

HOPE CREEK GENERATING STATION

SA-AP.ZZ-002(Q)

STATION ORGANIZATION AND OPERATING PRACTICES

Remarks: This procedure applies to the Public Service Startup Group (PSSUG) as well as to Hope Creek Operations. No revisions to this procedure may be made without written concurrence of the Public Service Startup Manager.

This revision provides overall station management succession, defines minimum shift manning, further defines startup interface responsibilities, indicates changes in the station organization and position descriptions, and includes various other additions and changes to the procedure.

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SA-AP.ZZ-002(Q)

Rev. 1

STATION ORGANIZATION AND OPERATING PRACTICES

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STATION ORGANIZATION AND OPERATING PRACTICES

1.0 PURPOSE

This Administrative Procedure defines the station organization and operating practices. It also identifies general departmental responsibilities and identifies the shift management responsibilities for station operation. Station Quality Assurance, although not part of the station organization, is addressed to clarify responsibilities and indicate interdepartmental relationships.

2.0 REFERENCES

- 2.1 NUGEG-0660, May 1980, "NRC Action Plan Developed as a Result of the TMI-2 Accident."
- 2.2 NUREG-0737, November 1980, "Clarification of TMI Action Plan Requirements."
- 2.3 ANSI/ANS 3.1-1981, "Selection, Qualification and Training of Personnel for Nuclear Power Plants."
- 2.4 NCR Regulatory Guide 1.8, Rev. 2, "Personnel Qualification and Training."
- 2.5 PSE&G Corporate Safety and Security Manual.
- 2.6 HCGS Final Safety Analysis Report, Section 13.1, "Organization Structure."
- 2.7 SA-AP.ZZ-006(Q), "Incident Report and Reportable Occurrence Program."
- 2.8 SA-AP.ZZ-031(Q), "Station Housekeeping Program."
- 2.9 VPN-PLP-01, "Shift Management."
- 2.10 VPN-POP-02, "Nuclear Department Organization and Responsibilities."
- 2.11 Closing Documents.

- CD-087Y (FSAR 12.5.1.1)
- CD-091Y (FSAR 12.5.1.3)
- CD-093D (Generic Letter 82-12)
- CD-116Y (FSAR 13.1.2.2)
- CD-121Y (FSAR 13.1.2.3)
- CD-128D (Generic Letter 83-14)
- CD-142D (Generic Letter 83-28)
- CD-149A (IE Circular 80-02)
- CD-174A (IE Circular 81-02)

CD-200A (IE Information Notice 79-20)
CD-618X (FSAR 12.5.1.3)
CD-868B (Letter from Manager - Nuclear Licensing and
Regulation to General Manager - Hope Creek
Operations)

3.0 DEFINITIONS

3.1 Managers - Individuals at the functional level of manager are those who are assigned broad responsibilities for direction of major aspects of a nuclear power plant. This functional level includes:

3.1.1 General Manager

3.1.2 Assistant General Manager

3.1.3 Operations Manager

3.1.4 Technical Manager

3.1.5 Maintenance Manager

3.1.6 Radiation Protection Manager

3.2 Professional-Technical - Personnel responsible for supervising and performing certain technical services in support of station operations. Examples are those responsible for reactor engineering, instrumentation and control, radiation protection, and chemistry.

3.3 Supervisors - Persons principally responsible for directing the actions of operators, technicians, or maintenance personnel. Those positions usually designated as intermediate and first line supervisors are included in this category.

3.4 Licensed Operators - Any individual maintaining a Reactor Operator's or Senior Reactor Operator's License for Hope Creek Generating Station (HCGS).

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3.5 Key Maintenance Personnel - Any member of the Technical or Maintenance Department actually engaged in F or Q-listed work except for those bargaining unit personnel at the entry level classification.

4.0 RESPONSIBILITIES

Managers and supervisors should frequently inspect the station to observe operations and station conditions and to identify deficiencies, out-of-specification conditions, and lack of procedural compliance.

4.1 General Manager - Has overall responsibility for ensuring safe and reliable operation of the HCGS and reports to the Vice President - Nuclear. His functions include, but are not limited to, general administration, liaison activities with regulatory and other agencies, reviewing and implementing programs and procedures, and acting on matters pertaining to PSE&G policies and practices.

4.2 Assistant General Manager - Assists the General Manager in ensuring safe and reliable operation of the HCGS. He reports to the General Manager and acts in his behalf when he is absent. In addition, he directs the planning and execution of various station activities, provides necessary station management interface, and chairs the SORC.

4.3 Department Managers - Direct and control the activities within their various departments and work closely with all other department managers to ensure that the various station activities are performed safely and reliably. All report to the Assistant General Manager.

4.4 Department Personnel - Provide the disciplines necessary for the safe and efficient operation of the department functions. Refer to Section 5.0.

4.5 Succession of Responsibility for Station Operation

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4.5.1 Overall station management shall be the responsibility of the General Manager - Hope Creek Operations. In the event of an unexpected contingency, the succession of authority and responsibility for the overall operation is in the following order:

4.5.1.1 Assistant General Manager

4.5.1.2 Technical Manager

4.5.1.3 Operations Manager

- 4.5.2 The succession of responsibility and authority for safe and reliable station operation is specified in Attachment 1, Shift Management Responsibility for Station Operation. This Attachment is a reproduction of a letter from the Vice President - Nuclear that states the Company policy on this subject.
- 4.5.3 Taking the Reactor Critical - Approval for taking the reactor critical shall be granted by the General Manager only after recommendations have been made by the SORC. The Assistant General Manager may grant the necessary approval for taking the reactor critical in the absence of the General Manager but again only after recommendations have been made by the SORC.
- 4.5.4 Post Trip Review - A post trip review shall be conducted after every reactor trip or safety injection.
 - 4.5.4.1 Senior Nuclear Shift Supervisor - Investigates and evaluates the cause of the trip and notifies the Operations Manager of the findings.
 - 4.5.4.2 Operations Manager - Reviews the findings with the SNSS and presents them to the SORC.
 - 4.5.4.3 SORC - Reviews the results of the investigation and makes recommendations to the General Manager.
 - 4.5.4.4 General Manager - After satisfactory completion of SORC recommendations, may either grant or deny approval for reactor startup.

4.6 Senior Nuclear Shift Supervisor (SNSS) - The responsibilities of the SNSS, as cited in Attachment 1, are further defined below. He shall:

- 4.6.1 Ensure operation in accordance with HCGS Technical Specifications.

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- 4.6.2 Notify the appropriate management personnel and the appropriate agencies in accordance with the Emergency Plan and SA-AP.ZZ-006(Q).
- 4.6.3 In an emergency:
 - 4.6.3.1 Direct personnel to take the necessary action to minimize personnel injury and damage to the facility and to protect the health and safety of the general public.
 - 4.6.3.2 Call out additional personnel as required to ensure safe operation of the station.
 - 4.6.3.3 Control access of the control room as he deems necessary. Specific areas shall have limited access at all times as discussed in paragraph 5.7.1.

5.0 PROCEDURE

5.1 Station Organization

- 5.1.1 The Vice President - Nuclear has issued a Policy Statement concerning nuclear plant operations. It states:

"The safety of the reactor core and the necessity to ensure that adequate cooling is provided under all circumstances shall transcend any other operating considerations with which operating personnel would normally deal. Because breaching of the reactor coolant boundary carries the potential for the release of radioactivity which could endanger the health and safety of the general public, the protection of the reactor core is dominant over all other considerations including, but not limited to, the reliability of the supply of electric energy and the protection of equipment in the generation and transmission systems."

5.1.2 In fulfillment of this charter, the Hope Creek Generating Station (HCGS) is organized into four departments (Operations, Maintenance, Technical, and Radiation Protection) plus an Administrative Staff. The Department Heads report to the Assistant General Manager - Hope Creek Operations who is responsible for station activities, including operation and onsite technical support for the station. The Office Administrator and the Assistant General Manager report to the General Manager - Hope Creek Operations. The General Manager - Hope Creek Operations has the overall responsibility for ensuring safe and reliable operations of the HCGS and reports to the Vice President - Nuclear.

5.1.3 The departments and positions that comprise the HCGS organization are shown in Attachment 2. The various positions shown in attachment 2 are discussed in the Position Descriptions (Attachment 3). These descriptions list the position title, the next higher level of management to which the position reports, the responsibilities of the position and the appropriate reference to ANSI/ANS 3.1-1981 which defines the minimum qualifications for the position.

5.2 Departmental Responsibilities

5.2.1. Operations Department

5.2.1.1 The Operations Department, under the direction of the Operations Manager, operates the station nuclear unit in compliance with the facility license and regulations, approved programs and procedures, and Company policy to ensure that public health and safety are met.

5.2.1.2 The Operations Department ensures that these operations are conducted safely and efficiently by properly trained and qualified personnel. Refueling operations are performed under the cognizance of the Operations Department, with assistance from the Maintenance Department, the Technical Department, and other support personnel are required.

5.2.1.3 All system valves and controls shall be operated by Operations Department personnel only. Those valves under the jurisdiction of the Technical Department, which include instrument valves, valves associated with the Condensate Polishing System, Demineralized Water System, Sampling System, etc., may be operated by both the Operations Department and the Technical Department. These valves are delineated in Technical Department procedures.

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5.2.1.4 Licensed operators may take reasonable action that departs from a license condition or technical specification in an emergency when this action is immediately needed to protect the public health and safety.

5.2.1.5 This department comprises the positions shown in the Organization Chart (Attachment 2). The responsibilities assigned to these positions are outlined in the selected Position Descriptions (Attachment 3) that pertain to the Operations Department.

5.2.2 Maintenance Department

5.2.2.1 The Maintenance Department, under the direction of the Maintenance Manager, performs inspection, testing, maintenance, and repair of station electrical and mechanical equipment in accordance with approved procedures and requirements of the facility license and regulations, and Company policy.

5.2.2.2 The Maintenance Department plans and performs maintenance activities safely and efficiently during station operation and outages to achieve maximum unit availability and reliability, and evaluates and recommends improved methods, materials, and equipment for station maintenance.

NOTE 5.2.2.2

Some outage and maintenance work may be done by the Outage Planning and Site Maintenance Groups in the Nuclear Services Department.

5.2.2.3 A Maintenance Planning Group, reporting to the Maintenance Manager, plans and coordinates all outage and in-operation maintenance activities at the station.

5.2.2.4 This department comprises the positions shown in the Organization Chart (Attachment 2). The responsibilities assigned to these positions are outlined in the selected Position Descriptions (Attachment 3) that pertain to the Maintenance Department.

5.2.3 Technical Department

5.2.3.1 The Technical Department, under the direction of the Technical Manager, provides technical assistance to the Operations, Maintenance, and Radiation Protection Departments.

5.2.3.2 This technical assistance includes the inspection, calibration, maintenance, and repair or station instrumentation and control equipment and station computers in accordance with approved procedures and the requirements of the facility license and regulations, and Company policy.

Additionally, the department conducts unit and equipment performance testing; chemical, radiochemical, and environmental monitoring including releases of liquid radioactive material; analysis and activities associated with operating demineralized water, radioactive and nonradioactive systems, and water treatment; and reactor core surveillance, reactor testing and analysis, fuel burnup and reactivity calculations. The department also is responsible for the preparation of various reports, technical document control, licensing and audit responses, and coordinating operating experience reviews.

- 5.2.3.3 This department comprises the positions shown in the Organization Chart (Attachment 2). The responsibilities assigned to these positions are outlined in the selected Position Descriptions (Attachment 3) that pertain to the Technical Department.

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5.2.4 Radiation Protection Department

- 5.2.4.1 The Radiation Protection Department, under the direction of the Radiation Protection Manager, develops, implements, and directs the ALARA, radiological safety, and radioactive material control programs.
- 5.2.4.2 These programs ensure that radiation exposure of personnel, and releases of radioactive material to the environment, are as low as reasonably achievable (ALARA). The department also performs personnel radiation monitoring and dosimetry.
- 5.2.4.3 This department comprises the positions shown in the Organization Chart (Attachment 2). The responsibilities assigned to these positions are outlined in the selected Position Descriptions (Attachment 3) that pertain to the Radiation Protection Department.

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5.2.5 Station Administrative Staff

5.2.5.1 The administrative staff reports to the General Manager - Hope Creek Operations and is responsible for word processing, office supplies, payroll, timekeeping, mail handling, and other administrative and office services required for effective functioning and support of the station management staff.

5.2.5.2 The administrative staff comprises the following personnel:

- a. General Manager's Executive Secretary
- b. Office Administrator
 - 1. Office Staff Assistant
 - 2. Clerical Staff to support the other station department managers

5.3 Station Quality Assurance Engineer Responsibilities

5.3.1 The Station Quality Assurance Engineer (SQAE) administers the Operational Quality Assurance Program through inspection, surveillance, and selected station document review in compliance with the Corporate QA Manual.

5.3.2 The SQAE has the authority to stop work where continuance of an activity would severely compromise safety or constitute a persistent and deliberate failure to correct a serious deficiency in spite of repeated documented notices. The SQAE reports directly to the General Manager - Nuclear Quality Assurance who reports to the Vice President - Nuclear and thus is independent of the station organization. He keeps the General Manager - Hope Creek Operations informed with regard to quality matters. The responsibilities of the SQAE include but are not limited to:

- 5.3.2.1 Conducting inspection and surveillance of station activities in accordance with applicable Quality Assurance Instructions (QAIs).
- 5.3.2.2 Participating in Quality Assurance Department (QAD) audits of station activities as requested by the QAD Programs and Audits Division.
- 5.3.2.3 Reviewing and approving procedures and instructions prepared by station departments to ensure that the quality assurance measures are adequate, that inspection hold points are included, where required, and determining that necessary changes are made to such procedures or instructions when required.
- 5.3.2.4 Reviewing nonconformances at the station, ensuring they are documented, and following up on the corrective measures required to remedy the nonconformance.
- 5.3.2.5 Advising station personnel on quality matters, as requested.

5.4 Station Switchyard Responsibilities

Operation of the station 13-kv switchgear is the responsibility of the Operations Department. However, maintenance is divided between the Electric Transmission and Distribution Department (T&D) and HCGS.

5.5 Overtime Guidelines

- 5.5.1 The following guidelines shall apply for all licensed operators, Equipment Operators, Radiation Protection Technicians, and Key Maintenance Personnel. However, these overtime restrictions may be waived by the department manager in the event of an emergency condition.

- 5.5.1.1 An individual should not be permitted to work more than 16 hours straight (excluding shift turnover time).

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- 5.5.1.2 An individual should not be permitted to work more than 16 hours in any 24 hour period, nor more than 24 hours in any 48 hour period, nor more than 72 hours in any seven day period (all excluding shift turnover time).
- 5.5.1.3 A break of at least eight hours should be allowed between work periods (including shift turnover time).
- 5.5.1.4 Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on shift.
- 5.5.2 Authorization for deviation from the above guidelines shall be obtained in writing and approved by the appropriate department manager. In his absence, the Assistant General Manager may approve these requests. All requests for deviations to these guidelines shall be retained by the department manager.

5.6 Station Safety

- 5.6.1 The safe conduct of operations and the personal safety of all individuals are a primary concern of the HCGS. The responsibility to see that safe practices are observed and that appropriate action is taken belongs to all personnel.
- 5.6.2 All personnel shall:
- 5.6.2.1 Implement the good housekeeping practices cited in SA-AP.ZZ-031(O).
 - 5.6.2.2 Attend safety meetings.
 - 5.6.2.3 Report any observed dangerous or improper condition or operation.
 - 5.6.2.4 Observe all safety rules and regulations.
- 5.6.3 Supervisors and Department Heads shall:

- 5.6.3.1 Ensure enforcement of all safety rules and regulations.
- 5.6.3.2 Make certain work is properly planned and performed safely.
- 5.6.3.3 Make certain only qualified personnel perform work.
- 5.6.3.4 Make every effort to see that safe conditions exist before beginning a job.
- 5.6.3.5 Take immediate action to correct any violation to safety rules.

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5.7 Control Room Restrictions

- 5.7.1 Plant related technical or administrative business and personal business should not be discussed where the Nuclear Control Operator's attentiveness or the professional atmosphere will be compromised. If discussions are necessary within the Control Room Complex, they should be outside the area designated "at the controls", preferably in the Shift Supervisor's area (Attachment 4).
- 5.7.2 Any non-shift personnel must gain permission from an on-shift licensed operator prior to entering the area designated "at the controls" on Attachment 4.

5.8 Delegation of Authority

The authority to perform functions not delineated in an individual's position may be delegated to that individual by his next higher immediate level of management provided that the delegating individual is authorized to perform said functions. This delegation of authority may also transcend beyond one level of management should the immediate higher management level not be onsite or otherwise indisposed. Such delegation of authority shall be stipulated in writing by the individual delegating the authority.

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5.9 NRC Enforcement Policy

5.9.1 NRC issued operator licenses may be revoked, suspended, or modified for failure to observe any terms or conditions of any rule, regulation, or order of the Commission, or any conduct determined to be a hazard to safe operation of the facility.

5.9.2 To ensure that HCGS is in compliance with these NRC requirements, the following actions are enforced:

5.9.2.1 Only licensed operators are permitted to manipulate the controls that directly affect reactivity [10CFR50.54(i)].

5.9.2.2 Licensed operators are required to be present at the controls at all times during the operation of the facility [10CFR50.54(k)].

5.9.2.3 Apparatus and mechanisms other than controls, the operation of which may affect the reactivity or power level of a reactor, shall be manipulated only with the knowledge and consent of an operator licensed in accordance with Part 55 [10CFR50.54(j)] present at the controls.

5.9.2.4 Licensed senior operators are required to be present at the facility during specified conditions, and available or on call at other times during operation [10CFR50.54(m)].

5.9.2.5 The NRC licensed individual shall observe all applicable rules, regulations and orders of the Commission, whether or not stated in the license [10CFR55.31(d)].

5.10 Startup Interface During Phase II Testing

- 5.10.1 During Phase II Testing, Department Managers and Engineers shall ensure that their department programs support the startup schedule in terms of procedures, spare parts, and manpower required to operate and maintain the equipment.

A startup interface function is also provided by the formation of a startup coordination group composed of representatives from various departments within Hope Creek Operations as shown in Attachment 5. The principal responsibility of this group is to ensure the proper coordination and direction of departmental efforts to meet the startup schedule.

- 5.10.2 During the construction turnover (Bechtel to PSE&G) of a system, the primary interface functions are as follows:

5.10.2.1 General Manager/Assistant General Manager - Provides general overall direction of station support for the startup program.

5.10.2.2 Operating Engineer (Line) - Provides direct interface in terms of coordination, direction, and scheduling requirements between Hope Creek Operations and the Public Service Startup Group (PSSUG). During the Phase II Testing period, he is functionally designated as the Operations/Startup Coordinator. His duties include:

- a. Providing direct communication with the Principal Test Engineer - Testing (PSSUG), the Integrated Testing Coordinator (PSSUG), and the Hope Creek Operations Department Heads to ensure effective utilization of supervisor's and bargaining unit personnel.

- b. Ensuring the station job priorities are consistent with the startup schedule.
- c. Providing direction to ensure that departmental activities are properly coordinated.
- d. Providing final review of component/system turnover (C/ST) packages to ensure that station concerns have been identified and addressed, exceptions are operationally appropriate, and that the packages have had departmental review.
- e. Identifying issues that affect the startup schedule which need higher level management attention.

5.10.2.3 Department Startup Coordinator - Provides departmental interface with the PSSUG to ensure that departmental efforts meet the startup schedule. This function is assigned to a named individual within each department. His duties include:

- a. Participating in component/system walkdowns. Prior to a formal construction walkdown, performs system review and walkdown to ensure an understanding of system scope and identification of potential concerns.
- b. Providing feedback/direction to ensure that procedures, programs, and spare parts effort are in support of the startup schedule.
- c. Providing direct communication with System Test Engineers to ensure productive utilization of manpower and resolution of conflicts.

- d. Assisting in performance and coordination of maintainability/accessibility evaluations based on normal and emergency activities that may be performed by department personnel.
- e. Performing reviews and providing departmental comments on C/ST packages. Represents the department at C/ST comment review meetings.
- f. Identifying comments and concerns to the Department Head including issues that have the potential to effect the startup schedule.

5.10.3 Following completion of the preoperational testing on a component/system, the interface duties and responsibilities are as follows:

5.10.3.1 General Manager/Assistant General Manager - Ensures that station programs are established to support the operation, maintenance, and/or long term storage of released from test status systems. Formally accepts the tested component/system from the Startup Manager. Ensures that appropriate QA and administrative control programs are in place and that station personnel are aware of, and trained to implement, these programs.

5.10.3.2 Startup Manager - Prepares the system proposed released from test status package and transmits the formal notification to the General Manager/Assistant General Manager for acceptance. The package shall be received by the General Manager two weeks prior to the scheduled release from test of the system. A comment resolution meeting shall be scheduled eight days after transmittal of the package. The system released from test status package shall include:

NOTE 5.10.3.2

The system released from the test status package does not necessarily have to include the documents cited herein. However, these documents must be made available to Hope Creek Operations so that system integrity can be attested to.

- a. Index of contents including page numbers.
- b. A complete listing and adequate description of all open and completed Startup Deviation Reports (SDRs) associated with the system.

NOTE 5.10.3.2, b

The Startup Manager shall retain responsibility for the tracking and closure of SDRs and shall provide to Hope Creek Operations a monthly status report (sorted by system code) for those systems under the operational control of the station.

- c. A completed copy of the Preoperational Test Procedure (PTP), verification of the successful completion of the Preoperational Tests, and acceptance of the PTP reports by the Preoperational Test Review Committee (PORC) as required.
- d. All design changes, open and closed, on the turnover system (SCR, DCN, FCR, FCN, ECN, FDI, FDDR).
- e. All TPR exception lists.
- f. All completed ICD cards.

- g. All engineering approved scaling calculations sheets.
- h. List of special tools unique to the system to be turned over to Hope Creek Operations.
- i. Computerized printout of the items to be turned over as part of this subsystem.
 - 1. EE-580
 - 2. Instrument index
 - 3. Equipment index
 - 4. Valve index
- j. Controlled drawings (P&ID, logic diagrams, etc. of turned over components/systems).
- k. Scoped drawings showing boundary of system for release from test status.
 - 1. Correspondence (Bechtel, vendor, etc.) that is important to system operations and maintenance.
- m. Notification of any abnormal system operational conditions due to related test activities.
- n. Special instructions or engineering directions required for system layup or storage.
- o. List of all temporary modifications presently in effect on the system (jumpers, lifted leads, valves, spool pieces, blind flanges, air supplies, water supplies, electrical supplies, and motors).

5.10.3.3 Operations/Startup Coordinator - Reviews the system released from test status package for completeness, distributes copies for departmental review, and submits the original package to the TDR for retention. He shall coordinate and send comments to the PSSUG five days after receiving the package. In performing these functions, he shall:

- a. Aid in the resolution of major problem areas between Hope Creek Operations and the PSSUG.
- b. Receive the departmental review of the package along with the completed system readiness review forms. Presents the package and the readiness review forms to the SORC for review, comment, and acceptance 12 days after receipt of the released from test status package.

NOTE 5.10.3.3.b

The cognizant System Test Engineer or Startup Engineer, along with the cognizant Site Engineer, should be present when SORC convenes to assist, as necessary, when the package is presented.

- c. Following SORC acceptance, forwards the readiness review forms with the original package to the TDR.

5.10.3.4 Department Managers/Department Engineers - Provide complete review of the system package in accordance with the applicable System Readiness Review Forms shown in Attachments 6 through 9. Each department shall declare its readiness to accept the system for Hope Creek Operations by the Manager's signature on the released from test status acceptance form.

5.10.3.5 Departmental Startup Coordinator - Provides the interface and coordination necessary to resolve departmental problems associated with the review of the system released from test status package.

- a. Provides departmental tracking of SDRs via monthly status reports.
- b. Ensures that followup action is accomplished via procedure changes, notification of operating personnel, etc.

5.10.4 Immediately prior to system acceptance by the General Manager, the following shall be performed:

5.10.4.1 All items on the turnover punch list are resolved to the satisfaction of Hope Creek Operations.

5.10.4.2 The computerized ICD card data base has been updated to include all system instrument required data and accuracy.

5.10.4.3 Control of the computer system ICD card data base has been transferred to Hope Creek Operations (I&C Group).

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5.11 Minimum Shift Manning

5.11.1 The minimum complement of personnel required for each shift is based on four shifts working 8-hours each on a 6-days on/2-days off schedule, with a fifth shift scheduled for training or requalification of the Operations Department personnel. The minimum complement of personnel is cited in the Technical Specifications.

5.11.2 The normal shift complement for various operational modes is as follows:

<u>Position</u>	<u>Normal Complement</u>
Senior Nuclear Shift Supervisor (SRO)	1
Nuclear Shift Supervisor (SRO) (NSS or STA/SRO)	1
Shift Support Supervisor (SSS)/Site Fire Brigade Coordinator	1
Nuclear Control Operator (RO)	2
Equipment Operators	4
Shift Electrician	1
Shift I&C Technician	1
Radiation Protection Technician	1
Chemistry Technician	1

5.11.3 The administrative control of shift manning shall include the following adjunct requirements:

- 5.11.3.1 A licensed senior reactor operator shall be in the main control room area at all times when the unit is in Mode 1, 2, or 3.
- 5.11.3.2 A licensed reactor operator shall be in the main control room at all times whenever there is fuel in the reactor.
- 5.11.3.3 The licensed senior reactor operator assigned to supervise core alterations in Mode 5 may have no concurrent operational duties.
- 5.11.3.4 If the NSS position is not filled by an STA/SRO, a qualified shift technical advisor is required.

5.11.3.5 In addition to the radiation protection technician required to be on shift whenever there is fuel in the reactor, all shift personnel shall be trained in basic radiation protection.

5.11.3.6 Shift hours shall be administratively controlled to ensure compliance with current NRC policy.

5.11.3.7 An electrician, I&C technician, and chemistry technician shall be required on all shifts and in all modes of operation.

5.12 NRC Interface

Hope Creek Operations maintains constant communications with the NRC. This close contact is maintained between the Assistant General Manager and the NRC Resident Inspector. There may also be communications between other individuals and the NRC Resident Inspector. Exchanges of information are encouraged. Should information be requested that is not available or is not known to an individual, such requests should be escalated to the next level of management.

**ATTACHMENT 1
SHIFT MANAGEMENT RESPONSIBILITY
FOR STATION OPERATION**



Public Service Electric and Gas Company P.O. Box 236 Hancocks Bridge, NJ 08038 609 339-4800

Richard A. Uderitz Vice President - Nuclear

September 28, 1983

To the General Manager - Salem Operations
Hope Creek Operations

SHIFT MANAGEMENT RESPONSIBILITY FOR STATION OPERATION

The need for all personnel to have, at all times, a clear understanding of who is in charge of station operation is an obvious necessity for safe and reliable operation. The purpose of this letter is to emphasize that the primary management responsibility for safe operation of the station rests with the Senior Nuclear Shift Supervisor under all conditions during his watch; and to reiterate and clarify this assignment of responsibility so that Nuclear Shift Supervisors, Nuclear Shift Supervisors-Engineers, Nuclear Shift Technical Advisors, Nuclear Control Operators, as well as other members of the shift organization, are not confused by instructions, orders and questions being given to them by various members of plant supervision.

The Senior Nuclear Shift Supervisor is in charge of his shift. All operating duties and responsibilities for operation of the units are his overall responsibility. He maintains an overview of the unit's status and condition, makes decisions, and directs operations by giving specific directions and responsibilities to his shift personnel. All personnel must have a clear understanding that the Senior Nuclear Shift Supervisor is in charge and responsible for all station operations while he is on duty.

This does not preclude the Operating Engineer, Operations Manager, Assistant to General Manager - Salem/Hope Creek Operations or the General Manager - Salem/Hope Creek Operations from giving instructions, directions, or orders; but such directives shall be issued through the Senior Nuclear Shift Supervisor. He, in turn, is responsible for giving instructions and orders to the Nuclear Shift Supervisor, Nuclear Shift Supervisors-Engineers, Nuclear Control Operators, or any other operator on duty. It does not preclude department heads making precautionary comments to the Nuclear Control Operators about the condition of the unit, such as "watch the low level in the pressurizer or steam generators" or "the temperature is getting too high". All specific instructions involving operating orders, such as "remove No. 11 Feed Pump" or "drop the load 30 megawatts" must, however, come from Operating Department management through the Senior Nuclear Shift Supervisor as described above.

ATTACHMENT 1 (cont'd)

Memo

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The Nuclear Shift Supervisor or Nuclear Shift Supervisor-Engineer is an extension of the authority and responsibility of the Senior Nuclear Shift Supervisor. The Nuclear Shift Supervisor or Nuclear Shift Supervisor-Engineer maintains an overview of the unit's status and condition. In the areas of operation to which he is assigned, he is given the authority and responsibility to make decisions and direct operations by giving specific direction and responsibility to the shift personnel. All operating personnel are subject to the orders, direction and instruction of the Nuclear Shift Supervisor or Nuclear Shift Supervisor-Engineer as though he were the Senior Nuclear Shift Supervisor. He coordinates the operation activities of the shift personnel with the Senior Nuclear Shift Supervisor to avoid conflict of action and to assure that all operations are performed according to the orders, direction, and instructions of the Senior Nuclear Shift Supervisor.

The Nuclear Control Operator is responsible for the direct control and operation of his assigned unit as indicated in the existing job specifications. This often involves giving instructions, orders, and communicating with Equipment Operators and Utility Operators. For those units which have a "desk" operator and "board" operator signed, the "board" operator is responsible for all Control Room directions, orders, and manipulations in the absence of the Senior Nuclear Shift Supervisor, Nuclear Shift Supervisor or Nuclear Shift Supervisor-Engineer.

If under unique or emergency situations, senior licensed station management determine it necessary to give orders directly to Nuclear Control Operators, they must immediately inform the Senior Nuclear Shift Supervisor and all Control Room personnel that they have assumed responsibility for the unit. When responsibility is returned to the Senior Nuclear Shift Supervisor, all shift personnel shall again be informed. The times of both actions shall be noted in the Senior Nuclear Shift Supervisor's Log.

Whenever two Senior Nuclear Shift Supervisors are present, the one that is "on duty" is in charge and responsible for the overall station operation. He may assign the other Senior Nuclear Shift Supervisor responsibility for a specific operation. Care should be taken to ensure that all shift personnel know who is responsible for specific operations at all times.

The Senior Nuclear Shift Supervisor, Nuclear Shift Supervisors, and Nuclear Shift Supervisors-Engineers must remain free to survey and analyze all operating parameters. Intense involvement in any particular detail may run the risk of losing control and perspective of the overall operation. Hence, a supervisor who is compelled to "jump in" to prevent a misoperation or mitigate an unusual occurrence must quickly back away to survey all operating parameters so that he never loses sight of the entire operation.

ATTACHMENT 1 (cont'd)

Memo

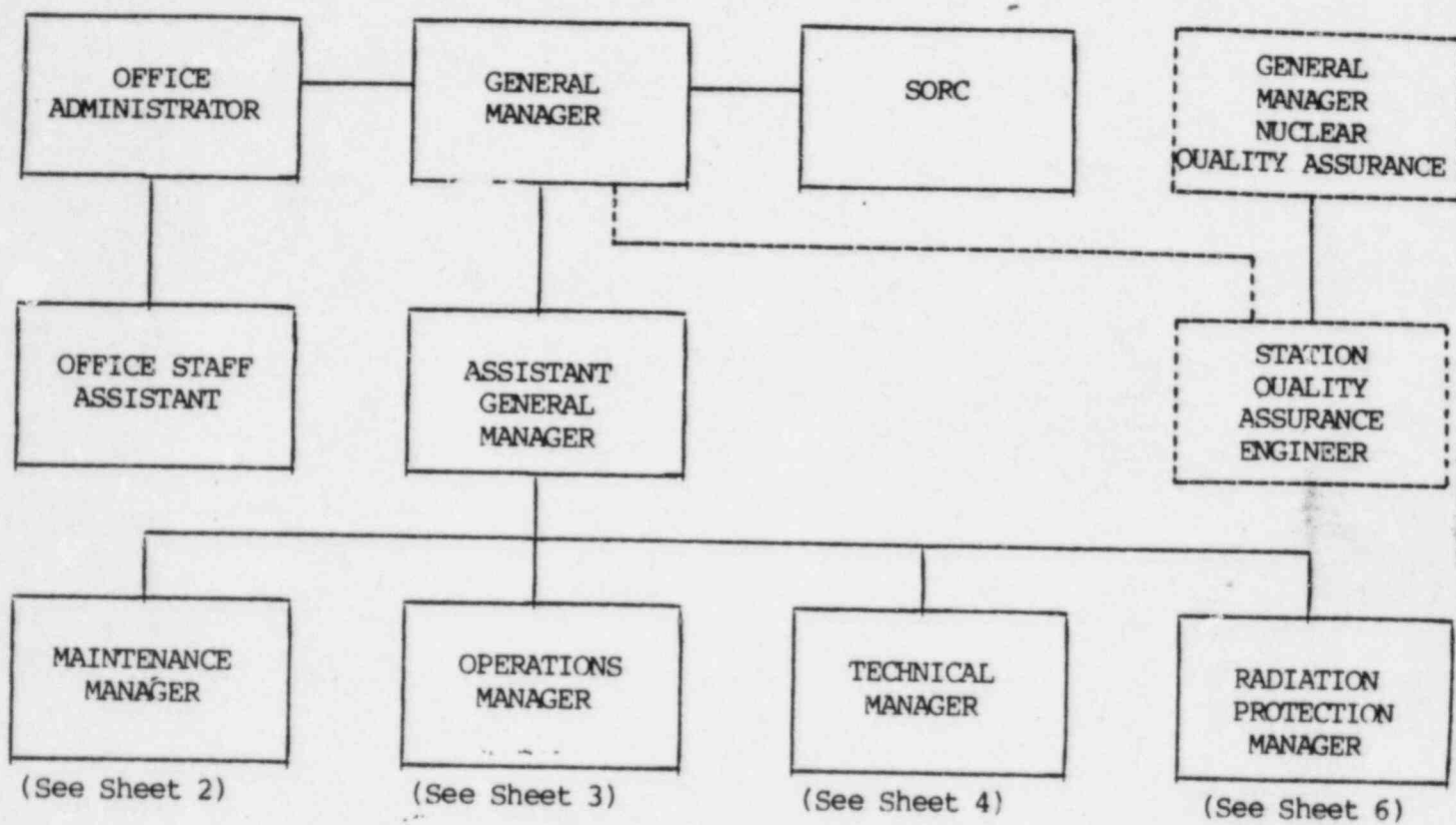
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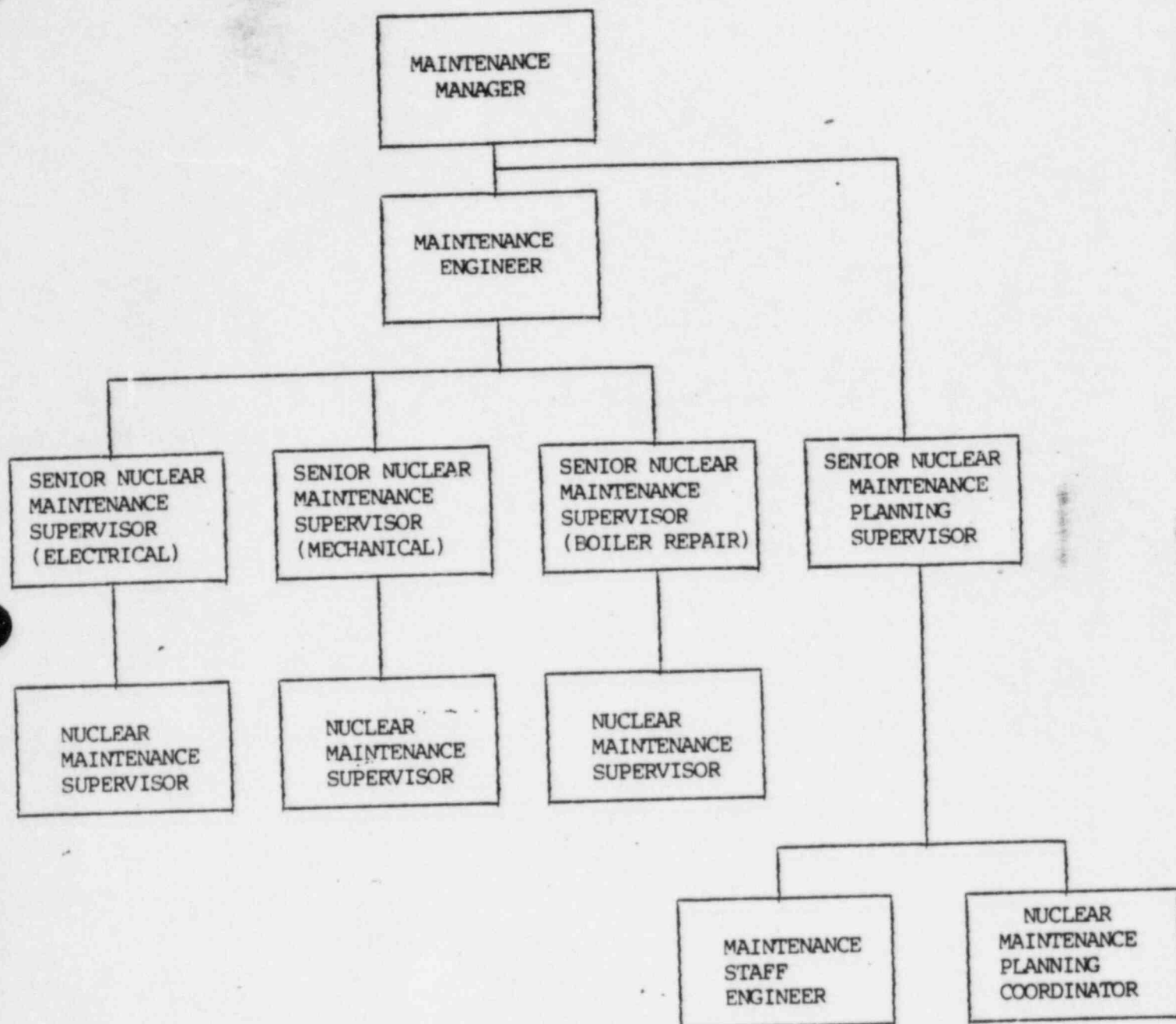
Above all, only one person can be in charge and it must be clearly understood who that person is. To do otherwise will only create confusion and jeopardize the operation of the station.



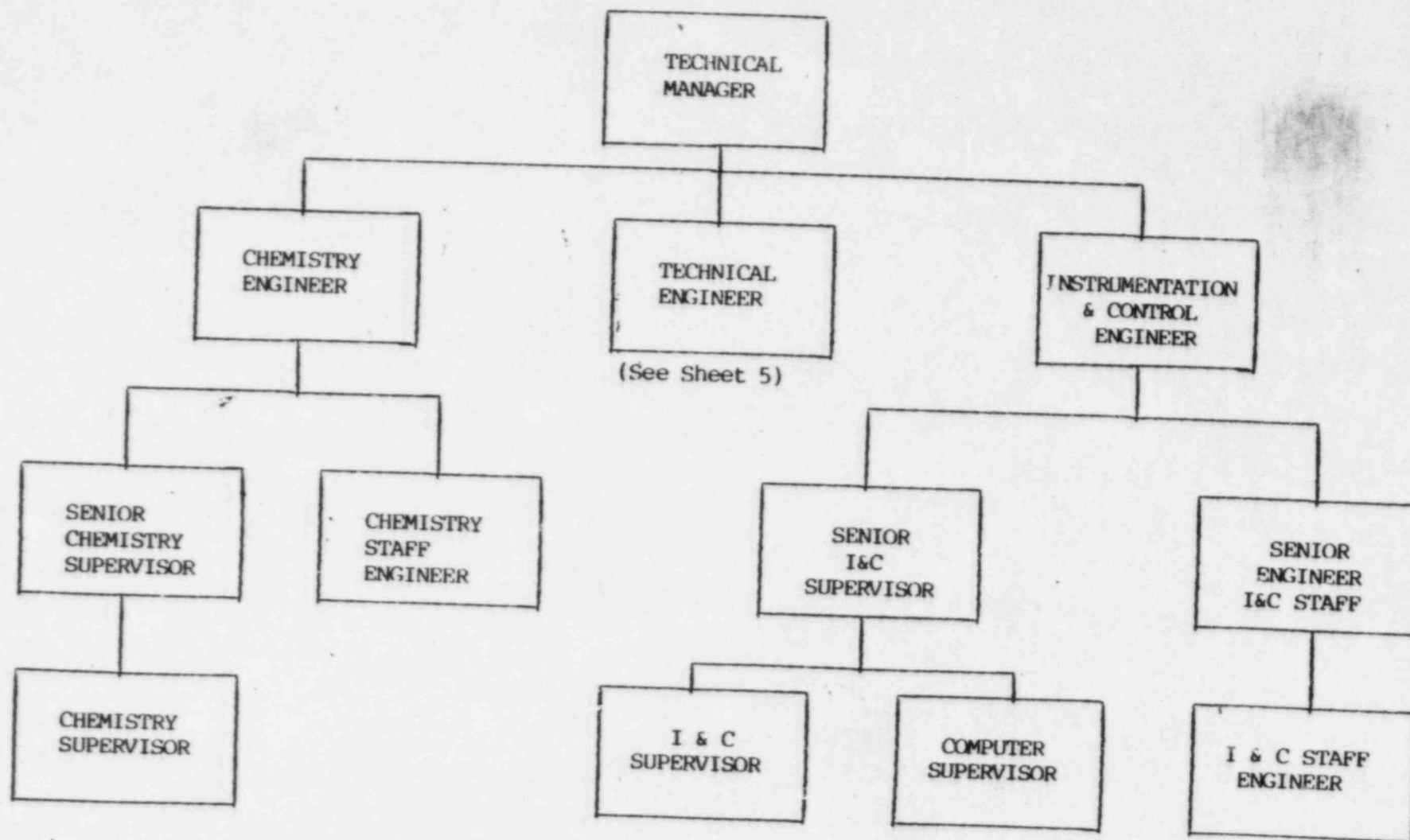
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ATTACHMENT 2
STATION ORGANIZATION

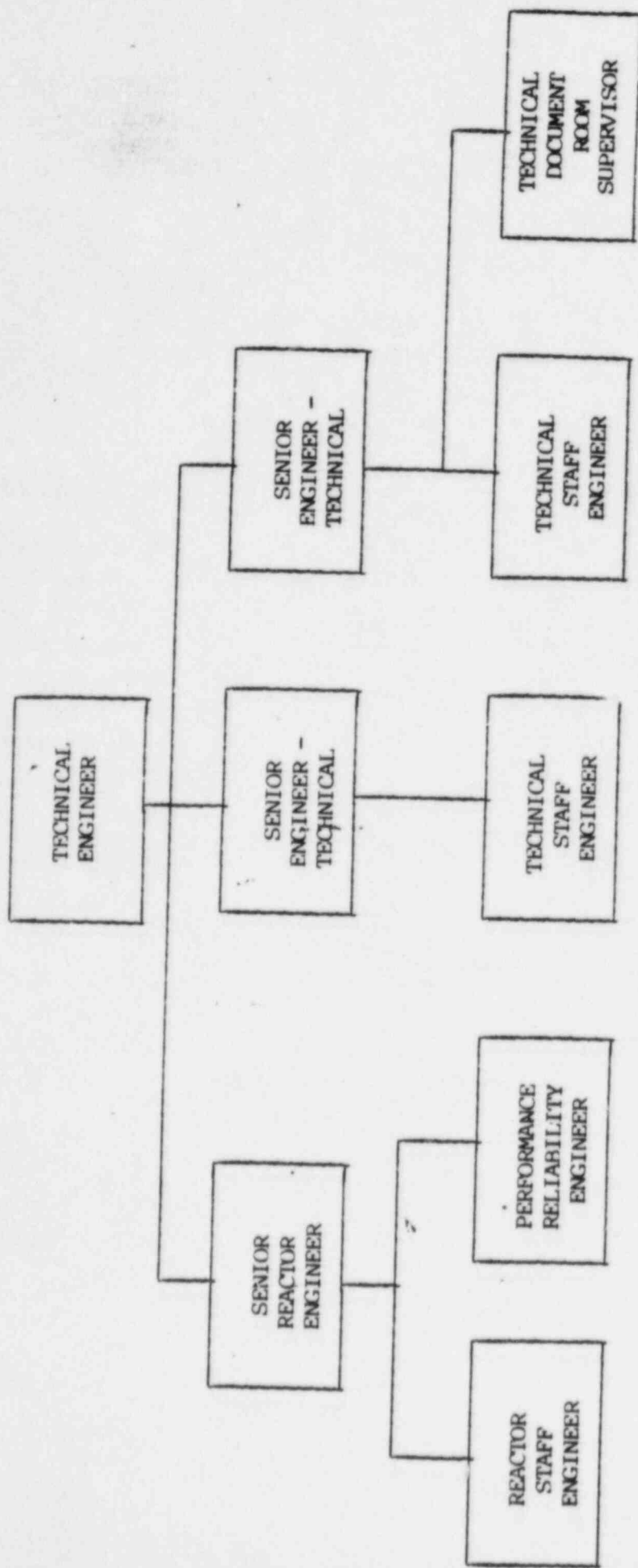
ATTACHMENT 2 (cont'd)



ATTACHMENT 2 (cont'd)



ATTACHMENT 2 (cont'd)



ATTACHMENT 3 (cont'd)

Position: Radiation Protection Supervisor - Effluents and Shipping

Reports to: Senior Radiation Protection Supervisor - RMC

Position Purpose

This position is accountable for ensuring that all shipments of Radioactive Material and release of gaseous effluents are ALARA and meet regulatory criteria.

Accountabilities, Responsibilities, Qualification

- Ensures that all shipments of radioactive material comply with all applicable procedures and regulations.
- Ensures that monitoring requirements for gaseous effluents are complied with.
- Ensures that gaseous effluent releases meet applicable procedures and regulatory limits.
- Responsible for the Radioactive Source Control Program.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Radiation Protection Supervisor - Decontamination

Reports to: Senior Radiation Protection Supervisor - RMC

Position Purpose

This position is accountable for area and tool decontamination, protective clothing and respiratory protection equipment cleaning, and the collection, segregation, and compaction of solid radioactive material.

Accountabilities, Responsibilities, Qualification

- Ensures that adequate supplies of protective clothing are available at all times.
- Ensures that area and tool decontamination is performed in a timely manner and in accordance with applicable procedures.
- Ensures that solid radioactive material is collected, segregated, packaged, and stored in accordance with applicable procedures.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Radiation Protection Supervisor - Equipment

Reports to: Senior Radiation Protection Supervisor - RMC

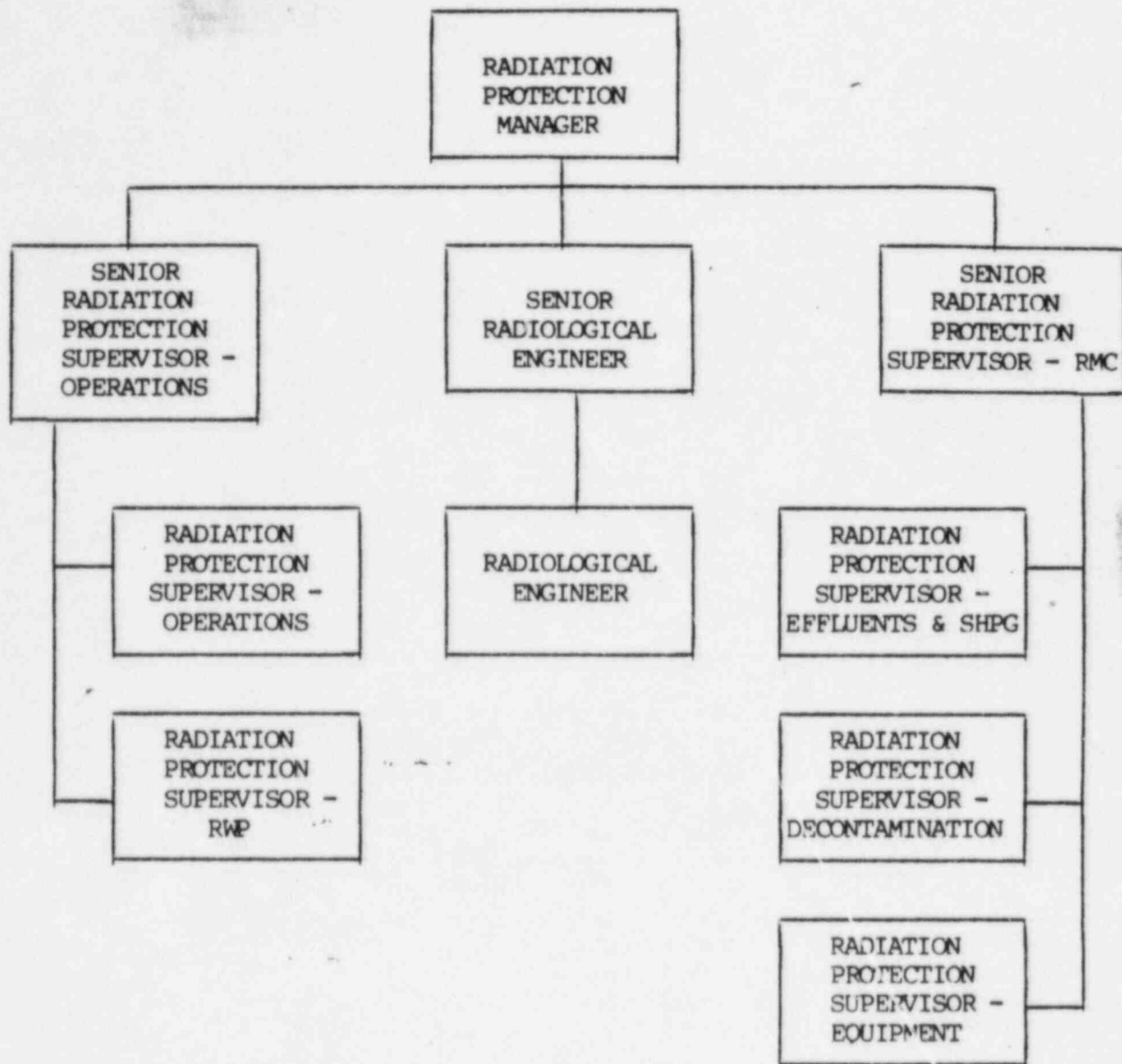
Position Purpose

This position is accountable for directing and coordinating activities associated with Radiation Protection Department equipment.

Accountabilities, Responsibilities, Qualification

- Ensures the acquisition, maintenance, calibration, and tracking of equipment such as radiological monitoring instrumentation, respiratory protection equipment, and other radiation protection equipment is accomplished.
- Ensures that routine calibration and daily response checks of department counting room equipment are properly completed and documented.
- Ensures an adequate inventory of radiation protection equipment and consumables is maintained at all times.
- Schedules and coordinates repair, maintenance, and periodic calibration of portable radiation monitoring devices.
- Develops and controls budgets for acquisition of radiation protection equipment.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 2 (cont'd)



ATTACHMENT 3 POSITION DESCRIPTIONS

The position descriptions contained herein describe the various managerial, supervisory, and professional-technical positions shown on the organization chart (Attachment 2).

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ATTACHMENT 3 (cont'd)

Position: General Manager - Hope Creek Operations

Reports to: Vice President - Nuclear

Position Purpose

This position is accountable for the safe, reliable, and efficient operation of the Hope Creek Generating Station (HCGS) in accordance with the Station Operating License, Technical Specifications, applicable Federal and State regulations, and policies established by PSE&G.

Accountabilities, Responsibilities, Qualification

- Provides general administrative direction to station personnel by coordinating the activities of the Operations, Maintenance, Technical, and Radiation Protection Departments and delegating specified responsibilities to the appropriate departments.
- Conducts formal and informal liaison activities with regulatory agencies, political bodies, and the general public by acting on matters which may arise in a manner consistent with PSE&G policies and practices.
- Ensures Nuclear Review Board (NRB) consideration of identified nuclear safety matters deemed essential to the safe operation of HCGS by recommending NRB disposition of such matters.
- Ensures that radiation exposure of station and support personnel is as low as is reasonably achievable (ALARA) by implementing an effective radiological protection program.
- Ensures properly trained and qualified personnel are provided for the safe and efficient operation of HCGS by reviewing and approving the establishment and administration of an adequate training program.
- In emergencies, takes the appropriate measures required by the PSE&G Emergency Plan and associated procedures.
- Ensures that reportable occurrences and unusual events are investigated and corrective action implemented in accordance with the administrative procedures.

ATTACHMENT 3 (cont'd)

Position: General Manager - Hope Creek Operations

- Maximizes the cost efficiency of HCGS by the development and control of budgets for operation and maintenance of the station.
- Ensures station commitment to the PSE&G Operational Quality Assurance Program by maintaining close liaison with the Station Quality Assurance Engineer and ensuring timely resolution of all quality-affecting discrepancies.
- Ensures adherence by all station personnel to the Plant Industrial Security Program and related security procedures to meet the requirements of Regulatory Guide 1.17 (ANSI N18.17) and other applicable regulations.
- Ensures the planning and administration of the Station Safety Program to provide industrial safety and fire protection in accordance with State and Federal regulations.
- Oversees general personnel relations by executing and interpreting Company personnel policies and practices, promulgating departmental policies and directives, and general administration of the Company-Union agreement(s).
- Responsible for the safe, reliable , and efficient day-to-day operation of HCGS including compliance with Technical Specifications, and State and Federal controls for nuclear radiation.
- Responsible for the control of all onsite personnel activities.
- Ensures compliance with the Station Operating License, applicable State and Federal regulations, and policies established by PSE&G.
- Responsible for timely referral of appropriate matters to higher management and/or independent reviewers to provide a diverse, independent review of such matters.
- Obtains technical, administrative, and logistical support from the Nuclear Services and Nuclear Support groups of the Nuclear Department.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.2.1, Station Manager.

ATTACHMENT 3 (cont'd)

Position: Assistant General Manager - Hope Creek Operations

Reports to: General Manager - Hope Creek Operations

Position Purpose

This position is accountable for assisting the General Manager - Hope Creek Operations in ensuring the safe, reliable, and efficient operation of the Hope Creek Generating Station (HCGS) in accordance with the Station Operating License, Technical Specifications, applicable Federal and State regulations, and policies established by PSE&G.

Accountabilities, Responsibilities, Qualification

- Assists the General Manager in all his principal accountabilities and, in the absence of the General Manager, acts for him in matters so delegated.
- Ensures effective planning and execution of the PSE&G Emergency Plan by ensuring scheduling and coordination of the required training and drills.
- Ensures normal and emergency site security requirements are met by interfacing with the Manager - Site Protection when the need arises to discuss normal or preplanned security activities; and under urgent or emergency conditions, interfaces with the Security Supervisor - Hope Creek to ensure compliance with all regulations.
- Assists the General Manager in providing management direction and control over the activities of station personnel in day-to-day station operation.
- Chairs the Station Operations Review Committee (SORC) proceedings and ensures resolution of unreviewed safety questions arising from proposed plant modifications, procedures, or changes which effect nuclear safety.
- Assumes responsibility for station management in the absence of the General Manager.
- Maintains close contact with the NRC Resident Inspector.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.2.1, Plant Manager.

ATTACHMENT 3 (cont'd)

Position: Maintenance Manager

Reports to: Assistant General Manager - Hope Creek Operations

Position Purpose

This position is accountable for directing and controlling the activities of the Maintenance Department to ensure that plant maintenance activities are performed safely and efficiently by properly trained and qualified personnel in accordance with the Station Operating License, Technical Specifications, applicable State and Federal regulations and policies established by PSE&G.

Accountabilities, Responsibilities, Qualification

- Supports the goal to maximize unit availability and reliability by ensuring that plant on-line and outage maintenance work is conducted safely and efficiently by properly trained and qualified personnel.
- Maximizes cost efficiency for the Maintenance Department by developing and controlling department budgets.
- Ensures an adequate and cost effective spare parts inventory and tracking system to support overall plant operation and maintenance.
- Ensures the department is staffed by trained and qualified personnel (in-house or contract) to support operations and outage needs by interfacing with the Personnel and Training Departments to meet these requirements.
- Meets ALARA requirements by ensuring that maintenance, inspection, and repair activities are planned and conducted so as to minimize personnel radiation exposure.
- Ensures effective planning and scheduling of maintenance, repair, and inspection activities by providing overall direction to the Senior Maintenance Planning Supervisor and his staff through the Maintenance Engineer.
- Provides general department personnel relations by executing and interpreting Company personnel policies and practices, promulgating department policies and directives, and general administration of the Company-Union agreement where applicable.

ATTACHMENT 3 (cont'd)

Position: Maintenance Manager

- Directs the overall mechanical and electrical maintenance activities in the plant, including maintenance planning.
- Supports the Operations Manager and interfaces with the Technical Department for engineering support. Radiological protection is coordinated with the Radiation Protection Engineer.
- May act as Vice-Chairman of the Station Operations Review Committee (SORC).
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.2.3, Maintenance Manager.

ATTACHMENT 3 (cont'd)

Position: Operations Manager

Reports to: Assistant General Manager - Hope Creek Operations

Position Purpose

This position is accountable for directing and controlling the activities of the Operations Department to ensure the station is operated safely and efficiently by properly trained and qualified personnel in accordance with the Station Operating License, Technical Specifications, applicable Federal and State regulations, and policies established by PSE&G.

Accountabilities, Responsibilities, Qualification

- Maximizes unit availability and reliability by ensuring that station operation and outage work is conducted safely and efficiently by properly trained and qualified personnel.
- Maximizes cost efficiency for the Operations Department by developing and controlling department budgets.
- Ensures the department is fully staffed by trained and qualified personnel by forecasting department manpower requirements and interfacing with the Personnel and Training Departments to meet these requirements.
- Ensures station operation and outage work is performed efficiently by interfacing with the Technical and Maintenance Department Managers and the Radiation Protection Engineer to provide effective and timely support services.
- Provides general department personnel relations by executing and interpreting Company personnel policies and practices, promulgating department policies and directives, and general administration of the Company-Union agreement where applicable.
- May act as Vice-Chairman of the Station Operations Review Committee (SORC).
- Assumes responsibility for station management in the absence of the General Manager, Assistant General Manager, and Technical Manager.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.2.2, Operations Manager.

ATTACHMENT 3 (cont'd)

Position: Technical Manager

Reports to: Assistant General Manager - Hope Creek Operations

Position Purpose

This position is accountable for directing and controlling the activities of the Technical Department to provide support of station operation in the areas of technical, chemistry, and instrumentation and control (I&C) engineering and maintenance.

Accountabilities, Responsibilities, Qualification

- Maximizes unit availability and reliability by ensuring timely and effective monitoring of station reactor performance, fuel utilization, and adherence to the station Technical Specifications.
- Maximizes cost efficiency for the Technical Department by developing and controlling department budgets.
- Ensures the department is staffed by trained and qualified personnel to support operational and technical requirements by interfacing with the Personnel and Training Departments to meet these requirements.
- Ensures station conformance to regulatory requirements by administering timely reporting and response to NRC, industry, Federal and State audits, bulletins, and other inquiries.
- Ensures compliance with technical and regulatory station chemistry requirements by overall administration of those personnel that direct and perform chemical, radiochemical and effluent monitoring, sampling, and analysis activities.
- Ensures station I&C support by performing overall administration and direction of I&C maintenance and calibration activities and station computer maintenance and operation.
- Provides document control and control of plant records by ensuring establishment and maintenance of a Technical Document Room as required by PSE&G policies, State and Federal regulations, and the Corporate QA program.

ATTACHMENT 3 (cont'd)

Position: Technical Manager

- Provides general department personnel relations by executing and interpreting Company personnel policies and practices, promulgating department policies and directives, and general administration of the Company-Union agreement where applicable.
- Responsible for technical, chemical, and I&C support for plant operations.
- Has general administrative responsibility for special reports, NRC responses, station administrative procedures, station performance and reliability monitoring, technical document handling, chemistry, and station I&C, including the station computers.
- May act as Vice-Chairman of the Station Operations Review Committee (SORC).
- Assumes responsibility for station management in the absence of the General Manager and Assistant General Manager.
- Meets the minimum qualification requirements of ANSI/ANS-3.1-1981, paragraph 4.2.4, Technical Manager.

ATTACHMENT 6

OPERATIONS DEPARTMENT SYSTEM READINESS REVIEW

SYSTEM: _____ DATE: _____

CODE: _____ ACCEPTANCE: _____
Operations Manager

<u>Item</u>	<u>Initials</u>
1. System Operating Procedures have been written, reviewed, and approved for department use.	_____
2. System has been walked down and the system P&IDs have been highlighted to verify that major components (i.e., valves, pumps, heat exchangers) are installed as shown on the system P&ID.	_____
3. No Bechtel issued tags (stubs) or construction RFT tags remain on system.	_____
4. Operating rounds and associated logs have been developed and are being used.	_____
5. System valves have metal identification tags installed.	_____
6. All system major equipment (pumps, motors, heat exchangers) are clearly identified and labeled.	_____
7. Operations functional test procedures have been written, reviewed, and approved for department use.	_____
8. All electrical power distribution panel circuit breakers have been properly identified and labeled.	_____
9. Technical Specification surveillance procedures have been written, reviewed, and approved.	_____
10. Open FQs on technical or vendor manuals have been reviewed for impact on system operability and have been identified to Site Engineering to expedite resolution.	_____

ATTACHMENT 6 (cont'd)

OPERATIONS DEPARTMENT SYSTEM READINESS REVIEW

SYSTEM: _____ DATE: _____
CODE: _____ ACCEPTANCE: _____
Operations Manager

<u>Item</u>	<u>Initials</u>
11. Accessibility of valves, operators, and indicators has been performed.	_____
12. ALARA considerations have been applied, and identified as potential problems, to both manual and emergency conditions at operating locations.	_____

ATTACHMENT 7

MAINTENANCE DEPARTMENT SYSTEM READINESS REVIEW

SYSTEM: _____ DATE: _____

CODE: _____ ACCEPTANCE: _____
Maintenance Manager

<u>Item</u>	<u>Initials</u>
1. Preventive Maintenance Program (including applicable section of Lubrication Manual) is current and implemented on system.	_____
2. Maintenance Department procedures are written, reviewed, and approved for system.	_____
3. Spare parts have been reviewed for adequacy.	_____
4. Maintenance Technical Specification surveillance procedures have been written, reviewed, and approved.	_____
5. Maintenance has visually inspected the area and is satisfied that cleanliness can be controlled to support plant operation and maintenance activities.	_____
6. Open FQs on technical or vendor manuals have been reviewed for impact on system operability and have been identified to Site Engineering to expedite resolution.	_____
7. Maintainability of equipment has been evaluated. Special rigging and laydown requirements are satisfied or have been identified as a potential problem to Site Engineering for resolution.	_____

ATTACHMENT 8

RADIATION PROTECTION DEPARTMENT SYSTEM READINESS REVIEW

SYSTEM: _____ DATE: _____

CODE: _____ ACCEPTANCE: _____
Radiation Protection Manager

<u>Item</u>	<u>Initials</u>
1. Appropriate radiological controls (e.g., dosimetry, posting, access control, monitoring, etc.) are in place for Hope Creek Operations to accept the system.	_____
2. ALARA walkdown of system has been completed or scheduled.	_____
3. Open FQs on technical or vendor manuals have been reviewed for impact on system operability and have been identified to Site Engineering to expedite resolution.	_____

ATTACHMENT 9

**TECHNICAL DEPARTMENT SYSTEM READINESS REVIEW
(INSTRUMENTATION AND CONTROL)**

SYSTEM: _____ DATE: _____

CODE: _____ ACCEPTANCE: _____
I&C Engineer

Technical Manager

<u>Item</u>	<u>Initials</u>
1. I&C procedures have been reviewed for adherence to Hope Creek Technical Specification data.	_____
2. All system exceptions and their possible impact on system maintenance and or operability have been evaluated.	_____
Construction punchlist	_____
Preop test exceptions	_____
Response tracking items	_____
Other (provide description)	_____
3. A preventive maintenance schedule has been established for the system.	_____
4. Personnel are trained in I&C aspects of the system.	_____
5. Initial spare parts needs have been addressed and any exceptions noted below.	_____
Exceptions:	
6. Open FQs on technical or vendor manuals have been reviewed for impact on system operability and have been identified to Site Engineering to expedite resolution.	_____
7. Maintainability/accessibility evaluation has been performed and potential problems have been identified to Site Engineering for resolution.	_____

ATTACHMENT 9 (cont'd)

TECHNICAL DEPARTMENT SYSTEM READINESS REVIEW
(CHEMISTRY)

SYSTEM: _____ DATE: _____

CODE: _____ ACCEPTANCE: _____
Chemistry Engineer_____
Technical Manager

<u>Item</u>	<u>Initials</u>
1. Appropriate operating chemical and chemical analysis procedures have been issued.	_____
2. Preventive Maintenance Program (Inspection Orders) is written, reviewed, and approved.	_____
3. Initial spare parts needs have been addressed and any exceptions noted below: Exceptions:	_____
4. Instrument Calibration Data (ICD) cards are written and are on file.	_____
5. Technical Specification requirements are included in CH-AP.ZZ-012(Q).	_____
6. Open FQs on technical or vendor manuals have been reviewed for impact on system operability and have been identified to Site Engineering to expedite resolution.	_____
7. Maintainability/accessibility evaluation has been performed and potential problems have been identified to Site Engineering for resolution.	_____

ATTACHMENT 9 (cont'd)

TECHNICAL DEPARTMENT SYSTEM READINESS REVIEW
(TECHNICAL)

SYSTEM: _____ DATE: _____

CODE: _____ ACCEPTANCE: _____
Technical Engineer_____
Technical Manager

<u>Item</u>	<u>Initials</u>
1. Technical Department procedures have been written, reviewed, and approved.	_____
2. Performance and Reliability Engineering has reviewed associated equipment/system baseline data and found satisfactory.	_____
3. Open FQs on technical or vendor manuals have been reviewed for impact on system operability and have been identified to Site Engineering to expedite resolution.	_____

ATTACHMENT 3 (cont'd)

Position: Radiation Protection Manager

Reports to: Assistant General Manager - Hope Creek Operations

Position Purpose

This position is accountable for the implementation of the Station Radiological Protection Program and the Station Radioactive Material Control (RMC) Program to ensure that personnel radiation exposure and release of radioactive material to the environment are as low as reasonably achievable (ALARA).

Accountabilities, Responsibilities, Qualification

- Provides timely and effective coordination and direction to the Radiation Protection Supervisors to implement the Station Radiological Protection Program.
- Supports the Radiation Protection Training Program by ensuring development of program specifications and content to provide adequately trained and qualified personnel.
- Supports the Company Emergency Plan by developing, implementing, and directing all associated radiation safety functions.
- Administers Radiation Protection Department personnel activities by conducting fair and effective implementation of the Company-Union agreement and PSE&G personnel policies where applicable.
- Ensures an adequate inventory of radiation protection equipment and clothing by initiating and controlling the budgets for, and acquisition of, such equipment.
- Supports the goal to minimize station radwaste volume and activity level by implementing the Radwaste Program.
- Establishes and maintains training, experience, and qualification records of department personnel. Ensures that personnel are scheduled to receive necessary training, examinations, etc.
- Responsible for the preparation, coordination, and conduct of the station radiological program, including delineating the operating philosophy and procedures for maintaining occupational radiation exposure as low as is reasonably achievable (ALARA).

ATTACHMENT 3 (cont'd)

Position: Radiation Protection Manager

- Responsible for tracking radiation exposures of personnel, maintenance of related records, conduct of surveillance, and approval of radioactive waste disposal activities.
- Serves as a member of the Station Operations Review Committee (SORC).
- Responsibility corresponds to that described in NRC Regulatory Guide 1.8 under "Radiation Protection Manager."
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.4.4, Radiation Protection and meets the recommendations of Regulatory Guide 1.8.

ATTACHMENT 3 (cont'd)

Position: Office Administrator

Reports to: General Manager - Hope Creek Operations

Position Purpose

This position is accountable for supervising, directing, and coordinating the administrative and office services personnel required to support Station Management.

Accountabilities, Responsibilities, Qualification

- Provides timely and efficient office services to the station general management by ensuring competent clerical, typing, payroll, timekeeping, and administrative record maintenance.
- Directs the office staff in the performance of those administrative duties required to support all station departments.
- Coordinates budget preparation and tracking.
- Coordinates timekeeping and payroll recordkeeping with the department managers.
- Coordinates personnel activities such as new hires, terminations, etc.
- Administers the accounting, disbursement, and physical security of station cash funds.
- Ensures adequate supplies of office consumables by coordinating the ordering, receiving, stocking, and issuing of office supplies in accordance with Company practices and procedures.
- Established and maintains training, experience, and qualification records of administrative personnel. Ensures that personnel are scheduled to receive necessary training, examinations, etc.
- Obtains history records of new and transferred employees and processes them to the applicable departments.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Maintenance Engineer

Reports to: Maintenance Manager

Position Purpose

This position is accountable for overall direction and control of the activities of the Senior Maintenance Supervisors in providing electrical, mechanical, and boiler repair in support of station operation.

Accountabilities, Responsibilities, Qualification

- Assists the Maintenance Manager in his principal accountabilities and, in the absence of the Maintenance Manager, acts for him in matters so delegated.
- Supports the goal to maximize unit availability and reliability by ensuring timely and effective maintenance in assigned areas of responsibility by properly trained and qualified personnel.
- Ensures that all maintenance activities are conducted in accordance with approved procedures which meet regulatory requirements, Technical Specifications, and State and Federal regulations.
- Ensures maintenance activities are conducted by fully trained and qualified personnel by coordinating training with the Training Department in accordance with the Company training program.
- Establishes and maintains training, experience, and qualification records of department personnel. Ensures that personnel are scheduled to receive necessary training, examinations, etc.
- Assists the Maintenance Manager in providing management direction and control over the day-to-day activities of Maintenance Department personnel.
- Has nondestructive testing familiarity, craft knowledge, and an understanding of electrical, pressure vessel, and piping codes.
- May assume responsibility for the Maintenance Manager when so delegated and is a member of the Station Operations Review Committee (SORC).
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.2.3, Maintenance Manager.

ATTACHMENT 3 (cont'd)

Position: Senior Nuclear Maintenance Supervisor

Reports to: Maintenance Engineer

Position Purpose

This position is accountable for supervising and coordinating station maintenance personnel in support of station operations.

Accountabilities, Responsibilities, Qualification

- Provides timely and effective supervision and control of station maintenance by assigning, directing, and coordinating the work of the Maintenance Supervisor and union personnel.
- Ensures properly trained and qualified personnel are available to meet station maintenance requirements by developing and administering maintenance training for section personnel.
- Ensures an adequate inventory of spare parts and test equipment by initiating and controlling the budgets for, and acquisition of, such equipment.
- Ensures that station maintenance and repair activities are conducted in accordance with regulatory requirements and PSE&G personnel and safety policies by establishing and maintaining administrative and technical procedures in accordance with such regulations and policies.
- Administers maintenance personnel activities by conducting fair and effective implementation of the Company-Union agreement and PSE&G personnel policies.
- Schedules maintenance and inspection work and assigns personnel with specific consideration to the radiation safety requirements (ALARA).
- Ensures instruction of maintenance personnel in the performance of complex, unusual, or potentially hazardous work.

ATTACHMENT 3 (cont'd)

Position: Senior Nuclear Maintenance Supervisor

- Assists in the development and provides first-level review of maintenance procedures.
- Processes requests for Radiation Work Permits as required.
- Reviews maintenance and inspection reports as required by the appropriate work orders and inspection orders.
- Ensures review of safety tagging rules every six months with the maintenance personnel.
- Monitors Maintenance Department tools, fixtures, and equipment to determine that they are in safe condition.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Nuclear Maintenance Supervisor

Reports to: Senior Nuclear Maintenance Supervisor

Position Purpose

This position is accountable for assigning, supervising, and coordinating the work of Maintenance Department personnel as directed by the Senior Nuclear Maintenance Supervisor.

Accountabilities, Responsibilities, Qualification

- Ensures timely and effective performance of assigned maintenance by trained and qualified personnel using approved procedures and work practices.
- Provides first level personnel supervision by implementing appropriate areas of the Company-Union agreement and PSE&G personnel policies and procedures.
- Supports department training objectives by conducting assigned training and instructing personnel in maintenance practices and procedures.
- Instructs maintenance personnel in the performance of complex, unusual, or potentially hazardous work.
- Assists in the development of maintenance procedures.
- Initiates requests to purchase parts and supplies for maintenance and repair work.
- Initiates requests for Radiation Work Permits as required.
- Submits maintenance and inspection reports as required by the appropriate work orders and inspection orders.
- Reviews safety tagging rules every six months with the assigned maintenance personnel.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Senior Nuclear Maintenance Planning Supervisor

Reports to: Maintenance Manager

Position Purpose

This position is accountable for supervising, directing, and coordinating the activities of the Maintenance Planning Section in support of station maintenance and operations.

Accountabilities, Responsibilities, Qualification

- Provides timely and effective planning and coordination of plant maintenance activities by assigning and directing the work of the Maintenance Planning Coordinators and Maintenance Staff Engineers.
- Assists the Maintenance Manager in preparation, data collection, cost assessments, forecasting, and other activities as required for budget control.
- Provides control of maintenance procedures by tracking preparation, review, approval, and distribution of such procedures.
- Provides prompt regulatory response for maintenance-related matters by collecting information and coordinating preparation of the response documents in a timely and effective manner.
- Provides overall control and tracking of station maintenance activities.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Nuclear Maintenance Planning Coordinator

Reports to: Senior Nuclear Maintenance Planning Supervisor

Position Purpose

This position is accountable for planning and tracking maintenance work activities as assigned for day-to-day operations and outage conditions.

Accountabilities, Responsibilities, Qualification

- Optimizes Maintenance Department productivity by administering the Work Order System to achieve efficient utilization of maintenance personnel, material and spare parts in support of station operation, and outage work.
- Provides detailed planning of nonroutine, nonemergency maintenance and outage work by preparing plans, procedures, manhour estimates, material needs, etc., to ensure safe and efficient execution of the work.
- Plans in detail all work for which no procedure exists and estimates work requirements in manhours and classification.
- Coordinates the use of the Work Order System within the Maintenance Department.
- Maintains the Maintenance Department equipment history file.
- Monitors maintenance productivity and required corrective actions.
- Develops maintenance procedures as required.

ATTACHMENT 3 (cont'd)

Position: Maintenance Staff Engineer

Reports to: Senior Nuclear Maintenance Planning Supervisor

Position Purpose

This position is accountable for assisting the Senior Nuclear Maintenance Planning Supervisor in training, procedures, material, and special projects as assigned.

Accountabilities, Responsibilities, Qualification

- Supports the Maintenance Department in specific areas by gathering data, preparing reports, tracking material, training, work orders, etc., for routine or special projects.
- Prepares and reviews maintenance procedures to comply with station administrative procedures.
- Implements the Inspection Order System for the Maintenance Department and writes work orders as required.
- Performs special projects as directed by the Senior Nuclear Maintenance Planning Supervisor (i.e., suggestions, equipment problems, safety/security lists, etc.).
- Prepares status reports and conducts special studies related to various maintenance activities (i.e., Safety Review Group recommendations, overtime studies, equipment studies, work order backlog, etc.).

ATTACHMENT 3 (cont'd)

Position: Operating Engineer

Reports to: Operations Manager

Position Purpose

This position is accountable for assisting the Operations Manager in directing and controlling the activities of the Operations Department to ensure the plant is operated safely and efficiently by properly trained and qualified personnel in accordance with the Station Operating License, Technical Specifications, applicable Federal and State regulations, and policies established by PSE&G.

Accountabilities, Responsibilities, Qualification

- Assists the Operations Manager in all his principal accountabilities and, in the absence of the Operations Manager, acts for him in matters so delegated.
- Ensures that each operating shift is suitably manned for the expected operational activities by ensuring that shift manning schedules comply with the Technical Specifications, minimum Shift Crew Compositions, and within the dictates of good operating practice.
- Maintains control of the Station Operating Procedures by reviewing and acting upon proposed revisions, and ensuring each shift is notified of these procedures and revisions in a timely manner.
- Ensures operations are conducted by fully trained and qualified personnel by coordinating training with the Training Department in accordance with the Company training program.
- Establishes and maintains training, experience, and qualification working records of department personnel. Ensures that personnel are scheduled to receive necessary training examinations, etc.
- Performs overall day-to-day Operations Department administration by directing and coordinating the activities of the personnel reporting to him.
- Assists the Operations Manager by providing management direction and control over the day-to-day activities of Operations Department personnel.
- Acts as Fire Chief.

ATTACHMENT 3 (cont'd)

Position: Operating Engineer

- Directs the on-shift activities of the Nuclear Shift Technical Advisor.
- May assume responsibility for the Operations Manager when so delegated.
- Serves as a member of the Station Operations Review Committee (SORC).
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.2.2, Operations Manager.

ATTACHMENT 3 (cont'd)

Position: Senior Operating Supervisor

Reports to: Operating Engineer

Position Purpose

This position is accountable for day-to-day station operation by directing and coordinating the Senior Nuclear Shift Supervisors to ensure shift operations are performed in accordance with Technical Specifications and established procedures.

Accountabilities, Responsibilities, Qualification

- Directs overall day-to-day operations in accordance with the station Technical Specifications and approved operating procedures to ensure safe and efficient operation.
- Investigates station operational problems and incidents by periodically reviewing shift logs, reports, and other collected data and making recommendations for corrective action to the Operating Engineer.
- Ensures safe operation during unusual or infrequent operation by reviewing plans, procedures, and precautions with the Senior Nuclear Shift Supervisor.
- Administers shift operations personnel activities by conducting fair and effective implementation of the Company-Union contract and PSE&G personnel policies.
- Makes shift personnel assignments and conducts new shift personnel indoctrinations.
- Coordinates station operational problems with other departments and, during unit outages, acts as departmental outage coordinator.
- Schedules and assigns shift activities and tasks.
- Reviews shift personnel vacation requests, administers and enforces the Company-Union agreement, and assigns and reviews shift personnel appraisals.
- Ensures required drills and emergency exercises are scheduled and performed.
- Ensures all shift are properly staffed with properly qualified personnel.

ATTACHMENT 3 (cont'd)

Position: Senior Operating Supervisor

- Investigates shift personnel disciplinary matters and makes recommendations to the Operating Engineer.
- Participates in operator training review group meetings.
- Assumes responsibility of the Operating Engineer when so directed.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.1, Supervisors Requiring NRC License.

ATTACHMENT 3 (cont'd)

Position: Senior Nuclear Shift Supervisor

Reports to: Senior Operating Supervisor

Position Purpose

This position is accountable for station shift operations by directing and coordinating the efforts of the Nuclear Shift Supervisors to ensure safe and efficient station operation.

Accountabilities, Responsibilities, Qualification

- Directs shift operations in accordance with the Station Operating License, Technical Specifications, and approved operating procedures to ensure safe and efficient operation.
- Controls maintenance and repair to station operational systems by reviewing and approving maintenance requests, ensuring safe removal of equipment from service, and ensuring that retest and return to service are accomplished in accordance with approved procedures and policies.
- Anticipates potential station operational problems by periodically reviewing shift logs, reports, and other collected data to detect abnormal trends or station anomalies. Confirms that information is complete and accurate.
- Ensures safe operation during unusual or infrequent operation by reviewing plans, procedures, and precautions with the shift supervisors.
- Administers shift operations personnel activities by conducting fair and effective implementation of the Company-Union contract and PSE&G personnel policies.
- Ensures shift operations are conducted in a safe and efficient manner.
- Maintains an overview of the station's operational condition.
- Ensures shift staffing is adequate to meet license requirements and anticipated station conditions.
- Notifies the Operating Engineer or Operations Manager in the event of operational problems or incidents.
- Processes requests for Radiation Work Permits as required.

ATTACHMENT 3 (cont'd)

Position: Senior Nuclear Shift Supervisor

- Takes actions during emergencies to notify the required station management and the Emergency Duty Officer and performs the duties of the Emergency Duty Officer until he arrives on site and proper turnover is completed.
- Directs on-shift activities of the Shift Support Supervisor.
- Approves the discharge of radioactive liquids and gases to ensure compliance with station procedures.
- Serves as a member of the Station Operations Review Committee (SORC).
- Provides on-shift fire brigade direction to the Shift Support Supervisor in the event of fire.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.1.1, Shift Supervisor.

ATTACHMENT 3 (cont'd)

Position: Nuclear Shift Supervisor

Reports to: Senior Nuclear Shift Supervisor

Position Purpose

This position is accountable for on-shift supervision of unit Nuclear Control Operators during all station conditions.

Accountabilities, Responsibilities, Qualification

- Directs on-shift unit operations in accordance with the Station Operating License, Technical Specifications, and approved operating procedures to ensure safe and efficient operation.
- Ensures safe operation during unusual or infrequent operation by conducting in-depth review of plans, procedures, and precautions to be observed with the Nuclear Control Operators.
- Directs and ensures shift operational activities are conducted in a safe, reliable, and efficient manner for the unit supervised.
- Performs the steps necessary to ensure that the operating shift is adequately manned to meet license requirements and anticipated unit conditions.
- Explains plans, procedures, and safety precautions to shift operations personnel prior to unusual or infrequent operations.
- Disseminates information to the operating shift concerning changes to procedures, policies, and operational practices.
- Reviews shift logs, reports, recorder charts, computer printouts, and other collected data to detect abnormal trends. Assesses potential operational problems, and confirms that the information is complete and accurate.
- Reports all operational problems, discrepancies, occurrences, and incidents to the Senior Nuclear Shift Supervisor.
- Initiates requests for maintenance or repairs through the Work Order System to ensure the continuity and safety of operations.

ATTACHMENT 3 (cont'd)

Position: Nuclear Shift Supervisor

- Checks the reasonability of system parameter values for existing conditions and notifies the Senior Nuclear Shift Supervisor of items requiring corrective action.
- Investigates all outstanding (unclearable) alarms and notifies the Senior Nuclear Shift Supervisor of subsequent findings to allow these alarms to be cleared.
- Conducts an investigation of all incidents and initiates an Incident Report when required.
- Performs verification of equipment status in accordance with the Safety Tagging Program.
- Administers and enforces the Company-Union agreement.
- Makes shift personnel work assignments.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.1, Supervisors Requiring NRC License.

ATTACHMENT 3 (cont'd)

Position: Nuclear Shift Technical Advisor

Reports to: Operating Engineer

Position Purpose

This position is accountable for assessing accident/transient occurrences and providing reports, advice, and assistance to ensure that safe conditions are maintained.

Accountabilities, Responsibilities, Qualification

- Observes, advises, and provides technical assistance to the Senior Nuclear Shift Supervisor/Nuclear Shift Supervisor in order to reduce the probability and consequences of abnormal occurrences or accidents.
- Maintains a log of all events pertaining to station safety to be utilized in shift turnover.
- Ensures that operating information pertinent to plant safety is continually supplied to operators and other personnel and is incorporated into station procedures and training programs.
- Prepares reports on significant findings and recommendations for dissemination to the operations staff and to appropriate management personnel where additional actions are required.
- Interfaces with the Safety Review Group as required.
- Performs verification of equipment status in accordance with the Safety Tagging Program.
- Reviews License Event Reports (LERs) for input and action by the Operations Department.
- May also currently fill the position of the Nuclear Shift Supervisor if he possesses a bachelors degree in an engineering discipline as well as having received training as specified in NUREG-0737.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.4.8, Shift Technical Advisor.

ATTACHMENT 3 (cont'd)

Position: Senior Operating Support Supervisor

Reports to: Operating Engineer

Position Purpose

This position is accountable for supervising the activities of the Shift Support Supervisor and the operating support staff.

Accountabilities, Responsibilities, Qualification

- Ensures station fire protection systems are maintained in an operable status and that impairments are reported and corrected as soon as possible.
- Directs operating support activities including radwaste operations.
- Participates in operator training review group meetings and reviews proposed changes to existing programs or new programs under development.
- Prepares responses to department commitment items.
- Functions as the Operations Department contact for contractor services and monitors contractors expenses.
- Performs as members of the Nuclear Plant Load Follow Committee.
- Monitors and maintains the fire watch program.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.1, Supervisors Requiring NRC License.

ATTACHMENT 3 (cont'd)

Position: Shift Support Supervisor

Reports to: Senior Operating Support Supervisor

Position Purpose

This position is accountable for directing and coordinating overall liquid radioactive waste (radwaste) treatment system operations.

Accountabilities, Responsibilities, Qualification

- Monitors overall radwaste operations to ensure that processing of liquid radwaste is conducted in accordance with approved procedures, waste release permits, Technical Specifications, ALARA requirements, and Federal and State regulations.
- Maximizes system efficiency by conducting radwaste operations to minimize solid radwaste volume for offsite disposal and achieving maximum reclamation of treated water in accordance with the Radwaste Volume Control Program.
- Schedules and coordinates radwaste operations for maximum utilization of assigned operators.
- Coordinates radwaste operations with the Radiation Protection Department to minimize personnel exposure.
- Monitors liquid and gaseous radwaste system operation to maximize efficiency.
- Ensures proper operation of the waste evaporator.
- Ensures resin transfer operations are performed in accordance with approved procedures.
- Schedules and coordinates the discharge of radioactive liquids and gases to ensure that the release is consistent with the requirements of the Environmental Protection Plan and approved station procedures.
- Acts as fire brigade technical advisor.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Senior Operating Technical Supervisor

Reports to: Operating Engineer

Position Purpose

This position is accountable for directing and controlling activities to provide administrative support to the Operations Department.

Accountabilities, Responsibilities, Qualification

- Develops and maintains systems to track and schedule departmental activities, commitments, responses, requests, work orders, and special reports. Prepares responses to department commitment items in conjunction with the Senior Operating Support Supervisor.
- Develops and maintains departmental documents and records.
- Reviews the various sources of station and industry information and prepares synopses for departmental dissemination.
- Provides operational information to the Nuclear Support and Services Department, and the Nuclear Training Center.
- Develops and maintains the Tagging Request Information System.
- Reviews and provides comments on station administrative procedures.
- Develops and maintains a tracking system to track training programs for Operations Department personnel.
- Prepares special reports and performs other activities as directed by the Operating Engineer.
- Coordinates the transfer and receipt of Operations Department records with the Technical Document Room (TDR) in accordance with SA-AP.ZZ-011(O).
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2; Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Operations Staff Engineer

Reports to: Senior Operating Technical Supervisor

Position Purpose

This position is responsible for reporting, evaluating, and tracking the status of outstanding commitments, inspection orders, and other open items within the Operations Department and working on special assignments as assigned by the Senior Operating Technical Supervisor.

Accountabilities, Responsibilities, Qualification

- Maintains systems to track and schedule departmental activities, commitments, responses, requests, and special reports.
- Reviews and evaluates the status of all departmental commitments and outstanding items.
- Maintains the Inspection Order System for the Operations Department and writes work orders as required.
- Assists in the development of Operations Department procedures.
- Checks the status of station and departmental procedures to ensure that they are reviewed within the two-year mandatory review.
- Reviews the status of all departmental initiated design change requests including installation time frame, available capital, etc.
- Performs special projects (i.e., suggestions, fire brigade qualification lists, department respirator qualification list, information documents, appraisals, etc.).

ATTACHMENT 3 (cont'd)

Position: Senior Radiation Protection Supervisor - Operations

Reports to: Radiation Protection Manager

Position Purpose

This position is accountable for coordinating and directing the activities of the Radiation Protection Supervisors in the implementation and enforcement of the Station Radiological Protection Program.

Accountabilities, Responsibilities, Qualification

- Ensures implementation of the Radiological Protection Program by directing the Radiation Protection Supervisors in their assigned area of responsibility to ensure station activities are conducted in compliance with ALARA criteria.
- Ensures properly trained and qualified personnel are available to meet station radiation protection monitoring and control requirements by developing and administering radiation protection training.
- Ensures an adequate inventory of radiation protection equipment, instruments, and consumables by initiating acquisition of such items.
- Has overall responsibility for supervision of the Radiological Protection Program.
- Ensures that there are procedures, controls, and personnel to support safe and efficient station operation under ALARA criteria.
- May act for the Radiation Protection Manager when so delegated.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Radiation Protection Supervisor - Operations

Reports to: Senior Radiation Protection Supervisor - Operations

Position Purpose

This position is accountable for directing and coordinating overall station radiation surveys and occupational dose limit monitoring.

Accountabilities, Responsibilities, Qualification

- Provides station radiation surveys to ensure all routine and special radiation areas are identified and properly marked in accordance with the Station Radiological Protection Program.
- Monitors and controls occupational dose limits of station personnel assessing job dose rates, previous dosage, and Company/Federal limits to minimize occupational radiation doses.
- Directs radiation and contamination surveys in and around the station in accordance with department procedures.
- Monitors station activities to ensure compliance with the Radiological Protection Program.
- Provides onsite training to improve the proficiency of the Radiation Protection Technicians, Assistants, Apprentices, and Workers.
- Ensures cleanliness requirements are maintained.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Radiation Protection Supervisor - Radiation Work Permits

Reports to: Senior Radiation Protection Supervisor - Operations

Position Purpose

This position is accountable for timely and effective application of the ALARA criteria to station operations.

Accountabilities, Responsibilities, Qualification

- Tracks occupational exposure of station personnel to ensure that issuance, use, and termination of Radiation Work Permits (RWP) are performed in accordance with approved procedures and Company policies.
- Controls occupational exposure of station personnel by ensuring adequate work requirements are specified and surveys are performed to verify such requirements.
- Serves as first-line control of the Radiological Protection Program to provide quality assurance overview for meeting ALARA criteria.
- Maintains cognizance of personnel radiation exposure records.
- Issues and reviews Radiation Work Permits, Extended Radiation Work Permits, and radiation protection procedures.
- Provides RWP outage planning and coordination as required to support refueling and maintenance activities.
- Ensures all radiological records required to be maintained by Technical Specifications are legible and orderly for transmittal to the Technical Document Room.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Senior Radiological Engineer

Reports to: Radiation Protection Manager

Position Purpose

This position is accountable for coordinating and directing the activities of the Radiological Engineers in the development and enforcement of the Station Radiological Protection and ALARA Programs.

Accountabilities, Responsibilities, Qualification

- Has overall responsibility for implementing the Station ALARA Program and providing technical support to the Radiation Protection Department by directing the Radiological Engineers in their assigned areas of responsibility to ensure that station activities are conducted in compliance with ALARA criteria.
- Serves as technical advisor to the station ALARA committee.
- Coordinates ALARA activities with the Nuclear Services ALARA Engineer.
- Maintains the ALARA Problem Reporting System.
- May act for the Radiation Protection Manager when so delegated.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Radiological Engineer

Reports to: Senior Radiological Engineer

Position Purpose

This position is responsible for ALARA planning and technical support activities necessary to support the Station Radiological Protection and ALARA Programs.

Accountabilities, Responsibilities, Qualification

- Provides ALARA planning and technical assistance to the Senior Radiological Engineer to ensure that station activities are conducted in compliance with ALARA criteria.
- Coordinates Radiation Protection Department training needs.
- Coordinates department and station inputs to the Station Emergency Plan.
- Responsible for generation of Regulatory Guide 1.21 reports.

ATTACHMENT 3 (cont'd)

Position: Senior Radiation Protection Supervisor - Radioactive Material Control

Reports to: Radiation Protection Manager

Position Purpose

This position is accountable for coordinating and directing the activities of Radiation Protection Supervisors in the implementation of the Station Radioactive Material Control (RMC) Program.

Accountabilities, Responsibilities, Qualification

- Ensures implementation of the station Radioactive Material Control Program by directing the Radiation Protection Supervisors in their assigned areas of responsibility to ensure that station activities are conducted in compliance with ALARA and regulatory criteria.
- Ensures that all releases of radioactive effluents and material from the station are ALARA. Coordinates station efforts to meet this goal with the Operations and the Chemistry Department.
- Ensures compliance with NUREG 0041 by administering the station Respiratory Protection Program.
- Ensures that an adequate supply of radioactive material control and respiratory protection equipment consumables is maintained at all times.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Technical Engineer

Reports to: Technical Manager

Position Purpose

This position is accountable for directing and controlling work in the areas of steam plant performance analysis, reliability monitoring, nuclear fuel management, reactor engineering, technical reports and responses, administrative procedures, Station Operations Review Committee (SORC) record-keeping and documentation, and technical document control in support of station operation.

Accountabilities, Responsibilities, Qualification

- Supports the goal to maximize unit availability and reliability by ensuring timely and effective evaluation and analysis of station performance and fuel utilization by qualified personnel.
- Provides general technical and administrative support for station operation by ensuring that required NRC and other regulatory agency responses and reports are prepared in a timely manner to meet required deadlines.
- Ensures Technical Department adherence to the applicable Technical Specifications by tracking surveillance requirements and compliance activities.
- Maintains the Technical Department administrative procedures by ensuring control of distribution and revision of the procedures to conform to current management policies, regulatory requirements, and operational requirements.
- Provides administrative procedure (AP) control by ensuring periodic review and, if needed, revision of the APs to conform to current management policies, regulatory requirements, or operational requirements.
- Ensures station technical document indexing, tracking, and storage by directing the establishment and maintenance of a station technical document program.
- Supports internal and external regulatory reporting requirements by collecting and providing data for station reports and lists such as Nuclear Plant Reliability Data System (NPRDS), NRC reports, refueling status, etc.

ATTACHMENT 3 (cont'd)

Position: Technical Engineer

- Ensures SORC clerical support by providing for meeting minutes, and distribution and retention of all SORC proceedings.
- Maintains individual qualification records of all station personnel and establishes the computer data base used in scheduling training attendance.
- Establishes and maintains training, experience, and qualification records of department personnel. Ensures that personnel are scheduled to receive necessary training, examinations, etc.
- Responsible for directing and coordinating his supervisors in providing engineering and technical document support for station operation.
- Responsible for conducting studies, preparing reports, and initiating action as required in areas of steam performance analysis, and regulatory reports, and responses.
- Ensures that documents in support of these activities and other required station technical documentation is collected, controlled, and retained in a retrievable manner.
- May act for the Technical Manager when so delegated.
- Serves as a member of the Station Operations Review Committee (SORC).
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.2.4, Technical Manager.

ATTACHMENT 3 (cont'd)

Position: Senior Reactor Supervisor

Reports to: Technical Engineer

Position Purpose

This position is accountable for supervising the activities of assigned staff engineers in steam plant performance and reliability analysis, reactor engineering, and nuclear fuel management.

Accountabilities, Responsibilities, Qualification

- Supports the goal to maximize unit availability and reliability by developing and executing effective steam plant surveillance and performance evaluation programs.
- Ensures safe reactor operation by development and execution of programs for reactor core surveillance, fuel burnup and reactivity calculations, reactor test procedures, and fuel handling procedures.
- Ensures overall station nuclear safety by providing review of operating, test, and fuel handling procedures for nuclear safety, conformance to Technical Specifications and the station Operating License.
- Performs tests/data-collection via department procedures/programs for evaluation of incore reactor surveillance measurements (power distribution), core depletion, reactivity follow measurements, and calibration checks to ensure that the reactor is operated within safe limits.
- Performs data collection and evaluation of department procedures/programs for steam plant follow and performance and makes subsequent recommendations to maximize unit efficiency.
- Prepares written reports as assigned.
- Develops refueling procedures.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.4.1, Reactor Engineering.

ATTACHMENT 3 (cont'd)

Position: Reactor Staff Engineer

Reports to: Senior Reactor Supervisor

Position Purpose

This position is accountable for reactor operational analysis and fuel handling safety as assigned and directed by the Senior Reactor Supervisor.

Accountabilities, Responsibilities, Qualification

- Provides assessment of reactor operational parameters by regularly evaluating such parameters to ensure that rated reactor power, linear power density, peaking factors, and thermal margins are not exceeded.
- Conducts reactor surveillance and startup tests using approved department procedures to ensure safe reactor operation in compliance with Technical Specifications.
- Performs burnup and isotopic abundance calculations for all nuclear fuel, as required by department procedures and NRC regulations.
- Maintains station nuclear fuel and special nuclear material records in compliance with department procedures and NRC regulations.
- Assists in planning and coordinating refueling efforts during each plant refueling outage.

ATTACHMENT 3 (cont'd)

Position: Performance Reliability Engineer

Reports to: Senior Reactor Supervisor

Position Purpose

This position is accountable for steam plant reliability and performance monitoring as assigned and directed by the Senior Reactor Supervisor.

Accountabilities, Responsibilities, Qualification

- Maintains a program of data gathering and assessment of the steam plant performance with the objectives of maximizing unit efficiency and safety.
- Monitors reactor engineering tests and procedures, especially in relation to steam plant performance.
- Monitors characteristic parameters in the feedwater, condensate, turbine and associated steam plant systems on a day-to-day basis.
- Analyzes characteristic parameters using computer models or other analytic techniques to evaluate the effect on overall station performance.
- Makes recommendations to the Senior Reactor Supervisor as to steam plant operation that will maximize the overall unit efficiency and safety.
- Assists in reactor testing and analysis to support reactor refuelings and startup testing as directed by the Senior Reactor Supervisor.

ATTACHMENT 3 (cont'd)

Position: Senior Engineer - Technical

Reports to: Technical Engineer

Position Purpose

This position is responsible for the preparation, tracking, and control of station administrative procedures (APs), responses to the NRC or other regulatory bodies, special reports, Licensee Event Reports (LER), and other technical responses or reports that may be required by Federal or State regulatory agencies. In addition, he shall maintain station records and documents.

Accountabilities, Responsibilities, Qualification

- Monitors station compliance with the Technical Specifications, Operating License, and approved administrative procedures by continually assessing station operations and practices for conformance to these documents.
- Provides HCGS response to the NRC or other regulatory bodies by delegating, coordinating, and tracking the response documents to ensure compliance with deadlines.
- Monitors industry and regulatory documentation (LERs, etc.) by ensuring qualified staff engineers are assigned to evaluate, track, and prepare reports addressing the items in question.
- Ensures the Technical Document Room (TDR) is established and maintained to provide needed historical documents as well as prints, specifications, manuals, etc. in support of unit operation.
- Directs a staff of engineers in the area of licensing compliance, administrative procedures, regulatory responses, and special reports, and keeps the Technical Engineer and Technical Manager appraised and cognizant of recent industry and regulatory actions of concern to HCGS.
- Tracks and coordinates the work of the staff engineers to satisfy his objectives.
- Maintains a knowledge of state-of-the-art technology, and strives to integrate it into the system to maintain it in a technologically modern condition.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Technical Staff Engineer

Reports to: Senior Engineer - Technical

Position Purpose

This position is accountable for the timely preparation of administrative and technical procedures, reports, and responses as directed by the Senior Engineer - Technical.

Accountabilities, Responsibilities, Qualification

- Provides timely, thorough, and professional reports as assigned by the Senior Engineer - Technical to comply with industry, Federal, and State reporting requirements.
- Supports station operation by implementing administrative and technical control and tracking programs as directed by the Senior Engineer - Technical.
- Provides support in the areas of plant administrative control, response preparation and tracking, and other projects as assigned.

ATTACHMENT 3 (cont'd)

Position: Technical Document Room Supervisor

Reports to: Senior Engineer - Technical

Position Purpose

This position is accountable for establishing and maintaining custody of plant records and documents in the Technical Document Room (TDR) as required by PSE&G policies, and State and Federal regulations.

Accountabilities, Responsibilities, Qualification

- Provides a central station technical document office by obtaining, indexing, controlling, and storing original or copies of all station records, test documents, reference codes, guides, and standards and other appropriate documents.
- Ensures station operational and preoperational records are indexed and stored in a retrievable manner.
- Maintains a library of all codes, standards, Regulatory Guides, and other documents referenced in station documents.
- Maintains a controlled set of station design documents (ODCNs, P&IDs, engineering documents, drawings lists, etc.) and other nonstation controlled documents as directed.
- Maintains a controlled updated set of vendor manuals, drawings, and specifications for station equipment and components.
- Controls updating of nonstation originated documents.
- Establishes and maintains a document distribution list.
- Distributes all controlled documents originating at the station.
- Establishes and maintains control of all documents entering and leaving the Technical Document Room.
- Maintains an index and provides for retrievability of documents (radiographs, single copy retention, etc.) stored offsite or at Nuclear Underground Storage (NUS).
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Chemistry Engineer

Reports to: Technical Manager

Position Purpose

This position is accountable for directing and controlling the activities of the chemistry section in the performance of chemical, radiochemical and environmental monitoring, chemical equipment operation, and analysis activities in support of station operations.

Accountabilities, Responsibilities, Qualification

- Supports the goal to maximize unit availability and reliability ensuring timely and effective chemical and radiochemical monitoring, assessment, and resolution of station chemistry requirements.
- Ensures that all chemical, radiochemical, and environmental sampling and analysis activities are conducted in accordance with approved chemistry section procedures, and that section procedures meet regulatory requirements, Technical Specifications, and State and Federal regulations.
- Ensures that there is an adequate inventory of chemistry section analysis supplies, equipment, and spare parts by developing and controlling the budgets for, and acquisition of, such equipment.
- Administers chemistry section personnel activities by conducting fair and effective implementation of PSE&G personnel policies and the Company-Union contract.
- Established and maintains training, experience, and qualification records of department personnel. Ensures that personnel are scheduled to receive necessary training, examinations, etc.
- Responsible for directing and controlling his supervisors and staff engineers to ensure that station chemistry specifications are met under all operating and outage conditions.
- Reviews sample analysis data and approves chemical additions to correct and maintain the various station system chemistry requirements.
- Responsible for review and approval of chemistry procedures and oversees section adherence to such procedures.

ATTACHMENT 3 (cont'd)

Position: Chemistry Engineer

- Serves as a member of the Station Operations Review Committee (SORC).
- May act for the Technical Manager when so delegated.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.4.3, Chemistry and Radiochemistry.

ATTACHMENT 3 (cont'd)

Position: Chemistry Staff Engineer

Reports to: Chemistry Engineer

Position Purpose

This position is accountable for providing chemistry procedures and station chemistry planning in support of station operations.

Accountabilities, Responsibilities, Qualification

- Provides administrative support to the Chemistry Engineer by preparing station chemistry plans, schedules, sampling, analysis, instrument calibration, and laboratory procedures.
- Plans chemistry section work for which no procedures exist and estimates work requirements in man-hours and by classification.
- Coordinates the use of the Work Order System within the chemistry section.
- Maintains the chemistry section equipment history file.
- Develops chemistry and analysis procedures as required.
- Maintains close coordination with overall planning to schedule outage chemistry activities.

ATTACHMENT 3 (cont'd)

Position: Senior Chemistry Supervisor

Reports to: Chemistry Engineer

Position Purpose

The position is accountable for supervising and coordinating the activities of the Chemistry Supervisors performing chemical and radiochemical analysis activities in support of station operations.

Accountabilities, Responsibilities, Qualification

- Provides timely and effective chemical/radiochemical analysis support by assigning, directing, and coordinating the work of the Chemistry Supervisors.
- Ensures properly trained and qualified personnel are available to meet station chemistry requirements by developing and administering the chemistry training program.
- Provides reliability for analysis results by ensuring an effective calibration program for analysis equipment and instruments is used.
- Provides ongoing plant chemistry support by review and evaluation of station chemical analysis results and recommends corrective action, as required, to return system to specification.
- Administers section personnel activities by conducting fair and effective implementation of the Company-Union contract and PSE&G personnel policies.
- Prepares and reviews chemical and radiochemical procedures to meet the regulatory requirements set forth in the Technical Specifications and the Environmental Protection Plan.
- Monitors the processing of radioactive waste to ensure that processing, storing, and disposal are being conducted in accordance with established procedures and specific instructions contained in the appropriate waste release permit.

ATTACHMENT 3 (cont'd)

Position: Senior Chemistry Supervisor

- Assists in safety reviews that may be required before startup, in accordance with the Technical Specifications.
- Investigates station chemistry problems or conditions which may require developing special test procedures, conducting tests, evaluating results, and submitting recommendations.
- Assists and coordinates chemistry section work assignments and manpower.
- Implements the chemistry section QA program.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Chemistry Supervisor

Reports to: Senior Chemistry Supervisor

Position Purpose

This position is accountable for supervising and coordinating chemistry and radiochemistry program activities, operations, and analysis associated with the demineralized water plant, nonradioactive systems, condensate polishers, and sewage treatment facilities.

Accountabilities, Responsibilities, Qualification

- Ensures that station system chemistry is maintained on a day-to-day basis by providing direction to laboratory technicians in obtaining and processing samples for analysis.
- Provides general laboratory supervision by scheduling routine and nonroutine work, instrument calibration, maintenance of analytical equipment and instrumentation, and other work as appropriate.
- Monitors station activities to ensure compliance with the chemistry specifications.
- Schedules sample and analysis operations as required to maintain control of station conditions and to determine the existence of abnormalities.
- Writes chemistry procedures and reviews sample results to comply with the Technical Specification requirements for chemical surveillance.
- Evaluates the performance of laboratory equipment and personnel with respect to the accuracy of the results and the effectiveness of analysis techniques.
- Assists in the performance of radiation safety measures in and around the station, including technical cognizance over the discharge of radioactive effluents and solid materials.

ATTACHMENT 3 (cont'd)

Position: Chemistry Supervisor

- Provides assistance in the methods of disposing of decontamination fluids.
- Assists in the review and evaluation of information derived from the offsite environmental monitoring program.
- Provides first-level personnel supervision by implementing appropriate areas of the Company-Union agreement and PSE&G personnel practices and procedures.
- Supports section training objectives by conducting assigned training and instructing section personnel in station chemistry practices and procedures.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Instrumentation & Control Engineer

Reports to: Technical Manager

Position Purpose

This position is accountable for directing and controlling work on station instrumentation and control (I&C) systems, station computer systems, and the planning and scheduling of such activities in support of station operation.

Accountabilities, Responsibilities, Qualification

- Directs and coordinates timely and effective I&C maintenance, calibration, and planning activities by properly trained and qualified personnel.
- Ensures station computer support by providing administrative directions to the Computer Supervisor.
- Ensures planning and coordination of all I&C operational and outage work and I&C training by administrative direction to the Senior Engineer (I&C) and his staff.
- Ensures that all I&C and computer maintenance activities are conducted in accordance with an approved I&C section manual, and that section procedures meet regulatory requirements, Technical Specifications, and station administrative procedures.
- Establishes and maintains training, experience, and qualification records of department personnel. Ensures that personnel are scheduled to receive necessary training, examinations, etc.
- Provides overall administrative and technical direction to the station I&C section, including the planning for all related I&C activities.
- Reviews and approves I&C procedures and oversees section adherence to such procedures.
- May act for the Technical Manager when so delegated.
- Serves as a member of the Station Operations Review Committee (SORC).
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.4.2, Instrumentation and Control.

ATTACHMENT 3 (cont'd)

Position: Senior I&C Supervisor

Reports to: Instrumentation & Control Engineer

Position Purpose

This position is accountable for supervising and coordinating station I&C activities in support of station operations.

Accountabilities, Responsibilities, Qualification

- Provides timely and effective supervision and control of station I&C activities by assigning, directing, and coordinating the work of the I&C Supervisors, Technicians, and helpers.
- Ensures that an adequate number of trained and qualified personnel are available to meet station I&C requirements by determining the actual training needs of the section and aiding the Senior Engineer - I&C in the development and administration of the training program.
- Ensures that an adequate inventory of test, measurement, and other equipment (such as office equipment, training needs, etc.) is maintained by developing and controlling the budgets of the I&C section
- Ensures station I&C activities are conducted in accordance with regulatory requirements and PSE&G policies by establishing and maintaining administrative and technical procedures in accordance with such regulations and policies.
- Administers section personnel activities by conducting fair and effective implementation of the Company-Union contract and PSE&G personnel policies.
- Provides technical direction to the I&C Supervisors for calibrating, troubleshooting, repairing, replacing, and modifying station instruments, controls, and test equipment.
- Ensures that the results of calibrations, tests, and inspections performed are in accordance with the Technical Specifications.

ATTACHMENT 3 (cont'd)

Position: Senior I&C Supervisor

- Directs investigation of particular station problems or conditions which may require special test procedures, conducts tests, evaluates results, and submits recommendations.
- Provides design and engineering assistance related to I&C design changes or plant modifications.
- Schedules I&C section work assignments and manpower.
- Assists in the development of training materials and aids in the determination of I&C training needs.
- Acts for the I&C Engineer when so delegated.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: I&C Supervisor

Reports to: Senior I&C Supervisor

Position Purpose

This position is accountable for supervising and coordinating I&C activities in assigned areas of responsibility.

Accountabilities, Responsibilities, Qualification

- Provides timely and effective performance of I&C work on his assigned systems by ensuring that work is performed by trained and qualified personnel using approved procedures and work practices.
- Supports section training objectives by conducting assigned training and instructing technicians in I&C practices and procedures.
- Provides first-level personnel supervision by implementing appropriate areas of the Company-Union contract, and PSE&G personnel policies and procedures.
- Verifies that instrument calibrations or control adjustments, that have vital operating significance or are related to reactor safety, are performed in accordance with approved procedures.
- Instructs and aids I&C technical personnel in repair procedures, troubleshooting techniques, and instrument shop practices as defined in the Technical Department Manual.
- Prepares instrumentation and calibration procedures to comply with the Technical Specification surveillance requirements.
- Schedules maintenance, repair, inspection, and calibration work as required by the appropriate Work Orders and Inspection Orders.
- Reviews safety tagging rules every six months (when assigned) with all technical personnel in the I&C section.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Computer Supervisor

Reports to: Senior I&C Supervisor

Position Purpose

This position is accountable for directing and coordinating programming, operation, and maintenance of all station computers to support station operation, site security, and station administration.

Accountabilities, Responsibilities, Qualification

- Provides timely and effective supervision and control of station computer activities by assigning, directing, and coordinating the work of technicians and programmers assigned to station computers.
- Provides support to station security by directing and coordinating programming and maintenance services in a timely manner to minimize disruption of security and access activities due to computer malfunctions.
- Assists station planning and administration by providing programming or other computer interface expertise as required for planning programs, tracking systems, etc.
- Ensures properly trained and qualified personnel are available to meet station computer maintenance and programming requirements by developing and administering a computer training program.
- Ensures an adequate inventory of spare parts and special test equipment by developing and controlling the budgets and acquisition of such equipment.
- Administers computer section personnel activities by conducting fair and effective implementation of the Company-Union contract and PSE&G personnel policies.
- Provides technical direction to technicians for programming, troubleshooting, repair, and replacement of components on station computers.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: Senior Engineer - I&C Staff

Reports to: Instrumentation & Control Engineer

Position Purpose

This position is accountable for supervising, directing, and coordinating the planning and scheduling of I&C section activities, and the administration and development of the I&C training program.

Accountabilities, Responsibilities, Qualification

- Supports station outages by scheduling and coordinating all I&C outage work to minimize outage time and maximize utilization of department resources.
- Provides training to the I&C technical personnel by administering and developing and onsite portion of the appropriate training program (Technical/Technical-Assistant), and by acting as the I&C section liaison with the offsite training group.
- Schedules and tracks training to ensure thorough and timely instruction of section personnel.
- Supports station planning by identifying and scheduling license commitments/requirements regarding I&C inspections, calibration, and tests.
- Supports other station departments by coordinating all I&C responsibilities in the outage planning effort.
- Provides I&C section planning and scheduling support by ensuring proper outage work accounting, administers the work order tracking system, and maintains spare parts records and inventory.
- Provides necessary administrative support to the I&C section by maintaining current work/surveillance procedures and by ensuring that all documents requiring SORC approval are prepared and reviewed in a timely manner in accordance with station administrative procedures.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 3 (cont'd)

Position: I&C Staff Engineer

Reports to: Senior Engineer - I&C Staff

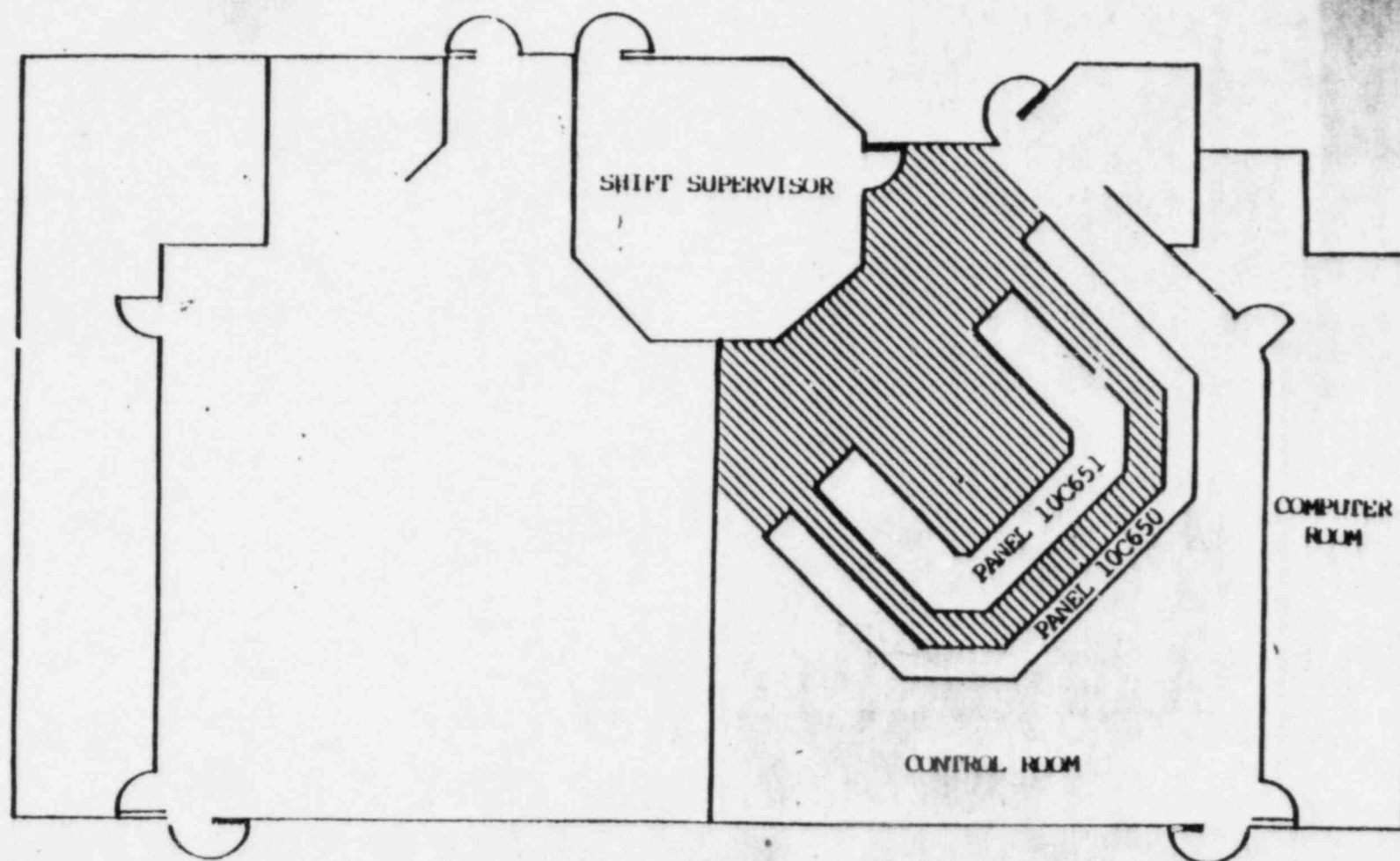
Position Purpose

This position is accountable for assisting the Senior Engineer - I&C Staff in training, procedures, material, and special projects as assigned.

Accountabilities, Responsibilities, Qualification

- Supports the I&C section in specific areas by gathering data preparing reports, tracking material, training, preparing work orders, etc. for routine or special projects.
- Prepares and reviews I&C procedures to comply with station administrative procedures.
- Maintains the I&C Inspection Order System and writes work orders as required.
- Reviews and updates the I&C section surveillance requirements as required.
- Performs special projects (i.e., suggestions, equipment problems, safety/security lists, etc.) as directed by the Senior Engineer - I&C Staff.
- Prepares status reports and conducts special studies related to various maintenance activities (i.e., response tracking recommendations, overtime studies, equipment studies, work order backlog, etc.).
- Maintains I&C instrument calibration records of in-plant calibration standards.
- Maintains schedules for offsite calibration of plant standards.
- Meets the minimum qualification requirements of ANSI/ANS 3.1-1981, paragraph 4.3.2, Supervisors not Requiring NRC Licenses.

ATTACHMENT 4
CONTROL ROOM COMPLEX



SHADED AREA INDICATES THE AREA
DESIGNATED 'AT THE CONTROLS'

ATTACHMENT 5 STARTUP COORDINATION INTERFACE

