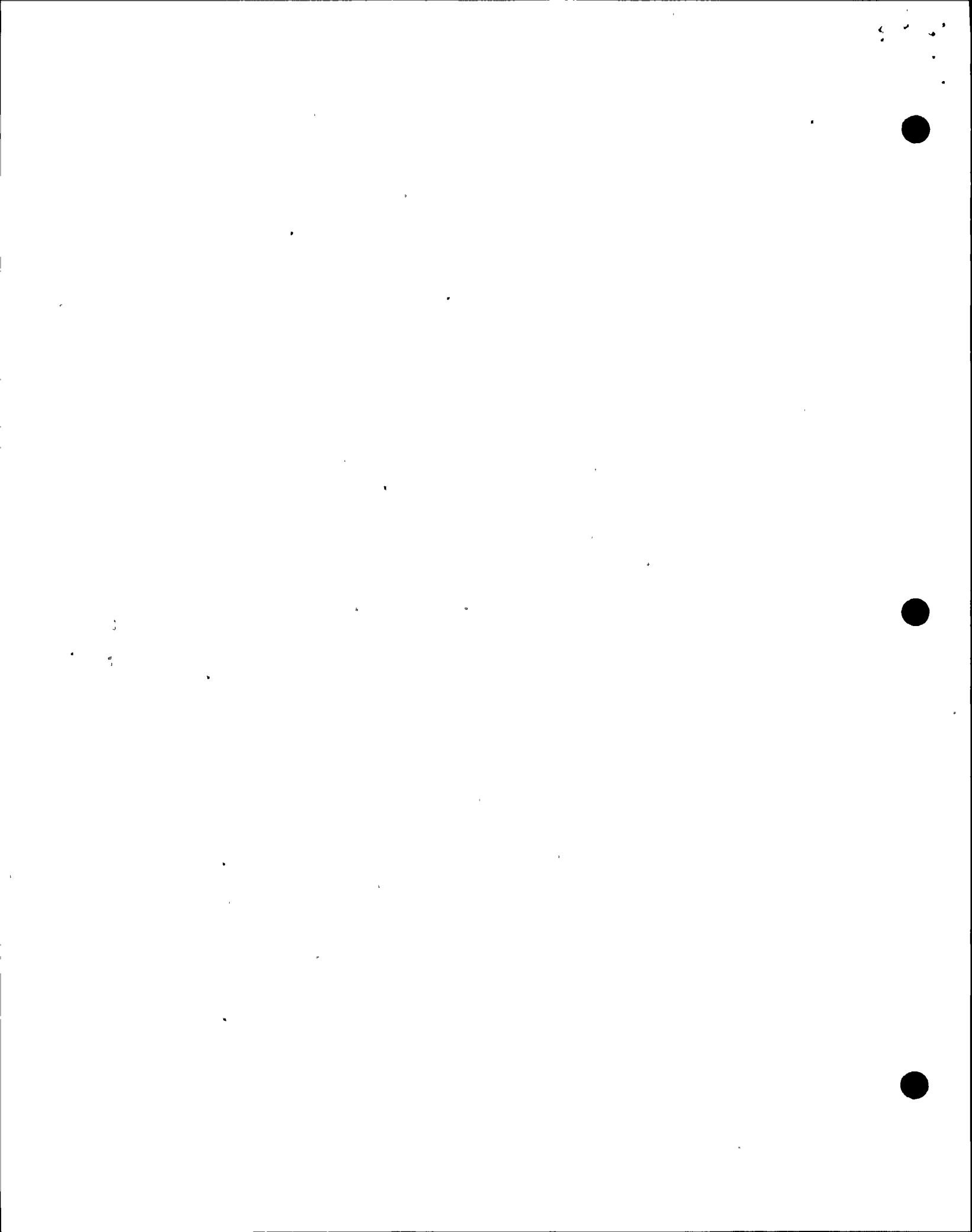
5.9.2 Whenever possible, the person directing the action shall verify the action has been performed correctly by observing expected results (i.e., indication or position lights, meters, gauges, and station/system responses).

5.9.3 If deemed necessary to pass a direction over the Public Address System, Radio, etc., the person directing the action should request an acknowledgment from the person implementing the action.

5.9.4 Personnel assigned to perform an activity shall:

- a. Review the procedure to fully understand what is required, and to be cognizant of the limitations, precautions, and requirements.
- b. Attend briefings for personnel involved in an evolution that is to be performed. The detail of the briefing is dependent on the degree of complexity and the number of personnel involved.

NOTE: Evolutions involving many personnel, especially from two or more departments or disciplines, may require formal briefing or preplanning sessions.



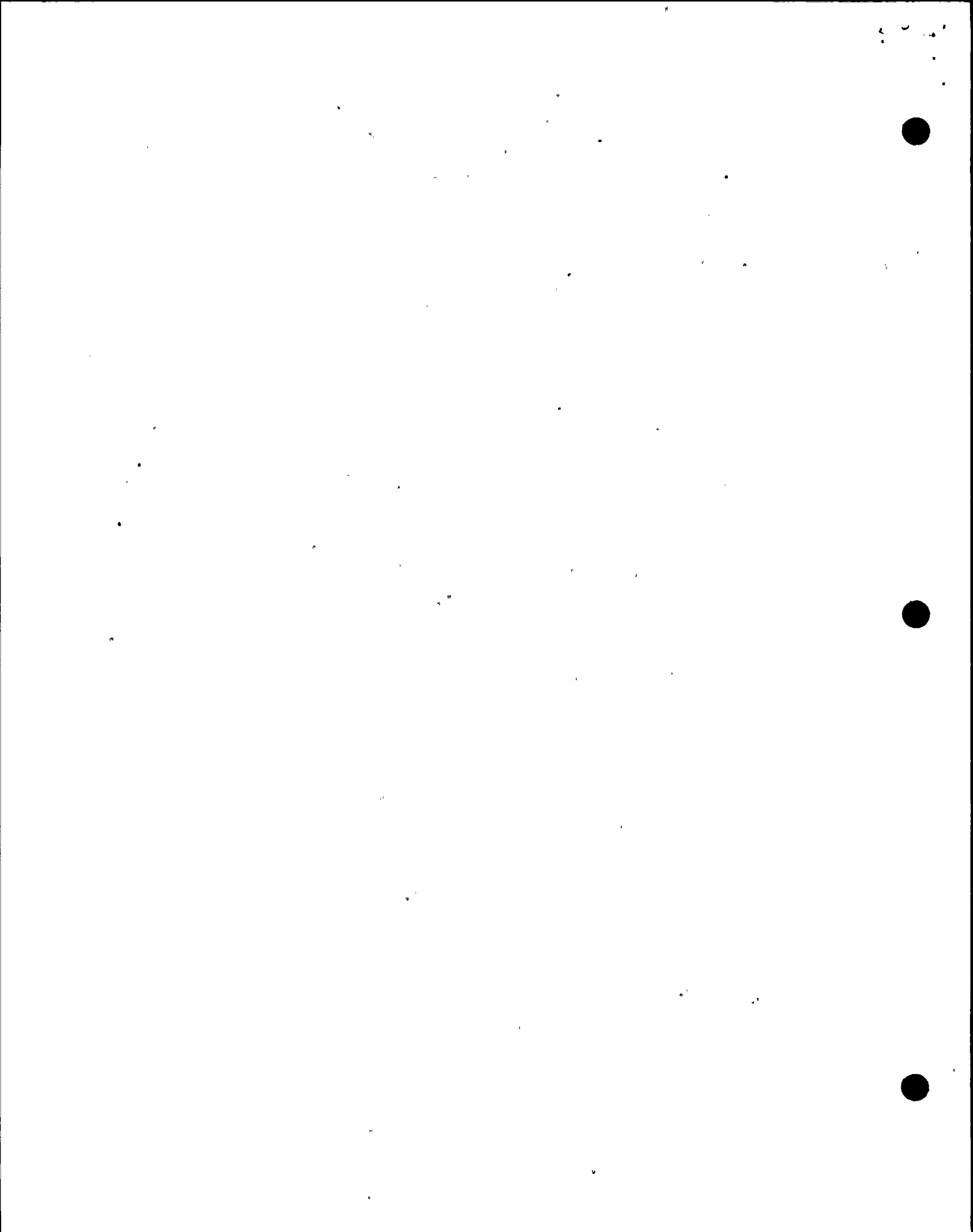
5.9.5 If an evolution is complex and involves close coordination, Operations personnel conducting the briefing session should include:

- a. A review of the appropriate section of the procedure by key personnel
- b. An examination of each person's specific involvement and responsibility
- c. A discussion of expected results or performance
- d. A review of limitations, hold points, and emergency action to be taken if contingencies arise
- e. Understanding of the interfaces and communications required

5.10 Records and Log Books

5.10.1 Shift records are comprised of logs, files, data sheets, checklists, sign-off lists, recorder charts, and computer printouts that describe or record operating information and actions. The following practices are applicable to operating shift records:

- a. Records and logs are maintained in a legible, accurate, complete, and understandable manner.
- b. The use of black ink to facilitate reproduction is required.
- c. The use of white-out or correction tape is NOT allowed on shift records.
- d. Errors in shift records are corrected by drawing a single line through the incorrect information and writing the correct information adjacent to the line or in an available space. The person making the correction shall initial and date the correction.
- e. Personnel responsible for maintaining logs and records shall sign and date portions that cover the applicable shift assignment.
- f. To assist in documenting authorship and turnover, stamp or write the following immediately after the last entry in the SSS and Control Room Logs:
 1. "The above is a true record of events on the preceding shift _____."
(Signature)



5.10.1.f (Cont)

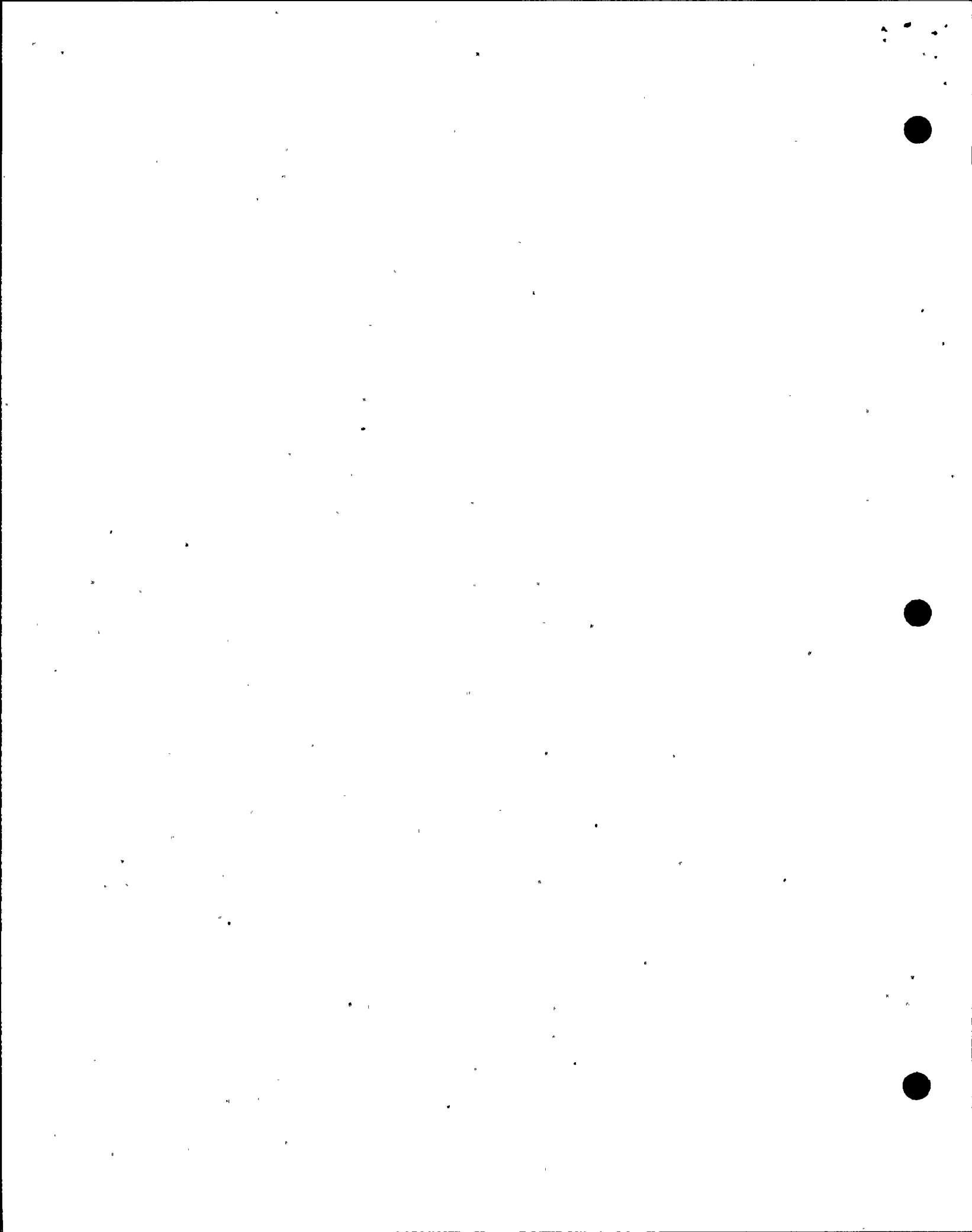
2. "I have read and understand the events recorded in this log since I was last on shift

_____."
(Signature)

- g. Recorder charts in operation are checked at least once per shift to verify markings are clearly visible and the timing is correct. The person making the check shall initial the chart and enter the time and date.
- h. Personnel shall mark recorder charts with the time, date, and recorder identification number before the chart is placed on the recorder and when the chart is removed, indicating pen and range selection, as necessary, to facilitate interpretation.
- i. If the recorder performs the date and time function automatically, marking recorder charts with date and time is NOT necessary.
- j. When significant events or unusual trends in parameters occur, operators shall indicate the time and event on applicable charts whenever possible to assist in operations analysis.
- k. The General Supervisor Operations shall periodically review shift records and logs to ensure accuracy and completeness.

5.10.2 The following controls are applicable to the Control Room Log Book:

- a. The Control Room Log Book is considered a legal document subject to being entered as a court record.
- b. Entries in the log book are made by the duty CSO or other authorized personnel only. NO other entries are allowed.
- c. Log entry copies are posted daily.



5.10.2 (Cont)

d. Log entries shall, at a minimum, consist of:

1. Activities associated with changing core reactivity

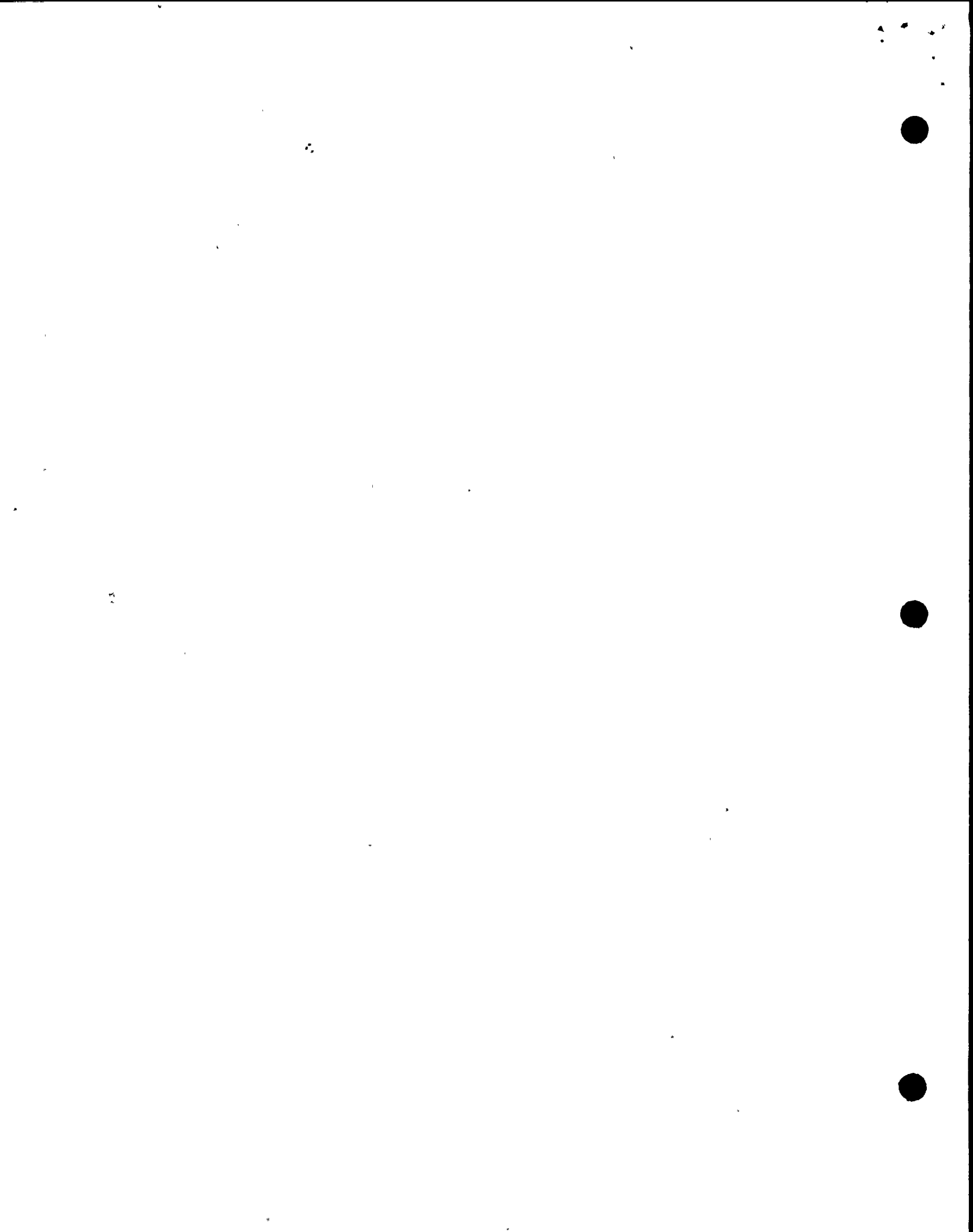
NOTE: The Unit Supervisor Reactor Engineering maintains separate Fuel Records in which detailed fuel histories and a record of core instrumentation changes are maintained. Detailed rod manipulations are NOT necessary, provided the movements are part of a startup or shutdown sequence developed by Reactor Engineering.

2. Changes in station output
3. Changes in auxiliary equipment
4. Unusual conditions or station evolutions
5. Line trips
6. Annunciator signals NOT recorded on the data logger

NOTE: Annunciator signals logged during unit outages are at the discretion of CSO.

7. Performance of surveillance testing
8. Equipment removed from service and returned to service
9. Other applicable information regarding shift activities

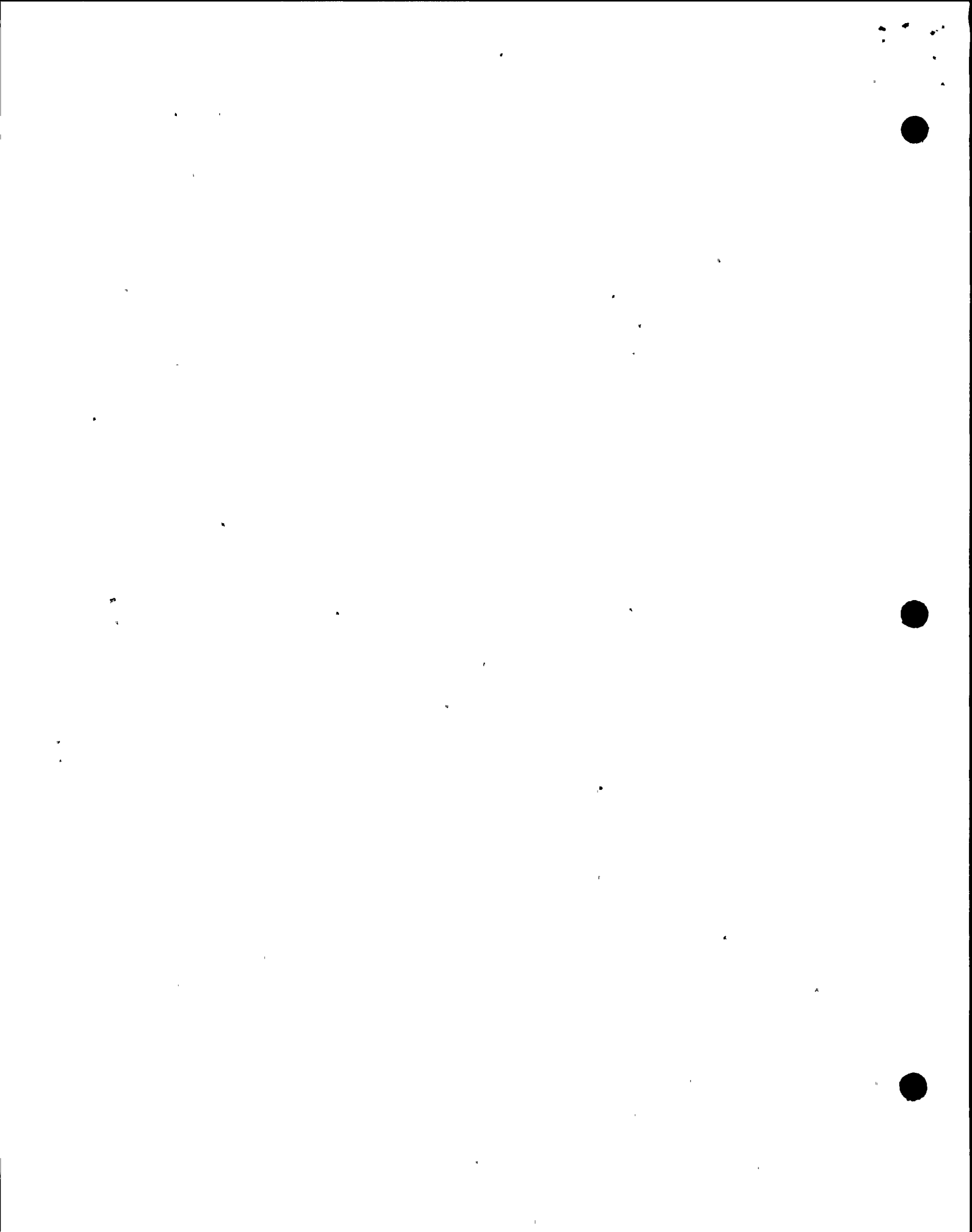
- e. The log book shall contain the date and time of entries and the name of the CSO or alternate.
- f. The log book should remain in the Control Room until completed and reviewed.
- g. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions.



5.10.3 The following controls are applicable to the SSS Log Book:

NOTE: The SSS Log Book is considered a legal document subject to being entered as a court record.

- a. The SSS Log Book shall contain an overall summary of station operations during the respective shift, including:
 1. Names of the supervisors, ROs, and auxiliary operators on-duty
 2. Date and time of entries
 3. Surveillance tests conducted and deviations from acceptance criteria
 4. Post-Maintenance Testing and returning Technical Specification related equipment to operable status
 5. Reportable occurrences
 6. Safety-related and other important equipment maintenance in progress
 7. Entering a Technical Specification action statement
 8. Leaving a Technical Specification action statement
 9. Implementation of the Site Emergency Plan or Emergency Operating Procedures
 10. Significant changes in radiological conditions
 11. A narrative of significant events, including notifications to the Plant Manager, Manager Operations, On-Call Operations Supervisor, and the NRC
- b. The SSS log entries may be written by the ASSS with the approval of the SSS, provided the log is reviewed and signed by the SSS.
- c. The log book should remain in the Control Room until completed and reviewed.
- d. Log entry copies are posted daily.
- e. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions.

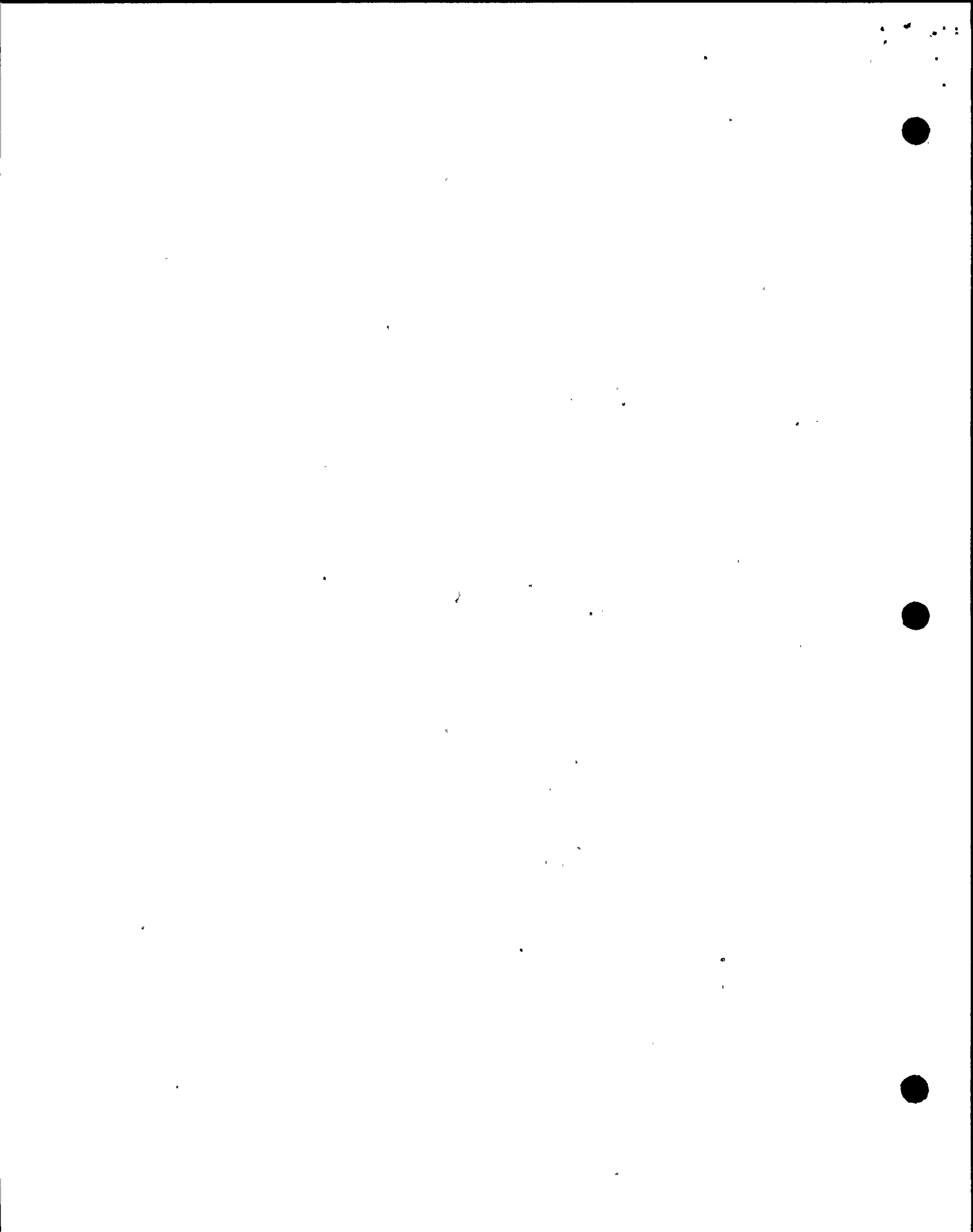


5.10.4 The following controls are applicable to the Radwaste Control Room Log Book:

- a. The log book should remain in the Radwaste Control Room until completed.
- b. The log book shall contain pertinent information associated with the Radwaste Facility operation.
- c. The date and time of activities are entered.

5.10.5 The following controls are applicable to the Equipment Status Log (ESL):
(NCTS 5)

- a. The SSS shall:
 1. Maintain the ESL.
 2. Ensure the ESL is used during all plant conditions.
 3. Ensure equipment entered in the log is marked up in accordance with AP-4.2, Control of Equipment Markups; OR
 4. If equipment is entered for administrative reasons, a markup which would render the equipment nonfunctional is not required. However, per AP-4.2, Control of Equipment Markups, Holdout tags may be placed on control switches to alert operators of potentially degraded conditions.
- b. Log entries should include:
 1. Station equipment determined to be inoperable which may limit station output or which impact Technical Specifications
 2. System unavailability due to removal from service of safety-related equipment for the purpose of conducting preventive maintenance
 3. Equipment which is otherwise operable, but may need special attention due to faulty instruments or other deficiencies (i.e., non-Technical Specification temperature elements on a Technical Specification pump)
 4. Date and time of equipment inoperability
 5. Equipment identification number of principal components



5.10.5.b (Cont)

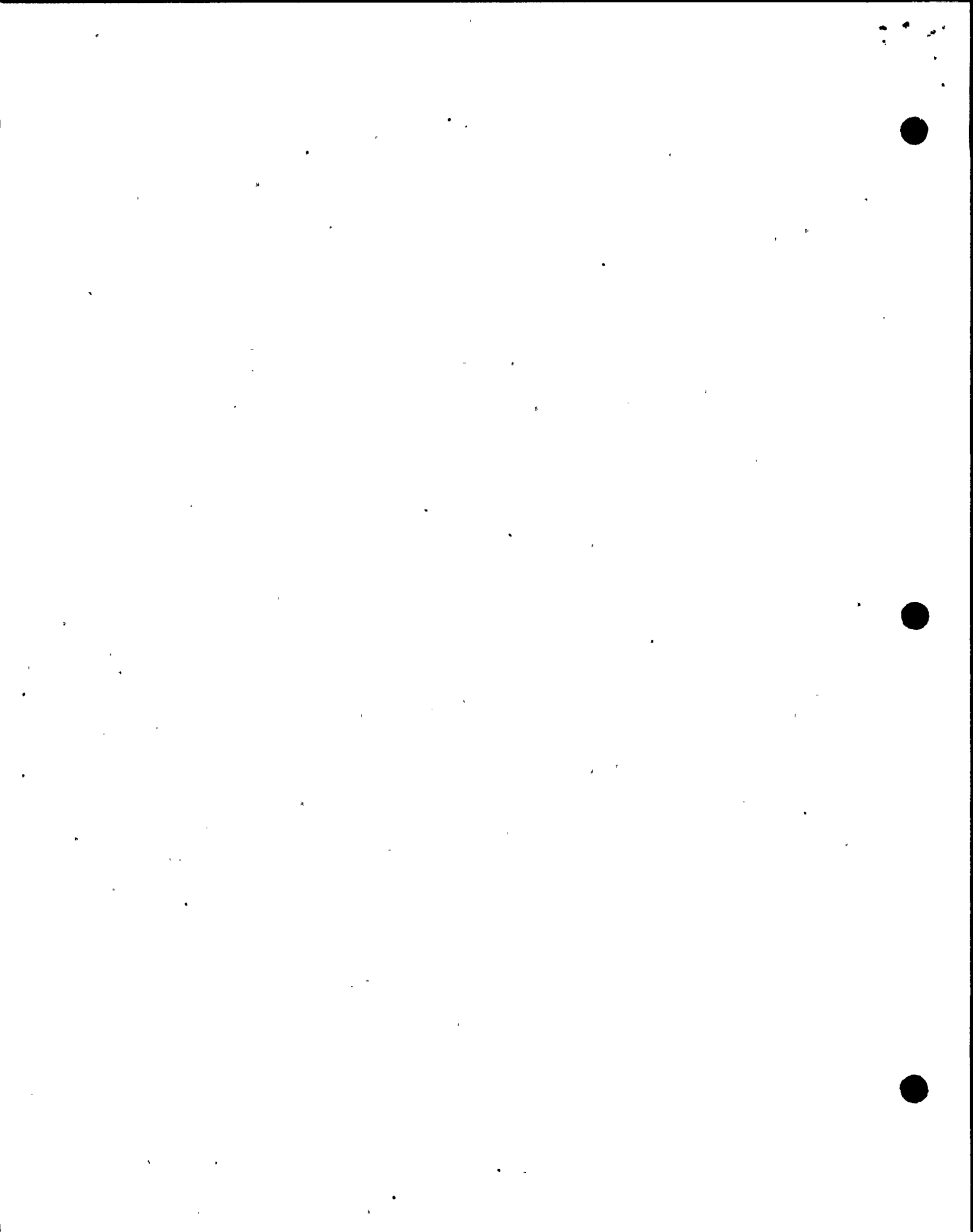
6. Name of equipment or system and the nature of malfunction or failure, if known
 7. Applicable Technical Specification paragraph
 8. Technical Specification surveillance tests which must be performed while equipment or system is NOT available
 9. Tests or inspections required before placing the equipment or system in service
 10. If applicable, Work Request number calling for corrective action
 11. Markup numbers and type
 12. Date Work Request completed and equipment is ready for service or declared operable
 13. Deviation Event Reports affecting operability
 14. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions
- c. The SSS shall review the ESL before declaring any system/equipment operable
- d. Upon return of equipment to normal or operable status, the entry may be removed from the log, subject to Step 5.10.5.b.3.

5.10.6 The Operator Aids Log is controlled in accordance with S-SUP-6, Control of Operator Aids.

5.10.7 The following controls are associated with the Markup, Work Request, and RWP files:

- a. The Markup File is maintained in or near the SSS office or Control Room.
- b. The Markup File shall contain outstanding markups.

5.10.8 Operator Rounds Logs and plant log books are controlled in accordance with applicable Operations Branch procedures.



5.11 Control Room Documents

- 5.11.1 Only controlled copies of documents related to station operations may be used for operation.
- 5.11.2 The following documents are required for on-duty Operators and should remain in the applicable Unit Control Room:
 - a. Station Administrative Procedures
 - b. Operating Procedures
 - c. Special Operating Procedures and/or Emergency Operating Procedures
 - d. Standing Orders
 - e. Station General Orders
 - f. Operation Department Instructions
 - g. Site Emergency Plan and Implementing Procedures
 - h. Radiation Protection Procedures
 - i. Operator performed Surveillance Procedures
 - j. Reactor Analysis/Engineering Procedures
 - k. Technical Specifications and Interpretations
 - l. P&I Drawings (Unit 1)
 - m. Flow Schematics (FSK), Logic Schematics (LSK), and P&I Drawings (Unit 2)
 - n. Selected Electrical Drawings
 - o. Other documents and drawings authorized by the SSS, or higher authority
 - p. Final Safety Analysis Report, FSAR "Updated" (Unit 1) or Updated Safety Analysis Report, USAR (Unit 2)
 - q. Core Operating Limits Report

5.12 Control Room Conduct

The following policies are established for Control Room conduct:

- 5.12.1 Potentially distracting activities are prohibited.
- 5.12.2 Access is limited to individuals on station business.

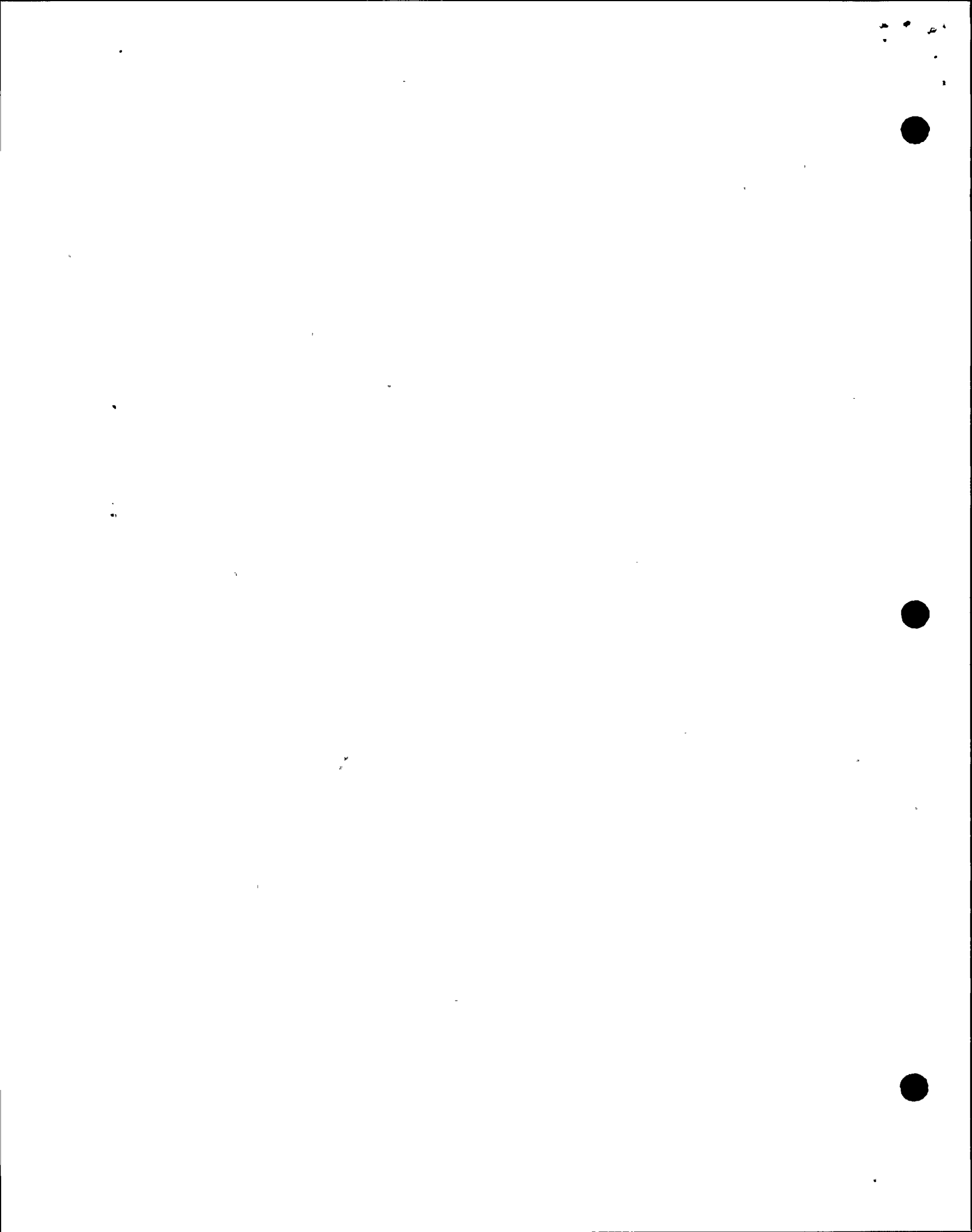
2. 3



- 5.12.3 During the conduct of station related business, the Control Room operator shall remain attentive and maintain the professional atmosphere in the Control Room.
- 5.12.4 Access to control panels and stations are restricted to authorized shift personnel or as authorized by the SSS, ASSS, or CSO.
- 5.12.5 Foreign objects and materials NOT necessary for plant operations, maintenance, or testing should be restricted from control panels and stations.
- 5.12.6 The General Supervisor Operations, Supervisor Operations, SSS, ASSS, and CSO have the authority to restrict access to OR remove personnel from the Control Room.
- 5.12.7 Additional rules may be issued and posted by the General Supervisor Operations.

5.13 Off-Normal Responses

- 5.13.1 The Site Emergency Plan and Implementing Procedures designate specific actions to be taken in the event of an unplanned release, or potential release, of radioactivity from the site.
- 5.13.2 Operations during off-normal conditions shall proceed according to approved procedures. Refer to AP-2.0, Procedure Use and Control, for procedure adherence requirements during emergencies.
- 5.13.3 At the earliest convenience, the SSS or designee shall notify the Plant Manager, either directly or via the Manager Operations or General Supervisor Operations, of the following:
 - a. Unscheduled operational condition changes
 - b. Unexpected changes of more than 50 MWe in station output (transient)
 - c. Unplanned entries into Limiting Condition for Operation (LCO) action statements requiring a plant shutdown
 - d. Events requiring entry into the EOPs or Emergency Action Procedures (EAPs)
 - e. Events requiring NRC notification within 1 hour, 4 hours, or 30 days
 - f. Other events which, in the judgment of the SSS, should be brought to the attention of the Plant Manager.



5.13.4 The Plant Manager must grant permission for all unit startups and for those following unscheduled shutdowns, determine the acceptability of restart according to the following criteria:

- a. The station has been determined to be in a safe condition.
- b. The cause of the shutdown has been determined and understood, OR SORC has reviewed the event and authorized restart.
- c. The need for corrective action has been determined and appropriately implemented.
- d. The expected automatic operation of the unit's safety-related systems have been verified.

5.14 Emergency Plan Operations

5.14.1 The five classes of events described in the Site Emergency Plan and Implementing Procedures which require a departure from normal station operation are:

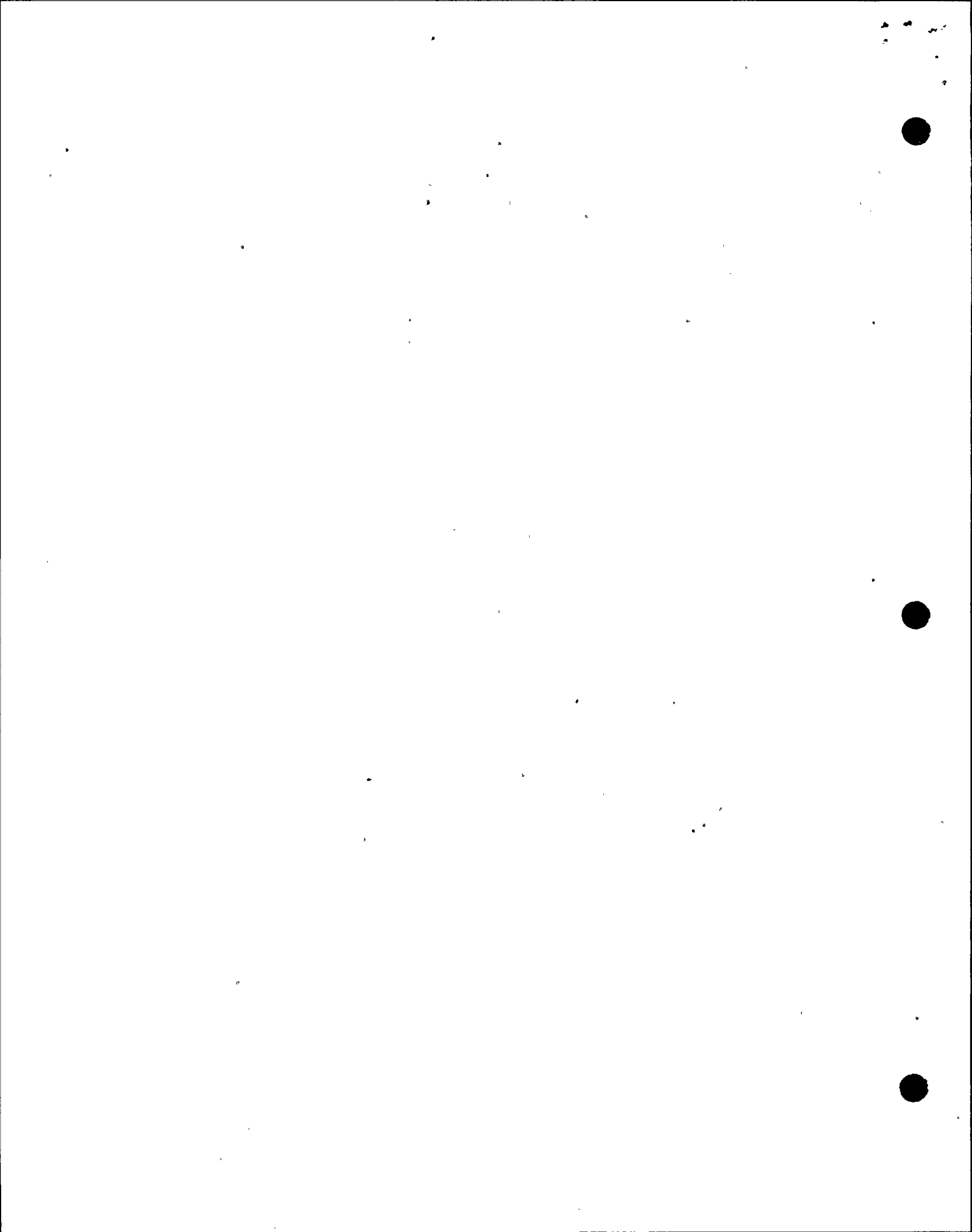
- a. Unusual Event
- b. Alert
- c. Site Area Emergency
- d. General Emergency
- e. Operational Event

NOTE: An Operational Event is NOT categorized as an emergency but is subject to management review.

5.14.2 The events listed in Step 5.14.1, except an Operational Event, require notification and responses according to the Site Emergency Plan and Implementing Procedures.

5.14.3 In the event station conditions require the implementation of the Site Emergency Plan and Implementing Procedures, the SSS shall immediately assume the role of Nine Mile Point Nuclear Station Site Emergency Director until properly relieved.

5.14.4 For Unit 2, when the Site Emergency Plan is activated, the Shift Emergency Plan Coordinator (SEPC) shall report to the Control Room to assist the SSS with implementation of the Site Emergency Plan. The SEPC shall perform duties as specified in departmental instructions.



5.14.5 When the Site Emergency Plan and Implementing Procedures are activated, the ASSS shall assume the role of Shift Technical Advisor (STA), and:

- a. Provide the SSS with an assessment of unit conditions and advise the SSS concerning actions to terminate or mitigate the consequences of the incident, as required.
- b. Perform NO other duties unrelated to assessment or diagnosis of the situation.

NOTE: A significant part of STA responsibility is ensuring the health and safety of the public is protected by appropriate automatic and manual response, as well as appropriate implementation of the emergency plan. However, this does not preclude the STA from assisting the SSS in reading the EOPs during severe transients when prompt actions in more than one EOP are concurrently required, as the EOPs by design require operators to maintain an overall perspective of plant status.

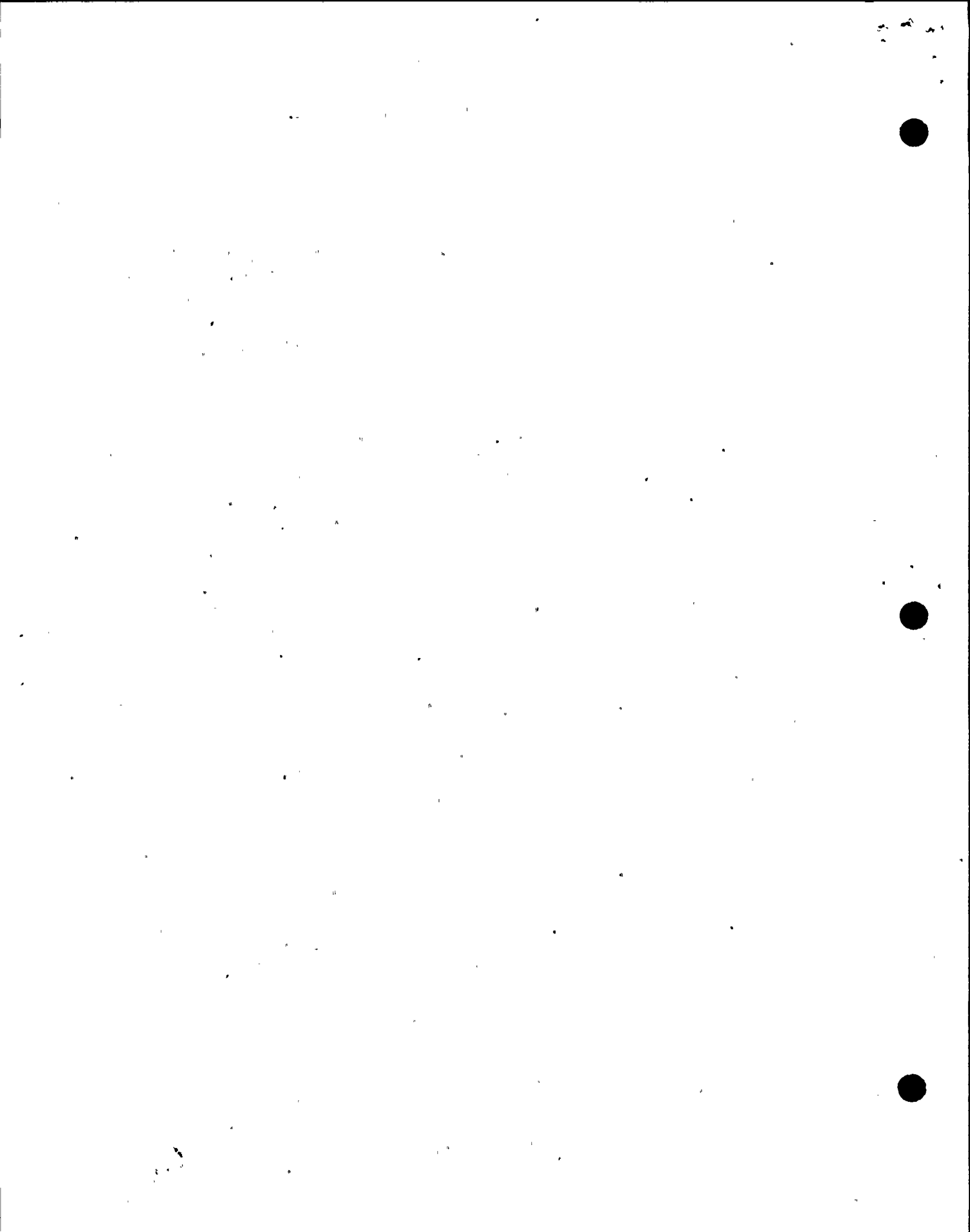
5.14.6 Emergency Response Facilities have been established in accordance with the Site Emergency Plan and Implementing Procedures. During Emergency Operations, advice and management directions may come from the Technical Support Center (TSC). However, station manipulations are directed from the applicable Unit Control Room only.

5.15 Associated Operations Activities
(NCTS 7)

5.15.1 When performing operating maneuvers, personnel shall use redundant or corroborating instrumentation if available. In the absence of such instrumentation, personnel shall rely upon existing instrument indications.

5.15.2 Unless operational or instrumented evidence exist showing that a system is not performing its intended function or that continued operation will prolong or produce an unsafe condition, personnel shall not override automatic engineered safety features.

5.15.3 Personnel shall NOT electrically or manually backseat a motor-operated valve, except for maintenance purposes or as a temporary measure until the plant is placed in a condition which allows maintenance on the valve.

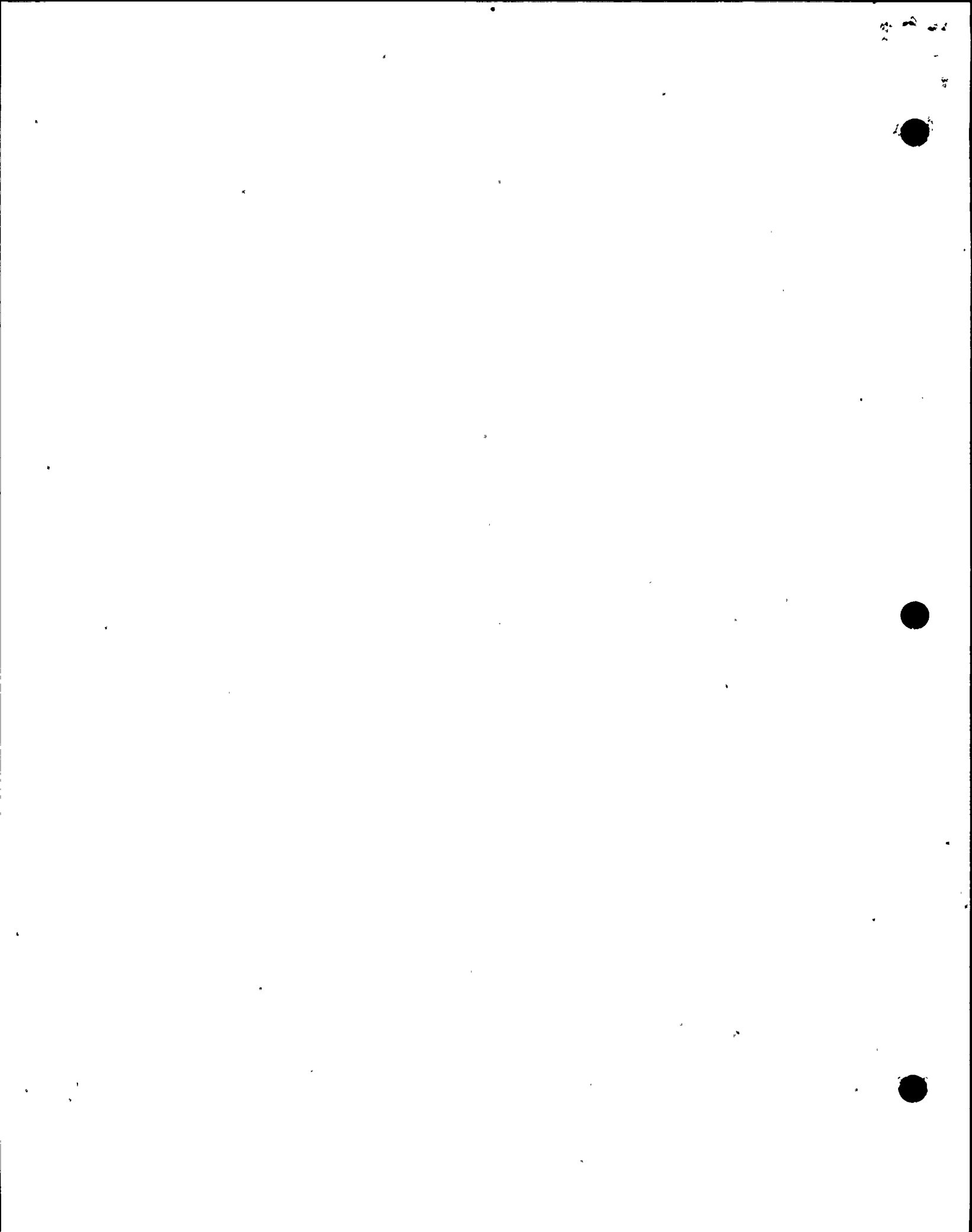


- 5.15.4 Personnel shall NOT override or jumper electrical circuits to backseat a motor-operated valve unless evaluations of the following have been performed:
- a. Effects of backseating on valve structural integrity
 - b. Valve operability in the backseated position
- 5.15.5 Motor-operated valves that have been backseated and were declared inoperable shall be demonstrated operable through an appropriate surveillance or Post-Maintenance Operability Test.
- 5.15.6 Personnel shall NOT manually seat a motor-operated valve, except for maintenance purposes or as a temporary measure until the plant is placed in a condition which allows maintenance on the valve.
- 5.15.7 When manually seating a motor-operated valve, open the motor operator breaker and apply a yellow hold-out tag, requiring the valve be manually backed off the seat before reclosing the motor operator breaker.
- 5.15.8 Motor-operated valves that have been manually seated and were declared inoperable shall be demonstrated operable through an appropriate surveillance or Post-Maintenance Operability Test.

6.0 RECORD REVIEW AND DISPOSITION

The following records are retained in accordance with AP-10.1, Management of Station Records:

None



For Information Only

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07-25-91

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION
ADMINISTRATIVE PROCEDURE

AP-4.0

REVISION 18

ADMINISTRATION OF OPERATIONS

TECHNICAL SPECIFICATION REQUIRED

Approved By:
K. A. Dahlberg

[Signature]
Plant Manager, Unit 1

FOR K. A. DAHLBERG
PLANT MANAGER - NMP #1 6/20/91
Date

Approved By:
M. J. McCormick, Jr.

[Signature]
Plant Manager, Unit 2

6-17-91
Date

FOR INFORMATION ONLY
Not To Be Used For Operations & Maintenance

Effective Date: June 28, 1991

PERIODIC REVIEW DUE DATE: June 1993

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1P-25-50

FOR INFORMATION ONLY

U.S. GOVERNMENT PRINTING OFFICE: 1967

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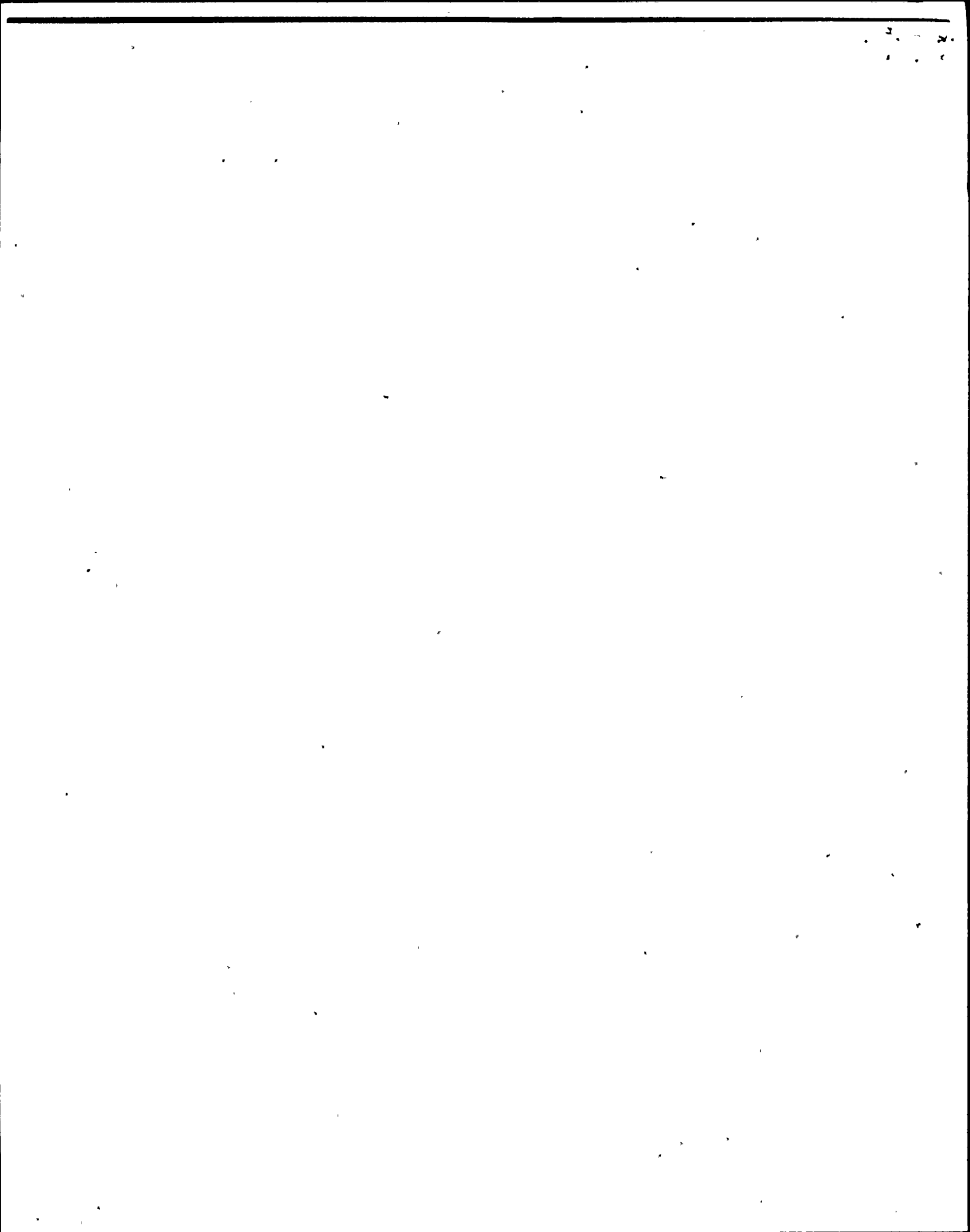
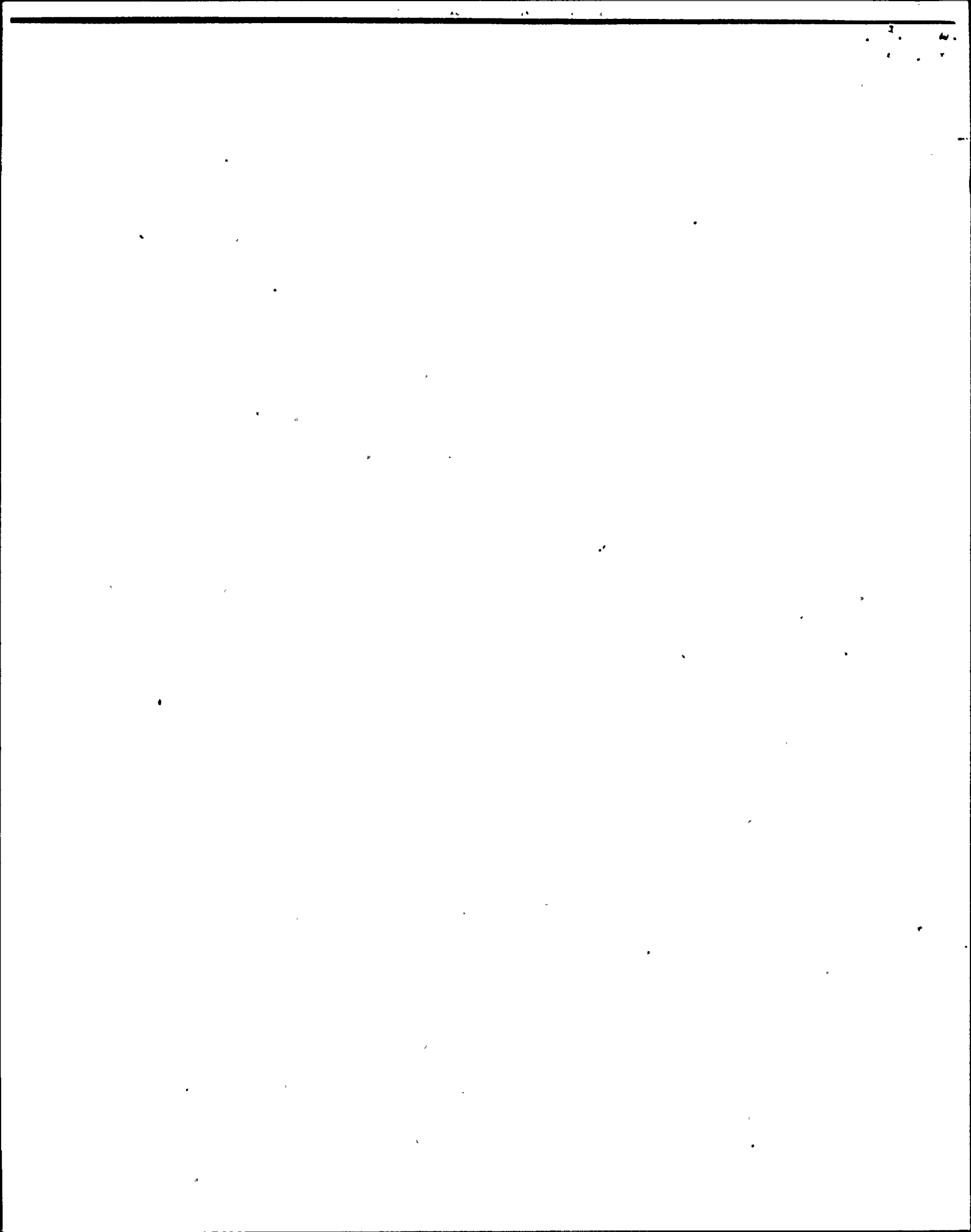


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1.0 PURPOSE
(NCTS 1&2)

To establish the responsibilities and controls necessary for the safe, reliable, and efficient administration of Operations at Nine Mile Point Nuclear Station.

1.1 Applicability

This procedure applies to Operations Branch personnel reporting either directly or indirectly to the Station 1 or 2 Manager Operations.

2.0 REFERENCES AND COMMITMENTS

2.1 Licensee Documentation

- 2.1.1 QATR-1, Quality Assurance Program Topical Report for Nine Mile Point Nuclear Station Operations
- 2.1.2 Station 1 and 2 Technical Specifications
- 2.1.3 Station 1 Final Safety Analysis Report (FSAR), Section XIII, Conduct of Operations
- 2.1.4 Station 2 Updated Safety Analysis Report (USAR), Chapter 13, Conduct of Operations

2.2 Standards, Regulations, and Codes

- 2.2.1 10CFR Part 50, Domestic Licensing of Production and Utilization Facilities
- 2.2.2 10CFR Part 55, Operators Licenses
- 2.2.3 10CFR50.54, Conditions of Licenses
- 2.2.4 10CFR50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors
- 2.2.5 ANSI/ANS-3.2-1982, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants
- 2.2.6 ANSI-ASME NQA-1-1983, Quality Assurance Program Requirements for Nuclear Facilities
- 2.2.7 ANSI/ASME NQA-2-1983, Quality Assurance Requirements for Nuclear Power Plants
- 2.2.8 INPO 84-021, Conduct of Operations, July 1984
- 2.2.9 INPO 85-017, Guidelines for the Conduct of Operations at Nuclear Power Stations, June 1985

2.2.10 NUREG 1.114, Revision 1, Guidance on Being Operator at the Controls of a Nuclear Power Plant

2.3 Policies, Programs, and Procedures

- 2.3.1 NIP-ECA-01, Deviation Event Report
- 2.3.2 AP-1.1, Composition and Responsibility of Nuclear Generation Organization
- 2.3.3 AP-2.0, Procedure Use and Control
- 2.3.4 AP-3.2, Industrial Health and Safety
- 2.3.5 AP-4.2, Control of Equipment Markups
- 2.3.6 AP-4.3, Control of Overtime
- 2.3.7 AP-9.0, Administration of Training
- 2.3.8 AP-9.1, Site Task Qualification Program
- 2.3.9 AP-10.1, Management of Station Records
- 2.3.10 AP-12.1, Fitness for Duty During an Unscheduled Call-out
- 2.3.11 S-SUP-6, Control of Operator Aids

2.4 Supplemental References

- 2.4.1 Niagara Mohawk Accident Prevention Rules
- 2.4.2 Site Emergency Plan and Implementing Procedures

2.5 Commitments

<u>Sequence Number</u>	<u>Commitment Number</u>	<u>Description</u>
1	1953	Improve Control Room operating practices.
2	1541	Conduct of Operations.
3	001065-03	Superintendent Operations shall ensure EOP training requirements are met.
4	503479-50	Management personnel shall observe certain training sessions.
5	503461	Administrative Controls for Equipment Status Log.

2.5

(Cont)

<u>Sequence Number</u>	<u>Commitment Number</u>	<u>Description</u>
6	OP.2-2	Enhance "At-the-Controls" operator responsibilities.
7	700130(Task 5)	MOV backseating controls.

3.0 DEFINITIONS

- 3.1 Personnel - Generic term that refers to both station personnel and external organization personnel.
- 3.2 Site - The term "site" refers to Stations 1 and 2 including the contiguous property of Niagara Mohawk Power Corporation surrounding Stations 1 and 2.

4.0 PRIMARY RESPONSIBILITIES

The Manager Operations is responsible for the content and maintenance of this procedure.

5.0 PROCEDURE

5.1 Operations Personnel Responsibilities

5.1.1 Manager Operations

- a. Reports directly to the Plant Manager.
- b. Establishes and maintains the Operations Branch organization and staff.
- c. Provides overall guidance and direction to the Operations Branch in cooperation with other branch/section heads.
- d. Develops, implements, and coordinates programs and policies that ensure safe and reliable station operations.
- e. Obtains Plant Manager approval to commence a reactor startup.
- f. Designates activities performed by the Reactor Engineering, Operations Support (includes Fire Protection), and Radwaste sections.

5.1.1 (Cont)

- g. Ensures branch personnel are properly trained and qualified.
- h. Provides guidance and direction to direct reports to ensure required quality and quantity of work is achieved and approved operating procedures and practices are followed.
- i. Maintains familiarity with the requirements of regulatory agencies relative to plant operations. Prepares or supervises the preparation of the necessary reports for these agencies, as directed.
- j. When assigned, may act as Plant Manager in the Plant Manager's absence.
- k. Ensures performance of reactor engineering, reactor core management, nuclear fuel accountability, storage, utilization, and disposition.
- l. Establishes Operation Branch goals and objectives to support station goals.

5.1.2 General Supervisor Operations

- a. Reports directly to the Manager Operations.
- b. Holds an NRC Senior Reactor Operator (SRO) license for the specific station assigned.
- c. Responsible for directing the actions of the operating shift through the on-duty SSS.
- d. Functioning as the Manager Operations in the absence of the Manager Operations, as required.
- e. Establishes and regularly reviews required operating logs and records.
- f. Supervises the preparation of operating reports to ensure completeness, accuracy, and timeliness.
- g. Develops performance standards for supervised personnel as a means of evaluating performance.
 - 1. Keeps Manager Operations informed of qualifications and performance of personnel.
 - 2. Makes appropriate recommendations concerning personnel showing outstanding or substandard performance.

5.1.2 (Cont)

- h. Monitors development and implementation of On-the-Job Training (OJT) programs and provides guidance and direction to the Nuclear Training Department to ensure:
 - 1. Content of training and retraining programs (including Emergency Plan and Emergency Operating Procedures) for operating personnel provides a highly qualified and efficient operating force.
 - 2. Qualified replacement personnel are available when vacancies occur.
- i. Ensure supervised personnel receive training in appropriate radiological protection practices, procedures, and ALARA principles.
- j. Promotes safe working conditions and practices by ensuring supervised personnel receive required instructions concerning industrial safety.
- k. Ensures strict adherence to company and plant security provisions and procedures.
- l. Promotes good housekeeping by periodically inspecting areas assigned to the Operations Branch.
- m. Maintains familiarity with company/union agreements and interpretations. Ensures company/union agreements are properly administered.
- n. Ensures performance of assigned surveillance activities in accordance with approved surveillance schedule.
- o. Ensures equipment status control is maintained.
- p. Ensures startup and operational testing is performed correctly.
- q. May issue written Station Shift Supervisor Instructions.
- r. May sign and date Station Shift Supervisor Instructions.
- s. Ensures Operations memorandums used to transmit information or instructions for conduct of operations of an intermediate to long-term nature are NOT used as a substitute for written procedures or procedure changes/revisions.

5.1.3 Supervisor Operations

- a. Reports directly to the General Supervisor Operations.
- b. Holds an NRC Senior Reactor Operator (SRO) License for the specific station assigned.
- c. Performs the duties of the SSS when required and when SRO License is active.
- d. May issue written Station Shift Supervisor Instructions.
- e. May sign and date Station Shift Supervisor Instructions.

5.1.4 Station Shift Supervisor (SSS)

- a. As a matter of highest priority, maintains a broad perspective of operational conditions affecting safety of the station.
- b. Maintains an NRC Senior Reactor Operator (SRO) License for the specific station assigned.
- c. Directs shut down of the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
- d. Provides full supervisory control of station operations subject to the general supervision of the General Supervisor Operations. Implements Station Shift Supervisor Instructions, as applicable.
- e. Relinquishes shift control only when properly relieved by a qualified replacement.
- f. Maintains accurate logs and records of operations activities, station status, and equipment status.
- g. Coordinates the activities of other organizations to accomplish the operating objectives for the shift.
- h. Authorizes the removal or return to service of equipment and systems from maintenance, testing, or operational activities.
- i. Monitors the mental and physical condition of operating shift personnel.
- j. Maintains the status of active equipment markups.

5.1.4 (Cont)

- k. Periodically tours the plant to monitor housekeeping, material condition, and work practices.
- l. Conducts shift briefings.

5.1.5 Assistance Station Shift Supervisor (ASSS)

- a. Maintains an active NRC Senior Reactor Operator (SRO) license for the specific station assigned.
- b. When assigned as the SRO in charge of the Control Room, maintains full supervisory control of station operations subject to the general supervision of the SSS.
- c. Assumes the duties and responsibilities of the Shift Technical Advisor (STA), when required.

5.1.6 Chief Shift Operator (CSO)

- a. Maintains an NRC Reactor Operator (RO) license for the specific station assigned.
- b. Shuts down the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
- c. Performs duties or directs activities associated with the safe operation of assigned station.
- d. Maintains order and minimizes unnecessary personnel in the Control Room.

NOTE: When responding to alarms or in the event of an emergency affecting the safety of operations, the operator at the controls may momentarily be absent from the defined surveillance area in order to verify the receipt of an annunciator alarm or initiate immediate corrective action, provided the operator remains within the confines of the Control Room.

- e. Remains continuously present and alert "at-the-controls" for the duration of the assigned shift, unless properly relieved by a qualified replacement.
- f. Should not get involved in detailed step-by-step work of procedures and Preventive Maintenance (PMs).

5.1.6 (Cont)

- (NCTS 6)
- g. As the "at-the-controls" reactor operator, is continuously aware of system and plant status and performs panel walkdowns to assess operation.
 - h. If coordination cannot be accomplished, the CSO has the authority and the responsibility to stop work or reprioritize work to be done.
 - i. Delegates work and coordinates personnel in the Control Room and the plant.
 - j. Maintains control of active equipment markups.

5.1.7 Licensed Reactor Operators (RO)

- a. Maintains an NRC Reactor Operator (RO) license for the specific station assigned.
 - b. With concurrence from the CSO, manipulates the controls that directly affect the reactivity or power level of the reactor.
 - c. Shuts down the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
 - d. Remains aware of the operation of mechanisms and apparatus that may indirectly affect the reactivity or power level of the reactor.
- (NCTS 6)
- e. When assigned as "at-the-controls" reactor operator, remain continuously aware of system and plant status and perform panel walkdown to assess operation.

5.1.8 Operations Branch Shift Personnel

- a. Remain alert and present at the site until properly relieved.
- b. Assume responsibility for monitoring instrumentation and controls located within assigned areas.
- c. Remain aware of, and responsible for, the station status while on shift.
- d. Perform timely and proper actions to ensure the safe and efficient operation of the station.

5.1.8 (Cont)

- e. Base operating actions and responses upon indications provided by appropriate instruments and alarms, unless such indications are proven to be incorrect.
- f. Inform the Control Room, and receive permission, before manipulating valves, controls, or instruments which could affect reactor operation or station performance.

5.1.9 Shift Technical Advisor (STA)

- a. Remains in the Control Room during transients or emergencies and observe plant information displays.
- b. Makes objective evaluations of plant operations and advises or assists plant supervision in correcting conditions that may compromise the safety of operations.
- c. Observes the operation of Emergency Core Cooling Systems and confirms availability of components of the Emergency Core Cooling Systems which were not activated by the effects of the transient.
- d. Immediately reports abnormalities to the SSS and provides assistance in formulating a plan for appropriate corrective action.
- e. Monitors applicable procedures and operator activities for possible errors and advises and SSS of appropriate corrective actions.
- f. During emergencies, observes critical parameters and determines if there is adequate core cooling, including availability of a heat sink for the coolant system.
- g. Makes qualitative assessment of the plant parameters during and following an accident in order to ascertain whether core damage has occurred.
- h. In the event critical parameters become unavailable due to instrument failure, performs calculations or determines, through other appropriate means, approximate values for the parameters in question.
- i. Evaluates the effectiveness of plant procedures in terms of terminating or mitigating accidents and makes recommendations when changes are needed.

5.1.9 (Cont)

- j. Monitors other Control Room displays not directly related to the transient to note abnormal values, undesirable trends, or normal conditions.

NOTE: A significant part of STA responsibility is ensuring the health and safety of the public is protected by appropriate automatic and manual response, as well as appropriate implementation of the emergency plan. However, this does not preclude the STA from assisting the SSS in reading the EOPs during severe transients when prompt actions in more than one EOP are concurrently required, as the EOPs by design require operators to maintain an overall perspective of plant status.

5.1.10 Supervisor Reactor Engineering

- a. Reports directly to the Manager Operations.
- b. Ensures routine and special surveillance on the reactor core are performed.
- c. Ensures proper implementation of the Reactivity Management Program.
- d. During steady state conditions, power changing, and flux shaping maneuvers:
 - 1. Provides control rod position recommendations and instructions to the SSS for approval.
 - 2. Conducts prescribed surveillances and tests.
 - 3. Provides information to the SSS and operating personnel to document compliance with Technical Specifications and reactor fuel operating and warranty requirements.
- e. Provides recommendations and technical support to the SSS and operating personnel during all planned reactivity changes. A designee of the Supervisor Reactor Engineering may provide such recommendations and support.
- f. Functions as the Special Nuclear Material Custodian.

5.1.11 General Supervisor Operations Support

- a. Reports directly to the Manager Operations.
- b. Ensures special reports are prepared.
- c. Ensure investigations are conducted and reviewed.
- d. Ensures routine administrative functions of the Operations Branch are performed.
- e. Ensures unit operations are coordinated with other unit organizations to ensure timely completion of required operations, maintenance, modification, surveillance, and testing.
- f. Ensures special projects are properly executed.
- g. Ensures appropriate level of technical and engineering support is provided to the Operations Branch.
- h. Ensures direction of the Station Fire Department is provided for day-to-day activities associated with implementation of the Fire Protection Program.
- i. Ensures personnel comply with the Fire Protection Program and procedures.
- j. Provides guidance and direction to Nuclear Training to ensure content of training and retraining program (including Emergency Plan and Emergency Operating Procedures) provides a highly qualified and efficient operating force.
- k. Promotes good housekeeping by periodically inspecting areas assigned to the Operations Support Section.
- l. Maintains familiarity with company/union agreements and interpretations.
- m. Ensures company/union agreements are properly administered.

5.1.12 General Supervisor Radwaste Operations

- a. Reports directly to the Manager Operations.
- b. Establishes and maintains the Radwaste Operations Section organization and staff.
- c. Provides overall guidance and direction to the Radwaste Operations Section in cooperation with other section heads.

5.1.12 (Cont)

- d. Ensures Section personnel are properly trained and qualified.
- e. Provides guidance and direction to ensure:
 - 1. Required quality and quantity of work is achieved; AND
 - 2. Approved operating procedures and practices are followed
- f. Maintains familiarity with the requirements of regulatory agencies relative to Radwaste Operations. Prepares or supervises the preparation of the necessary reports for these agencies, as directed.
- g. Establishes and regularly reviews required operating logs and records.
- h. Monitors development and implementation of On-the-Job Training (OJT) programs.
- i. Provides guidance and direction to Nuclear Training to ensure content of training and retraining program (including Emergency Plan and Emergency Operating Procedures) provides a highly qualified and efficient operating force.
- j. Ensures supervised personnel receive training in appropriate radiological protection practices, procedures, and ALARA principles.
- k. Promotes safe working conditions and practices by ensuring supervised personnel receive required instructions concerning industrial safety.
- l. Ensures strict adherence to company and plant security provisions and procedures.
- m. Promotes good housekeeping by periodically inspecting areas assigned to the Radwaste Operations Section.
- n. Maintains familiarity with company/union agreements and interpretations.
- o. Ensures company/union agreements are properly administered.
- p. Ensures proper processing, packaging, and disposal of radioactive waste.

5.1.13 Supervisor Radwaste Operations

- a. Reports directly to the General Supervisor Radwaste Operations.
- b. When assigned, functions as the General Supervisor Radwaste Operations.

5.1.14 Shift Emergency Plan Coordinator (SEPC) (Unit 2)

- a. During normal plant operations:
 - 1. Reports to the Control Room (within 10 minutes) upon activation of station alarm.
 - 2. Remains available to the Control Room by normal plant communications.
 - 3. Participates in shift turnover.
 - 4. Remains aware of existing plant conditions, Limiting Conditions for Operation (LCO), out-of-service equipment, and Emergency Core Cooling System (ECCS) status.
 - 5. Reviews the schedule for activities, surveillances, and maintenance.
 - 6. Maintains awareness of plant conditions pertaining to evolutions throughout the shift.
- b. When the Site Emergency Plan is activated:
 - 1. Reports to the Control Room.
 - 2. Assists the SSS with implementation of the Site Emergency Plan.

5.2 Operating Shift Complement

5.2.1 The General Supervisor Operations shall ensure minimum operating shift complements are established and maintained in accordance with:

- a. Technical Specifications, Section 6.2.2 for specified modes of operation; AND
- b. The Site Emergency Plan

5.2.2 The Station Shift Supervisor (SSS) or Assistant Station Shift Supervisor (ASSS) shall have the authority to call in off-duty personnel from any department, as necessary, to supplement or replace personnel.

5.3 Operating Shift Schedules and Assignments

- 5.3.1 The Operations General Supervisors/Supervisors shall:
- a. Prepare shift schedules and allocate operational tasks between shifts/personnel.
 - b. Designate tasks and schedule activities to be performed by Operations, Reactor Engineering, Operations Support, and Operations Radwaste personnel.
 - c. Ensure Operations Section personnel receive and maintain the required training, certifications, and licenses for assigned positions.
- 5.3.2 The SSS or ASSS shall remain in the Control Room during power operation.
- 5.3.3 The SSS and ASSS/STA shall remain in the Control Room whenever the Site Emergency Plan is activated.
- 5.3.4 The SSS or the ASSS are considered to be in the Control Room when in the following locations:
- a. Main Control Room
 - b. SSS office (Units 1 and 2)
 - c. Control Room kitchen (Unit 1)
 - d. Control Room laboratory (Unit 1)
 - e. Auxiliary Control Room (Unit 1)
 - f. Interior of duplex panels (Unit 1)
 - g. Operations Clerk Office and adjacent hallway (Unit 1)
 - h. Operations Clerk Office (Unit 2)
- 5.3.5 During normal power operations, the Senior Reactor Operator (SRO) in the Control Room may be either the SSS or the ASSS.
- 5.3.6 During power operation when the Site Emergency Plan is activated, the ASSS shall assume the position of Shift Technical Advisor and NOT serve as the Control Room SRO.
- 5.3.7 When assigned as the Control Room SRO, the ASSS shall assume full authority for station operations subject to the general supervision of the SSS. The ASSS shall NOT relinquish this position in the Control Room except when relieved by a qualified replacement.

- 5.3.8 When a portion of station operations has been delegated to an SRO other than the SSS (i.e., refueling activities):
- a. A division of duties shall be clearly established, AND
 - b. A single SRO shall assume overall control.
- 5.3.9 The SSS and the ASSS should avoid becoming personally involved in manipulative tasks or details of operation of any one portion of the station in order to retain a comprehensive perspective of the general station condition.
- 5.3.10 The Chief Shift Operator (CSO) assigned to each shift shall:
- a. Perform associated CSO duties and responsibilities unless relieved in accordance with Section 5.4 of this procedure.
 - b. Perform duties and assume responsibilities associated with the "at-the-controls" reactor operator, unless relieved in accordance with Step 5.3.12 of this procedure.
- 5.3.11 (NCTS 6) The "at-the-controls" reactor operator shall:
- a. Remain in the "at-the-controls" area in the Control Room.
 - b. Perform periodic panel walkdowns to assess Operations.
- 5.3.12 Any relief of the "at-the-controls" reactor operator during the assigned shift shall include:
- a. A review of current plant status AND
 - b. Documentation of relief in the Control Room Log.
- 5.3.13 Except in an extreme emergency for operations potentially affecting station process systems, personnel shall first obtain permission to proceed from the SSS.

5.4 Shift Relief and Changeover

- 5.4.1 The General Supervisor Operations shall prepare and update a shift turnover checklist to be reviewed and signed by on-coming shift personnel. As a minimum, the turnover checklists shall document the following, as applicable:
- a. Status of tests or special operations in progress
 - b. Special valve/switch line-ups

5.4.1 (Cont)

- c. Review of changes in status and locations of jumpers and blocks as reflected in the Temporary Modification Log
- d. Acknowledgment of instructions from the General Supervisor Operations
- e. Review of changes in equipment status as reflected in the Equipment Status Log

5.4.2 On-coming Operations shift personnel shall relieve the off-going shift in the Control Room or other assigned work station, as applicable.

5.4.3 The SSS, ASSS, CSO, and Control Room Operators shall read applicable log books from the date shift duty was last performed. The SSS and CSO shall sign below the last entry of the applicable log book.

5.4.4 Operations personnel shall:

- a. Include additional pertinent information regarding station status in a verbal exchange between the on-coming and off-going shifts.
- b. Perform shift turnover in accordance with branch/section instructions.

5.5 Notifications of Absences and Call-outs

5.5.1 Personnel expecting to be late or unable to report for work at the scheduled time shall, at the earliest opportunity, inform the SSS or the ASSS of the situation.

5.5.2 The SSS or ASSS shall make the necessary arrangements for obtaining replacements or holding over on-shift personnel.

5.5.3 The SSS or ASSS may call out required personnel, regardless of discipline or department, or ensure the safe and efficient operation of the station.

5.5.4 The SSS shall ensure ROs working more than eight continuous hours at the control board are relieved every four hours.

5.6 Training

5.6.1 The Manager Operations shall ensure Operations personnel are properly trained and qualified for assigned duties.

5.6.2 The General Supervisor Operations shall ensure Emergency (NCTS 3) Operating Procedure (EOP) training requirements are met.

5.6.3 The General Supervisor Operations shall, in conjunction with Nuclear Training, ensure the Operations Branch Training Program:

- a. Is scheduled and coordinated
- b. Is accomplished by one or more of the following:
 1. On-shift formal instruction by qualified instructors or supervisors
 2. Regularly scheduled license qualification, requalification, and Non-Licensed Operation Training (NLOT)
 3. Required reading
- c. Training records of personnel are maintained

5.6.4 The General Supervisor Operations ensures active license tracking is controlled.

5.6.5 Operations Management personnel shall observe training (NCTS 4) during each Requalification Cycle which includes Simulator Training.

5.7 Control of System Configuration

5.7.1 Systems are normally in service in accordance with approved Operating Procedure requirements; specifically valve lineups, power board/breaker lineups and instrumentation requirements.

5.7.2 If a component is discovered to be, or suspected to be out of the normal position as described in the appropriate procedures:

- a. Personnel discovering the potentially abnormal situation shall:
 1. Not alter the situation; AND
 2. Immediately notify the SSS; OR
 3. To prevent immediate personnel or equipment damage, take appropriate action, then immediately notify the SSS.
- b. The SSS shall:
 1. Review the impact to system operation, operability requirements, and reportability

5.7.2.b (Cont)

2. Determine the correct configuration of the system or component.
3. Direct action, as necessary, to restore the system or component to proper configuration.
4. If required, initiate a Deviation Event Report (DER) in accordance with NIP-ECA-01, Deviation Event Report.

5.7.3 If a change to a system configuration is required that is NOT within the scope of an approved Operating, Surveillance, or Special Test procedure, the SSS shall:

- a. If the altered system configuration is intended to be in service, initiate a change to the appropriate procedure reflecting the altered configuration; QR
- b. If the altered system configuration is NOT to be in service, then control is in accordance with AP-4.2, Control of Equipment Markups. Specifically, off normal positioned valves, breakers, control switches are tagged with:
 1. Yellow hold out tags (for equipment protection or other administrative reasons); QR
 2. Red or blue markup tags (for personnel protection)

5.8 Key Control

5.8.1 The SSS shall maintain:

- a. A list of key controlled items and areas under the authority of the Operations Branch
- b. Control of controlled keys until issue

NOTE: H-keys are controlled by the Radiation Protection Department.

5.8.2 The SSS or ASSS shall:

- a. Grant permission for issue of a controlled key.
- b. Maintain issuance of controlled keys.

5.8.3 "On-duty" personnel issued certain controlled keys for the performance of normal and emergency duties within an area of responsibility shall:

- a. Maintain control of the keys; AND
- b. Prevent unauthorized personnel from possessing or using controlled keys.

5.9 Communications and Directions

5.9.1 Operations personnel shall:

- a. Ensure communications and directions are clear, concise, explicit, and understandable.
- b. Provide verification, whenever possible, for complex directions and those that include numbers by having the person repeat back the instruction or issue written instructions.
- c. Upon completion of a directed action, require a response back to the controlling station stating the exact action that has taken place.
- d. Perform communication requirements in accordance with branch/section instructions.

5.9.2 Whenever possible, the person directing the action shall verify the action has been performed correctly by observing expected results (i.e., indication or position lights, meters, gauges, and station/system responses).

5.9.3 If deemed necessary to pass a direction over the Public Address System, Radio, etc., the person directing the action should request an acknowledgment from the person implementing the action.

5.9.4 Personnel assigned to perform an activity shall:

- a. Review the procedure to fully understand what is required, and to be cognizant of the limitations, precautions, and requirements.
- b. Attend briefings for personnel involved in an evolution that is to be performed. The detail of the briefing is dependent on the degree of complexity and the number of personnel involved.

NOTE: Evolutions involving many personnel, especially from two or more departments or disciplines, may require formal briefing or preplanning sessions.

5.9.5 If an evolution is complex and involves close coordination, Operations personnel conducting the briefing session should include:

- a. A review of the appropriate section of the procedure by key personnel
- b. An examination of each person's specific involvement and responsibility
- c. A discussion of expected results or performance
- d. A review of limitations, hold points, and emergency action to be taken if contingencies arise
- e. Understanding of the interfaces and communications required

5.10 Records and Log Books

5.10.1 Shift records are comprised of logs, files, data sheets, checklists, sign-off lists, recorder charts, and computer printouts that describe or record operating information and actions. The following practices are applicable to operating shift records:

- a. Records and logs are maintained in a legible, accurate, complete, and understandable manner.
- b. The use of black ink to facilitate reproduction is required.
- c. The use of white-out or correction tape is NOT allowed on shift records.
- d. Errors in shift records are corrected by drawing a single line through the incorrect information and writing the correct information adjacent to the line or in an available space. The person making the correction shall initial and date the correction.
- e. Personnel responsible for maintaining logs and records shall sign and date portions that cover the applicable shift assignment.
- f. To assist in documenting authorship and turnover, stamp or write the following immediately after the last entry in the SSS and Control Room Logs:
 1. "The above is a true record of events on the preceding shift _____."
(Signature)

5.10.1.f (Cont)

2. "I have read and understand the events recorded
in this log since I was last on shift

(Signature)

- g. Recorder charts in operation are checked at least once per shift to verify markings are clearly visible and the timing is correct. The person making the check shall initial the chart and enter the time and date.
- h. Personnel shall mark recorder charts with the time, date, and recorder identification number before the chart is placed on the recorder and when the chart is removed, indicating pen and range selection, as necessary, to facilitate interpretation.
- i. If the recorder performs the date and time function automatically, marking recorder charts with date and time is NOT necessary.
- j. When significant events or unusual trends in parameters occur, operators shall indicate the time and event on applicable charts whenever possible to assist in operations analysis.
- k. The General Supervisor Operations shall periodically review shift records and logs to ensure accuracy and completeness.

5.10.2 The following controls are applicable to the Control Room Log Book:

- a. The Control Room Log Book is considered a legal document subject to being entered as a court record.
- b. Entries in the log book are made by the duty CSO or other authorized personnel only. NO other entries are allowed.
- c. Log entry copies are posted daily.

5.10.2 (Cont)

d. Log entries shall, at a minimum, consist of:

1. Activities associated with changing core reactivity

NOTE: The Unit Supervisor Reactor Engineering maintains separate Fuel Records in which detailed fuel histories and a record of core instrumentation changes are maintained. Detailed rod manipulations are NOT necessary, provided the movements are part of a startup or shutdown sequence developed by Reactor Engineering.

2. Changes in station output
3. Changes in auxiliary equipment
4. Unusual conditions or station evolutions
5. Line trips
6. Annunciator signals NOT recorded on the data logger

NOTE: Annunciator signals logged during unit outages are at the discretion of CSO.

7. Performance of surveillance testing
8. Equipment removed from service and returned to service
9. Other applicable information regarding shift activities

e. The log book shall contain the date and time of entries and the name of the CSO or alternate.

f. The log book should remain in the Control Room until completed and reviewed.

g. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions.

5.10.3 The following controls are applicable to the SSS Log Book:

NOTE: The SSS Log Book is considered a legal document subject to being entered as a court record.

- a. The SSS Log Book shall contain an overall summary of station operations during the respective shift, including:
 1. Names of the supervisors, ROs, and auxiliary operators on-duty
 2. Date and time of entries
 3. Surveillance tests conducted and deviations from acceptance criteria
 4. Post-Maintenance Testing and returning Technical Specification related equipment to operable status
 5. Reportable occurrences
 6. Safety-related and other important equipment maintenance in progress
 7. Entering a Technical Specification action statement
 8. Leaving a Technical Specification action statement
 9. Implementation of the Site Emergency Plan or Emergency Operating Procedures
 10. Significant changes in radiological conditions
 11. A narrative of significant events, including notifications to the Plant Manager, Manager Operations, On-Call Operations Supervisor, and the NRC
- b. The SSS log entries may be written by the ASSS with the approval of the SSS, provided the log is reviewed and signed by the SSS.
- c. The log book should remain in the Control Room until completed and reviewed.
- d. Log entry copies are posted daily.
- e. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions.

5.10.4 The following controls are applicable to the Radwaste Control Room Log Book:

- a. The log book should remain in the Radwaste Control Room until completed.
- b. The log book shall contain pertinent information associated with the Radwaste Facility operation.
- c. The date and time of activities are entered.

5.10.5 The following controls are applicable to the Equipment Status Log (ESL):
(NCTS 5)

- a. The SSS shall:
 1. Maintain the ESL.
 2. Ensure the ESL is used during all plant conditions.
 3. Ensure equipment entered in the log is marked up in accordance with AP-4.2, Control of Equipment Markups; OR
 4. If equipment is entered for administrative reasons, a markup which would render the equipment nonfunctional is not required. However, per AP-4.2, Control of Equipment Markups, Holdout tags may be placed on control switches to alert operators of potentially degraded conditions.
- b. Log entries should include:
 1. Station equipment determined to be inoperable which may limit station output or which impact Technical Specifications
 2. System unavailability due to removal from service of safety-related equipment for the purpose of conducting preventive maintenance
 3. Equipment which is otherwise operable, but may need special attention due to faulty instruments or other deficiencies (i.e., non-Technical Specification temperature elements on a Technical Specification pump)
 4. Date and time of equipment inoperability
 5. Equipment identification number of principal components

- 5.12.3 During the conduct of station related business, the Control Room operator shall remain attentive and maintain the professional atmosphere in the Control Room.
- 5.12.4 Access to control panels and stations are restricted to authorized shift personnel or as authorized by the SSS, ASSS, or CSO.
- 5.12.5 Foreign objects and materials NOT necessary for plant operations, maintenance, or testing should be restricted from control panels and stations.
- 5.12.6 The General Supervisor Operations, Supervisor Operations, SSS, ASSS, and CSO have the authority to restrict access to OR remove personnel from the Control Room.
- 5.12.7 Additional rules may be issued and posted by the General Supervisor Operations.

5.13 Off-Normal Responses

- 5.13.1 The Site Emergency Plan and Implementing Procedures designate specific actions to be taken in the event of an unplanned release, or potential release, of radioactivity from the site.
- 5.13.2 Operations during off-normal conditions shall proceed according to approved procedures. Refer to AP-2.0, Procedure Use and Control, for procedure adherence requirements during emergencies.
- 5.13.3 At the earliest convenience, the SSS or designee shall notify the Plant Manager, either directly or via the Manager Operations or General Supervisor Operations, of the following:
 - a. Unscheduled operational condition changes
 - b. Unexpected changes of more than 50 MWe in station output (transient)
 - c. Unplanned entries into Limiting Condition for Operation (LCO) action statements requiring a plant shutdown
 - d. Events requiring entry into the EOPs or Emergency Action Procedures (EAPs)
 - e. Events requiring NRC notification within 1 hour, 4 hours, or 30 days
 - f. Other events which, in the judgment of the SSS, should be brought to the attention of the Plant Manager.

- 5.13.4 The Plant Manager must grant permission for all unit startups and for those following unscheduled shutdowns, determine the acceptability of restart according to the following criteria:
- a. The station has been determined to be in a safe condition.
 - b. The cause of the shutdown has been determined and understood, OR SORC has reviewed the event and authorized restart.
 - c. The need for corrective action has been determined and appropriately implemented.
 - d. The expected automatic operation of the unit's safety-related systems have been verified.

5.14 Emergency Plan Operations

5.14.1 The five classes of events described in the Site Emergency Plan and Implementing Procedures which require a departure from normal station operation are:

- a. Unusual Event
- b. Alert
- c. Site Area Emergency
- d. General Emergency
- e. Operational Event

NOTE: An Operational Event is NOT categorized as an emergency but is subject to ~~management~~ review.

- 5.14.2 The events listed in Step 5.14.1, except an Operational Event, require notification and responses according to the Site Emergency Plan and Implementing Procedures.
- 5.14.3 In the event station conditions require the implementation of the Site Emergency Plan and Implementing Procedures, the SSS shall immediately assume the role of Nine Mile Point Nuclear Station Site Emergency Director until properly relieved.
- 5.14.4 For Unit 2, when the Site Emergency Plan is activated, the Shift Emergency Plan Coordinator (SEPC) shall report to the Control Room to assist the SSS with implementation of the Site Emergency Plan. The SEPC shall perform duties as specified in departmental instructions.

5.10.5.b (Cont)

6. Name of equipment or system and the nature of malfunction or failure, if known
 7. Applicable Technical Specification paragraph
 8. Technical Specification surveillance tests which must be performed while equipment or system is NOT available
 9. Tests or inspections required before placing the equipment or system in service
 10. If applicable, Work Request number calling for corrective action
 11. Markup numbers and type
 12. Date Work Request completed and equipment is ready for service or declared operable
 13. Deviation Event Reports affecting operability
 14. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions
- c. The SSS shall review the ESL before declaring any system/equipment operable
 - d. Upon return of equipment to normal or operable status, the entry may be removed from the log, subject to Step 5.10.5.b.3.

5.10.6 The Operator Aids Log is controlled in accordance with S-SUP-6, Control of Operator Aids.

5.10.7 The following controls are associated with the Markup, Work Request, and RWP files:

- a. The Markup File is maintained in or near the SSS office or Control Room.
- b. The Markup File shall contain outstanding markups.

5.10.8 Operator Rounds Logs and plant log books are controlled in accordance with applicable Operations Branch procedures.

5.11 Control Room Documents

- 5.11.1 Only controlled copies of documents related to station operations may be used for operation.
- 5.11.2 The following documents are required for on-duty Operators and should remain in the applicable Unit Control Room:
 - a. Station Administrative Procedures
 - b. Operating Procedures
 - c. Special Operating Procedures and/or Emergency Operating Procedures
 - d. Standing Orders
 - e. Station General Orders
 - f. Operation Department Instructions
 - g. Site Emergency Plan and Implementing Procedures
 - h. Radiation Protection Procedures
 - i. Operator performed Surveillance Procedures
 - j. Reactor Analysis/Engineering Procedures
 - k. Technical Specifications and Interpretations
 - l. P&I Drawings (Unit 1)
 - m. Flow Schematics (FSK), Logic Schematics (LSK), and P&I Drawings (Unit 2)
 - n. Selected Electrical Drawings
 - o. Other documents and drawings authorized by the SSS, or higher authority
 - p. Final Safety Analysis Report, FSAR "Updated" (Unit 1) or Updated Safety Analysis Report, USAR (Unit 2)
 - q. Core Operating Limits Report

5.12 Control Room Conduct

The following policies are established for Control Room conduct:

- 5.12.1 Potentially distracting activities are prohibited.
- 5.12.2 Access is limited to individuals on station business.

5.14.5 When the Site Emergency Plan and Implementing Procedures are activated, the ASSS shall assume the role of Shift Technical Advisor (STA), and:

- a. Provide the SSS with an assessment of unit conditions and advise the SSS concerning actions to terminate or mitigate the consequences of the incident, as required.
- b. Perform NO other duties unrelated to assessment or diagnosis of the situation.

NOTE: A significant part of STA responsibility is ensuring the health and safety of the public is protected by appropriate automatic and manual response, as well as appropriate implementation of the emergency plan. However, this does not preclude the STA from assisting the SSS in reading the EOPs during severe transients when prompt actions in more than one EOP are concurrently required, as the EOPs by design require operators to maintain an overall perspective of plant status.

5.14.6 Emergency Response Facilities have been established in accordance with the Site Emergency Plan and Implementing Procedures. During Emergency Operations, advice and management directions may come from the Technical Support Center (TSC). However, station manipulations are directed from the applicable Unit Control Room only.

5.15 Associated Operations Activities
(NCTS 7)

5.15.1 When performing operating maneuvers, personnel shall use redundant or corroborating instrumentation if available. In the absence of such instrumentation, personnel shall rely upon existing instrument indications.

5.15.2 Unless operational or instrumented evidence exist showing that a system is not performing its intended function or that continued operation will prolong or produce an unsafe condition, personnel shall not override automatic engineered safety features.

5.15.3 Personnel shall NOT electrically or manually backseat a motor-operated valve, except for maintenance purposes or as a temporary measure until the plant is placed in a condition which allows maintenance on the valve.

- 5.15.4 Personnel shall NOT override or jumper electrical circuits to backseat a motor-operated valve unless evaluations of the following have been performed:
- a. Effects of backseating on valve structural integrity
 - b. Valve operability in the backseated position
- 5.15.5 Motor-operated valves that have been backseated and were declared inoperable shall be demonstrated operable through an appropriate surveillance or Post-Maintenance Operability Test.
- 5.15.6 Personnel shall NOT manually seat a motor-operated valve, except for maintenance purposes or as a temporary measure until the plant is placed in a condition which allows maintenance on the valve.
- 5.15.7 When manually seating a motor-operated valve, open the motor operator breaker and apply a yellow hold-out tag, requiring the valve be manually backed off the seat before reclosing the motor operator breaker.
- 5.15.8 Motor-operated valves that have been manually seated and were declared inoperable shall be demonstrated operable through an appropriate surveillance or Post-Maintenance Operability Test.

6.0 RECORD REVIEW AND DISPOSITION

The following records are retained in accordance with AP-10.1, Management of Station Records:

None

For Information Only

~~07-25-91~~ 6/2

07-25-91

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION
ADMINISTRATIVE PROCEDURE

AP-4.0

REVISION 18

ADMINISTRATION OF OPERATIONS

TECHNICAL SPECIFICATION REQUIRED

Approved By:
K. A. Dahlberg


Plant Manager, Unit 1

FOR K. A. DAHLBERG
PLANT MANAGER - NMP #1 6/2/91
Date

Approved By:
M. J. McCormick, Jr.


Plant Manager, Unit 2

6-17-91
Date

FOR INFORMATION ONLY
Not To Be Used For Operations & Maintenance

Effective Date: June 28, 1991

PERIODIC REVIEW DUE DATE: June 1993

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1.0 PURPOSE
(NCTS 1&2).

To establish the responsibilities and controls necessary for the safe, reliable, and efficient administration of Operations at Nine Mile Point Nuclear Station.

1.1 Applicability

This procedure applies to Operations Branch personnel reporting either directly or indirectly to the Station 1 or 2 Manager Operations.

2.0 REFERENCES AND COMMITMENTS

2.1 Licensee Documentation

2.1.1 QATR-1, Quality Assurance Program Topical Report for Nine Mile Point Nuclear Station Operations

2.1.2 Station 1 and 2 Technical Specifications

2.1.3 Station 1 Final Safety Analysis Report (FSAR), Section XIII, Conduct of Operations

2.1.4 Station 2 Updated Safety Analysis Report (USAR), Chapter 13, Conduct of Operations

2.2 Standards, Regulations, and Codes

2.2.1 10CFR Part 50, Domestic Licensing of Production and Utilization Facilities

2.2.2 10CFR Part 55, Operators Licenses

2.2.3 10CFR50.54, Conditions of Licenses

2.2.4 10CFR50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors

2.2.5 ANSI/ANS-3.2-1982, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants

2.2.6 ANSI-ASME NQA-1-1983, Quality Assurance Program Requirements for Nuclear Facilities

2.2.7 ANSI/ASME NQA-2-1983, Quality Assurance Requirements for Nuclear Power Plants

2.2.8 INPO 84-021, Conduct of Operations, July 1984

2.2.9 INPO 85-017, Guidelines for the Conduct of Operations at Nuclear Power Stations, June 1985

2.2.10 NUREG 1.114, Revision 1, Guidance on Being Operator at the Controls of a Nuclear Power Plant

2.3 Policies, Programs, and Procedures

- 2.3.1 NIP-ECA-01, Deviation Event Report
- 2.3.2 AP-1.1, Composition and Responsibility of Nuclear Generation Organization
- 2.3.3 AP-2.0, Procedure Use and Control
- 2.3.4 AP-3.2, Industrial Health and Safety
- 2.3.5 AP-4.2, Control of Equipment Markups
- 2.3.6 AP-4.3, Control of Overtime
- 2.3.7 AP-9.0, Administration of Training
- 2.3.8 AP-9.1, Site Task Qualification Program
- 2.3.9 AP-10.1, Management of Station Records
- 2.3.10 AP-12.1, Fitness for Duty During an Unscheduled Call-out
- 2.3.11 S-SUP-6, Control of Operator Aids

2.4 Supplemental References

- 2.4.1 Niagara Mohawk Accident Prevention Rules
- 2.4.2 Site Emergency Plan and Implementing Procedures

2.5 Commitments

<u>Sequence Number</u>	<u>Commitment Number</u>	<u>Description</u>
1	1953	Improve Control Room operating practices.
2	1541	Conduct of Operations.
3	001065-03	Superintendent Operations shall ensure EOP training requirements are met.
4	503479-50	Management personnel shall observe certain training sessions.
5	503461	Administrative Controls for Equipment Status Log.

2.5 (Cont)

<u>Sequence Number</u>	<u>Commitment Number</u>	<u>Description</u>
6	OP.2-2	Enhance "At-the-Controls" operator responsibilities.
7	700130(Task 5)	MOV backseating controls.

3.0 DEFINITIONS

3.1 Personnel - Generic term that refers to both station personnel and external organization personnel.

3.2 Site - The term "site" refers to Stations 1 and 2 including the contiguous property of Niagara Mohawk Power Corporation surrounding Stations 1 and 2.

4.0 PRIMARY RESPONSIBILITIES

The Manager Operations is responsible for the content and maintenance of this procedure.

5.0 PROCEDURE

5.1 Operations Personnel Responsibilities

5.1.1 Manager Operations

- a. Reports directly to the Plant Manager.
- b. Establishes and maintains the Operations Branch organization and staff.
- c. Provides overall guidance and direction to the Operations Branch in cooperation with other branch/section heads.
- d. Develops, implements, and coordinates programs and policies that ensure safe and reliable station operations.
- e. Obtains Plant Manager approval to commence a reactor startup.
- f. Designates activities performed by the Reactor Engineering, Operations Support (includes Fire Protection), and Radwaste sections.

5.1.1 (Cont)

- g. Ensures branch personnel are properly trained and qualified.
- h. Provides guidance and direction to direct reports to ensure required quality and quantity of work is achieved and approved operating procedures and practices are followed.
- i. Maintains familiarity with the requirements of regulatory agencies relative to plant operations. Prepares or supervises the preparation of the necessary reports for these agencies, as directed.
- j. When assigned, may act as Plant Manager in the Plant Manager's absence.
- k. Ensures performance of reactor engineering, reactor core management, nuclear fuel accountability, storage, utilization, and disposition.
- l. Establishes Operation Branch goals and objectives to support station goals.

5.1.2 General Supervisor Operations

- a. Reports directly to the Manager Operations.
- b. Holds an NRC Senior Reactor Operator (SRO) license for the specific station assigned.
- c. Responsible for directing the actions of the operating shift through the on-duty SSS.
- d. Functioning as the Manager Operations in the absence of the Manager Operations, as required.
- e. Establishes and regularly reviews required operating logs and records.
- f. Supervises the preparation of operating reports to ensure completeness, accuracy, and timeliness.
- g. Develops performance standards for supervised personnel as a means of evaluating performance.
 - 1. Keeps Manager Operations informed of qualifications and performance of personnel.
 - 2. Makes appropriate recommendations concerning personnel showing outstanding or substandard performance.

5.1.2 (Cont)

- h. Monitors development and implementation of On-the-Job Training (OJT) programs and provides guidance and direction to the Nuclear Training Department to ensure:
 - 1. Content of training and retraining programs (including Emergency Plan and Emergency Operating Procedures) for operating personnel provides a highly qualified and efficient operating force.
 - 2. Qualified replacement personnel are available when vacancies occur.
- i. Ensure supervised personnel receive training in appropriate radiological protection practices, procedures, and ALARA principles.
- j. Promotes safe working conditions and practices by ensuring supervised personnel receive required instructions concerning industrial safety.
- k. Ensures strict adherence to company and plant security provisions and procedures.
- l. Promotes good housekeeping by periodically inspecting areas assigned to the Operations Branch.
- m. Maintains familiarity with company/union agreements and interpretations. Ensures company/union agreements are properly administered.
- n. Ensures performance of assigned surveillance activities in accordance with approved surveillance schedule.
- o. Ensures equipment status control is maintained.
- p. Ensures startup and operational testing is performed correctly.
- q. May issue written Station Shift Supervisor Instructions.
- r. May sign and date Station Shift Supervisor Instructions.
- s. Ensures Operations memorandums used to transmit information or instructions for conduct of operations of an intermediate to long-term nature are NOT used as a substitute for written procedures or procedure changes/revisions.

5.1.3 Supervisor Operations

- a. Reports directly to the General Supervisor Operations.
- b. Holds an NRC Senior Reactor Operator (SRO) License for the specific station assigned.
- c. Performs the duties of the SSS when required and when SRO License is active.
- d. May issue written Station Shift Supervisor Instructions.
- e. May sign and date Station Shift Supervisor Instructions.

5.1.4 Station Shift Supervisor (SSS)

- a. As a matter of highest priority, maintains a broad perspective of operational conditions affecting safety of the station.
- b. Maintains an NRC Senior Reactor Operator (SRO) License for the specific station assigned.
- c. Directs shut down of the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
- d. Provides full supervisory control of station operations subject to the general supervision of the General Supervisor Operations. Implements Station Shift Supervisor Instructions, as applicable.
- e. Relinquishes shift control only when properly relieved by a qualified replacement.
- f. Maintains accurate logs and records of operations activities, station status, and equipment status.
- g. Coordinates the activities of other organizations to accomplish the operating objectives for the shift.
- h. Authorizes the removal or return to service of equipment and systems from maintenance, testing, or operational activities.
- i. Monitors the mental and physical condition of operating shift personnel.
- j. Maintains the status of active equipment markups.

5.1.4 (Cont)

- k. Periodically tours the plant to monitor housekeeping, material condition, and work practices.
- l. Conducts shift briefings.

5.1.5 Assistance Station Shift Supervisor (ASSS)

- a. Maintains an active NRC Senior Reactor Operator (SRO) license for the specific station assigned.
- b. When assigned as the SRO in charge of the Control Room, maintains full supervisory control of station operations subject to the general supervision of the SSS.
- c. Assumes the duties and responsibilities of the Shift Technical Advisor (STA), when required.

5.1.6 Chief Shift Operator (CSO)

- a. Maintains an NRC Reactor Operator (RO) license for the specific station assigned.
- b. Shuts down the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
- c. Performs duties or directs activities associated with the safe operation of assigned station.
- d. Maintains order and minimizes unnecessary personnel in the Control Room.

NOTE: When responding to alarms or in the event of an emergency affecting the safety of operations, the operator at the controls may momentarily be absent from the defined surveillance area in order to verify the receipt of an annunciator alarm or initiate immediate corrective action, provided the operator remains within the confines of the Control Room.

- e. Remains continuously present and alert "at-the-controls" for the duration of the assigned shift, unless properly relieved by a qualified replacement.
- f. Should not get involved in detailed step-by-step work of procedures and Preventive Maintenance (PMs).

5.1.6 (Cont)

- (NCTS 6) g. As the "at-the-controls" reactor operator, is continuously aware of system and plant status and performs panel walkdowns to assess operation.
- h. If coordination cannot be accomplished, the CSO has the authority and the responsibility to stop work or reprioritize work to be done.
- i. Delegates work and coordinates personnel in the Control Room and the plant.
- j. Maintains control of active equipment markups.

5.1.7 Licensed Reactor Operators (RO)

- a. Maintains an NRC Reactor Operator (RO) license for the specific station assigned.
- b. With concurrence from the CSO, manipulates the controls that directly affect the reactivity or power level of the reactor.
- c. Shuts down the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
- d. Remains aware of the operation of mechanisms and apparatus that may indirectly affect the reactivity or power level of the reactor.
- (NCTS 6) e. When assigned as "at-the-controls" reactor operator, remain continuously aware of system and plant status and perform panel walkdown to assess operation.

5.1.8 Operations Branch Shift Personnel

- a. Remain alert and present at the site until properly relieved.
- b. Assume responsibility for monitoring instrumentation and controls located within assigned areas.
- c. Remain aware of, and responsible for, the station status while on shift.
- d. Perform timely and proper actions to ensure the safe and efficient operation of the station.

5.1.8 (Cont)

- e. Base operating actions and responses upon indications provided by appropriate instruments and alarms, unless such indications are proven to be incorrect.
- f. Inform the Control Room, and receive permission, before manipulating valves, controls, or instruments which could affect reactor operation or station performance.

5.1.9 Shift Technical Advisor (STA)

- a. Remains in the Control Room during transients or emergencies and observe plant information displays.
- b. Makes objective evaluations of plant operations and advises or assists plant supervision in correcting conditions that may compromise the safety of operations.
- c. Observes the operation of Emergency Core Cooling Systems and confirms availability of components of the Emergency Core Cooling Systems which were not activated by the effects of the transient.
- d. Immediately reports abnormalities to the SSS and provides assistance in formulating a plan for appropriate corrective action.
- e. Monitors applicable procedures and operator activities for possible errors and advises and SSS of appropriate corrective actions.
- f. During emergencies, observes critical parameters and determines if there is adequate core cooling, including availability of a heat sink for the coolant system.
- g. Makes qualitative assessment of the plant parameters during and following an accident in order to ascertain whether core damage has occurred.
- h. In the event critical parameters become unavailable due to instrument failure, performs calculations or determines, through other appropriate means, approximate values for the parameters in question.
- i. Evaluates the effectiveness of plant procedures in terms of terminating or mitigating accidents and makes recommendations when changes are needed.

5.1.9 (Cont)

- j. Monitors other Control Room displays not directly related to the transient to note abnormal values, undesirable trends, or normal conditions.

NOTE: A significant part of STA responsibility is ensuring the health and safety of the public is protected by appropriate automatic and manual response, as well as appropriate implementation of the emergency plan. However, this does not preclude the STA from assisting the SSS in reading the EOPs during severe transients when prompt actions in more than one EOP are concurrently required, as the EOPs by design require operators to maintain an overall perspective of plant status.

5.1.10 Supervisor Reactor Engineering

- a. Reports directly to the Manager Operations.
- b. Ensures routine and special surveillance on the reactor core are performed.
- c. Ensures proper implementation of the Reactivity Management Program.
- d. During steady state conditions, power changing, and flux shaping maneuvers:
 - 1. Provides control rod position recommendations and instructions to the SSS for approval.
 - 2. Conducts prescribed surveillances and tests.
 - 3. Provides information to the SSS and operating personnel to document compliance with Technical Specifications and reactor fuel operating and warranty requirements.
- e. Provides recommendations and technical support to the SSS and operating personnel during all planned reactivity changes. A designee of the Supervisor Reactor Engineering may provide such recommendations and support.
- f. Functions as the Special Nuclear Material Custodian.

5.1.11 General Supervisor Operations Support

- a. Reports directly to the Manager Operations.
- b. Ensures special reports are prepared.
- c. Ensure investigations are conducted and reviewed.
- d. Ensures routine administrative functions of the Operations Branch are performed.
- e. Ensures unit operations are coordinated with other unit organizations to ensure timely completion of required operations, maintenance, modification, surveillance, and testing.
- f. Ensures special projects are properly executed.
- g. Ensures appropriate level of technical and engineering support is provided to the Operations Branch.
- h. Ensures direction of the Station Fire Department is provided for day-to-day activities associated with implementation of the Fire Protection Program.
- i. Ensures personnel comply with the Fire Protection Program and procedures.
- j. Provides guidance and direction to Nuclear Training to ensure content of training and retraining program (including Emergency Plan and Emergency Operating Procedures) provides a highly qualified and efficient operating force.
- k. Promotes good housekeeping by periodically inspecting areas assigned to the Operations Support Section.
- l. Maintains familiarity with company/union agreements and interpretations.
- m. Ensures company/union agreements are properly administered.

5.1.12 General Supervisor Radwaste Operations

- a. Reports directly to the Manager Operations.
- b. Establishes and maintains the Radwaste Operations Section organization and staff.
- c. Provides overall guidance and direction to the Radwaste Operations Section in cooperation with other section heads.

5.1.12 (Cont)

- d. Ensures Section personnel are properly trained and qualified.
- e. Provides guidance and direction to ensure:
 - 1. Required quality and quantity of work is achieved; AND
 - 2. Approved operating procedures and practices are followed
- f. Maintains familiarity with the requirements of regulatory agencies relative to Radwaste Operations. Prepares or supervises the preparation of the necessary reports for these agencies, as directed.
- g. Establishes and regularly reviews required operating logs and records.
- h. Monitors development and implementation of On-the-Job Training (OJT) programs.
- i. Provides guidance and direction to Nuclear Training to ensure content of training and retraining program (including Emergency Plan and Emergency Operating Procedures) provides a highly qualified and efficient operating force.
- j. Ensures supervised personnel receive training in appropriate radiological protection practices, procedures, and ALARA principles.
- k. Promotes safe working conditions and practices by ensuring supervised personnel receive required instructions concerning industrial safety.
- l. Ensures strict adherence to company and plant security provisions and procedures.
- m. Promotes good housekeeping by periodically inspecting areas assigned to the Radwaste Operations Section.
- n. Maintains familiarity with company/union agreements and interpretations.
- o. Ensures company/union agreements are properly administered.
- p. Ensures proper processing, packaging, and disposal of radioactive waste.

5.1.13 Supervisor Radwaste Operations

- a. Reports directly to the General Supervisor Radwaste Operations.
- b. When assigned, functions as the General Supervisor Radwaste Operations.

5.1.14 Shift Emergency Plan Coordinator (SEPC) (Unit 2)

- a. During normal plant operations:
 - 1. Reports to the Control Room (within 10 minutes) upon activation of station alarm.
 - 2. Remains available to the Control Room by normal plant communications.
 - 3. Participates in shift turnover.
 - 4. Remains aware of existing plant conditions, Limiting Conditions for Operation (LCO), out-of-service equipment, and Emergency Core Cooling System (ECCS) status.
 - 5. Reviews the schedule for activities, surveillances, and maintenance.
 - 6. Maintains awareness of plant conditions pertaining to evolutions throughout the shift.
- b. When the Site Emergency Plan is activated:
 - 1. Reports to the Control Room.
 - 2. Assists the SSS with implementation of the Site Emergency Plan.

5.2 Operating Shift Complement

- 5.2.1 The General Supervisor Operations shall ensure minimum operating shift complements are established and maintained in accordance with:
 - a. Technical Specifications, Section 6.2.2 for specified modes of operation; AND
 - b. The Site Emergency Plan
- 5.2.2 The Station Shift Supervisor (SSS) or Assistant Station Shift Supervisor (ASSS) shall have the authority to call in off-duty personnel from any department, as necessary, to supplement or replace personnel.

5.3 Operating Shift Schedules and Assignments

- 5.3.1 The Operations General Supervisors/Supervisors shall:
- a. Prepare shift schedules and allocate operational tasks between shifts/personnel.
 - b. Designate tasks and schedule activities to be performed by Operations, Reactor Engineering, Operations Support, and Operations Radwaste personnel.
 - c. Ensure Operations Section personnel receive and maintain the required training, certifications, and licenses for assigned positions.
- 5.3.2 The SSS or ASSS shall remain in the Control Room during power operation.
- 5.3.3 The SSS and ASSS/STA shall remain in the Control Room whenever the Site Emergency Plan is activated.
- 5.3.4 The SSS or the ASSS are considered to be in the Control Room when in the following locations:
- a. Main Control Room
 - b. SSS office (Units 1 and 2)
 - c. Control Room kitchen (Unit 1)
 - d. Control Room laboratory (Unit 1)
 - e. Auxiliary Control Room (Unit 1)
 - f. Interior of duplex panels (Unit 1)
 - g. Operations Clerk Office and adjacent hallway (Unit 1)
 - h. Operations Clerk Office (Unit 2)
- 5.3.5 During normal power operations, the Senior Reactor Operator (SRO) in the Control Room may be either the SSS or the ASSS.
- 5.3.6 During power operation when the Site Emergency Plan is activated, the ASSS shall assume the position of Shift Technical Advisor and NOT serve as the Control Room SRO.
- 5.3.7 When assigned as the Control Room SRO, the ASSS shall assume full authority for station operations subject to the general supervision of the SSS. The ASSS shall NOT relinquish this position in the Control Room except when relieved by a qualified replacement.

5.3.8 When a portion of station operations has been delegated to an SRO other than the SSS (i.e., refueling activities):

- a. A division of duties shall be clearly established, AND
- b. A single SRO shall assume overall control.

5.3.9 The SSS and the ASSS should avoid becoming personally involved in manipulative tasks or details of operation of any one portion of the station in order to retain a comprehensive perspective of the general station condition.

5.3.10 The Chief Shift Operator (CSO) assigned to each shift shall:

- a. Perform associated CSO duties and responsibilities unless relieved in accordance with Section 5.4 of this procedure.
- b. Perform duties and assume responsibilities associated with the "at-the-controls" reactor operator, unless relieved in accordance with Step 5.3.12 of this procedure.

5.3.11 The "at-the-controls" reactor operator shall:
(NCTS 6)

- a. Remain in the "at-the-controls" area in the Control Room.
- b. Perform periodic panel walkdowns to assess Operations.

5.3.12 Any relief of the "at-the-controls" reactor operator during the assigned shift shall include:

- a. A review of current plant status AND
- b. Documentation of relief in the Control Room Log.

5.3.13 Except in an extreme emergency for operations potentially affecting station process systems, personnel shall first obtain permission to proceed from the SSS.

5.4 Shift Relief and Changeover

5.4.1 The General Supervisor Operations shall prepare and update a shift turnover checklist to be reviewed and signed by on-coming shift personnel. As a minimum, the turnover checklists shall document the following, as applicable:

- a. Status of tests or special operations in progress
- b. Special valve/switch line-ups

5.4.1 (Cont)

- c. Review of changes in status and locations of jumpers and blocks as reflected in the Temporary Modification Log
- d. Acknowledgment of instructions from the General Supervisor Operations
- e. Review of changes in equipment status as reflected in the Equipment Status Log

5.4.2 On-coming Operations shift personnel shall relieve the off-going shift in the Control Room or other assigned work station, as applicable.

5.4.3 The SSS, ASSS, CSO, and Control Room Operators shall read applicable log books from the date shift duty was last performed. The SSS and CSO shall sign below the last entry of the applicable log book.

5.4.4 Operations personnel shall:

- a. Include additional pertinent information regarding station status in a verbal exchange between the on-coming and off-going shifts.
- b. Perform shift turnover in accordance with branch/section instructions.

5.5 Notifications of Absences and Call-outs

5.5.1 Personnel expecting to be late or unable to report for work at the scheduled time shall, at the earliest opportunity, inform the SSS or the ASSS of the situation.

5.5.2 The SSS or ASSS shall make the necessary arrangements for obtaining replacements or holding over on-shift personnel.

5.5.3 The SSS or ASSS may call out required personnel, regardless of discipline or department, or ensure the safe and efficient operation of the station.

5.5.4 The SSS shall ensure ROs working more than eight continuous hours at the control board are relieved every four hours.

5.6 Training

5.6.1 The Manager Operations shall ensure Operations personnel are properly trained and qualified for assigned duties.

5.6.2 (NCTS 3) The General Supervisor Operations shall ensure Emergency Operating Procedure (EOP) training requirements are met.

5.6.3 The General Supervisor Operations shall, in conjunction with Nuclear Training, ensure the Operations Branch Training Program:

- a. Is scheduled and coordinated
- b. Is accomplished by one or more of the following:
 1. On-shift formal instruction by qualified instructors or supervisors
 2. Regularly scheduled license qualification, requalification, and Non-Licensed Operation Training (NLOT)
 3. Required reading
- c. Training records of personnel are maintained

5.6.4 The General Supervisor Operations ensures active license tracking is controlled.

5.6.5 Operations Management personnel shall observe training (NCTS 4) during each Requalification Cycle which includes Simulator Training.

5.7 Control of System Configuration

5.7.1 Systems are normally in service in accordance with approved Operating Procedure requirements; specifically valve lineups, power board/breaker lineups and instrumentation requirements.

5.7.2 If a component is discovered to be, or suspected to be out of the normal position as described in the appropriate procedures:

- a. Personnel discovering the potentially abnormal situation shall:
 1. Not alter the situation; AND
 2. Immediately notify the SSS; OR
 3. To prevent immediate personnel or equipment damage, take appropriate action, then immediately notify the SSS.
- b. The SSS shall:
 1. Review the impact to system operation, operability requirements, and reportability

5.7.2.b (Cont)

2. Determine the correct configuration of the system or component.
3. Direct action, as necessary, to restore the system or component to proper configuration.
4. If required, initiate a Deviation Event Report (DER) in accordance with NIP-ECA-01, Deviation Event Report.

5.7.3 If a change to a system configuration is required that is NOT within the scope of an approved Operating, Surveillance, or Special Test procedure, the SSS shall: →

- a. If the altered system configuration is intended to be in service, initiate a change to the appropriate procedure reflecting the altered configuration; OR
- b. If the altered system configuration is NOT to be in service, then control is in accordance with AP-4.2, Control of Equipment Markups. Specifically, off normal positioned valves, breakers, control switches are tagged with:
 1. Yellow hold out tags (for equipment protection or other administrative reasons); OR
 2. Red or blue markup tags (for personnel protection)

5.8 Key Control

5.8.1 The SSS shall maintain:

- a. A list of key controlled items and areas under the authority of the Operations Branch
- b. Control of controlled keys until issue

NOTE: H-keys are controlled by the Radiation Protection Department.

5.8.2 The SSS or ASSS shall:

- a. Grant permission for issue of a controlled key.
- b. Maintain issuance of controlled keys.

5.8.3 "On-duty" personnel issued certain controlled keys for the performance of normal and emergency duties within an area of responsibility shall:

- a. Maintain control of the keys; AND
- b. Prevent unauthorized personnel from possessing or using controlled keys.

5.9 Communications and Directions

5.9.1 Operations personnel shall:

- a. Ensure communications and directions are clear, concise, explicit, and understandable.
- b. Provide verification, whenever possible, for complex directions and those that include numbers by having the person repeat back the instruction or issue written instructions.
- c. Upon completion of a directed action, require a response back to the controlling station stating the exact action that has taken place.
- d. Perform communication requirements in accordance with branch/section instructions.

5.9.2 Whenever possible, the person directing the action shall verify the action has been performed correctly by observing expected results (i.e., indication or position lights, meters, gauges, and station/system responses).

5.9.3 If deemed necessary to pass a direction over the Public Address System, Radio, etc., the person directing the action should request an acknowledgment from the person implementing the action.

5.9.4 Personnel assigned to perform an activity shall:

- a. Review the procedure to fully understand what is required, and to be cognizant of the limitations, precautions, and requirements.
- b. Attend briefings for personnel involved in an evolution that is to be performed. The detail of the briefing is dependent on the degree of complexity and the number of personnel involved.

NOTE: Evolutions involving many personnel, especially from two or more departments or disciplines, may require formal briefing or preplanning sessions.

5.9.5 If an evolution is complex and involves close coordination, Operations personnel conducting the briefing session should include:

- a. A review of the appropriate section of the procedure by key personnel
- b. An examination of each person's specific involvement and responsibility
- c. A discussion of expected results or performance
- d. A review of limitations, hold points, and emergency action to be taken if contingencies arise
- e. Understanding of the interfaces and communications required

5.10 Records and Log Books

5.10.1 Shift records are comprised of logs, files, data sheets, checklists, sign-off lists, recorder charts, and computer printouts that describe or record operating information and actions. The following practices are applicable to operating shift records:

- a. Records and logs are maintained in a legible, accurate, complete, and understandable manner.
- b. The use of black ink to facilitate reproduction is required.
- c. The use of white-out or correction tape is NOT allowed on shift records.
- d. Errors in shift records are corrected by drawing a single line through the incorrect information and writing the correct information adjacent to the line or in an available space. The person making the correction shall initial and date the correction.
- e. Personnel responsible for maintaining logs and records shall sign and date portions that cover the applicable shift assignment.
- f. To assist in documenting authorship and turnover, stamp or write the following immediately after the last entry in the SSS and Control Room Logs:
 1. "The above is a true record of events on the preceding shift _____."
(Signature)

5.10.1.f (Cont)

2. "I have read and understand the events recorded in this log since I was last on shift

(Signature)

- g. Recorder charts in operation are checked at least once per shift to verify markings are clearly visible and the timing is correct. The person making the check shall initial the chart and enter the time and date.
- h. Personnel shall mark recorder charts with the time, date, and recorder identification number before the chart is placed on the recorder and when the chart is removed, indicating pen and range selection, as necessary, to facilitate interpretation.
- i. If the recorder performs the date and time function automatically, marking recorder charts with date and time is NOT necessary.
- j. When significant events or unusual trends in parameters occur, operators shall indicate the time and event on applicable charts whenever possible to assist in operations analysis.
- k. The General Supervisor Operations shall periodically review shift records and logs to ensure accuracy and completeness.

5.10.2 The following controls are applicable to the Control Room Log Book:

- a. The Control Room Log Book is considered a legal document subject to being entered as a court record.
- b. Entries in the log book are made by the duty CSO or other authorized personnel only. NO other entries are allowed.
- c. Log entry copies are posted daily.

5.10.2 (Cont)

d. Log entries shall, at a minimum, consist of:

1. Activities associated with changing core reactivity

NOTE: The Unit Supervisor Reactor Engineering maintains separate Fuel Records in which detailed fuel histories and a record of core instrumentation changes are maintained. Detailed rod manipulations are NOT necessary, provided the movements are part of a startup or shutdown sequence developed by Reactor Engineering.

2. Changes in station output
3. Changes in auxiliary equipment
4. Unusual conditions or station evolutions
5. Line trips
6. Annunciator signals NOT recorded on the data logger

NOTE: Annunciator signals logged during unit outages are at the discretion of CSO.

7. Performance of surveillance testing
8. Equipment removed from service and returned to service
9. Other applicable information regarding shift activities

e. The log book shall contain the date and time of entries and the name of the CSO or alternate.

f. The log book should remain in the Control Room until completed and reviewed.

g. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions.

5.10.3 The following controls are applicable to the SSS Log Book:

NOTE: The SSS Log Book is considered a legal document subject to being entered as a court record.

- a. The SSS Log Book shall contain an overall summary of station operations during the respective shift, including:
 1. Names of the supervisors, ROs, and auxiliary operators on-duty
 2. Date and time of entries
 3. Surveillance tests conducted and deviations from acceptance criteria
 4. Post-Maintenance Testing and returning Technical Specification related equipment to operable status
 5. Reportable occurrences
 6. Safety-related and other important equipment maintenance in progress
 7. Entering a Technical Specification action statement
 8. Leaving a Technical Specification action statement
 9. Implementation of the Site Emergency Plan or Emergency Operating Procedures
 10. Significant changes in radiological conditions
 11. A narrative of significant events, including notifications to the Plant Manager, Manager Operations, On-Call Operations Supervisor, and the NRC
- b. The SSS log entries may be written by the ASSS with the approval of the SSS, provided the log is reviewed and signed by the SSS.
- c. The log book should remain in the Control Room until completed and reviewed.
- d. Log entry copies are posted daily.
- e. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions.

5.10.4 The following controls are applicable to the Radwaste Control Room Log Book:

- a. The log book should remain in the Radwaste Control Room until completed.
- b. The log book shall contain pertinent information associated with the Radwaste Facility operation.
- c. The date and time of activities are entered.

5.10.5 The following controls are applicable to the Equipment Status Log (ESL):
(NCTS 5)

- a. The SSS shall:
 1. Maintain the ESL.
 2. Ensure the ESL is used during all plant conditions.
 3. Ensure equipment entered in the log is marked up in accordance with AP-4.2, Control of Equipment Markups; OR
 4. If equipment is entered for administrative reasons, a markup which would render the equipment nonfunctional is not required. However, per AP-4.2, Control of Equipment Markups, Holdout tags may be placed on control switches to alert operators of potentially degraded conditions.
- b. Log entries should include:
 1. Station equipment determined to be inoperable which may limit station output or which impact Technical Specifications
 2. System unavailability due to removal from service of safety-related equipment for the purpose of conducting preventive maintenance
 3. Equipment which is otherwise operable, but may need special attention due to faulty instruments or other deficiencies (i.e., non-Technical Specification temperature elements on a Technical Specification pump)
 4. Date and time of equipment inoperability
 5. Equipment identification number of principal components

5.10.5.b (Cont)

6. Name of equipment or system and the nature of malfunction or failure, if known
 7. Applicable Technical Specification paragraph
 8. Technical Specification surveillance tests which must be performed while equipment or system is NOT available
 9. Tests or inspections required before placing the equipment or system in service
 10. If applicable, Work Request number calling for corrective action
 11. Markup numbers and type
 12. Date Work Request completed and equipment is ready for service or declared operable
 13. Deviation Event Reports affecting operability
 14. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions
- c. The SSS shall review the ESL before declaring any system/equipment operable
- d. Upon return of equipment to normal or operable status, the entry may be removed from the log, subject to Step 5.10.5.b.3.
- 5.10.6 The Operator Aids Log is controlled in accordance with S-SUP-6, Control of Operator Aids.
- 5.10.7 The following controls are associated with the Markup, Work Request, and RWP files:
- a. The Markup File is maintained in or near the SSS office or Control Room.
 - b. The Markup File shall contain outstanding markups.
- 5.10.8 Operator Rounds Logs and plant log books are controlled in accordance with applicable Operations Branch procedures.

5.11 Control Room Documents

- 5.11.1 Only controlled copies of documents related to station operations may be used for operation.
- 5.11.2 The following documents are required for on-duty Operators and should remain in the applicable Unit Control Room:
- a. Station Administrative Procedures
 - b. Operating Procedures
 - c. Special Operating Procedures and/or Emergency Operating Procedures
 - d. Standing Orders
 - e. Station General Orders
 - f. Operation Department Instructions
 - g. Site Emergency Plan and Implementing Procedures
 - h. Radiation Protection Procedures
 - i. Operator performed Surveillance Procedures
 - j. Reactor Analysis/Engineering Procedures
 - k. Technical Specifications and Interpretations
 - l. P&I Drawings (Unit 1)
 - m. Flow Schematics (FSK), Logic Schematics (LSK), and P&I Drawings (Unit 2)
 - n. Selected Electrical Drawings
 - o. Other documents and drawings authorized by the SSS, or higher authority
 - p. Final Safety Analysis Report, FSAR "Updated" (Unit 1) or Updated Safety Analysis Report, USAR (Unit 2)
 - q. Core Operating Limits Report

5.12 Control Room Conduct

The following policies are established for Control Room conduct:

- 5.12.1 Potentially distracting activities are prohibited.
- 5.12.2 Access is limited to individuals on station business.

- 5.12.3 During the conduct of station related business, the Control Room operator shall remain attentive and maintain the professional atmosphere in the Control Room.
- 5.12.4 Access to control panels and stations are restricted to authorized shift personnel or as authorized by the SSS, ASSS, or CSO.
- 5.12.5 Foreign objects and materials NOT necessary for plant operations, maintenance, or testing should be restricted from control panels and stations.
- 5.12.6 The General Supervisor Operations, Supervisor Operations, SSS, ASSS, and CSO have the authority to restrict access to OR remove personnel from the Control Room.
- 5.12.7 Additional rules may be issued and posted by the General Supervisor Operations.

5.13 Off-Normal Responses

- 5.13.1 The Site Emergency Plan and Implementing Procedures designate specific actions to be taken in the event of an unplanned release, or potential release, of radioactivity from the site.
- 5.13.2 Operations during off-normal conditions shall proceed according to approved procedures. Refer to AP-2.0, Procedure Use and Control, for procedure adherence requirements during emergencies.
- 5.13.3 At the earliest convenience, the SSS or designee shall notify the Plant Manager, either directly or via the Manager Operations or General Supervisor Operations, of the following:
 - a. Unscheduled operational condition changes
 - b. Unexpected changes of more than 50 MWe in station output (transient)
 - c. Unplanned entries into Limiting Condition for Operation (LCO) action statements requiring a plant shutdown
 - d. Events requiring entry into the EOPs or Emergency Action Procedures (EAPs)
 - e. Events requiring NRC notification within 1 hour, 4 hours, or 30 days
 - f. Other events which, in the judgment of the SSS, should be brought to the attention of the Plant Manager.

- 5.13.4 The Plant Manager must grant permission for all unit startups and for those following unscheduled shutdowns, determine the acceptability of restart according to the following criteria:
- a. The station has been determined to be in a safe condition.
 - b. The cause of the shutdown has been determined and understood, OR SORC has reviewed the event and authorized restart.
 - c. The need for corrective action has been determined and appropriately implemented.
 - d. The expected automatic operation of the unit's safety-related systems have been verified.

5.14 Emergency Plan Operations

- 5.14.1 The five classes of events described in the Site Emergency Plan and Implementing Procedures which require a departure from normal station operation are:
- a. Unusual Event
 - b. Alert
 - c. Site Area Emergency
 - d. General Emergency
 - e. Operational Event
- NOTE: An Operational Event is NOT categorized as an emergency but is subject to ~~management~~ review.
- 5.14.2 The events listed in Step 5.14.1, except an Operational Event, require notification and responses according to the Site Emergency Plan and Implementing Procedures.
- 5.14.3 In the event station conditions require the implementation of the Site Emergency Plan and Implementing Procedures, the SSS shall immediately assume the role of Nine Mile Point Nuclear Station Site Emergency Director until properly relieved.
- 5.14.4 For Unit 2, when the Site Emergency Plan is activated, the Shift Emergency Plan Coordinator (SEPC) shall report to the Control Room to assist the SSS with implementation of the Site Emergency Plan. The SEPC shall perform duties as specified in departmental instructions.

5.14.5 When the Site Emergency Plan and Implementing Procedures are activated, the ASSS shall assume the role of Shift Technical Advisor (STA), and:

- a. Provide the SSS with an assessment of unit conditions and advise the SSS concerning actions to terminate or mitigate the consequences of the incident, as required.
- b. Perform NO other duties unrelated to assessment or diagnosis of the situation.

NOTE: A significant part of STA responsibility is ensuring the health and safety of the public is protected by appropriate automatic and manual response, as well as appropriate implementation of the emergency plan. However, this does not preclude the STA from assisting the SSS in reading the EOPs during severe transients when prompt actions in more than one EOP are concurrently required, as the EOPs by design require operators to maintain an overall perspective of plant status.

5.14.6 Emergency Response Facilities have been established in accordance with the Site Emergency Plan and Implementing Procedures. During Emergency Operations, advice and management directions may come from the Technical Support Center (TSC). However, station manipulations are directed from the applicable Unit Control Room only.

5.15 Associated Operations Activities
(NCTS 7)

- 5.15.1 When performing operating maneuvers, personnel shall use redundant or corroborating instrumentation if available. In the absence of such instrumentation, personnel shall rely upon existing instrument indications.
- 5.15.2 Unless operational or instrumented evidence exist showing that a system is not performing its intended function or that continued operation will prolong or produce an unsafe condition, personnel shall not override automatic engineered safety features.
- 5.15.3 Personnel shall NOT electrically or manually backseat a motor-operated valve, except for maintenance purposes or as a temporary measure until the plant is placed in a condition which allows maintenance on the valve.

- 5.15.4 Personnel shall NOT override or jumper electrical circuits to backseat a motor-operated valve unless evaluations of the following have been performed:
- a. Effects of backseating on valve structural integrity
 - b. Valve operability in the backseated position
- 5.15.5 Motor-operated valves that have been backseated and were declared inoperable shall be demonstrated operable through an appropriate surveillance or Post-Maintenance Operability Test.
- 5.15.6 Personnel shall NOT manually seat a motor-operated valve, except for maintenance purposes or as a temporary measure until the plant is placed in a condition which allows maintenance on the valve.
- 5.15.7 When manually seating a motor-operated valve, open the motor operator breaker and apply a yellow hold-out tag, requiring the valve be manually backed off the seat before reclosing the motor operator breaker.
- 5.15.8 Motor-operated valves that have been manually seated and were declared inoperable shall be demonstrated operable through an appropriate surveillance or Post-Maintenance Operability Test.

6.0 RECORD REVIEW AND DISPOSITION

The following records are retained in accordance with AP-10.1, Management of Station Records:

None

07-25-91

NIAGARA MOHAWK POWER CORPORATION
NINE MILE POINT NUCLEAR STATION
ADMINISTRATIVE PROCEDURE

AP-4.0

REVISION 18

ADMINISTRATION OF OPERATIONS

TECHNICAL SPECIFICATION REQUIRED

FOR INFORMATION ONLY

Approved By:
K. A. Dahlberg

FOR K. A. DAHLBERG
PLANT MANAGER - NMP #1 6/2-91
Date
Plant Manager, Unit 1

Approved By:
M. J. McCormick, Jr.

M. J. McCormick, Jr.
Date
Plant Manager, Unit 2

Effective Date: June 28, 1991

PERIODIC REVIEW DUE DATE: June 1993

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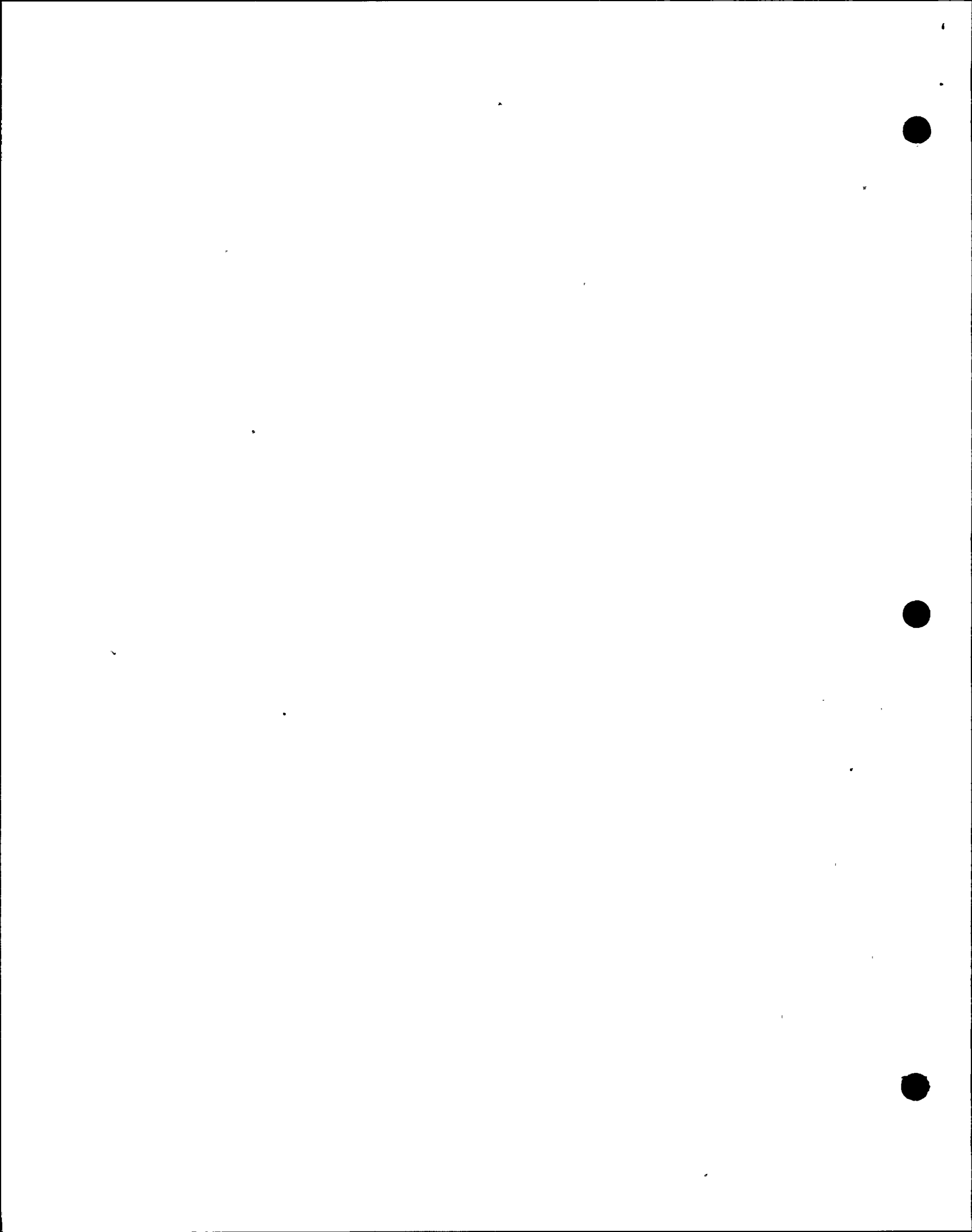
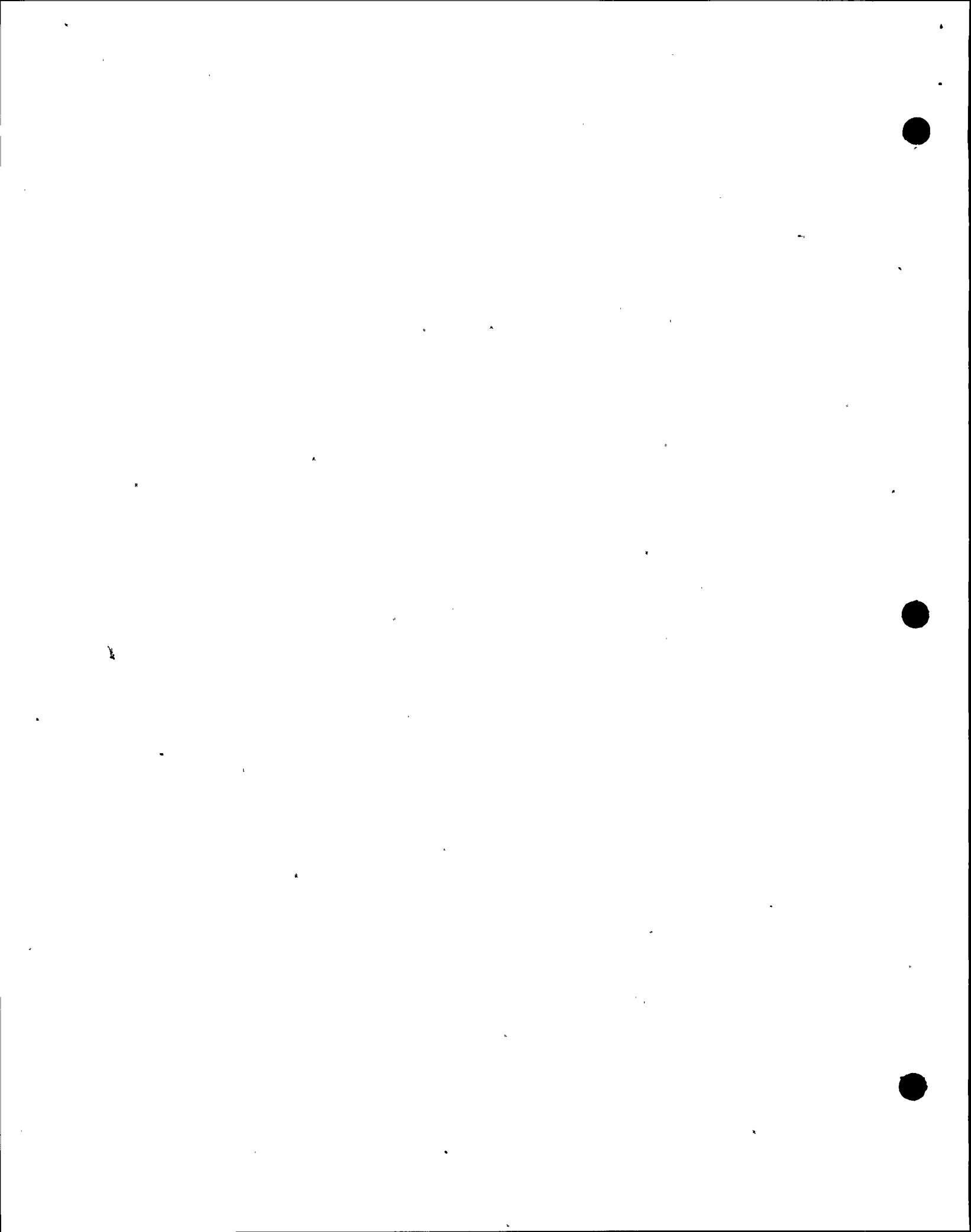


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1.0 PURPOSE
(NCTS 1&2)

To establish the responsibilities and controls necessary for the safe, reliable, and efficient administration of Operations at Nine Mile Point Nuclear Station.

1.1 Applicability

This procedure applies to Operations Branch personnel reporting either directly or indirectly to the Station 1 or 2 Manager Operations.

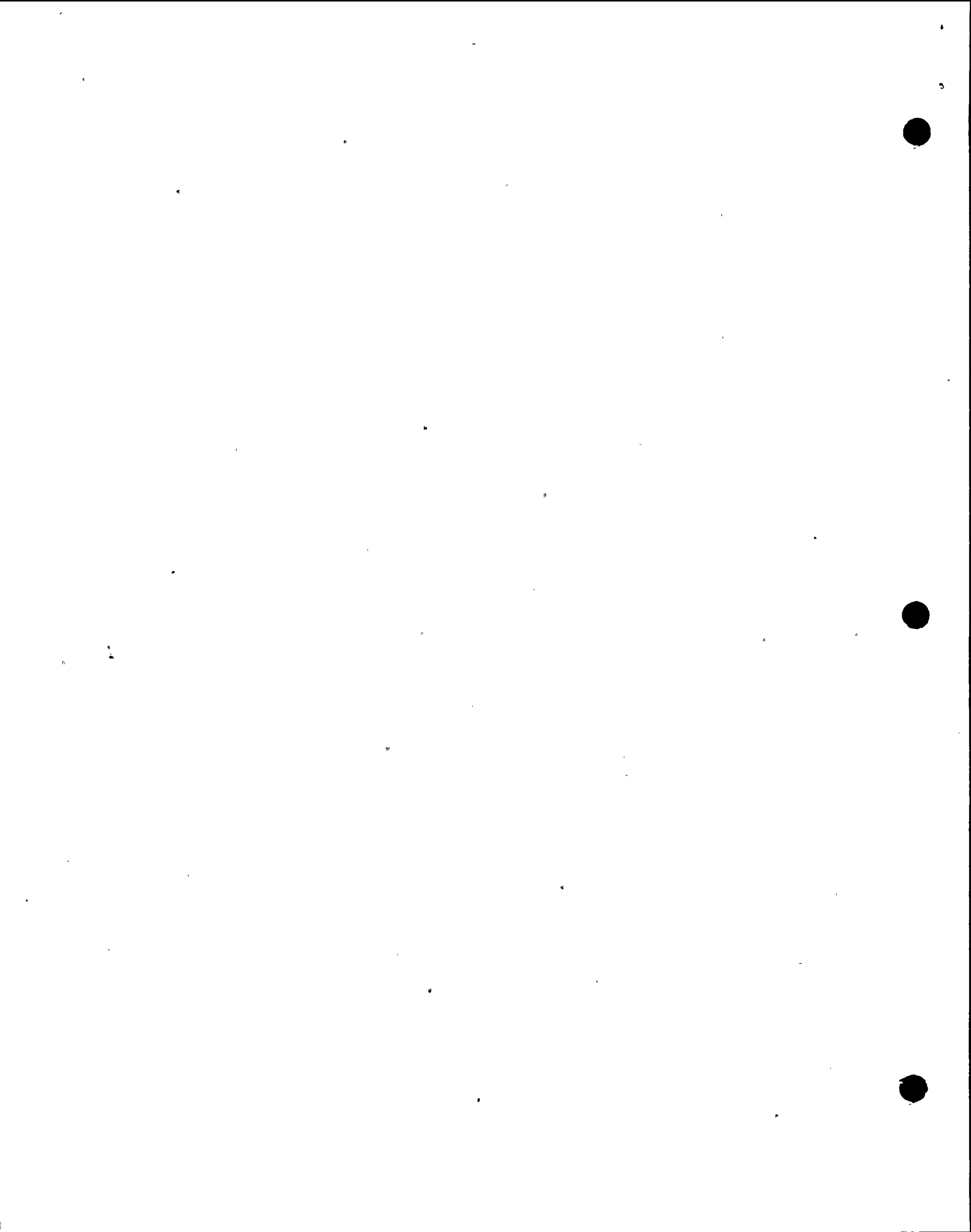
2.0 REFERENCES AND COMMITMENTS

2.1 Licensee Documentation

- 2.1.1 QATR-1, Quality Assurance Program Topical Report for Nine Mile Point Nuclear Station Operations
- 2.1.2 Station 1 and 2 Technical Specifications
- 2.1.3 Station 1 Final Safety Analysis Report (FSAR), Section XIII, Conduct of Operations
- 2.1.4 Station 2 Updated Safety Analysis Report (USAR), Chapter 13, Conduct of Operations

2.2 Standards, Regulations, and Codes

- 2.2.1 10CFR Part 50, Domestic Licensing of Production and Utilization Facilities
- 2.2.2 10CFR Part 55, Operators Licenses
- 2.2.3 10CFR50.54, Conditions of Licenses
- 2.2.4 10CFR50.72, Immediate Notification Requirements for Operating Nuclear Power Reactors
- 2.2.5 ANSI/ANS-3.2-1982, Administrative Controls and Quality Assurance for the Operational Phase of Nuclear Power Plants
- 2.2.6 ANSI-ASME NQA-1-1983, Quality Assurance Program Requirements for Nuclear Facilities
- 2.2.7 ANSI/ASME NQA-2-1983, Quality Assurance Requirements for Nuclear Power Plants
- 2.2.8 INPO 84-021, Conduct of Operations, July 1984
- 2.2.9 INPO 85-017, Guidelines for the Conduct of Operations at Nuclear Power Stations, June 1985



2.2.10 NUREG 1.114, Revision 1, Guidance on Being Operator at the Controls of a Nuclear Power Plant

2.3 Policies, Programs, and Procedures

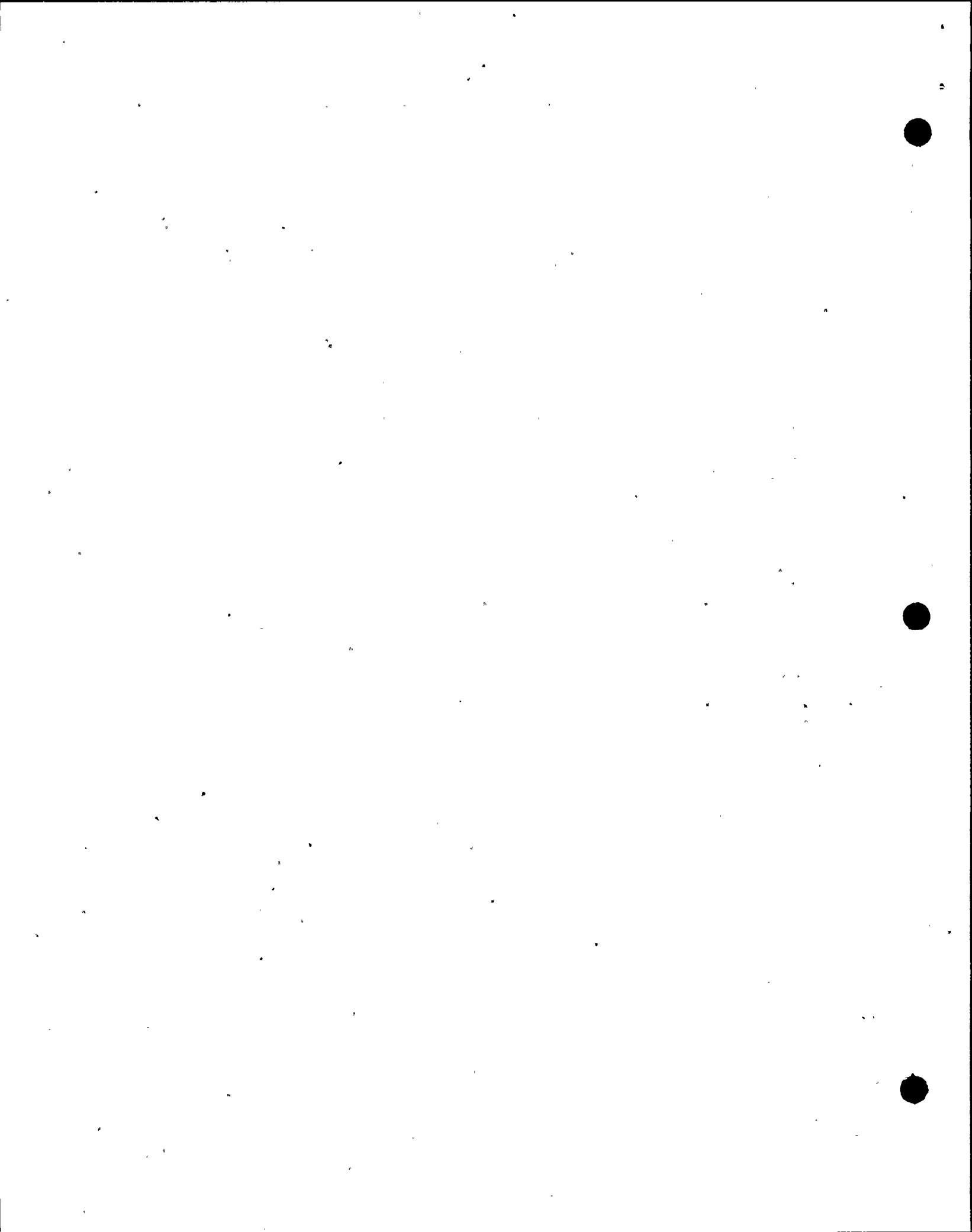
- 2.3.1 NIP-ECA-01, Deviation Event Report
- 2.3.2 AP-1.1, Composition and Responsibility of Nuclear Generation Organization
- 2.3.3 AP-2.0, Procedure Use and Control
- 2.3.4 AP-3.2, Industrial Health and Safety
- 2.3.5 AP-4.2, Control of Equipment Markups
- 2.3.6 AP-4.3, Control of Overtime
- 2.3.7 AP-9.0, Administration of Training
- 2.3.8 AP-9.1, Site Task Qualification Program
- 2.3.9 AP-10.1, Management of Station Records
- 2.3.10 AP-12.1, Fitness for Duty During an Unscheduled Call-out
- 2.3.11 S-SUP-6, Control of Operator Aids

2.4 Supplemental References

- 2.4.1 Niagara Mohawk Accident Prevention Rules
- 2.4.2 Site Emergency Plan and Implementing Procedures

2.5 Commitments

<u>Sequence Number</u>	<u>Commitment Number</u>	<u>Description</u>
1	1953	Improve Control Room operating practices.
2	1541	Conduct of Operations.
3	001065-03	Superintendent Operations shall ensure EOP training requirements are met.
4	503479-50	Management personnel shall observe certain training sessions.
5	503461	Administrative Controls for Equipment Status Log.



2.5 (Cont)

<u>Sequence Number</u>	<u>Commitment Number</u>	<u>Description</u>
6	OP.2-2	Enhance "At-the-Controls" operator responsibilities.
7	700130(Task 5)	MOV backseating controls.

3.0 DEFINITIONS

3.1 Personnel - Generic term that refers to both station personnel and external organization personnel.

3.2 Site - The term "site" refers to Stations 1 and 2 including the contiguous property of Niagara Mohawk Power Corporation surrounding Stations 1 and 2.

4.0 PRIMARY RESPONSIBILITIES

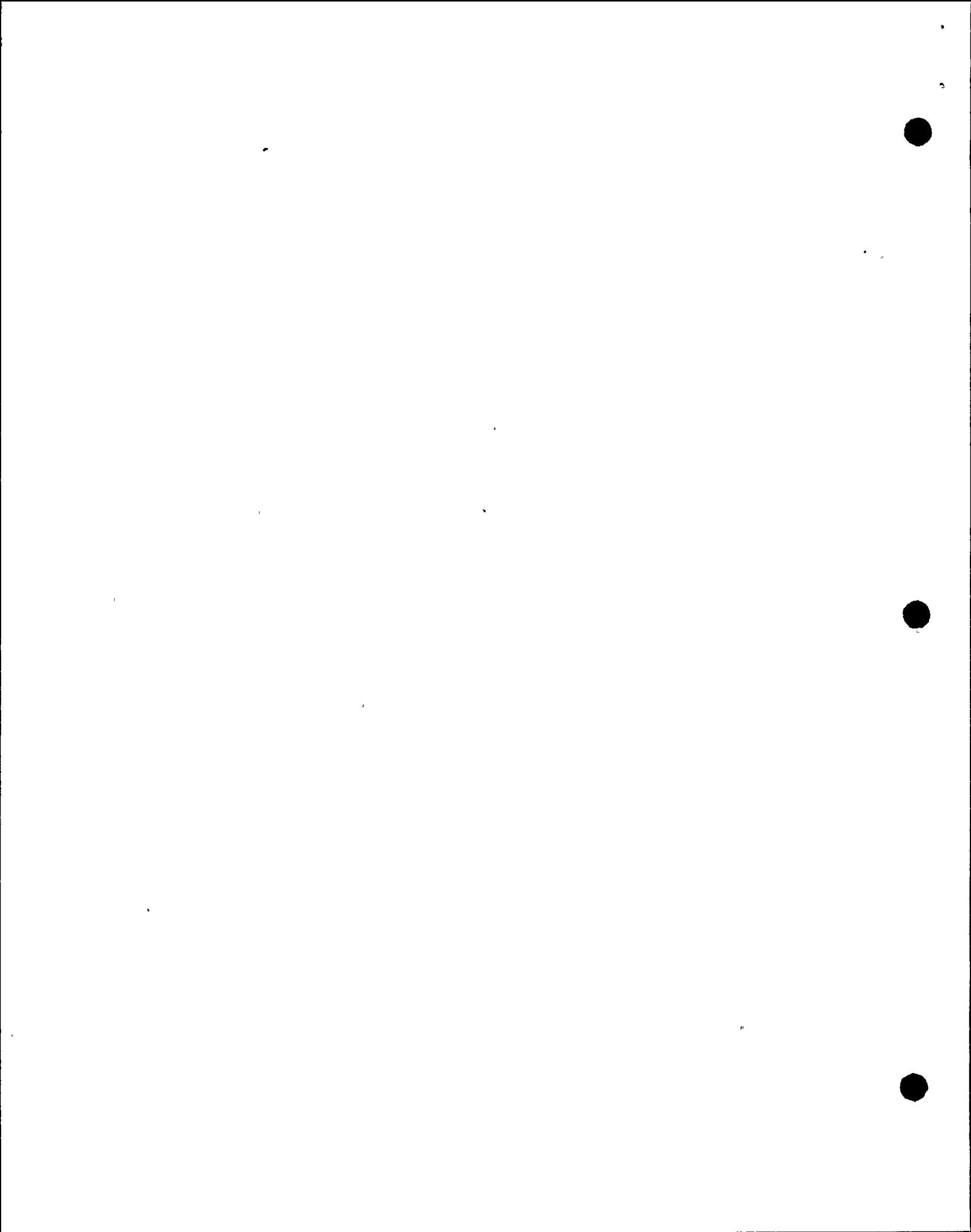
The Manager Operations is responsible for the content and maintenance of this procedure.

5.0 PROCEDURE

5.1 Operations Personnel Responsibilities

5.1.1 Manager Operations

- a. Reports directly to the Plant Manager.
- b. Establishes and maintains the Operations Branch organization and staff.
- c. Provides overall guidance and direction to the Operations Branch in cooperation with other branch/section heads.
- d. Develops, implements, and coordinates programs and policies that ensure safe and reliable station operations.
- e. Obtains Plant Manager approval to commence a reactor startup.
- f. Designates activities performed by the Reactor Engineering, Operations Support (includes Fire Protection), and Radwaste sections.

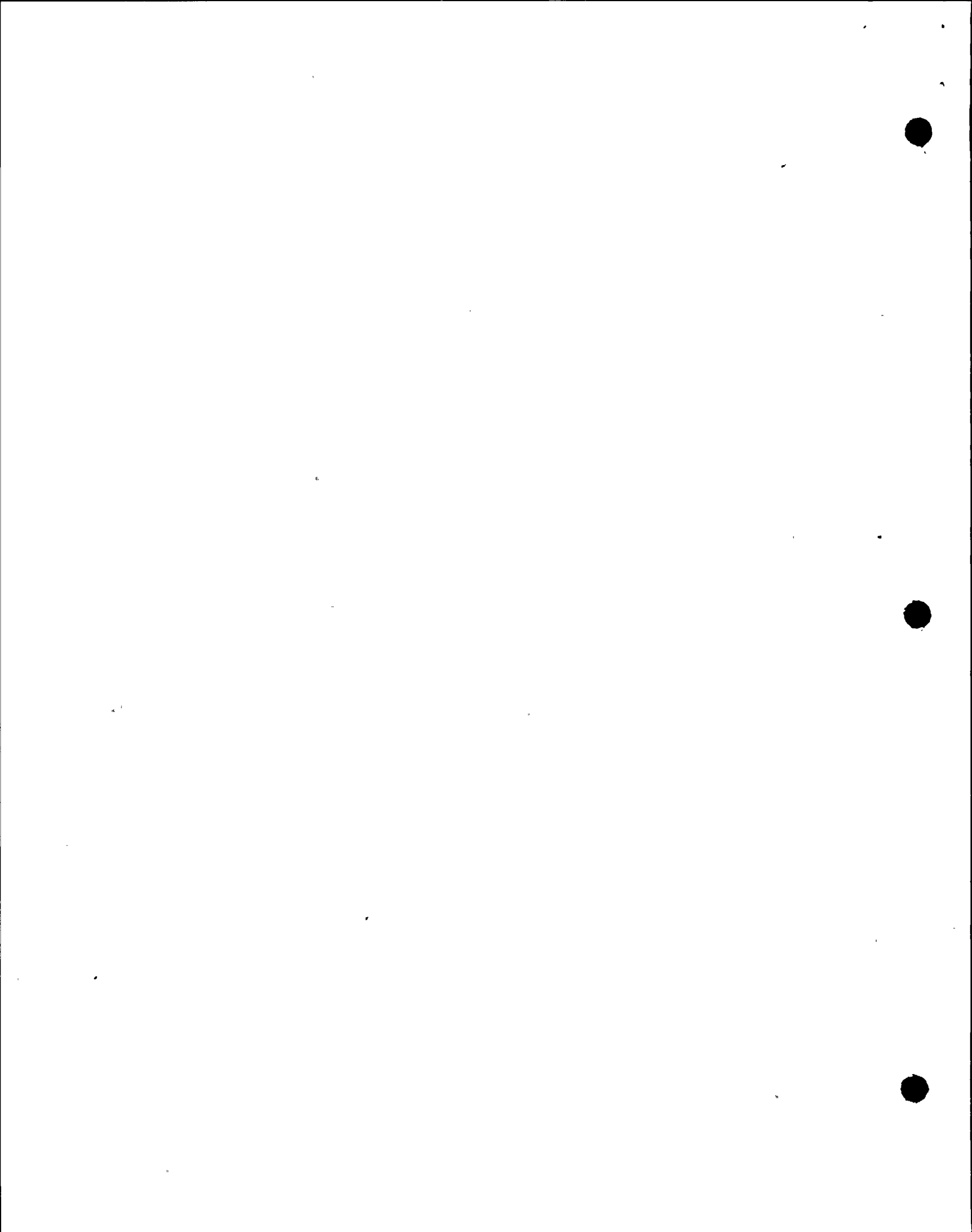


5.1.1 (Cont)

- g. Ensures branch personnel are properly trained and qualified.
- h. Provides guidance and direction to direct reports to ensure required quality and quantity of work is achieved and approved operating procedures and practices are followed.
- i. Maintains familiarity with the requirements of regulatory agencies relative to plant operations. Prepares or supervises the preparation of the necessary reports for these agencies, as directed.
- j. When assigned, may act as Plant Manager in the Plant Manager's absence.
- k. Ensures performance of reactor engineering, reactor core management, nuclear fuel accountability, storage, utilization, and disposition.
- l. Establishes Operation Branch goals and objectives to support station goals.

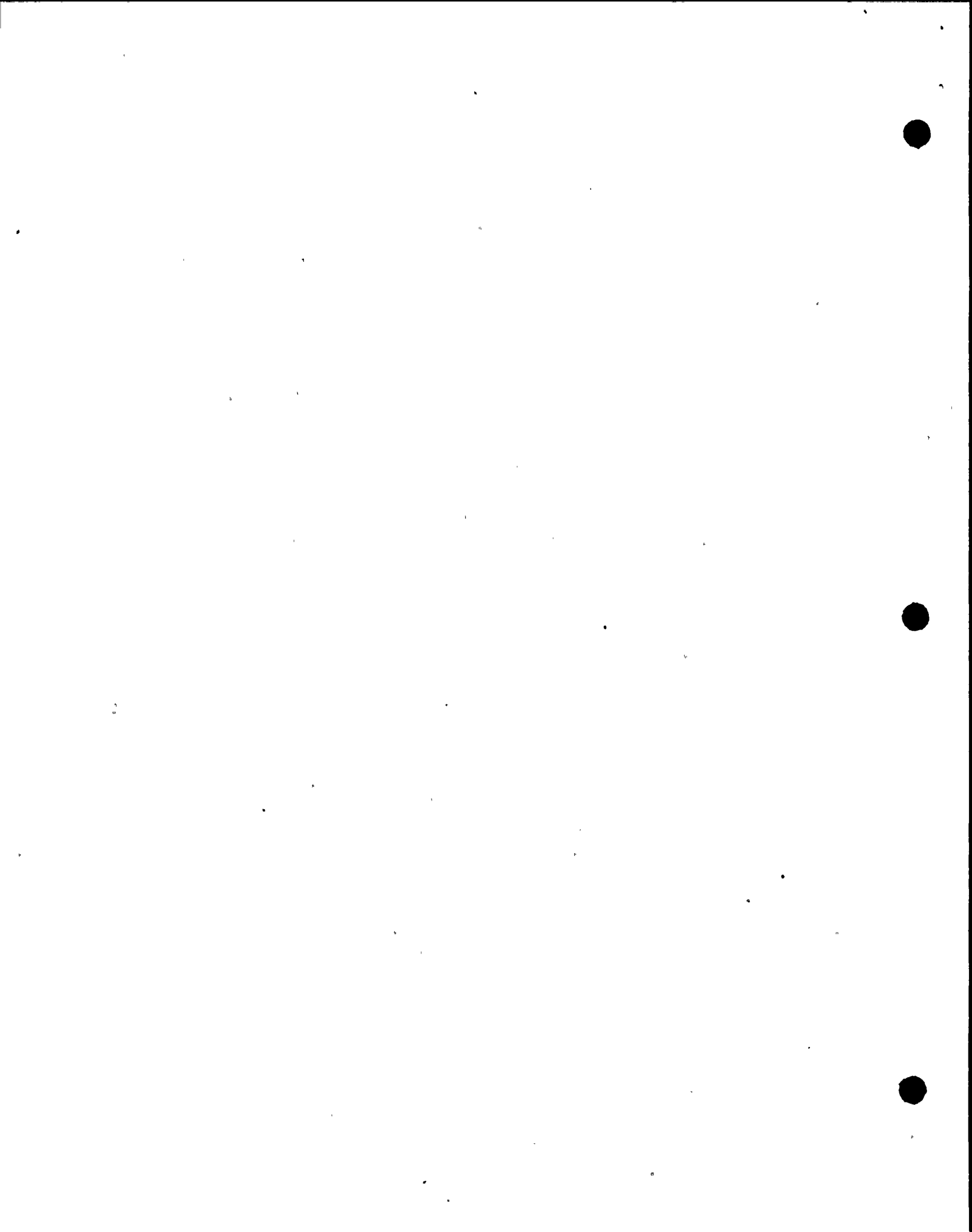
5.1.2 General Supervisor Operations

- a. Reports directly to the Manager Operations.
- b. Holds an NRC Senior Reactor Operator (SRO) license for the specific station assigned.
- c. Responsible for directing the actions of the operating shift through the on-duty SSS.
- d. Functioning as the Manager Operations in the absence of the Manager Operations, as required.
- e. Establishes and regularly reviews required operating logs and records.
- f. Supervises the preparation of operating reports to ensure completeness, accuracy, and timeliness.
- g. Develops performance standards for supervised personnel as a means of evaluating performance.
 - 1. Keeps Manager Operations informed of qualifications and performance of personnel.
 - 2. Makes appropriate recommendations concerning personnel showing outstanding or substandard performance.



5.1.2 (Cont)

- h. Monitors development and implementation of On-the-Job Training (OJT) programs and provides guidance and direction to the Nuclear Training Department to ensure:
 - 1. Content of training and retraining programs (including Emergency Plan and Emergency Operating Procedures) for operating personnel provides a highly qualified and efficient operating force.
 - 2. Qualified replacement personnel are available when vacancies occur.
- i. Ensure supervised personnel receive training in appropriate radiological protection practices, procedures, and ALARA principles.
- j. Promotes safe working conditions and practices by ensuring supervised personnel receive required instructions concerning industrial safety.
- k. Ensures strict adherence to company and plant security provisions and procedures.
- l. Promotes good housekeeping by periodically inspecting areas assigned to the Operations Branch.
- m. Maintains familiarity with company/union agreements and interpretations. Ensures company/union agreements are properly administered.
- n. Ensures performance of assigned surveillance activities in accordance with approved surveillance schedule.
- o. Ensures equipment status control is maintained.
- p. Ensures startup and operational testing is performed correctly.
- q. May issue written Station Shift Supervisor Instructions.
- r. May sign and date Station Shift Supervisor Instructions.
- s. Ensures Operations memorandums used to transmit information or instructions for conduct of operations of an intermediate to long-term nature are NOT used as a substitute for written procedures or procedure changes/revisions.

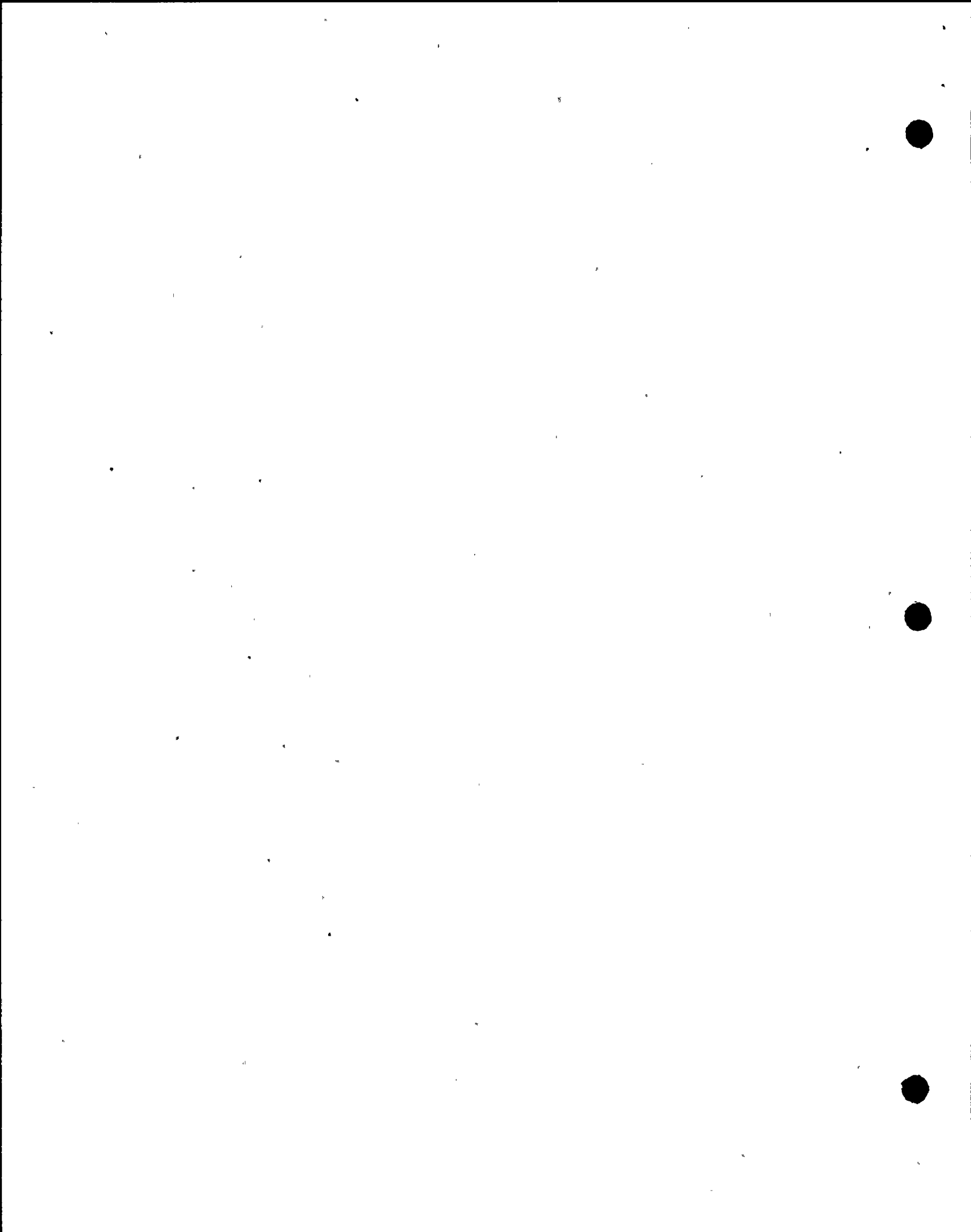


5.1.3 Supervisor Operations

- a. Reports directly to the General Supervisor Operations.
- b. Holds an NRC Senior Reactor Operator (SRO) License for the specific station assigned.
- c. Performs the duties of the SSS when required and when SRO License is active.
- d. May issue written Station Shift Supervisor Instructions.
- e. May sign and date Station Shift Supervisor Instructions.

5.1.4 Station Shift Supervisor (SSS)

- a. As a matter of highest priority, maintains a broad perspective of operational conditions affecting safety of the station.
- b. Maintains an NRC Senior Reactor Operator (SRO) License for the specific station assigned.
- c. Directs shut down of the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
- d. Provides full supervisory control of station operations subject to the general supervision of the General Supervisor Operations. Implements Station Shift Supervisor Instructions, as applicable.
- e. Relinquishes shift control only when properly relieved by a qualified replacement.
- f. Maintains accurate logs and records of operations activities, station status, and equipment status.
- g. Coordinates the activities of other organizations to accomplish the operating objectives for the shift.
- h. Authorizes the removal or return to service of equipment and systems from maintenance, testing, or operational activities.
- i. Monitors the mental and physical condition of operating shift personnel.
- j. Maintains the status of active equipment markups.



5.1.4 (Cont)

- k. Periodically tours the plant to monitor housekeeping, material condition, and work practices.
- l. Conducts shift briefings.

5.1.5 Assistance Station Shift Supervisor (ASSS)

- a. Maintains an active NRC Senior Reactor Operator (SRO) license for the specific station assigned.
- b. When assigned as the SRO in charge of the Control Room, maintains full supervisory control of station operations subject to the general supervision of the SSS.
- c. Assumes the duties and responsibilities of the Shift Technical Advisor (STA), when required.

5.1.6 Chief Shift Operator (CSO)

- a. Maintains an NRC Reactor Operator (RO) license for the specific station assigned.
- b. Shuts down the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
- c. Performs duties or directs activities associated with the safe operation of assigned station.
- d. Maintains order and minimizes unnecessary personnel in the Control Room.

NOTE: When responding to alarms or in the event of an emergency affecting the safety of operations, the operator at the controls may momentarily be absent from the defined surveillance area in order to verify the receipt of an annunciator alarm or initiate immediate corrective action, provided the operator remains within the confines of the Control Room.

- e. Remains continuously present and alert "at-the-controls" for the duration of the assigned shift, unless properly relieved by a qualified replacement.
- f. Should not get involved in detailed step-by-step work of procedures and Preventive Maintenance (PMs).



5.1.6 (Cont)

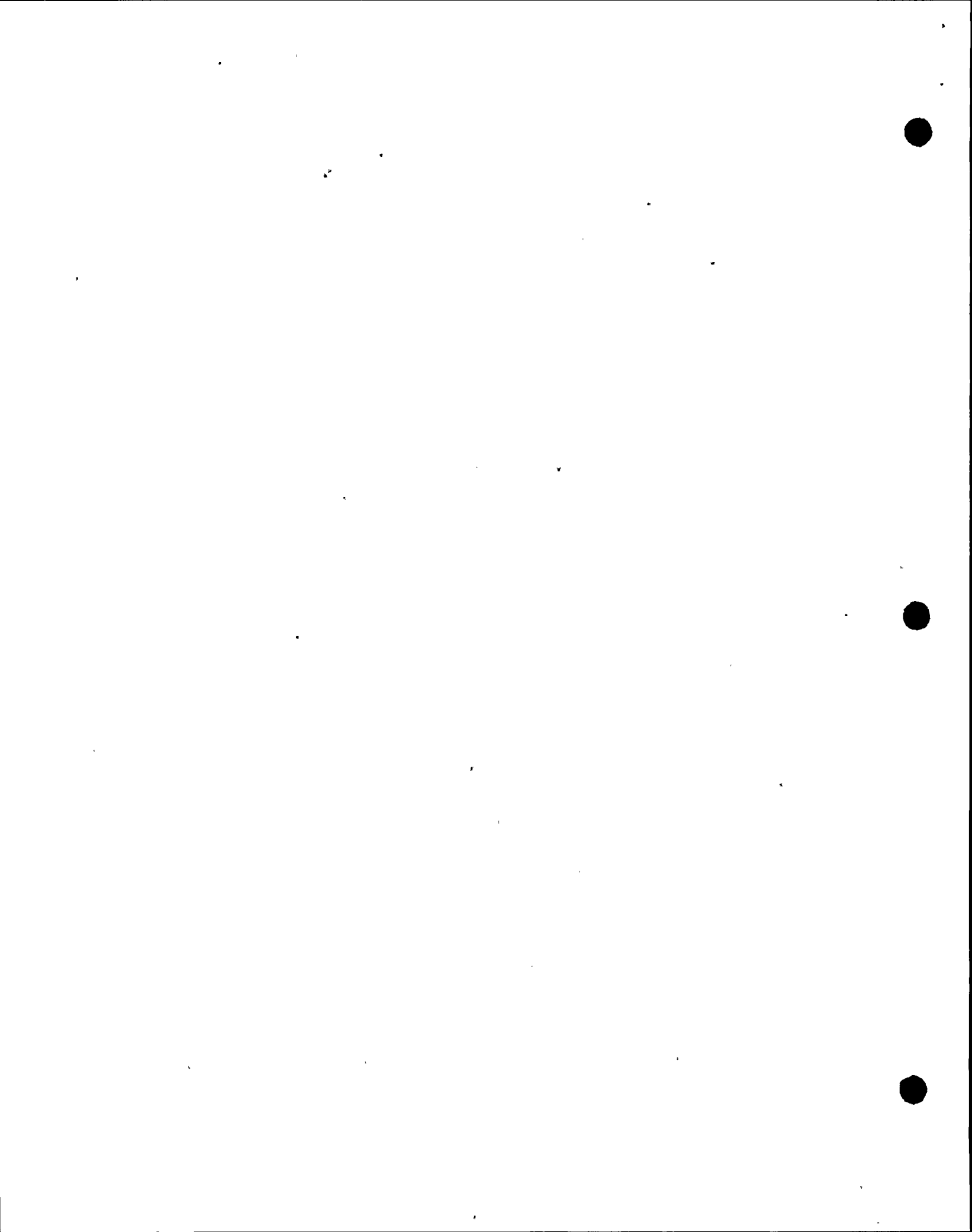
- (NCTS 6) g. As the "at-the-controls" reactor operator, is continuously aware of system and plant status and performs panel walkdowns to assess operation.
- h. If coordination cannot be accomplished, the CSO has the authority and the responsibility to stop work or reprioritize work to be done.
- i. Delegates work and coordinates personnel in the Control Room and the plant.
- j. Maintains control of active equipment markups.

5.1.7 Licensed Reactor Operators (RO)

- a. Maintains an NRC Reactor Operator (RO) license for the specific station assigned.
- b. With concurrence from the CSO, manipulates the controls that directly affect the reactivity or power level of the reactor.
- c. Shuts down the reactor when the safety of the reactor is in jeopardy or when operating parameters exceed any of the Reactor Protection System setpoints and automatic shutdown has not occurred.
- d. Remains aware of the operation of mechanisms and apparatus that may indirectly affect the reactivity or power level of the reactor.
- (NCTS 6) e. When assigned as "at-the-controls" reactor operator, remain continuously aware of system and plant status and perform panel walkdown to assess operation.

5.1.8 Operations Branch Shift Personnel

- a. Remain alert and present at the site until properly relieved.
- b. Assume responsibility for monitoring instrumentation and controls located within assigned areas.
- c. Remain aware of, and responsible for, the station status while on shift.
- d. Perform timely and proper actions to ensure the safe and efficient operation of the station.

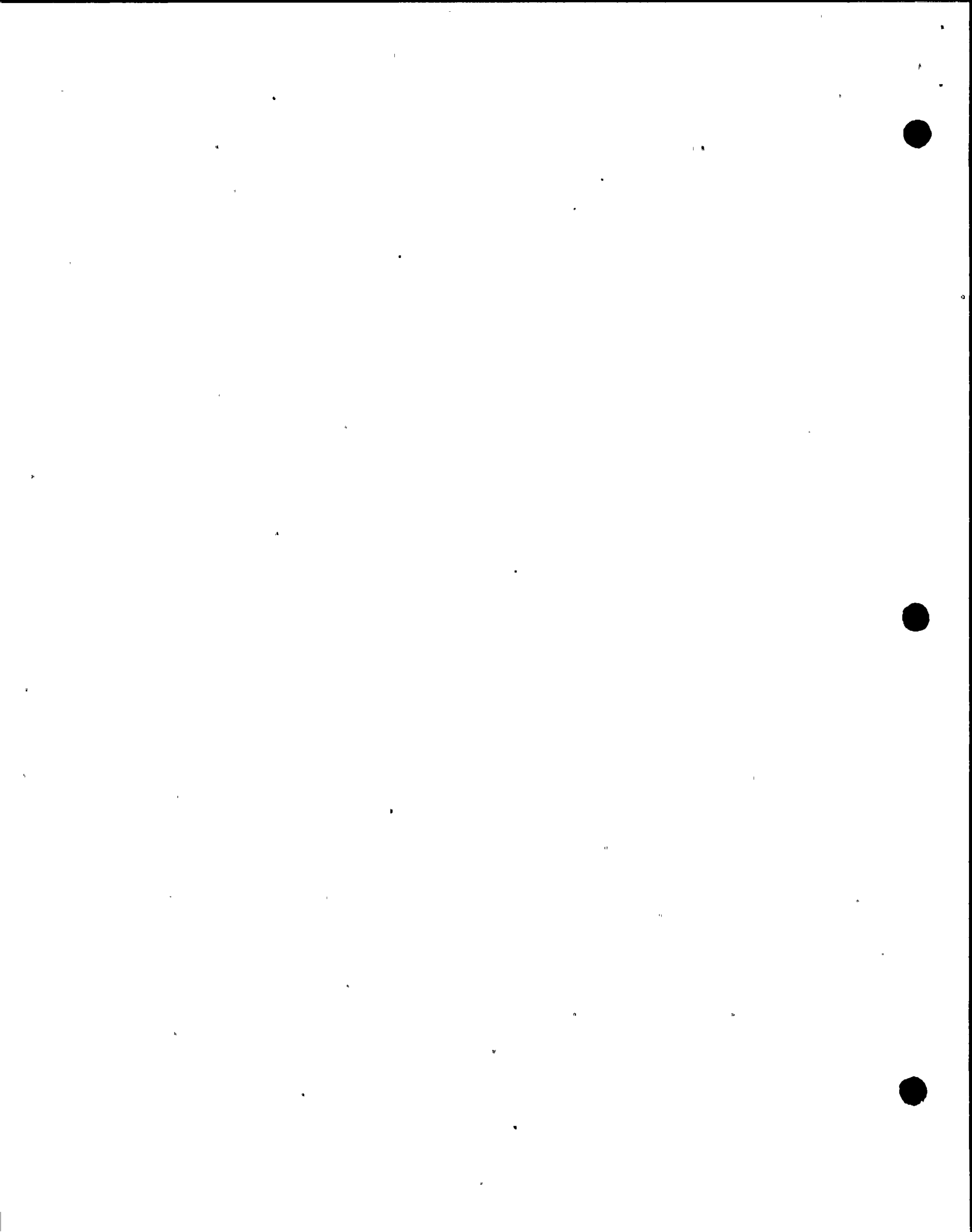


5.1.8 (Cont)

- e. Base operating actions and responses upon indications provided by appropriate instruments and alarms, unless such indications are proven to be incorrect.
- f. Inform the Control Room, and receive permission, before manipulating valves, controls, or instruments which could affect reactor operation or station performance.

5.1.9 Shift Technical Advisor (STA)

- a. Remains in the Control Room during transients or emergencies and observe plant information displays.
- b. Makes objective evaluations of plant operations and advises or assists plant supervision in correcting conditions that may compromise the safety of operations.
- c. Observes the operation of Emergency Core Cooling Systems and confirms availability of components of the Emergency Core Cooling Systems which were not activated by the effects of the transient.
- d. Immediately reports abnormalities to the SSS and provides assistance in formulating a plan for appropriate corrective action.
- e. Monitors applicable procedures and operator activities for possible errors and advises and SSS of appropriate corrective actions.
- f. During emergencies, observes critical parameters and determines if there is adequate core cooling, including availability of a heat sink for the coolant system.
- g. Makes qualitative assessment of the plant parameters during and following an accident in order to ascertain whether core damage has occurred.
- h. In the event critical parameters become unavailable due to instrument failure, performs calculations or determines, through other appropriate means, approximate values for the parameters in question.
- i. Evaluates the effectiveness of plant procedures in terms of terminating or mitigating accidents and makes recommendations when changes are needed.



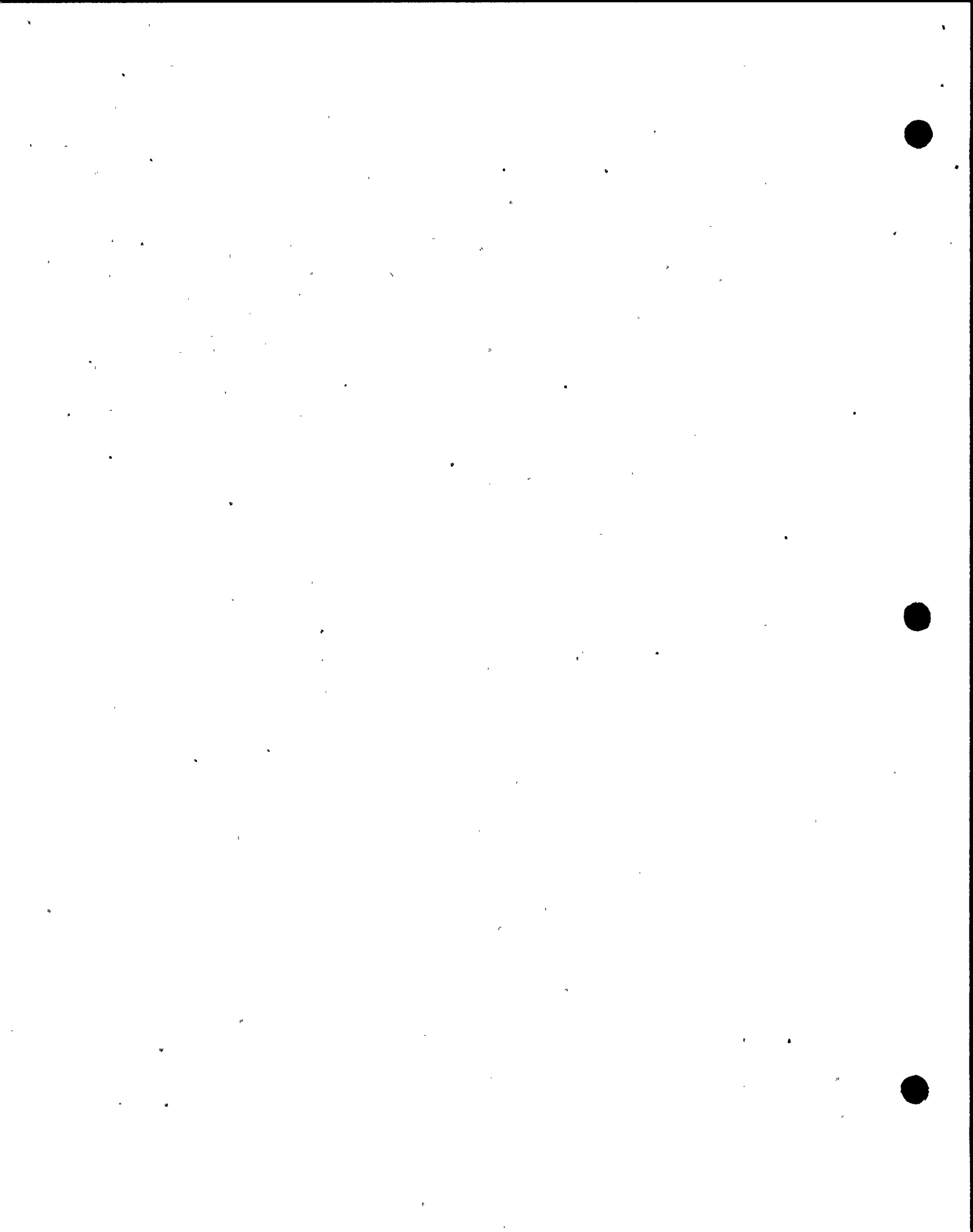
5.1.9 (Cont)

- j. Monitors other Control Room displays not directly related to the transient to note abnormal values, undesirable trends, or normal conditions.

NOTE: A significant part of STA responsibility is ensuring the health and safety of the public is protected by appropriate automatic and manual response, as well as appropriate implementation of the emergency plan. However, this does not preclude the STA from assisting the SSS in reading the EOPs during severe transients when prompt actions in more than one EOP are concurrently required, as the EOPs by design require operators to maintain an overall perspective of plant status.

5.1.10 Supervisor Reactor Engineering

- a. Reports directly to the Manager Operations.
- b. Ensures routine and special surveillance on the reactor core are performed.
- c. Ensures proper implementation of the Reactivity Management Program.
- d. During steady state conditions, power changing, and flux shaping maneuvers:
 - 1. Provides control rod position recommendations and instructions to the SSS for approval.
 - 2. Conducts prescribed surveillances and tests.
 - 3. Provides information to the SSS and operating personnel to document compliance with Technical Specifications and reactor fuel operating and warranty requirements.
- e. Provides recommendations and technical support to the SSS and operating personnel during all planned reactivity changes. A designee of the Supervisor Reactor Engineering may provide such recommendations and support.
- f. Functions as the Special Nuclear Material Custodian.



5.1.11 General Supervisor Operations Support

- a. Reports directly to the Manager Operations.
- b. Ensures special reports are prepared.
- c. Ensure investigations are conducted and reviewed.
- d. Ensures routine administrative functions of the Operations Branch are performed.
- e. Ensures unit operations are coordinated with other unit organizations to ensure timely completion of required operations, maintenance, modification, surveillance, and testing.
- f. Ensures special projects are properly executed.
- g. Ensures appropriate level of technical and engineering support is provided to the Operations Branch.
- h. Ensures direction of the Station Fire Department is provided for day-to-day activities associated with implementation of the Fire Protection Program.
- i. Ensures personnel comply with the Fire Protection Program and procedures.
- j. Provides guidance and direction to Nuclear Training to ensure content of training and retraining program (including Emergency Plan and Emergency Operating Procedures) provides a highly qualified and efficient operating force.
- k. Promotes good housekeeping by periodically inspecting areas assigned to the Operations Support Section.
- l. Maintains familiarity with company/union agreements and interpretations.
- m. Ensures company/union agreements are properly administered.

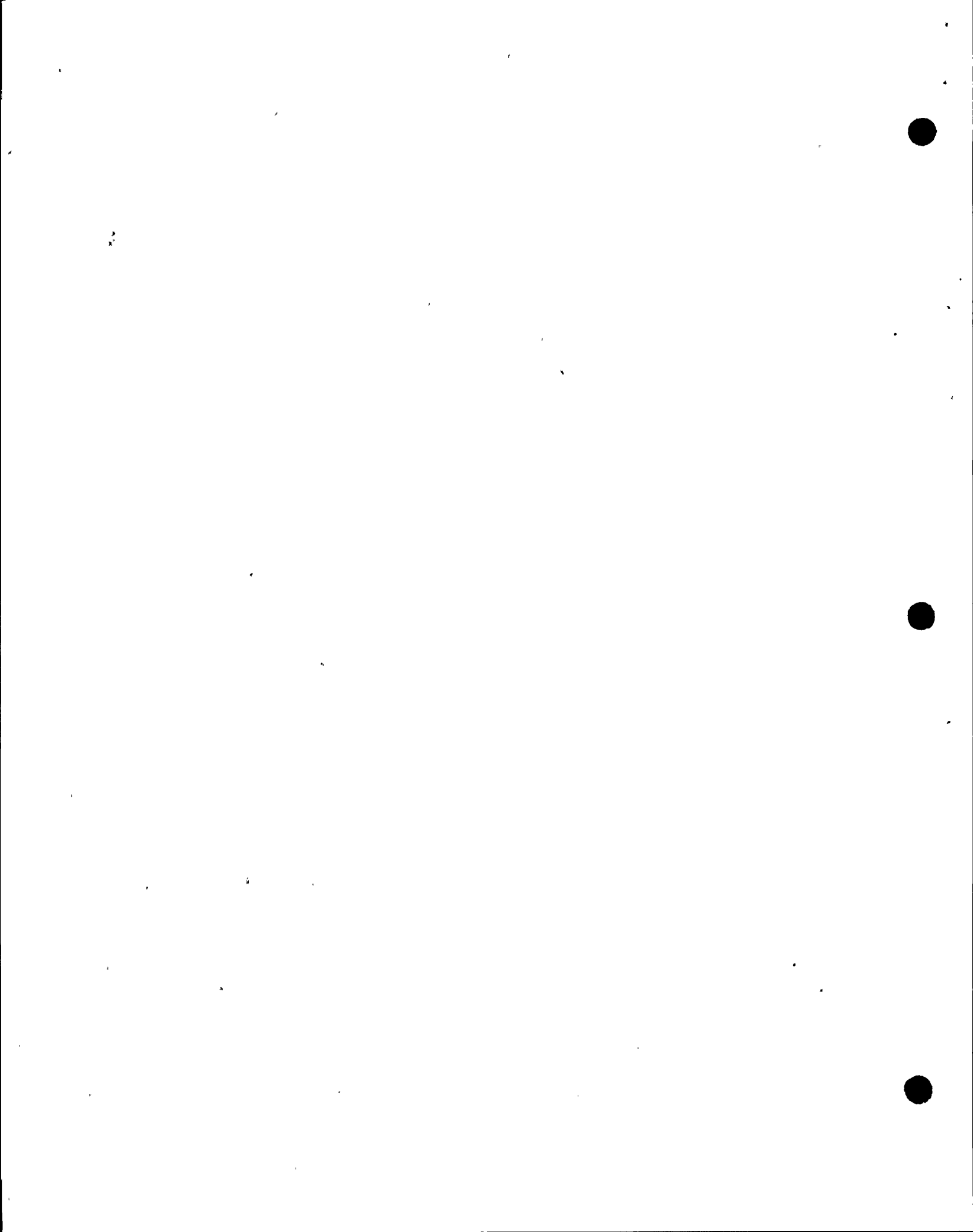
5.1.12 General Supervisor Radwaste Operations

- a. Reports directly to the Manager Operations.
- b. Establishes and maintains the Radwaste Operations Section organization and staff.
- c. Provides overall guidance and direction to the Radwaste Operations Section in cooperation with other section heads.



5.1.12 (Cont)

- d. Ensures Section personnel are properly trained and qualified.
- e. Provides guidance and direction to ensure:
 - 1. Required quality and quantity of work is achieved; AND
 - 2. Approved operating procedures and practices are followed
- f. Maintains familiarity with the requirements of regulatory agencies relative to Radwaste Operations. Prepares or supervises the preparation of the necessary reports for these agencies, as directed.
- g. Establishes and regularly reviews required operating logs and records.
- h. Monitors development and implementation of On-the-Job Training (OJT) programs.
- i. Provides guidance and direction to Nuclear Training to ensure content of training and retraining program (including Emergency Plan and Emergency Operating Procedures) provides a highly qualified and efficient operating force.
- j. Ensures supervised personnel receive training in appropriate radiological protection practices, procedures, and ALARA principles.
- k. Promotes safe working conditions and practices by ensuring supervised personnel receive required instructions concerning industrial safety.
- l. Ensures strict adherence to company and plant security provisions and procedures.
- m. Promotes good housekeeping by periodically inspecting areas assigned to the Radwaste Operations Section.
- n. Maintains familiarity with company/union agreements and interpretations.
- o. Ensures company/union agreements are properly administered.
- p. Ensures proper processing, packaging, and disposal of radioactive waste.



5.1.13 Supervisor Radwaste Operations

- a. Reports directly to the General Supervisor Radwaste Operations.
- b. When assigned, functions as the General Supervisor Radwaste Operations.

5.1.14 Shift Emergency Plan Coordinator (SEPC) (Unit 2)

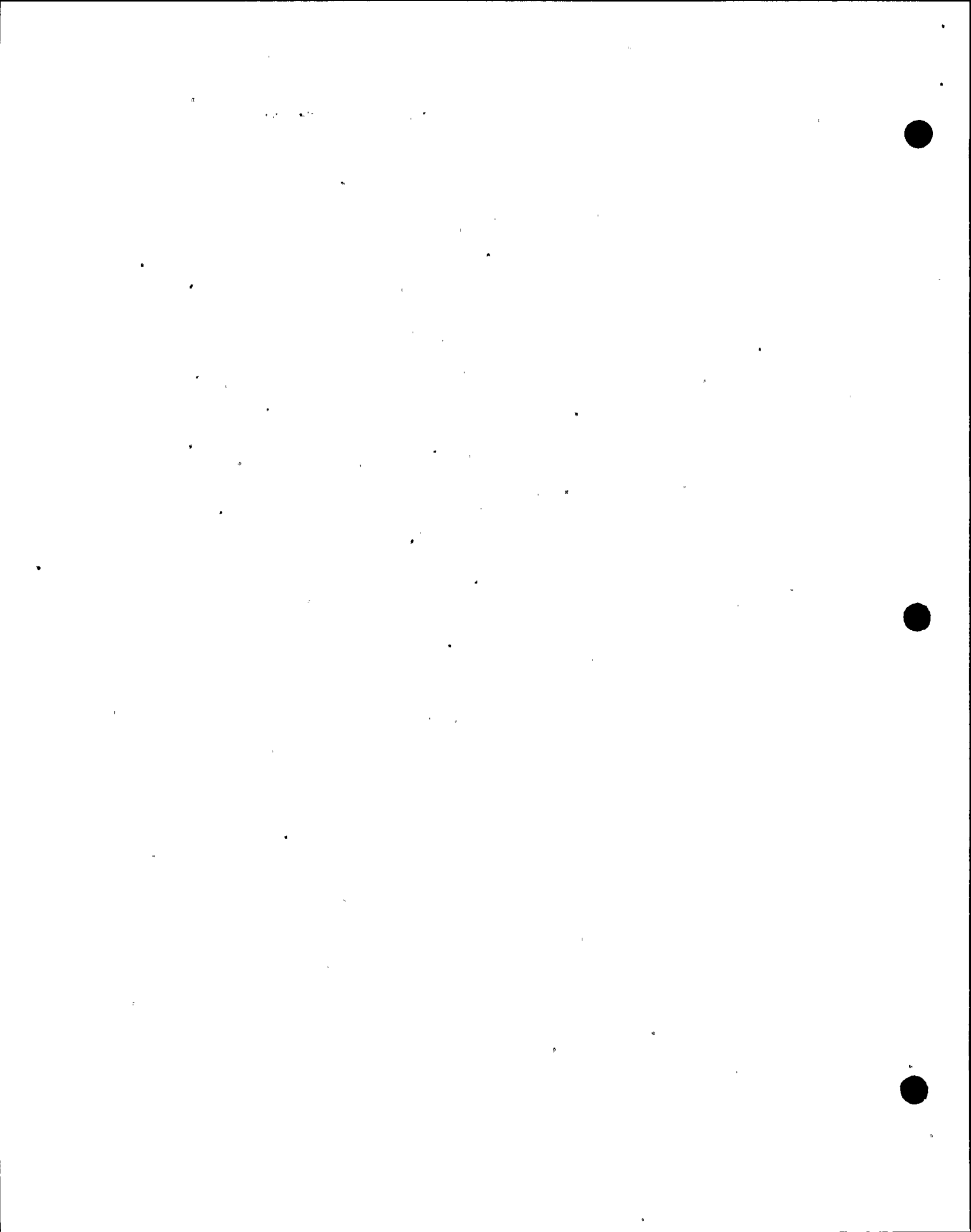
- a. During normal plant operations:
 - 1. Reports to the Control Room (within 10 minutes) upon activation of station alarm.
 - 2. Remains available to the Control Room by normal plant communications.
 - 3. Participates in shift turnover.
 - 4. Remains aware of existing plant conditions, Limiting Conditions for Operation (LCO), out-of-service equipment, and Emergency Core Cooling System (ECCS) status.
 - 5. Reviews the schedule for activities, surveillances, and maintenance.
 - 6. Maintains awareness of plant conditions pertaining to evolutions throughout the shift.
- b. When the Site Emergency Plan is activated:
 - 1. Reports to the Control Room.
 - 2. Assists the SSS with implementation of the Site Emergency Plan.

5.2 Operating Shift Complement

5.2.1 The General Supervisor Operations shall ensure minimum operating shift complements are established and maintained in accordance with:

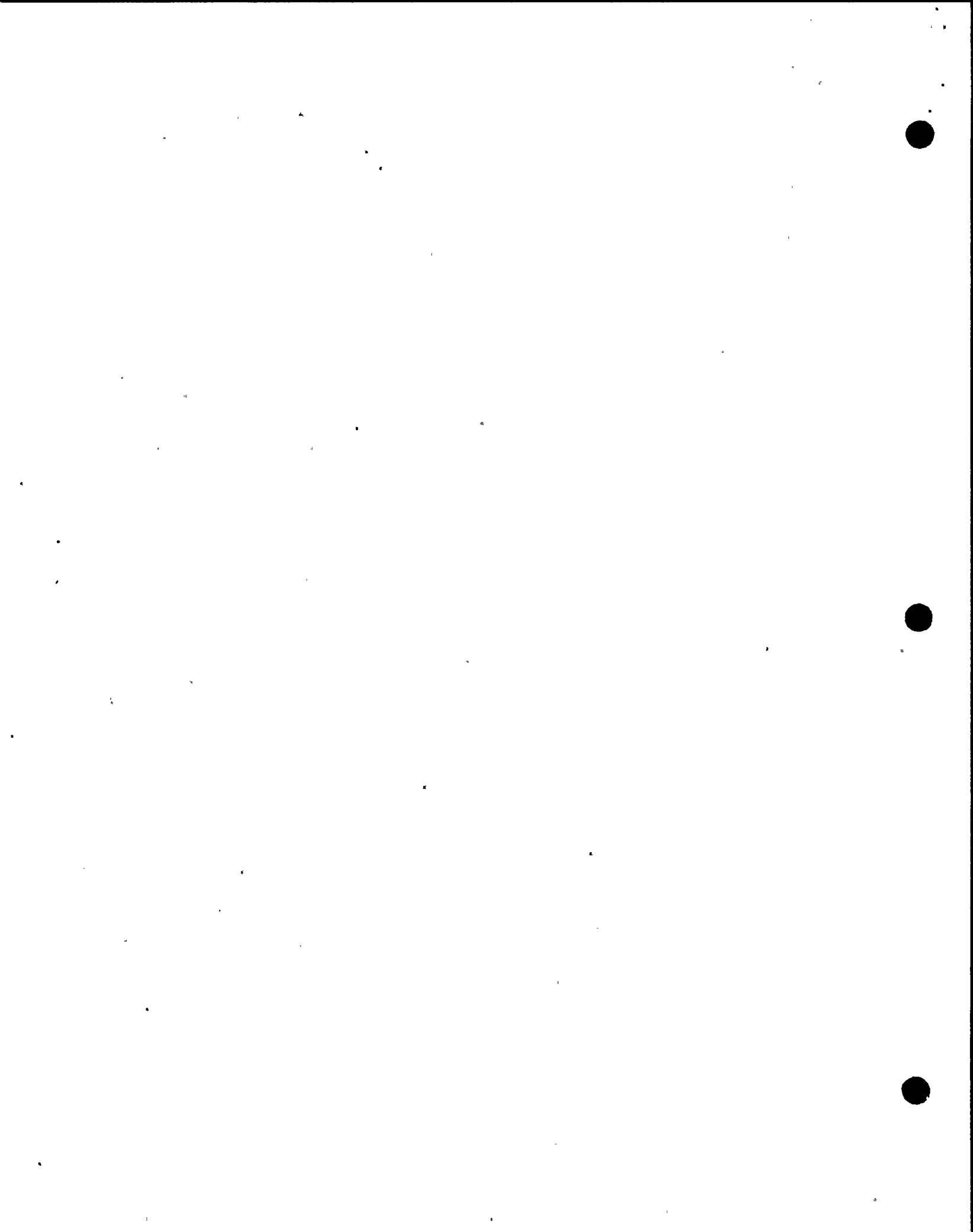
- a. Technical Specifications, Section 6.2.2 for specified modes of operation; AND
- b. The Site Emergency Plan

5.2.2 The Station Shift Supervisor (SSS) or Assistant Station Shift Supervisor (ASSS) shall have the authority to call in off-duty personnel from any department, as necessary, to supplement or replace personnel.



5.3 Operating Shift Schedules and Assignments

- 5.3.1 The Operations General Supervisors/Supervisors shall:
- a. Prepare shift schedules and allocate operational tasks between shifts/personnel.
 - b. Designate tasks and schedule activities to be performed by Operations, Reactor Engineering, Operations Support, and Operations Radwaste personnel.
 - c. Ensure Operations Section personnel receive and maintain the required training, certifications, and licenses for assigned positions.
- 5.3.2 The SSS or ASSS shall remain in the Control Room during power operation.
- 5.3.3 The SSS and ASSS/STA shall remain in the Control Room whenever the Site Emergency Plan is activated.
- 5.3.4 The SSS or the ASSS are considered to be in the Control Room when in the following locations:
- a. Main Control Room
 - b. SSS office (Units 1 and 2)
 - c. Control Room kitchen (Unit 1)
 - d. Control Room laboratory (Unit 1)
 - e. Auxiliary Control Room (Unit 1)
 - f. Interior of duplex panels (Unit 1)
 - g. Operations Clerk Office and adjacent hallway (Unit 1)
 - h. Operations Clerk Office (Unit 2)
- 5.3.5 During normal power operations, the Senior Reactor Operator (SRO) in the Control Room may be either the SSS or the ASSS.
- 5.3.6 During power operation when the Site Emergency Plan is activated, the ASSS shall assume the position of Shift Technical Advisor and NOT serve as the Control Room SRO.
- 5.3.7 When assigned as the Control Room SRO, the ASSS shall assume full authority for station operations subject to the general supervision of the SSS. The ASSS shall NOT relinquish this position in the Control Room except when relieved by a qualified replacement.



- 5.3.8 When a portion of station operations has been delegated to an SRO other than the SSS (i.e., refueling activities):
- a. A division of duties shall be clearly established, AND
 - b. A single SRO shall assume overall control.
- 5.3.9 The SSS and the ASSS should avoid becoming personally involved in manipulative tasks or details of operation of any one portion of the station in order to retain a comprehensive perspective of the general station condition.
- 5.3.10 The Chief Shift Operator (CSO) assigned to each shift shall:
- a. Perform associated CSO duties and responsibilities unless relieved in accordance with Section 5.4 of this procedure.
 - b. Perform duties and assume responsibilities associated with the "at-the-controls" reactor operator, unless relieved in accordance with Step 5.3.12 of this procedure.
- 5.3.11 (NCTS 6) The "at-the-controls" reactor operator shall:
- a. Remain in the "at-the-controls" area in the Control Room.
 - b. Perform periodic panel walkdowns to assess Operations.
- 5.3.12 Any relief of the "at-the-controls" reactor operator during the assigned shift shall include:
- a. A review of current plant status AND
 - b. Documentation of relief in the Control Room Log.
- 5.3.13 Except in an extreme emergency for operations potentially affecting station process systems, personnel shall first obtain permission to proceed from the SSS.

5.4 Shift Relief and Changeover

- 5.4.1 The General Supervisor Operations shall prepare and update a shift turnover checklist to be reviewed and signed by on-coming shift personnel. As a minimum, the turnover checklists shall document the following, as applicable:
- a. Status of tests or special operations in progress
 - b. Special valve/switch line-ups



5.4.1 (Cont)

- c. Review of changes in status and locations of jumpers and blocks as reflected in the Temporary Modification Log
- d. Acknowledgment of instructions from the General Supervisor Operations
- e. Review of changes in equipment status as reflected in the Equipment Status Log

5.4.2 On-coming Operations shift personnel shall relieve the off-going shift in the Control Room or other assigned work station, as applicable.

5.4.3 The SSS, ASSS, CSO, and Control Room Operators shall read applicable log books from the date shift duty was last performed. The SSS and CSO shall sign below the last entry of the applicable log book.

5.4.4 Operations personnel shall:

- a. Include additional pertinent information regarding station status in a verbal exchange between the on-coming and off-going shifts.
- b. Perform shift turnover in accordance with branch/section instructions.

5.5 Notifications of Absences and Call-outs

5.5.1 Personnel expecting to be late or unable to report for work at the scheduled time shall, at the earliest opportunity, inform the SSS or the ASSS of the situation.

5.5.2 The SSS or ASSS shall make the necessary arrangements for obtaining replacements or holding over on-shift personnel.

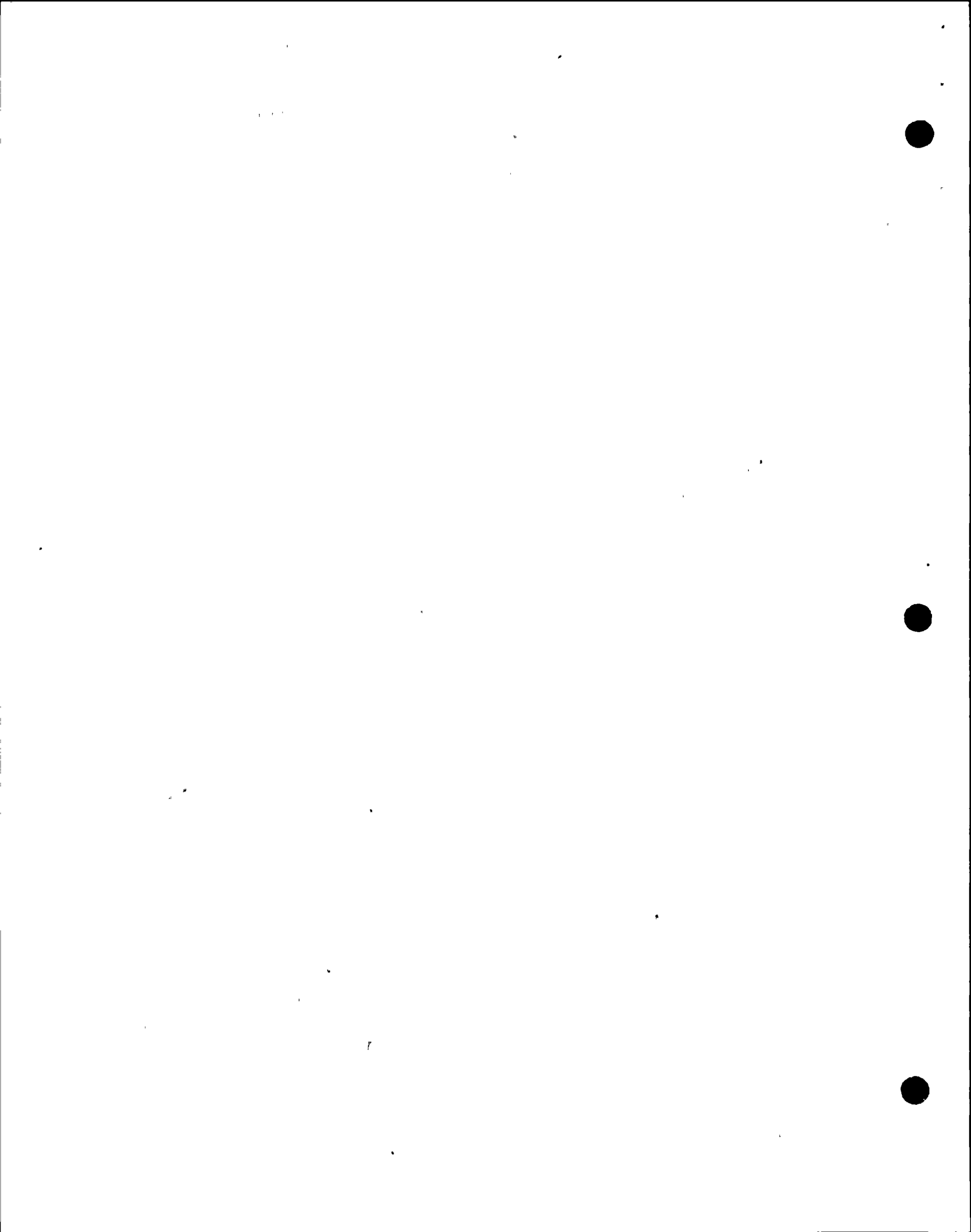
5.5.3 The SSS or ASSS may call out required personnel, regardless of discipline or department, or ensure the safe and efficient operation of the station.

5.5.4 The SSS shall ensure ROs working more than eight continuous hours at the control board are relieved every four hours.

5.6 Training

5.6.1 The Manager Operations shall ensure Operations personnel are properly trained and qualified for assigned duties.

5.6.2 (NCTS 3) The General Supervisor Operations shall ensure Emergency Operating Procedure (EOP) training requirements are met.



5.6.3 The General Supervisor Operations shall, in conjunction with Nuclear Training, ensure the Operations Branch Training Program:

- a. Is scheduled and coordinated
- b. Is accomplished by one or more of the following:
 - 1. On-shift formal instruction by qualified instructors or supervisors
 - 2. Regularly scheduled license qualification, requalification, and Non-Licensed Operation Training (NLOT)
 - 3. Required reading
- c. Training records of personnel are maintained

5.6.4 The General Supervisor Operations ensures active license tracking is controlled.

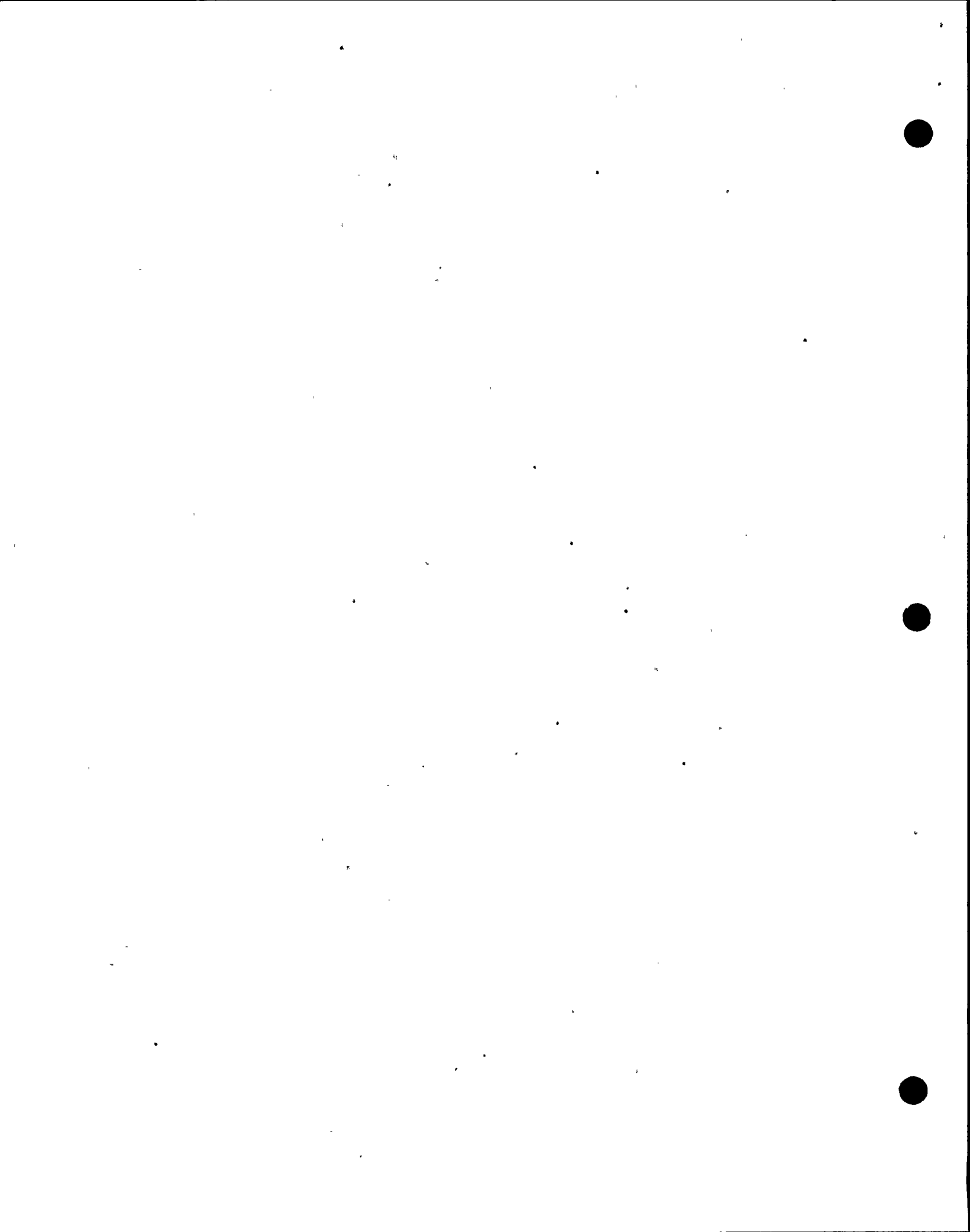
5.6.5 Operations Management personnel shall observe training (NCTS 4) during each Requalification Cycle which includes Simulator Training.

5.7 Control of System Configuration

5.7.1 Systems are normally in service in accordance with approved Operating Procedure requirements; specifically valve lineups, power board/breaker lineups and instrumentation requirements.

5.7.2 If a component is discovered to be, or suspected to be out of the normal position as described in the appropriate procedures:

- a. Personnel discovering the potentially abnormal situation shall:
 - 1. Not alter the situation; AND
 - 2. Immediately notify the SSS; OR
 - 3. To prevent immediate personnel or equipment damage, take appropriate action, then immediately notify the SSS.
- b. The SSS shall:
 - 1. Review the impact to system operation, operability requirements, and reportability



5.7.2.b (Cont)

2. Determine the correct configuration of the system or component.
3. Direct action, as necessary, to restore the system or component to proper configuration.
4. If required, initiate a Deviation Event Report (DER) in accordance with NIP-ECA-01, Deviation Event Report.

5.7.3 If a change to a system configuration is required that is NOT within the scope of an approved Operating, Surveillance, or Special Test procedure, the SSS shall:

- a. If the altered system configuration is intended to be in service, initiate a change to the appropriate procedure reflecting the altered configuration; OR
- b. If the altered system configuration is NOT to be in service, then control is in accordance with AP-4.2, Control of Equipment Markups. Specifically, off normal positioned valves, breakers, control switches are tagged with:
 1. Yellow hold out tags (for equipment protection or other administrative reasons); OR
 2. Red or blue markup tags (for personnel protection)

5.8 Key Control

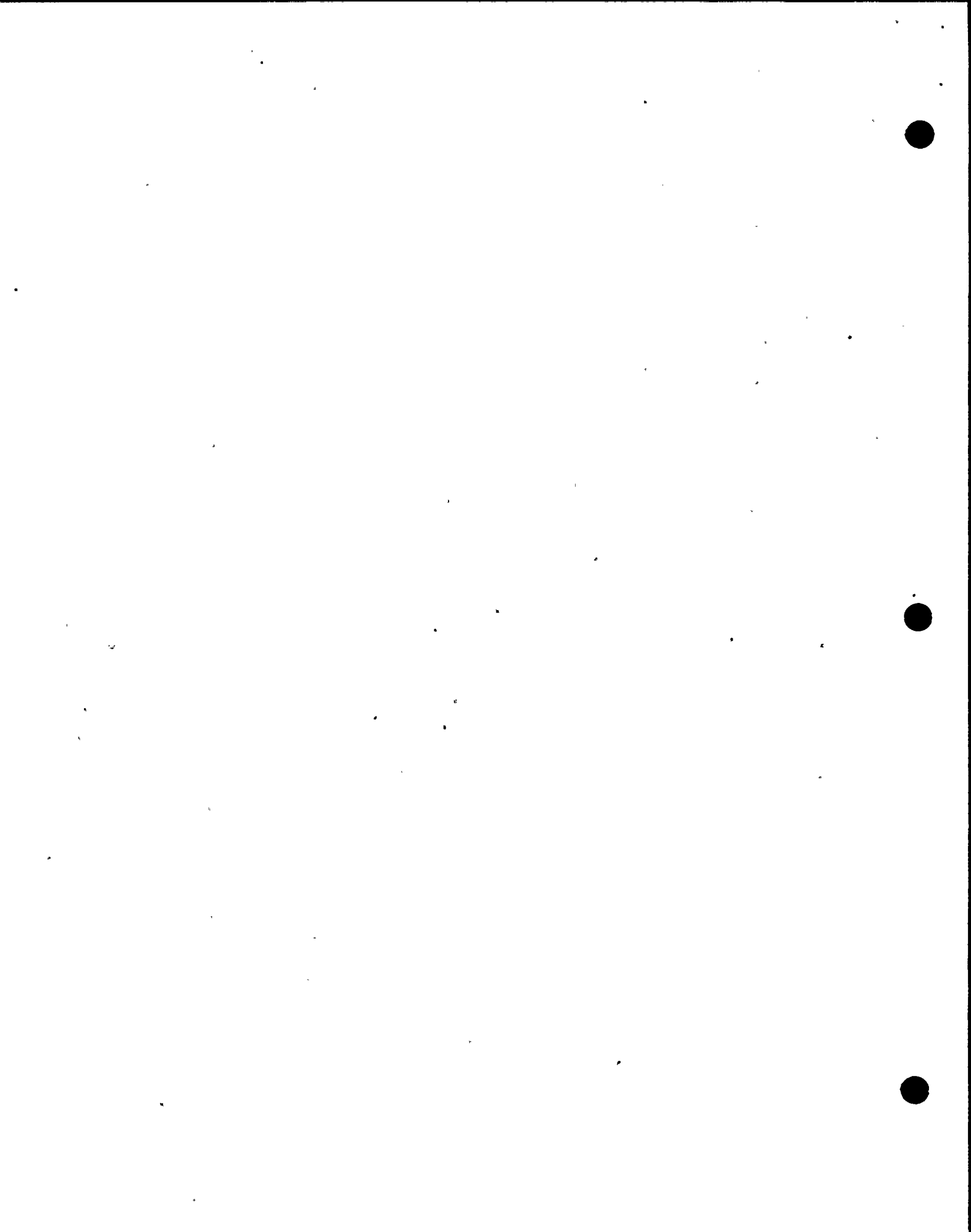
5.8.1 The SSS shall maintain:

- a. A list of key controlled items and areas under the authority of the Operations Branch
- b. Control of controlled keys until issue

NOTE: H-keys are controlled by the Radiation Protection Department.

5.8.2 The SSS or ASSS shall:

- a. Grant permission for issue of a controlled key.
- b. Maintain issuance of controlled keys.



5.8.3 "On-duty" personnel issued certain controlled keys for the performance of normal and emergency duties within an area of responsibility shall:

- a. Maintain control of the keys; AND
- b. Prevent unauthorized personnel from possessing or using controlled keys.

5.9 Communications and Directions

5.9.1 Operations personnel shall:

- a. Ensure communications and directions are clear, concise, explicit, and understandable.
- b. Provide verification, whenever possible, for complex directions and those that include numbers by having the person repeat back the instruction or issue written instructions.
- c. Upon completion of a directed action, require a response back to the controlling station stating the exact action that has taken place.
- d. Perform communication requirements in accordance with branch/section instructions.

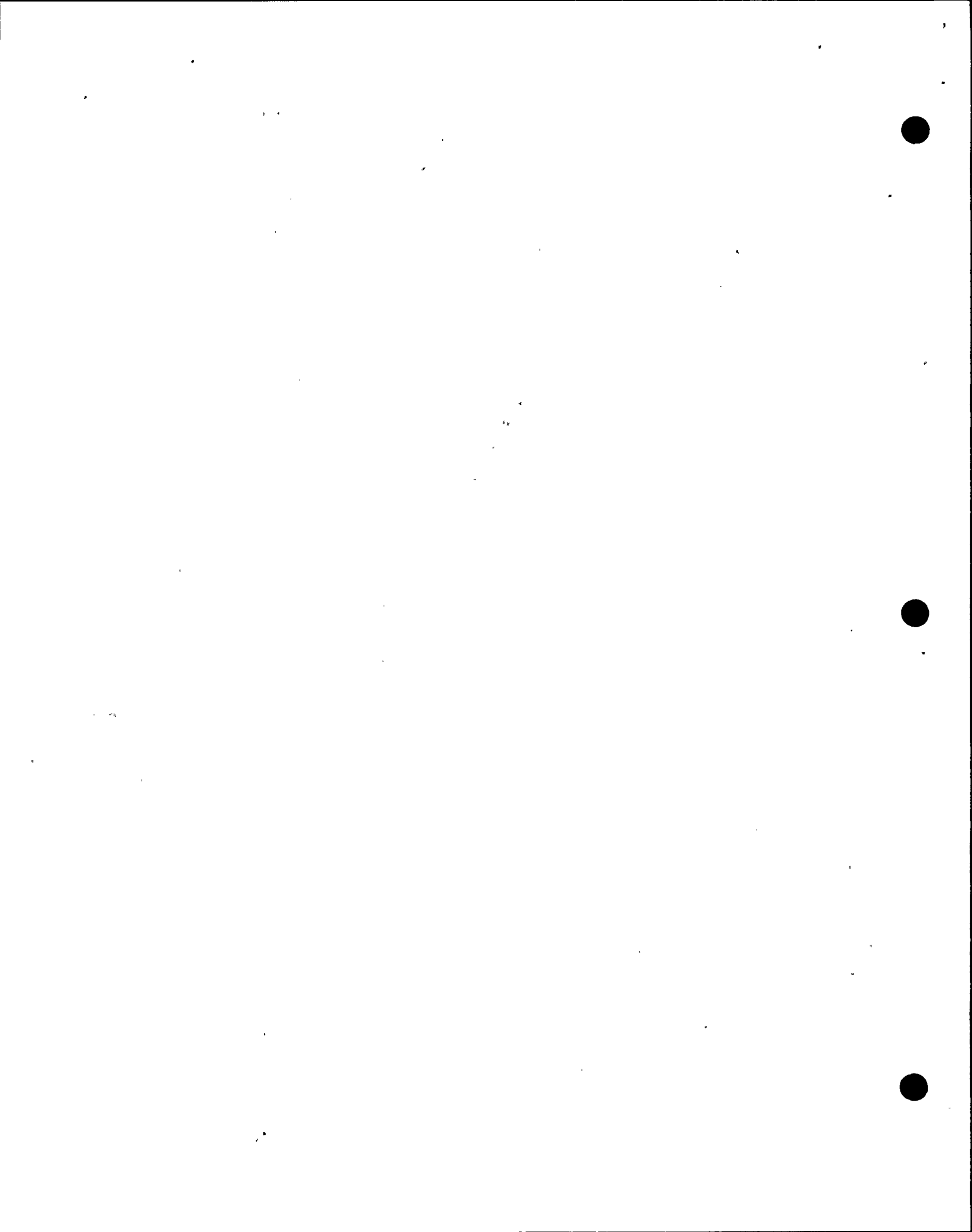
5.9.2 Whenever possible, the person directing the action shall verify the action has been performed correctly by observing expected results (i.e., indication or position lights, meters, gauges, and station/system responses).

5.9.3 If deemed necessary to pass a direction over the Public Address System, Radio, etc., the person directing the action should request an acknowledgment from the person implementing the action.

5.9.4 Personnel assigned to perform an activity shall:

- a. Review the procedure to fully understand what is required, and to be cognizant of the limitations, precautions, and requirements.
- b. Attend briefings for personnel involved in an evolution that is to be performed. The detail of the briefing is dependent on the degree of complexity and the number of personnel involved.

NOTE: Evolutions involving many personnel, especially from two or more departments or disciplines, may require formal briefing or preplanning sessions.



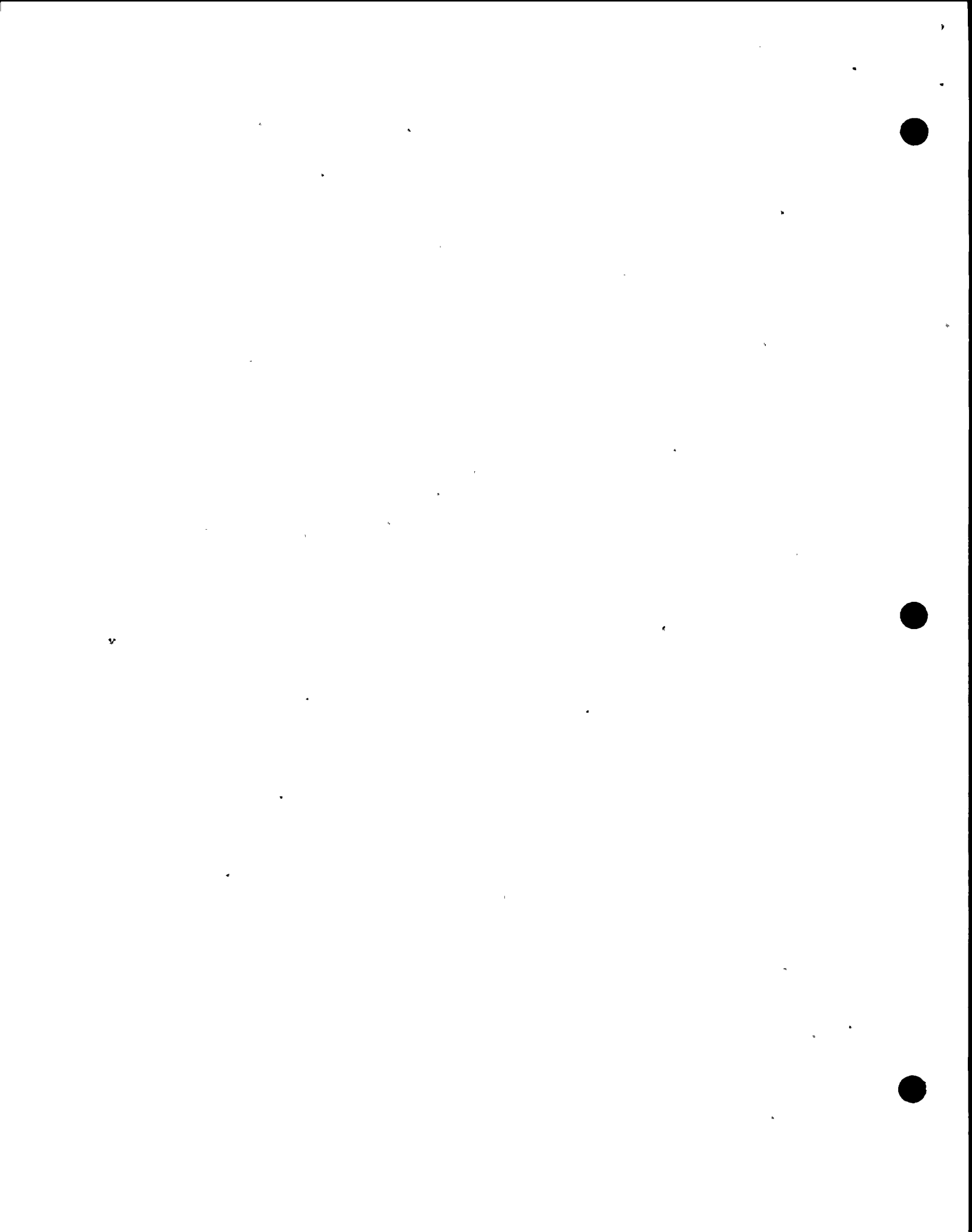
5.9.5 If an evolution is complex and involves close coordination, Operations personnel conducting the briefing session should include:

- a. A review of the appropriate section of the procedure by key personnel
- b. An examination of each person's specific involvement and responsibility
- c. A discussion of expected results or performance
- d. A review of limitations, hold points, and emergency action to be taken if contingencies arise
- e. Understanding of the interfaces and communications required

5.10 Records and Log Books

5.10.1 Shift records are comprised of logs, files, data sheets, checklists, sign-off lists, recorder charts, and computer printouts that describe or record operating information and actions. The following practices are applicable to operating shift records:

- a. Records and logs are maintained in a legible, accurate, complete, and understandable manner.
- b. The use of black ink to facilitate reproduction is required.
- c. The use of white-out or correction tape is NOT allowed on shift records.
- d. Errors in shift records are corrected by drawing a single line through the incorrect information and writing the correct information adjacent to the line or in an available space. The person making the correction shall initial and date the correction.
- e. Personnel responsible for maintaining logs and records shall sign and date portions that cover the applicable shift assignment.
- f. To assist in documenting authorship and turnover, stamp or write the following immediately after the last entry in the SSS and Control Room Logs:
 1. "The above is a true record of events on the preceding shift _____."
(Signature)



5.10.1.f (Cont)

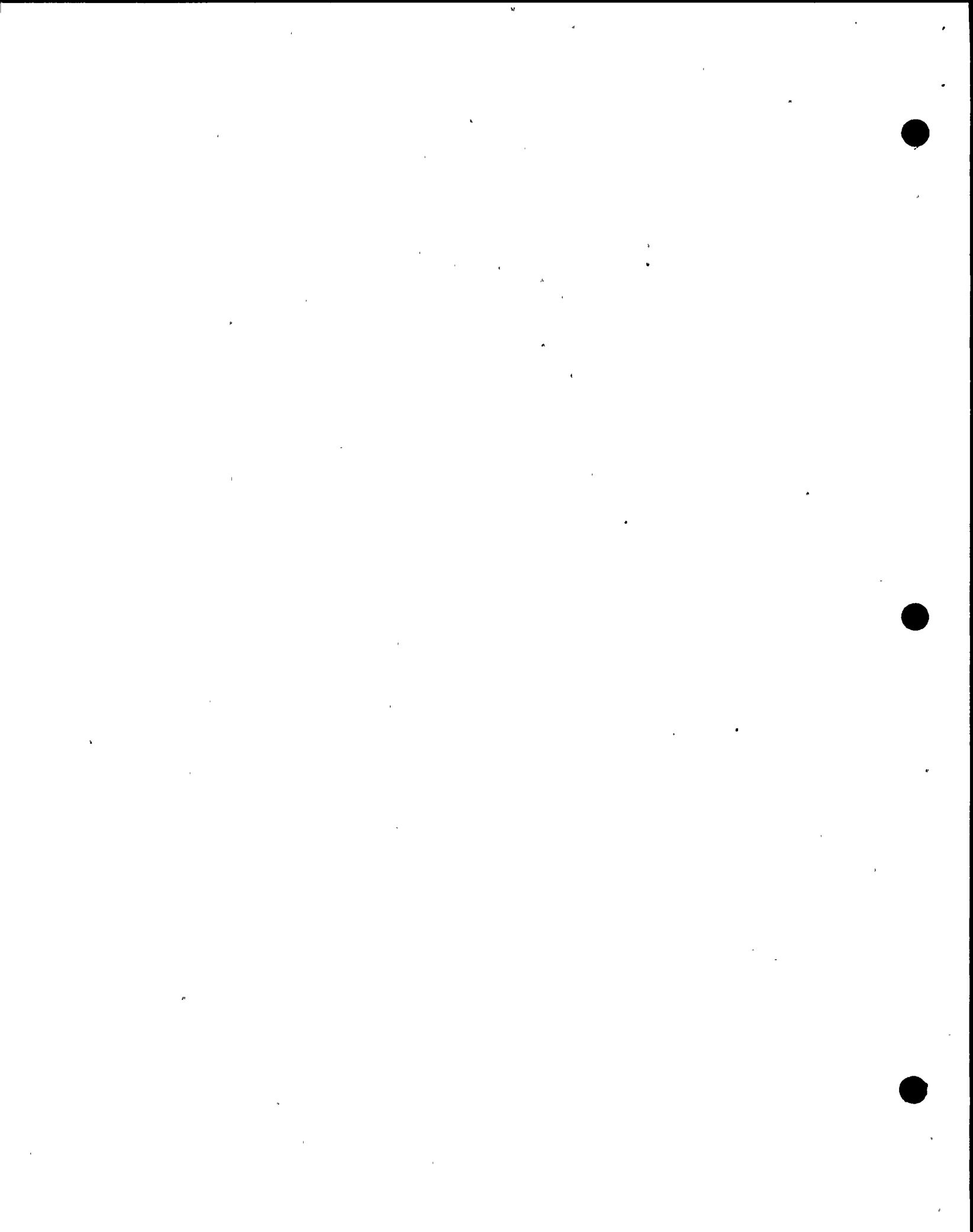
2. "I have read and understand the events recorded in this log since I was last on shift

(Signature)

- g. Recorder charts in operation are checked at least once per shift to verify markings are clearly visible and the timing is correct. The person making the check shall initial the chart and enter the time and date.
- h. Personnel shall mark recorder charts with the time, date, and recorder identification number before the chart is placed on the recorder and when the chart is removed, indicating pen and range selection, as necessary, to facilitate interpretation.
- i. If the recorder performs the date and time function automatically, marking recorder charts with date and time is NOT necessary.
- j. When significant events or unusual trends in parameters occur, operators shall indicate the time and event on applicable charts whenever possible to assist in operations analysis.
- k. The General Supervisor Operations shall periodically review shift records and logs to ensure accuracy and completeness.

5.10.2 The following controls are applicable to the Control Room Log Book:

- a. The Control Room Log Book is considered a legal document subject to being entered as a court record.
- b. Entries in the log book are made by the duty CSO or other authorized personnel only. NO other entries are allowed.
- c. Log entry copies are posted daily.



5.10.2 (Cont)

d. Log entries shall, at a minimum, consist of:

1. Activities associated with changing core reactivity

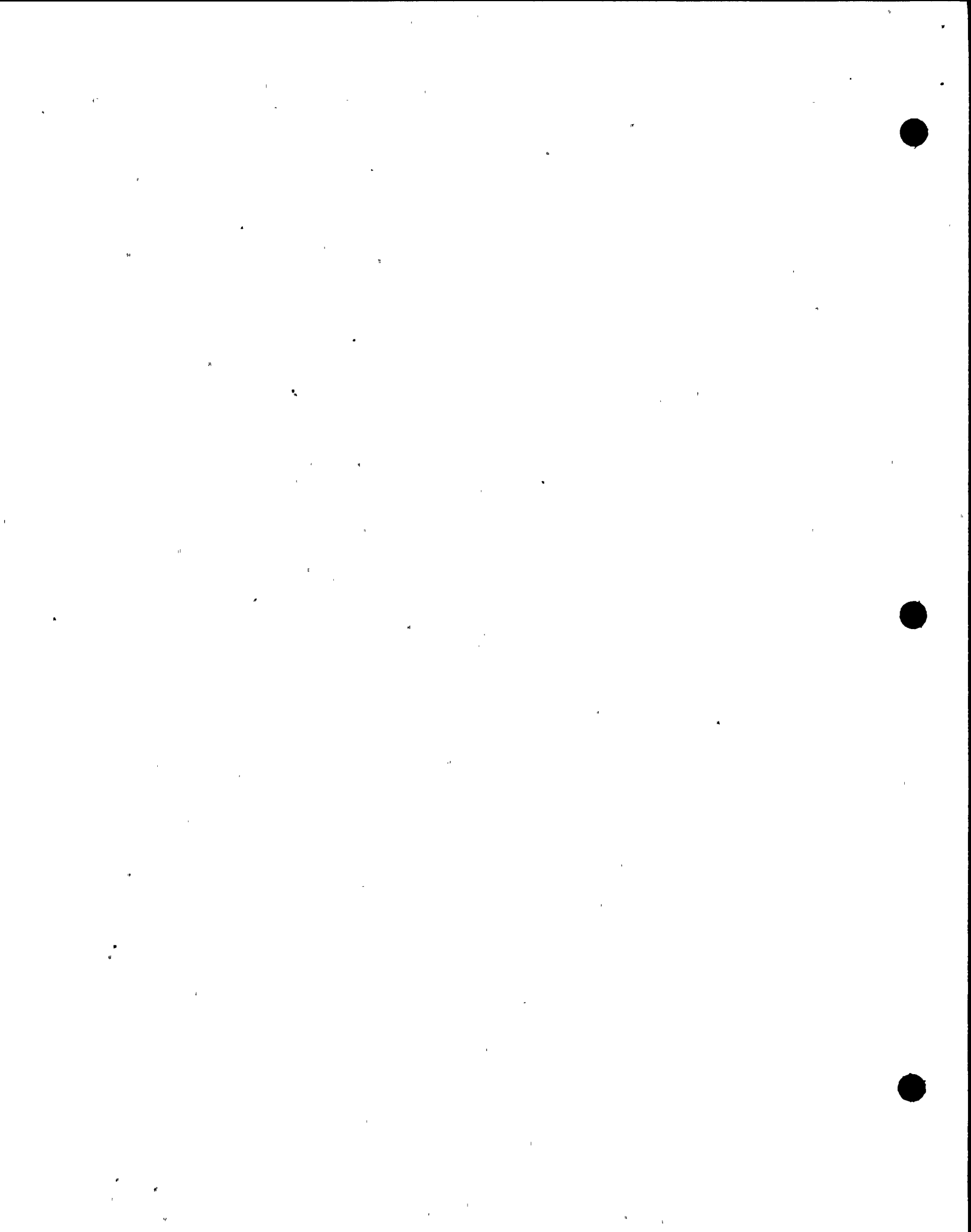
NOTE: The Unit Supervisor Reactor Engineering maintains separate Fuel Records in which detailed fuel histories and a record of core instrumentation changes are maintained. Detailed rod manipulations are NOT necessary, provided the movements are part of a startup or shutdown sequence developed by Reactor Engineering.

2. Changes in station output
3. Changes in auxiliary equipment
4. Unusual conditions or station evolutions
5. Line trips
6. Annunciator signals NOT recorded on the data logger

NOTE: Annunciator signals logged during unit outages are at the discretion of CSO.

7. Performance of surveillance testing
8. Equipment removed from service and returned to service
9. Other applicable information regarding shift activities

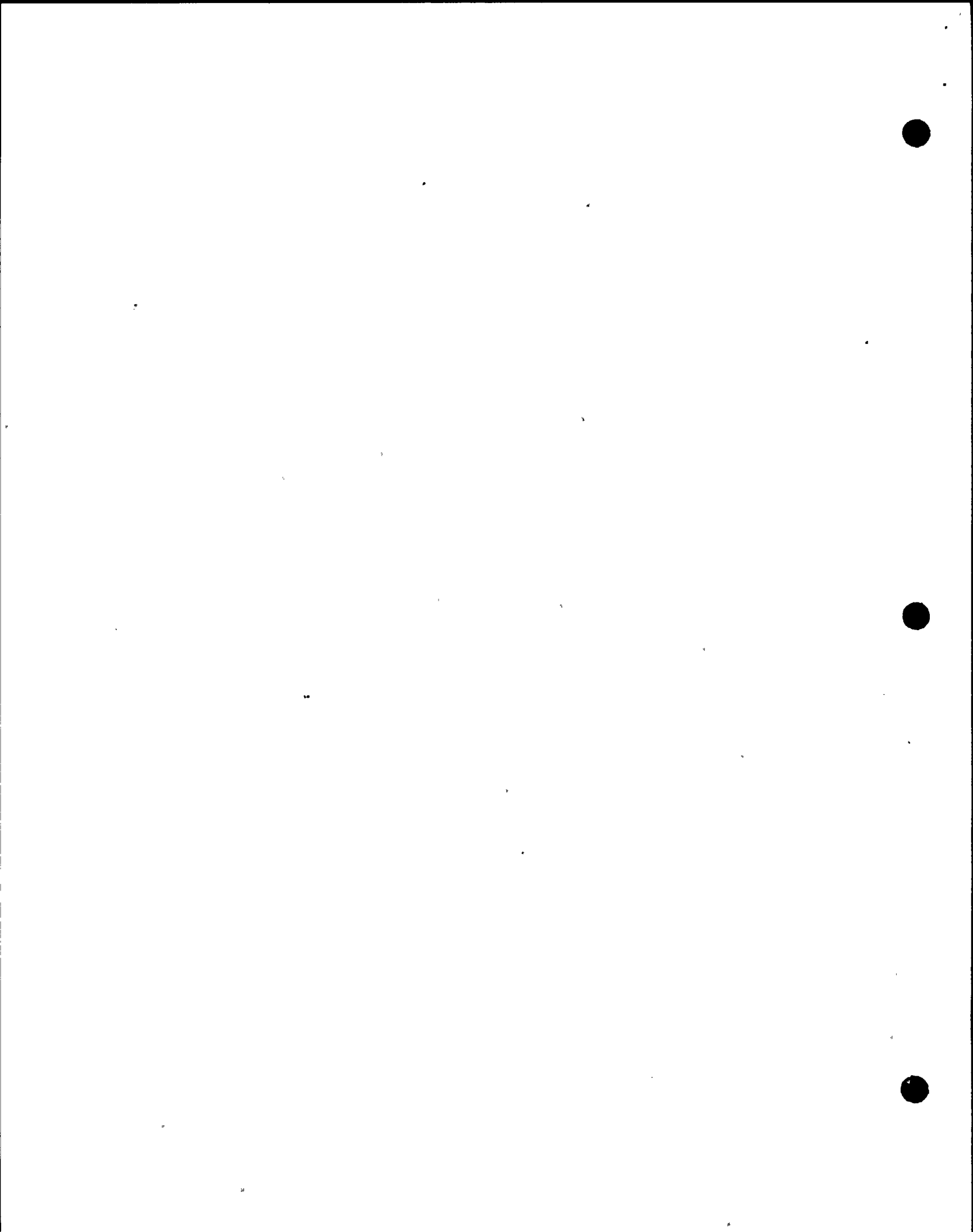
- e. The log book shall contain the date and time of entries and the name of the CSO or alternate.
- f. The log book should remain in the Control Room until completed and reviewed.
- g. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions.



5.10.3 The following controls are applicable to the SSS Log Book:

NOTE: The SSS Log Book is considered a legal document subject to being entered as a court record.

- a. The SSS Log Book shall contain an overall summary of station operations during the respective shift, including:
 1. Names of the supervisors, ROs, and auxiliary operators on-duty
 2. Date and time of entries
 3. Surveillance tests conducted and deviations from acceptance criteria
 4. Post-Maintenance Testing and returning Technical Specification related equipment to operable status
 5. Reportable occurrences
 6. Safety-related and other important equipment maintenance in progress
 7. Entering a Technical Specification action statement
 8. Leaving a Technical Specification action statement
 9. Implementation of the Site Emergency Plan or Emergency Operating Procedures
 10. Significant changes in radiological conditions
 11. A narrative of significant events, including notifications to the Plant Manager, Manager Operations, On-Call Operations Supervisor, and the NRC
- b. The SSS log entries may be written by the ASSS with the approval of the SSS, provided the log is reviewed and signed by the SSS.
- c. The log book should remain in the Control Room until completed and reviewed.
- d. Log entry copies are posted daily.
- e. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions.



5.10.4 The following controls are applicable to the Radwaste Control Room Log Book:

- a. The log book should remain in the Radwaste Control Room until completed.
- b. The log book shall contain pertinent information associated with the Radwaste Facility operation.
- c. The date and time of activities are entered.

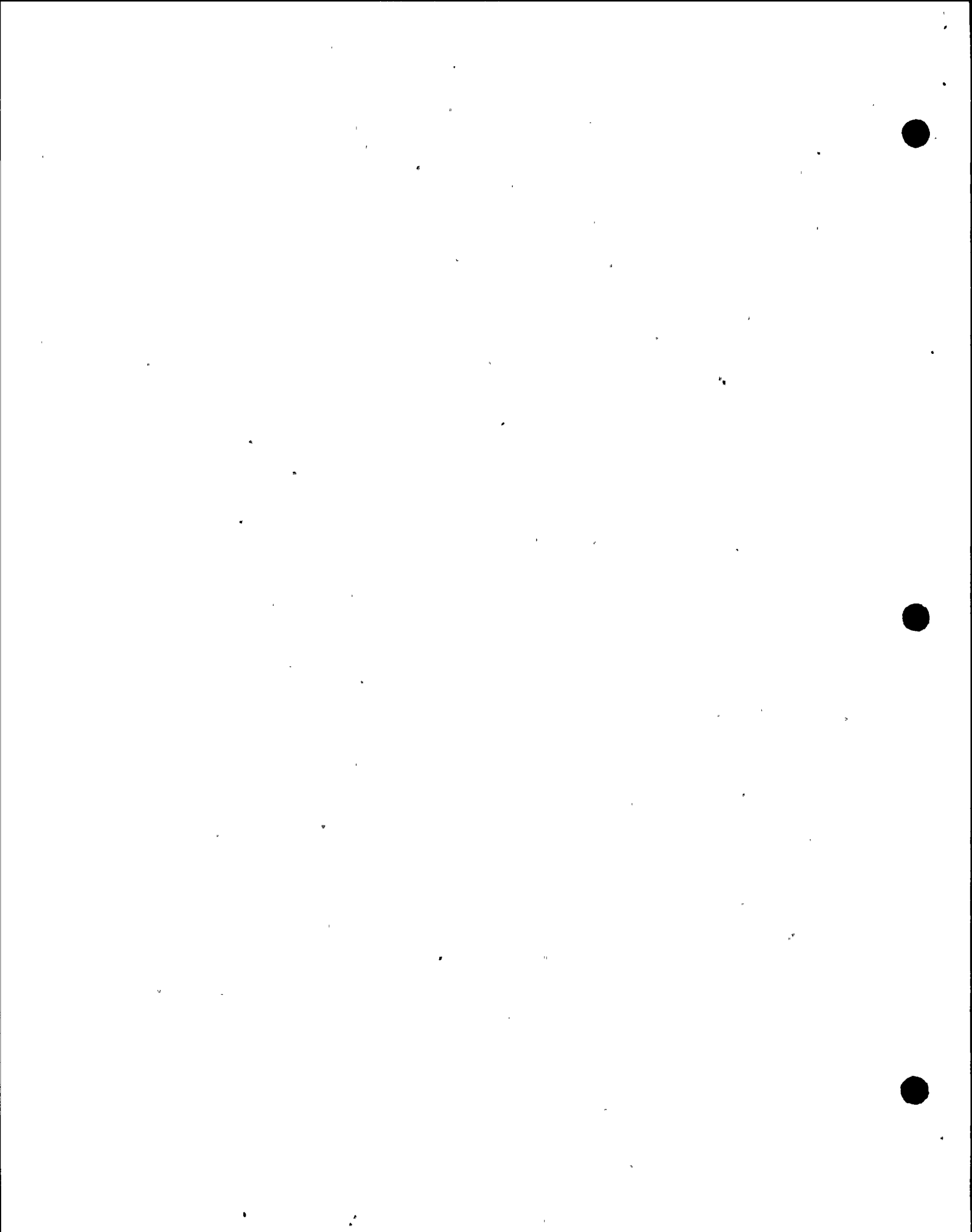
5.10.5 The following controls are applicable to the Equipment Status Log (ESL):
(NCTS 5)

- a. The SSS shall:
 1. Maintain the ESL.
 2. Ensure the ESL is used during all plant conditions.
 3. Ensure equipment entered in the log is marked up in accordance with AP-4.2, Control of Equipment Markups; OR
 4. If equipment is entered for administrative reasons, a markup which would render the equipment nonfunctional is not required. However, per AP-4.2, Control of Equipment Markups, Holdout tags may be placed on control switches to alert operators of potentially degraded conditions.
- b. Log entries should include:
 1. Station equipment determined to be inoperable which may limit station output or which impact Technical Specifications
 2. System unavailability due to removal from service of safety-related equipment for the purpose of conducting preventive maintenance
 3. Equipment which is otherwise operable, but may need special attention due to faulty instruments or other deficiencies (i.e., non-Technical Specification temperature elements on a Technical Specification pump)
 4. Date and time of equipment inoperability
 5. Equipment identification number of principal components



5.10.5.b (Cont)

6. Name of equipment or system and the nature of malfunction or failure, if known
 7. Applicable Technical Specification paragraph
 8. Technical Specification surveillance tests which must be performed while equipment or system is NOT available
 9. Tests or inspections required before placing the equipment or system in service
 10. If applicable, Work Request number calling for corrective action
 11. Markup numbers and type
 12. Date Work Request completed and equipment is ready for service or declared operable
 13. Deviation Event Reports affecting operability
 14. Other data and format guidance may be specified by the General Supervisor Operations in separate instructions
- c. The SSS shall review the ESL before declaring any system/equipment operable
 - d. Upon return of equipment to normal or operable status, the entry may be removed from the log, subject to Step 5.10.5.b.3.
- 5.10.6 The Operator Aids Log is controlled in accordance with S-SUP-6, Control of Operator Aids.
- 5.10.7 The following controls are associated with the Markup, Work Request, and RWP files:
- a. The Markup File is maintained in or near the SSS office or Control Room.
 - b. The Markup File shall contain outstanding markups.
- 5.10.8 Operator Rounds Logs and plant log books are controlled in accordance with applicable Operations Branch procedures.



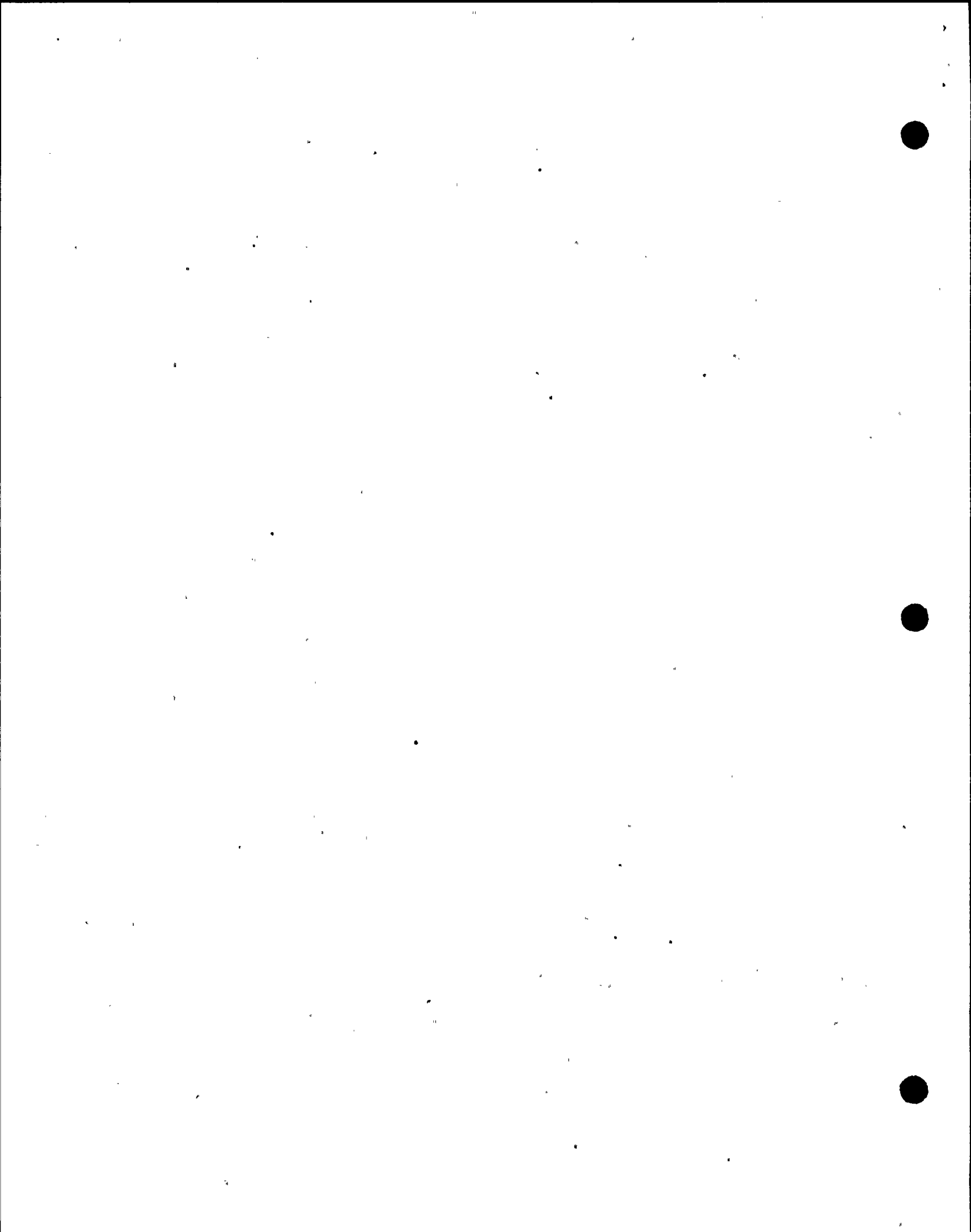
5.11 Control Room Documents

- 5.11.1 Only controlled copies of documents related to station operations may be used for operation.
- 5.11.2 The following documents are required for on-duty Operators, and should remain in the applicable Unit Control Room:
 - a. Station Administrative Procedures
 - b. Operating Procedures
 - c. Special Operating Procedures and/or Emergency Operating Procedures
 - d. Standing Orders
 - e. Station General Orders
 - f. Operation Department Instructions
 - g. Site Emergency Plan and Implementing Procedures
 - h. Radiation Protection Procedures
 - i. Operator performed Surveillance Procedures
 - j. Reactor Analysis/Engineering Procedures
 - k. Technical Specifications and Interpretations
 - l. P&I Drawings (Unit 1)
 - m. Flow Schematics (FSK), Logic Schematics (LSK), and P&I Drawings (Unit 2)
 - n. Selected Electrical Drawings
 - o. Other documents and drawings authorized by the SSS, or higher authority
 - p. Final Safety Analysis Report, FSAR "Updated" (Unit 1) or Updated Safety Analysis Report, USAR (Unit 2)
 - q. Core Operating Limits Report

5.12 Control Room Conduct

The following policies are established for Control Room conduct:

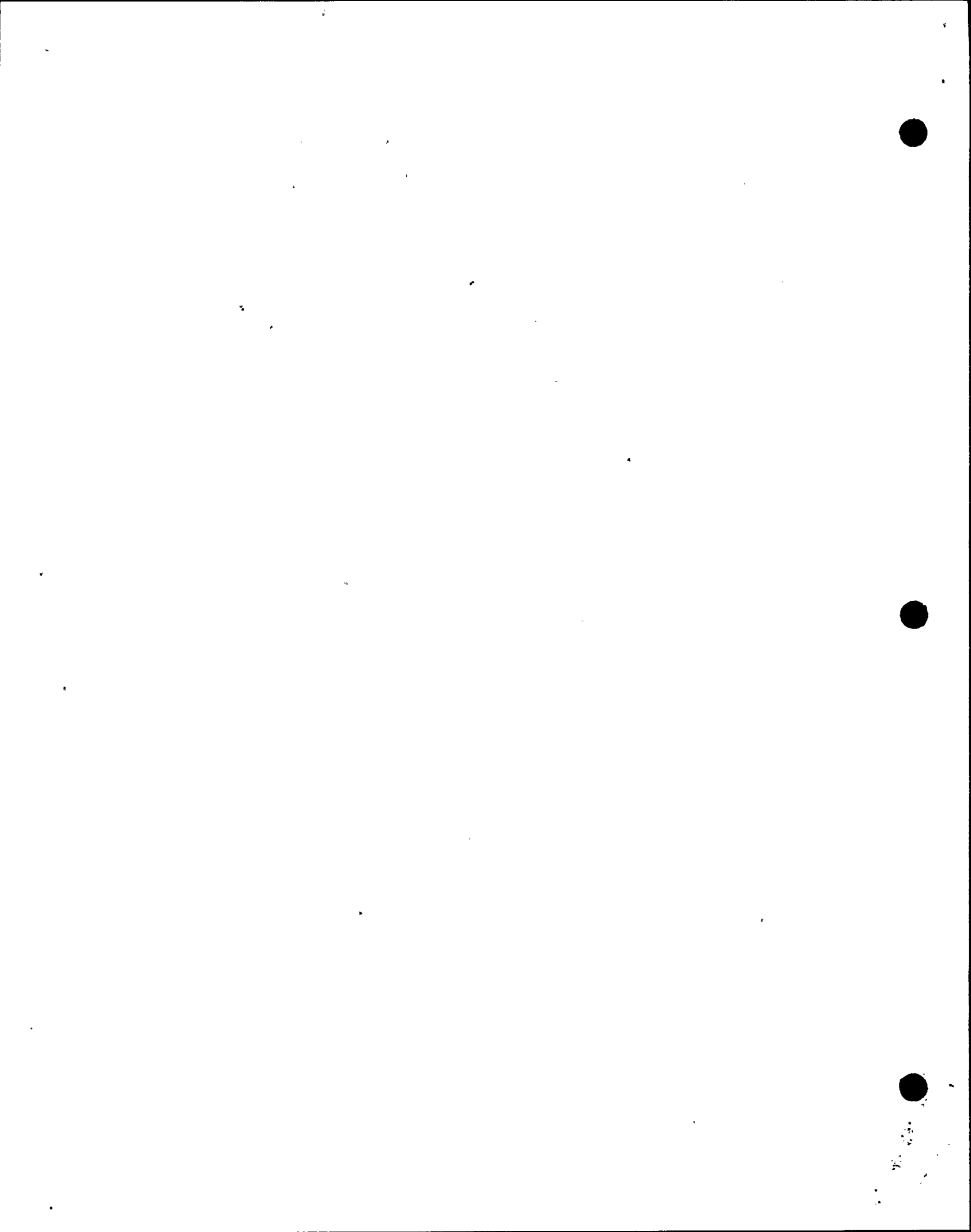
- 5.12.1 Potentially distracting activities are prohibited.
- 5.12.2 Access is limited to individuals on station business.



- 5.12.3 During the conduct of station related business, the Control Room operator shall remain attentive and maintain the professional atmosphere in the Control Room.
- 5.12.4 Access to control panels and stations are restricted to authorized shift personnel or as authorized by the SSS, ASSS, or CSO.
- 5.12.5 Foreign objects and materials NOT necessary for plant operations, maintenance, or testing should be restricted from control panels and stations.
- 5.12.6 The General Supervisor Operations, Supervisor Operations, SSS, ASSS, and CSO have the authority to restrict access to OR remove personnel from the Control Room.
- 5.12.7 Additional rules may be issued and posted by the General Supervisor Operations.

5.13 Off-Normal Responses

- 5.13.1 The Site Emergency Plan and Implementing Procedures designate specific actions to be taken in the event of an unplanned release, or potential release, of radioactivity from the site.
- 5.13.2 Operations during off-normal conditions shall proceed according to approved procedures. Refer to AP-2.0, Procedure Use and Control, for procedure adherence requirements during emergencies.
- 5.13.3 At the earliest convenience, the SSS or designee shall notify the Plant Manager, either directly or via the Manager Operations or General Supervisor Operations, of the following:
 - a. Unscheduled operational condition changes
 - b. Unexpected changes of more than 50 MWe in station output (transient)
 - c. Unplanned entries into Limiting Condition for Operation (LCO) action statements requiring a plant shutdown
 - d. Events requiring entry into the EOPs or Emergency Action Procedures (EAPs)
 - e. Events requiring NRC notification within 1 hour, 4 hours, or 30 days
 - f. Other events which, in the judgment of the SSS, should be brought to the attention of the Plant Manager.



- 5.13.4 The Plant Manager must grant permission for all unit startups and for those following unscheduled shutdowns, determine the acceptability of restart according to the following criteria:
- a. The station has been determined to be in a safe condition.
 - b. The cause of the shutdown has been determined and understood, OR SORC has reviewed the event and authorized restart.
 - c. The need for corrective action has been determined and appropriately implemented.
 - d. The expected automatic operation of the unit's safety-related systems have been verified.

5.14 Emergency Plan Operations

- 5.14.1 The five classes of events described in the Site Emergency Plan and Implementing Procedures which require a departure from normal station operation are:
- a. Unusual Event
 - b. Alert
 - c. Site Area Emergency
 - d. General Emergency
 - e. Operational Event

NOTE: An Operational Event is NOT categorized as an emergency but is subject to management review.

- 5.14.2 The events listed in Step 5.14.1, except an Operational Event, require notification and responses according to the Site Emergency Plan and Implementing Procedures.
- 5.14.3 In the event station conditions require the implementation of the Site Emergency Plan and Implementing Procedures, the SSS shall immediately assume the role of Nine Mile Point Nuclear Station Site Emergency Director until properly relieved.
- 5.14.4 For Unit 2, when the Site Emergency Plan is activated, the Shift Emergency Plan Coordinator (SEPC) shall report to the Control Room to assist the SSS with implementation of the Site Emergency Plan. The SEPC shall perform duties as specified in departmental instructions.



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5.14.5 When the Site Emergency Plan and Implementing Procedures are activated, the ASSS shall assume the role of Shift Technical Advisor (STA), and:

- a. Provide the SSS with an assessment of unit conditions and advise the SSS concerning actions to terminate or mitigate the consequences of the incident, as required.
- b. Perform NO other duties unrelated to assessment or diagnosis of the situation.

NOTE: A significant part of STA responsibility is ensuring the health and safety of the public is protected by appropriate automatic and manual response, as well as appropriate implementation of the emergency plan. However, this does not preclude the STA from assisting the SSS in reading the EOPs during severe transients when prompt actions in more than one EOP are concurrently required, as the EOPs by design require operators to maintain an overall perspective of plant status.

5.14.6 Emergency Response Facilities have been established in accordance with the Site Emergency Plan and Implementing Procedures. During Emergency Operations, advice and management directions may come from the Technical Support Center (TSC). However, station manipulations are directed from the applicable Unit Control Room only.

5.15 Associated Operations Activities
(NCTS 7)

- 5.15.1 When performing operating maneuvers, personnel shall use redundant or corroborating instrumentation if available. In the absence of such instrumentation, personnel shall rely upon existing instrument indications.
- 5.15.2 Unless operational or instrumented evidence exist showing that a system is not performing its intended function or that continued operation will prolong or produce an unsafe condition, personnel shall not override automatic engineered safety features.
- 5.15.3 Personnel shall NOT electrically or manually backseat a motor-operated valve, except for maintenance purposes or as a temporary measure until the plant is placed in a condition which allows maintenance on the valve.



- 5.15.4 Personnel shall NOT override or jumper electrical circuits to backseat a motor-operated valve unless evaluations of the following have been performed:
 - a. Effects of backseating on valve structural integrity
 - b. Valve operability in the backseated position
- 5.15.5 Motor-operated valves that have been backseated and were declared inoperable shall be demonstrated operable through an appropriate surveillance or Post-Maintenance Operability Test.
- 5.15.6 Personnel shall NOT manually seat a motor-operated valve, except for maintenance purposes or as a temporary measure until the plant is placed in a condition which allows maintenance on the valve.
- 5.15.7 When manually seating a motor-operated valve, open the motor operator breaker and apply a yellow hold-out tag, requiring the valve be manually backed off the seat before reclosing the motor operator breaker.
- 5.15.8 Motor-operated valves that have been manually seated and were declared inoperable shall be demonstrated operable through an appropriate surveillance or Post-Maintenance Operability Test.

6.0 RECORD REVIEW AND DISPOSITION

The following records are retained in accordance with AP-10.1, Management of Station Records:

None

