HUMBOLDT BAY POWER PLANT

UNIT 3 - SAFSTOR

QUALITY ASSURANCE PLAN

December 1985

(Rev. 1)

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1.0 INTRODUCTION

1.1 Plan Objective

The objectives of Pacific Gas and Electric Company's (PGandE) Quality Assurance Plan (Plan) for Humboldt Bay Power Plant Unit 3 (HBPP-3) during SAFSTOR operation are:

a) To meet the regulatory requirements for quality assurance programs as specified in 10CFR71, "Packaging and Transportation of Radioactive Material", and in U.S. Nuclear Regulatory Commission (USNRC) Regulatory Guide 4.15, "Quality Assurance for Radiological Monitoring Programs (Normal Operations) - Effluent Streams and the Environment".

b) To assure compliance with the plant Technical Specifications.

1.2 Plan Scope

a) This Plan applies to the following HBPP-3 SAFSTOR activities:

* Radiological monitoring of gaseous and liquid effluents and the environment.

* Packaging and transport of radioactive material.

* Implementing plant Technical Specifications.

b) This Plan applies to all personnel involved in the HBPP-3 SAFSTOR activities.

1.3 Plan Control

The Manager, Quality Assurance shall be responsible to identify, prepare, submit for approval, and issue changes as are necessry to maintain the Plan current and in conformance with applicable regulatory requirements and PGandE commitments to the USNRC. Changes to the commitments contained herein shall be submitted to the USNRC in accordance with 10CFR50.54.

2.0 ORGANIZATION

PGandE's program for assuring the quality and safety of the decommissioning of HBPP-3 is organized in a structured manner with clearly defined levels of authority, assignments of responsibility, and lines of communication. Assignment of responsibility for an item or activity includes responsibility for its quality.

PGandE acknowledges full responsibility to its employees, stockholders, the general public, and affected governmental regulatory agencies for the establishment and execution of this Plan. The work of executing selected portions of this Plan may be delegated to organizations external to PGandE; however, in all such instances PGandE retains overall responsibility.

Specific responsibilities pertaining to quality assurance matters are assigned to various individuals throughout the Company. In each instance, the assignment of a responsibility to an individual includes with it a commensurate delegation of sufficient authority that the person can, in fact, fulfill that responsibility. Unless otherwise specifically prohibited, it is understood that the functions, tasks, and activities necessary to implement a responsibility may be delegated to and performed by other qualified individuals.

Instances are documented in which authority is to be delegated or support services are to be provided.

That individual within PGandE who has been assigned a particular responsibility in this Plan is the only person within the Company who is authorized to perform the activities necessary to discharge that responsibility. Normally, the activities related to discharging that particular responsibility will be performed either by the person who has been assigned that responsibility or by personnel who are directly subordinate to and under the control of that person. However, circumstances may arise where it is considered either necessary or desirable to have such activities, or some portion of them, actually performed by someone else. In such cases, the assigning person retains responsibility.

Verification of conformance to established requirements is accomplished by individuals or groups within the Quality Assurance organization who do not have direct responsibility for performing the work being verified or by individuals or groups trained and qualified in quality assurance concepts and practices and independent of the performance of the task. The persons and organizations performing quality assurance functions have direct access to management levels which assure the ability to identify quality problems, recommend or provide solutions through designated channels, and verify implementation of solutions.

They are sufficiently free from direct pressures for cost/schedule and have the responsibility to stop unsatisfactory work and control further processing, delivery, or installation of nonconforming material. (The organizational positions with stop work authority are identified in the implementing procedures.) The Quality Assurance Department reviews and documents concurrence with procedures that implement the requirements of the Plan.

Organization charts are presented in Section VII of the HBPP-3 Technical Specifications. Responsibilities of these individuals are summarized below.

The Executive Vice President, Facilities and Electric Resources Development has overall responsibility for the decommissioning of HBPP-3. The Executive Vice President reports to the President for all power plant development projects, with the exception of Diablo Canyon Power Plant, where he reports to the Chief Executive Officer. Reporting directly to the Executive Vice President are the Vice Presidents of Engineering, Planning and Research, General Construction, Nuclear Power Generation, and the Manager, Quality Assurance.

The Vice President, Planning and Research is responsible for providing, upon request, environmental plans and programs; environmental permits and certificates; environmental, radiological, and health physics investigations, analyses, monitoring, and mitigation services; and specialized engineering, technical, and scientific services to support the SAFSTOR operation of HBPP-3.

The Vice President, Nuclear Power Generation is responsible for the safe and efficient decommissioning of HBPP-3. Reporting directly to him are the Plant Manager, Humboldt Bay; the Manager, Nuclear Operations Support; the Director, Nuclear Regulatory Affairs; the Director, Nuclear Administrative and Support Services; the Manager, Nuclear Engineering and Construction Services; and the HBPP-3 Plant Staff Review Committee. The Vice President, Nuclear Power Generation approves and signs all official Company correspondence with the USNRC or their representatives.

The Manager, Nuclear Operations Support is responsible for providing General Office staff support to HBPP-3 in various operations-related areas such as safety review, reactor analysis, operations engineering, emergency planning, radiation protection and radwaste management.

The Plant Manager, Humboldt Bay, is responsible for the conduct of all onsite activities related to the safe and efficient surveillance and maintenance of HBPP-3. He is responsible to develop and is authorized to approve and direct the implementation of those programs, procedures, and instructions required for HBPP-3 within limits established by the Technical Specifications and administrative guidelines established by the Vice President, Nuclear Power Generation. The Quality Control Supervisor reports to the Plant Manager.

The Director, Nuclear Regulatory Affairs is the principal corporate interface with the USNRC and other regulatory agencies on matters related to obtaining and maintaining licenses for HBPP-3.

The Quality Control Supervisor is a member of the Plant Staff Review Committee. The Quality Control Supervisor functions as part of the Quality Assurance organization and participates in the day-to-day SAFSTOR Quality Assurance Plan activities. The Quality Control Supervisor shall have the authority to identify quality problems, recommend or provide solutions to quality problems, and verify implementation of solutions to quality problems. Inspection results shall be evaluated by the Quality Control Supervisor or designated personnel to assure that the inspection requirements have been satisfied.

The Manager, Quality Assurance is responsible for management of this Plan and to assure that this Plan is established and effectively implemented by all involved organizations, both internal and external to PGandE. The qualifications of the Manager, Quality Assurance are at least equivalent to those described in ANSI/ANS 3.1 - 1978, "Selection and Training of Nuclear Power Plant Personnel." The Chairman of the Board and the President have given him the organizational freedom and delegated the requisite authority to investigate any area or aspect of the Company's operations as necessary to identify and define problems associated with establishment or execution of this Plan. They have also delegated to him the authority to recommend solutions for such problems to whatever management level is necessary, and to verify that effective corrective action is taken in a timely manner. The Manager, Quality Assurance has the authority and responsibility to stop work should there be a serious breach of any part of this Plan, or of technical or regulatory requirements wherein public health or safety could be involved. The Manager, Quality Assurance is authorized to prepare, approve, and issue standard procedures prescribing a uniform Company-wide method of assuring quality when such standardization is essential to the effectiveness of this Plan.

3.0 QUALITY ASSURANCE REQUIREMENTS

3.1 General Requirements

Quality assurance requirements applicable to all the activities within the scope of this Plan are specified in this Section. Additional requirements for the radiological monitoring, radioactive material packaging and transport, and Technical Specification activities are specified in Sections 3.2, 3.3, and 3.4, respectively.

3.1.1 Procedures, Instructions, and Drawings

This Plan shall be implemented by procedures, instructions, or drawings prepared and utilized by organizations having responsibility to perform the activities described herein. Standard guidelines for the format, content, and review and approval processes shall be established and set forth in written procedures or instructions issued by the organizational units.

Procedures and instructions shall identify the required interfaces with other organizations and shall delineate the responsibilities of each for the specific activity.

Procedures and instructions shall be reviewed by other organizations with interface responsibilities and comments forwarded to the issuing organization for resolution. The Quality Assurance organization shall review and concur with (for compliance with this Plan) procedures and instructions that define administrative methods for implementing the requirements of this Plan.

3.1.2 Document Control

Documents and changes to documents that prescribe and verify activities affecting quality shall be controlled in a manner that precludes the use of inappropriate or outdated documents.

The organization responsible for establishing instructions, procedures, drawings, or other documents prescribing and verifying activities affecting quality shall also be responsible for developing and implementing systematic methods for the control of such documents.

Procedures and instructions shall provide means to assure that documents, including changes, are prepared, reviewed and approved for release by authorized personnel;

A document control system shall be established to: (a) identify the current revision of instructions, procedures, and drawings; and (b) assure the use thereof.

The organization issuing procedures shall be responsible to maintain a file of all procedure revisions issued.

3.1.3 Nonconformance Control

Measures shall be established in written procedures and utilized for documenting, reviewing, and dispositioning of nonconformances occurring in the conduct of the activities within the scope of this Plan. Technical decisions for the disposition of nonconformances shall be made by personnel with assigned authority in the relevant discipline.

3.1.4 Indoctrination and Training

Personnel involved in implementing the activities within the scope of this Plan shall be responsible for the quality of their work. These personnel shall receive:

* Indoctrination in the requirements of this Plan.

* Indoctrination in their organization's implementing procedures.

* Training and qualification in tasks requiring special skills or knowledge in accordance with the requirements referenced in Sections 3.2, 3.3 and 3.4.

Indoctrination, training, qualification and requalification (when applicable) shall be prescribed and performed in accordance with written procedures which specify the management responsibilities, training areas, frequency of training, method of qualification and requalification, and documentation requirements. Each organization shall be responsible for the training of its own personnel. The Quality Assurance Department shall assist applicable organizations by providing indoctrination in the purposes and requirements of this Plan.

3.1.5 Records

Records shall be maintained, in accordance with written procedures, to furnish evidence that items or activities affecting quality meet: (a) technical requirements of applicable procedures, instructions, drawings, and other documents; and (b) regulatory requirements.

Participating organizations shall establish a control system for the collection, storage, and maintenance of completed quality assurance records in accordance with USNRC Regulatory Guide 1.88 (October 1976), "Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records." (PGandE shall comply to a 2-hr fire rating rather than that specified therein.)

Records shall be assigned a retention period in conformance with applicable regulatory requirements.

3.1.6 Audits

The Manager, Quality Assurance shall audit the implementation of this Plan at least once every 12 months.

Audits shall be conducted in accordance with USNRC Regulatory Guide 1.144 (January 1979) "Auditing of Quality Assurance Programs for Nuclear Power Plants."

Auditors shall be independent of direct responsibility for the performance of the activities they audit; have experience or training commensurate with the scope and complexity of their audit responsibility; and be qualified in accordance with USNRC Regulatory Guide 1.146 (August 1980) "Qualification of Quality Assurance Program Audit Personnel for Nuclear Power Plants."

Audit reports shall be prepared, signed by the Lead Auditor, and issued to responsible management of both the audited and auditing organizations. Managment of the audited organization shall review the audit report and investigate any adverse findings to identify their cause and determine the extent of corrective action required, including action to prevent recurrence. They shall schedule such corrective action and also take appropriate action to assure it is accomplished as scheduled. They shall respond to the Manager, Quality Assurance regarding each adverse finding, give the results of their review and investigation, and clearly state the corrective action taken or planned. The Manager, Quality Assurance shall: receive the written response to audit findings; evaluate the adequacy of each response; assure that corrective action is identified and taken for each adverse finding; and confirm that corrective action is accomplished as scheduled.

3.2 Radiological Monitoring

Radiological monitoring of gaseous and liquid effluents and the environment shall be controlled in accordance with the requirements of Section 3.1 and USNRC Regulatory Guide 4.15 (December 1977).

3.3 Radioactive Material Packaging and Transport

Containers used for transport of radioactive materials shall be controlled in accordance with the requirements of Section 3.1 and the NRC-approved DCPP Quality Assurance Program, as contained in Sections 17.1 - 17.18 Diablo Canyon Power Plant (DCPP) Final Safety Analysis Report Update (FSARU), and thereby in compliance with the quality assurance requirements of 10CFR71.101. Relative to Section 17.1, DCPP FSARU, the plant organization referenced therein shall be the HBPP-3 organization described in the HBPP-3 Technical Specifications.

3.4 Technical Specification Activities

The Technical Specification activities shall be controlled in accordance with the requirements of Section 3.1 and the Operating Limits and Requirements and the Administrative Controls as specified in the HBPP-3 Technical Specifications.