

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 25, 1993

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Dear Chairpersons:

SUBJECT: CONTENT OF STANDARD TECHNICAL SPECIFICATIONS, SECTION 5.0, ADMINISTRATIVE CONTROLS

As a result of our discussion on this subject at the meeting on August 12, 1993, the NRC staff has conducted a review of the Administrative Controls (Section 5.0) of the improved Standard Technical Specifications (STS) to develop justifications for retaining specific requirements. The staff has identified a basis for retention for about half of the administrative control provisions. We have concluded that the provisions in the other sections can be relocated to other licensee documents for which changes to those provisions are adequately controlled by other regulatory requirements.

In general, administrative controls are those requirements not covered by other technical specification sections, but are necessary to assure operation of the facility in a safe manner. The initial screening for measurement against this criterion contained two categories: (1) requirements not covered by other regulatory requirements, but necessary to assure the safe operation of the facility or (2) specific requirements that are broadly covered by regulations or other regulatory controls, for which details need to be specified in the technical specifications to ensure safe plant operation. In general, technical specifications should not duplicate other regulatory requirements. Certain reporting requirements need to be retained: Occupational Radiation Exposure Report (5.9.1.2.a), Monthly Operating Report (5.9.1.5), and the Annual Radiological Environmental Operating Report (5.9.1.3). These provisions are not specified in regulations because they have been historically required by technical specifications. In addition, 10 CFR 50, Appendix I requirements required under 50.36a are included in the × RD-8-2 (Behever & Hillary) × RD-8-2 (Combustion Engeller × L-4-1, Part 50 (Desputations × RD-10-1 RD-8-2 (Westinghause) administrative controls.

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Addressees - 2 -October 25, 1993 The staff requests that the Owners Groups review the proposed scope of administrative controls to be relocated, as depicted in the enclosed "strikeout" version of the STS, and develop corresponding details of the relocation process, consistent with the Commission's Final Policy Statement on Technical Specifications Improvements. These details should include the identification of the licensee-controlled documents (e.g., the FSAR, the QA Plan, the Security Plan) and the associated process for change control, e.g., the 50.59 change process. Particular attention should be given to the relocation of the alternative requirements for High Radiation Areas (5.11). In preparing this information, it is important to note that the NRC expects that the relocation of these provisions will not diminish the effectiveness of enforcement of the relocated provisions. During the course of this review, the staff concluded that certain administrative programs should be restored to applicable surveillance requirements: Primary Coolant Sources Outside Containment (5.7.2.4), Pre-Stressed Concrete Containment Tendon Surveillance Program (5.7.2.10), Ventilation Filter Testing Program (5.7.2.15) and Diesel Fuel Oil Testing Program (5.7.2.17). These programs do not fit the general characteristics of an administrative control, rather they appear to have been developed as a convenient location for technical requirements. We would like the Owners Groups to propose appropriate relocation of these requirements. Enclosed is a mark-up of Revision O of the STS. This mark-up does not include other changes to Section 5.0 which are being processed separately for other reasons. The enclosed markup also does not include changes to correct internal consistency (e.g., cross-references) or otherwise change the organization or structure of the administrative controls. We would like the Owners Groups to suggest possible changes to the organization and structure of the administrative controls to complement these changes. The Technical Specifications Branch will discuss the proposed administrative control changes with the Owners Groups at the next scheduled meeting, including means to accommodate these changes for lead plant technical specification conversions. The staff is separately preparing documents that will explain the basis for retaining specific provisions of the Administrative Controls, and the basis and conditions for relocating the other provisions. WMwell William T. Russell, Associate Director for Inspection & Technical Assessment Office of Nuclear Reactor Regulation Enclosure: As stated

5.1 Responsibility

5.1.1 The [Plant Superintendent] shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

The [Plant Superintendent], or his designee, in accordance with approved administrative procedures, shall approve prior to implementation, each proposed test or experiment and proposed changes and modifications to unit systems or equipment that affect nuclear safety.

The [Shift Supervisor (SS)] shall be responsible for the control room command function. A management directive to this effect, signed by the [highest level of corporate or site management] shall be issued annually to all station personnel. During any absence of the [SS] from the control room while the unit is in MODE 1, 2, 3, or 4, an individual with a valid an active Senior Reactor Operator (SRO) license shall be designated to assume the control room command function. During any absence of the [SS] from the control room while the unit is in MODE 5 or 6, an individual with a valid an active SRO license or Reactor Operator license shall be designated to assume the control room command function.

5.2 Organization

5.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting the safety of the nuclear power plant.

- a. Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all operating organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the [FSAR];
- b. The [Plant Superintendent] shall be responsible for overall safe operation of the plant and shall have control over those onsite activities necessary for safe operation and maintenance of the plant;
- c. The [a specified cc.porate executive position] shall have corporate responsibility for overall plant nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the plant to ensure nuclear safety; and
- d. The individuals who train the operating staff, carry out health physics, or perform quality assurance functions may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their independence from operating pressures.

5.2.2 Unit Staff

The unit staff organization shall be as follows include the following:

a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 5.2.2 1. An auxiliary

5.2.2 <u>Unit Staff</u> (continued)

operator shall be assigned to each reactor containing fuel and an additional auxiliary operator shall be assigned for each control room from which a reactor is operating.

- b. At least one licensed Reactor Operator (RO) shall be present in the control room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3, or 4, at least one licensed Senior Reactor Operator (SRO) shall be present in the control room.
- c. A [Health Physics Technician] shall be on site when fuel is in the reactor. The position may be vacant for not more than 2 hours, in order to provide for unexpected absence, provided immediate action is taken to fill the required position.
- d. Either a licensed SRO or licensed SRO limited to fuel handling who has no concurrent responsibilities during this operation shall be present during fuel handling and shall directly supervise all CORE ALTERATIONS.
- e. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety related functions (e.g., licensed SROs, licensed ROs, health physicists, auxiliary operators, and key maintenance personnel).

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work an [8 or 12] hour day, nominal 40 hour week while the unit is operating. However, in the event that unforeseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintenance, or major plant modification, on a temporary basis the following guidelines shall be followed:

 An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time;

Two unit sites with both units shutdown or defueled require a total of three auxiliary operators for the two units

5.2 Organization

- 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 7 day period, all excluding shift turnover time;
- A break of at least 8 hours should be allowed between work periods, including shift turnover time;

5.2.2 <u>Unit Staff</u> (continued)

 Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized in advance by the [Plant Superintendent] or his designee, in accordance with approved administrative procedures, or by higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation.

Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the [Plant Superintendent] or his designee to ensure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

OR

The amount of overtime worked by unit staff members performing safety related functions shall be limited and controlled in accordance with the NRC Policy Statement on working hours (Generic Letter 82-12).

- f. The [Operations Manager or Assistant Operations Manager] shall hold an active SRO license.
- g. The Shift Technical Advisor (STA) shall provide advisory technical support to the Shift Supervisor (SS) in the areas of thermal hydraulics, reactor engineering, and plant analysis with regard to the safe operation of the unit. In addition, the STA shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

Table 5.2.2 1 (page 1 of 1) Minimum Shift Crew Composition(a) [Single Unit Facility]

POSITION(b)	MINIMUM-CI	MINIMUM CREW NUMBER	
	UNIT IN MODE 1, 2, 3, OR 4	UNIT IN MODE 5 OR 6	
\$\$		-	
SR0	i	None	
RO	2	1	
AO STA(C)	2	None	

- (a) The shift crew composition may be one less than the minimum requirements of Table 5.2.2 1 for not more than 2 hours to accommodate unexpected absences of on duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 5.2.2 1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.
- (b) Table Notation:

SS [Shift Supervisor] with a Senior Reactor Operator license;
SRO Individual with a Senior Reactor Operator license;
RO Individual with a Reactor Operator license;
AO Auxiliary Operator;
STA Shift Technical Advisor.

(c) The STA position may be filled by an on shift SS or SRO provided the individual meets the Commission Policy Statement on Engineering Expertise on Shift.

Table 5.2.2-1 (page 1 of 1) Minimum Shift Crew Composition(a) [Two Units With a Common Control Room] (Totals for Both Units)

POSITION(b)	MINIMUM GREW NUMBER			
	EACH UNIT IN MODE 1, 2, 3, OR 4	ONE UNIT IN MODE 1, 2, 3, OR 4, AND ONE UNIT IN MODE 5, MODE 6, OR DEFLIELED	EACH UNIT IN MODE 5 OF 6 OR DEFUELED	
ES STA(C)	.1 .1 .3 .3	1 1 3 3	4 None 2 3 None	

- (a) The shift crew composition may be one loss than the minimum requirements of Table 5.2.2-1 for not more than 2 hours to accommodate unexpected absence of on-duty shift crew members, provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 5.2.2-. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or obsent.
- (b) Table Notations
 - 68 [Shift Supervisor] with a Senior Reactor Operator License for each unit whose reactor contains (vel.
 - SRO Individual with a Senior Reactor Operator License for each unit whose reactor contains fuely. Otherwise, provide an individual for each unit who holds a Senior Reactor Operator License for the unit accigned. During CORE ALTERATIONS on either unit at least one licensed SRO or licensed SRO limited to fuel handling, who has no other concurrent responsibilities, must be present.
 - RO Individual with a Reactor Operator License or a Senior Reactor Operator License for unit accigned. At least one RO shall be assigned to each unit whose reactor contains fuel and one RO shall be assigned as relief operator for unit(s) in MODE 1, 2, or 3. Individuals acting as relief operators shall hold a license for both units. Otherwise, for each unit, provide a relief operator who holds a license for the unit assigned.
 - AO . At least one auxiliary operator chall be assigned to each unit whose reactor contains fuel.
- (c) The STA position may be filled by an on-shift SS or SRO provided the individual mosts the Commission Policy Statement on Engineering Expertise on Shift.

Table 5.2.2 1 (page 1 of 1) Minimum Shift Crew Composition(a) [Two Units With Two Control Rooms] (Numbers for Each Unit)

POSITION(b)	MINIMUM CREW NUMBER			
	UNIT IN MODE 1, 2, 3, OR 4	UNIT IN MODE 5 OR 6	UNIT IN MODE 1, 2, 3, OR 4; OTHER UNIT IN MODE 5 OR 6 OR DEFUELED	UNIT IN MODE 5 OR 6; OTHER UNIT IN MODE 5 OR 6 OR DEFUELED
SS SRO RO AO STA(C)	1(d) 5 1(d)	none l None None	1(d) 1 2 2 1	7(d) None 1 2(e) None

- (a) The shift crew composition may be one less than the minimum requirements of Table 5.2.2 1 for not more than 2 hours in order to accommodate unexpected absence of on duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 5.2.2 1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.
- (b) Table Notation:

SS [Shift Supervisor] with a Senior Reactor Operator license;
SRO Individual with a Senior Reactor Operator license;
RO Individual with a Reactor Operator license;
AO Auxiliary Operator;
STA Shift Technical Advisor.

- (c) The STA position may be filled by an on shift SS or SRO provided the individual meets the Commission Policy Statement on Engineering Expertise on Shift.
- (d) Individual may fill the same position on the other unit if licensed for both.
- (e) One of the two required individuals may fill the same position on the other unit.

5.3 Unit Staff Qualifications

Reviewer's Note: Minimum qualifications for members of the unit staff shall be specified by use of an overall qualification statement referencing an ANSI Standard acceptable to the NRC staff or by specifying individual position qualifications. Generally, the first method is preferable; however, the second method is adaptable to those unit staffs requiring special qualification statements because of unique organizational structures.

Each member of the unit staff shall meet or exceed the minimum qualifications of [Regulatory Guide 1.8, Revision 2, 1987, or more recent revisions, or ANSI Standard acceptable to the NRC staff]. The staff not covered by [Regulatory Guide 1.8] shall meet or exceed the minimum qualifications of [Regulations, Regulatory Guides, or ANSI Standards acceptable to NRC staff]. In addition, the Shift Technical Advisor shall meet the qualifications specified by the Commission Policy Statement on Engineering Expertise on Shift.

5.4 Training

A retraining and replacement training program for the unit staff shall be maintained under the direction of the [position title] and shall meet or exceed the requirements and recommendations of Section [] of [an ANSI Standard acceptable to the NRC staff] and 10 CFR 55, and, for appropriate designated positions, shall include familiarization with relevant industry operational experience.

5.5 Reviews and Audits

Reviewer's Note: The licensee shall describe the method(s) established to conduct independent reviews and audits. The methods may take a range of forms acceptable to the NRC. These methods may include creating an organizational unit or a standing or ad hoc committee, or assigning individuals capable of conducting these reviews and audits. When an individual performs a review function, a cross disciplinary review determination is necessary. If deemed necessary, such reviews shall be performed by the review personnel of the appropriate discipline. Individual reviewers shall not review their own work. Regardless of the method used, the licensee shall specify the functions, organizational arrangement, responsibilities, appropriate ANSI/ANS 3.1 1981 qualifications, and reporting requirements of each functional element or unit that contributes to these processes.

Reviews and audits of activities affecting plant safety have two distinct elements. The first element is the reviews performed by plant staff personnel to ensure that day to day activities are conducted in a safe manner. These reviews are described in Section 5.5.1. The second element, described in Section 5.5.2, is the [offsite] reviews and audits of unit activities and programs affecting nuclear safety that are performed independent of the plant staff. The [offsite] reviews and audits should provide integration of the reviews and audits into a cohesive program that provides senior level utility management with an assessment of facility operation and recommends actions to improve nuclear safety and plant reliability. It should include an assessment of the effectiveness of reviews conducted according to Section 5.5.1.

5.5.1 Plant Reviews

Reviewer's Note: The licensee shall describe provisions for plant reviews (organization, reporting, records) and the appropriate ANSI/ANS Standard for personnel qualification.

5.5.1.1 Functions

The [plant review method specified in Specification 5.5.1] shall, as a minimum, incorporate functions that:

 Advise the [Plant Superintendent] on all matters related to nuclear safety;

5.5.1.1 Functions (continued)

- b. Recommend to the [Plant Superintendent] approval or disapproval of items considered under Specifications 5.5.1.2.a through 5.5.1.2.e prior to their implementation, except as provided in Specification 5.7.1.3;
- E. Determine whether each item considered under Specifications 5.5.1.2.a through 5.5.1.2.d constitutes an unreviewed safety question as defined in 10 CFR 50.59; and
- d. Notify the [Vice President Nuclear Operations] of any safety significant disagreement between the [review organization or individual specified in Specification 5.5.1] and the [Plant Superintendent] within 24 hours. However, the [Plant Superintendent] shall have responsibility for resolution of such disagreements pursuant to Specification 5.1.1.

5.5.1.2 Responsibilities

The [plant review method specified in Specification 5.5.1] shall be used to conduct, as a minimum, reviews of the following:

- a. All proposed procedures required by Specification 5.7.1.1 and changes thereto:
- All proposed programs required by Specification 5.7.2 and changes thereto;
- e. All proposed changes and modifications to unit systems or equipment that affect nuclear safety:
- d. All proposed tests and experiments that affect nuclear safety; and
- e. All proposed changes to these Technical Specifications (TS), their Bases, and the Operating License.

5.5 Reviews and Audits (continued)

5.5.2 [Offsite] Review and Audit

Reviewer's Note: The licensee shall describe the provisions for reviews and audits independent of the plant's staff (organization, reporting, and records) and the appropriate ANSI/ANS Standards for personnel qualifications. These individuals may be located onsite or offsite provided organizational independence from plant staff is maintained. The [technical] review responsibilities, Specification 5.5.2.4, shall include several individuals located onsite.

5.5.2.1 Functions

The [offsite review and audit provisions specified in Specification 5.5.2] shall, as a minimum, incorporate the following functions that:

- Advise the [Vice President Nuclear Operations] on all matters related to nuclear safety;
- b. Advise the management of the audited organization, and [its Corporate Management and Vice President Nuclear Operations], of the audit results as they relate to nuclear safety:
- Recommend to the management of the audited organization, and its management, any corrective action to improve nuclear safety and plant operation; and
- d. Notify the [Vice President Nuclear Operations] of any safety significant disagreement between the [review organization or individual specified in Specification 5.5.2] and the [organization or function being reviewed] within 24 hours.

5.5.2.2 [Offsite] Review Responsibilities

The [review method specified in Specification 5.5.2] shall be responsible for the review of:

a. The safety evaluations for changes to procedures, equipment, or systems, and tests or experiments completed under the provisions of 10 CFR 50.59, to verify that such actions do not constitute an unreviewed safety question as defined in 10 CFR 50.59;

5.5.2.2 [Offsite] Review Responsibilities (continued)

- b. Proposed changes to procedures, equipment, or systems that involve an unreviewed safety question as defined in 10 CFR 50.59;
- c. Proposed tests or experiments that involve an unreviewed safety question as defined in 10 CFR 50.59;
- d. Proposed changes to TS and the Operating License:
- e. Violations of codes, regulations, orders, license requirements, and internal procedures or instructions having nuclear safety significance;
- f. All Licensee Event Reports required by 10 CFR 50.73:
- g. Plant staff performance:
- h. Indications of unanticipated deficiencies in any aspect of design or operation of structures, systems, or components that could affect nuclear safety;
- Significant accidental, unplanned, or uncontrolled radioactive releases, including corrective action to prevent recurrence;
- j. Significant operating abnormalities or deviations from normal and expected performance of equipment that affect nuclear safety; and
- k. The performance of the corrective action system.

Reports or records of these reviews shall be forwarded to the [Vice President Nuclear Operations] within 30 days following completion of the review.

5.5.2.3 Audit Responsibilities

The audit responsibilities shall encompass:

- a. The conformance of unit operation to provisions contained within the TS and applicable license conditions;
- b. The training and qualifications of the unit staff:

5.5.2.3 Audit Responsibilities (continued)

- c. The implementation of all programs required by Specification 5.7.2:
- d. Actions taken to correct deficiencies occurring in equipment, structures, systems, components, or method of operation that affect nuclear safety; and
- e. Other activities and documents as requested by the [Vice President Nuclear Operations].

Reports or records of these audits shall be forwarded to the [Vice President Nuclear Operations] within 30 days following completion of the review.

5.5.2.4 [Technical] Review Responsibilities

The [technical] review responsibilities shall encompass:

- a. Plant operating characteristics, NRC issuances, industry advisories, Licensee Event Reports, and other sources that may indicate areas for improving plant safety;
- b. Plant operations, modifications, maintenance, and surveillance to verify independently that these activities are performed safely and correctly and that human errors are reduced as much as practical;
- Internal and external operational experience information that may indicate areas for improving plant safety; and
- d. Making detailed recommendations through the [Vice President Nuclear Operations] for revising procedures, equipment modifications or other means of improving nuclear safety and plant reliability.

5.5.3 Records

Written records of reviews and audits shall be maintained. As a minimum these records shall include:

a. Results of the activities conducted under the provisions of Section 5.5:

5.5 Reviews and Audits (continued)

5.5.3 Records (continued)

- b. Recommendations to the management of the organization being audited:
- An assessment of the safety significance of the review or audit findings;
- d. Recommended approval or disapproval of items considered under Specifications 5.5.1.2.a through 5.5.1.2.e; and
- e. Determination whether each item considered under Specifications 5.5.1.2.a through 5.5.1.2.d constitutes an unreviewed safety question as defined in 10 CFR 50.59.

5.6 Technical Specifications (TS) Bases Control

- 5.6.1 Changes to the Bases of the TS shall be made under appropriate administrative controls and reviewed according to Specification 5.5.1.
- 5.6.2 Licensees may make changes to Bases without prior NRC approval provided the changes do not involve either of the following:
 - a. A change in the TS incorporated in the license; or
 - b. A change to the updated FSAR or Bases that involves an unreviewed safety question as defined in 10 CFR 50.59.
- 5.6.3 The Bases Control Program shall contain provisions to ensure that the Bases are maintained consistent with the FSAR.
- 5.6.4 Proposed changes that meet the criteria of (a) or (b) above shall be reviewed and approved by the NRC prior to implementation. Changes to the Bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71.

5.7 Procedures, Programs, and Manuals

5.7.1 Procedures

5.7.1.1 Scope

Written procedures shall be established, implemented, and maintained covering the following activities:

- The applicable procedures recommended in Regulatory Guide 1.33, Revision 2, Appendix A, February 1978;
- b. The emergency operating procedures required to implement the requirements of NUREG-0737 and to NUREG-0737, Supplement 1, as stated in [Generic Letter 82-33];
- c. Security plan implementation;
- d. Emergency plan implementation:
- e. Quality assurance for effluent and environmental monitoring;
- f. Fire Protection Program implementation; and
- g. All programs specified in Specification 5.7.2.

5.7.1.2 Review and Approval

Each procedure of Specification 5.7.1.1, and changes thereto, shall be reviewed in accordance with Specification 5.5.1, approved by the [Plant Superintendent] or his designee in accordance with approved administrative procedures prior to implementation and reviewed periodically as set forth in administrative procedures.

5.7.1.3 Temporary Changes

Temporary changes to procedures of Specification 5.7.1 may be made provided:

- a. The intent of the existing procedure is not altered;
- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator license on the unit affected; and

5.7.1.3 Temporary Changes (continued)

c. The change is documented and reviewed in accordance with Specification 5.5.1 and approved by the [Plant Superintendent] or his designee in accordance with approved administrative procedures within 14 days of implementation.

5.7.2 Programs and Manuals

The following programs shall be established, implemented, and maintained.

5.7.2.1 Radiation Protection Program

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR 20 and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

5.7.2.2 Process Control Program (PCP)

The PCP shall contain the current formulas, sampling, analyses, tests, and determinations to be made to ensure that processing and packaging of solid radioactive wastes will be accomplished to ensure compliance with 10 CFR 20, 10 CFR 61, and 10 CFR 71; state regulations; burial ground requirements; and other requirements governing the disposal of solid radioactive waste.

Licensee initiated changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
 - sufficient information to support the change(s) and appropriate analyses or evaluations justifying the change(s), and
 - a determination that the change(s) maintain the overall conformance of the solidified waste product to the existing requirements of Federal, State, or other applicable regulations.

5.7.2.2 Process Control Program (PCP) (continued)

b. Shall be effective after review and acceptance by the [review method of Specification 5.5.1] and the approval of the [Plant Superintendent].

5.7.2.3 Offsite Dose Calculation Manual (ODCM)

- a. The ODCM shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm and trip setpoints, and in the conduct of the Radiological Environmental Monitoring Program; and
- b. The ODCM shall also contain the Radioactive Effluent Controls and Radiological Environmental Monitoring programs required by Specification 5.7.2, and descriptions of the information that should be included in the Annual Radiological Environmental Operating and Radioactive Effluent Release Reports required by Specification [5.9.1.3] and Specification [5.9.1.4].

Licensee initiated changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained. This documentation shall contain:
 - sufficient information to support the change(s) together with the appropriate analyses or evaluations justifying the change(s),
 - 2. a determination that the change(s) maintain the levels of radioactive effluent control required by 10 CFR 20.106, 40 CFR 190, 10 CFR 50.36a, and 10 CFR 50, Appendix I, and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations:
- b. Shall become effective after review and acceptance by the [review method of Specification 5.5.1] and the approval of the [Plant Superintendent]; and

5.7.2.3 Offsite Dose Calculation Manual (ODCM) (continued)

c. Shall be submitted to the NRC in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change in the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.7.2.4 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include [Recirculation Spray, Safety Injection, Chemical and Volume Control, gas stripper, and Hydrogen Recombiner]. The program shall include the following:

- Preventive maintenance and periodic visual inspection requirements; and
- b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.7.2.5 In Plant Radiation Monitoring

This program provides controls to ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- a. Training of personnel:
- b. Procedures for monitoring: and
- equipment.

5.7.2 Programs and Manuals (continued)

5.7.2.6 Post Accident Sampling

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive gases, and particulates in plant gaseous effluents and containment atmosphere samples under accident conditions. The program shall include the following:

- a. Training of personnel;
- b. Procedures for sampling and analysis; and
- c. Provisions for maintenance of sampling and analysis equipment.

5.7.2.7 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- a. Limitations on the functional capability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM;
- b. Limitations on the concentrations of radioactive material released in liquid effluents to unrestricted areas, conforming to 10 CFR 20, Appendix B, Table II, Column 2;
- c. Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.106 and with the methodology and parameters in the ODCM;
- d. Limitations on the annual and quarterly doses or dose commitment to a member of the public from radioactive materials in liquid effluents released from each unit to unrestricted areas, conforming to 10 CFR 50, Appendix I;

5.7.2.7 Radioactive Effluent Controls Program (continued)

- e. Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days;
- f. Limitations on the functional capability and use of the liquid and gaseous effluent treatment systems to ensure that appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a period of 31 days would exceed 2% of the guidelines for the annual dose or dose commitment, conforming to 10 CFR 50, Appendix I;
- g. Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the site boundary conforming to the dose associated with 10 CFR 20, Appendix B, Table II, Column 1:
- h. Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I;
- i. Limitations on the annual and quarterly doses to a member of the public from iodine-131, iodine-133, tritium, and all radionuclides in particulate form with half lives > 8 days in gaseous effluents released from each unit to areas beyond the site boundary, conforming to 10 CFR 50, Appendix I; and
- j. Limitations on the annual dose or dose commitment to any member of the public due to releases of radioactivity and to radiation from uranium fuel cycle sources, conforming to 40 CFR 190.

5.7.2.8 Radiological Environmental Monitoring Program

This program is for monitoring the radiation and radionuclides in the environs of the plant: The program shall provide representative measurements of radioactivity in the highest potential exposure pathways and verification of the accuracy of the effluent monitoring program and modeling of environmental

5.7.2.8 Radiological Environmental Monitoring Program (continued)

exposure pathways. The program shall be contained in the ODCM, shall conform to the guidance of 10 CFR 50, Appendix I, and shall include the following:

- a. Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM;
- b. A land Use Census to ensure that changes in the use of areas at and beyond the site boundary are identified and that modifications to the monitoring program are made if required by the results of this census; and
- c. Participation in an Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

5.7.2.9 Component Cyclic or Transient Limit

This program provides controls to track the FSAR, Section [], cyclic and transient occurrences to ensure that components are maintained within the design limits.

5.7.2.10 Pre-Stressed Concrete Containment Tendon Surveillance Program

This program provides controls for monitoring any tendon degradation in prestressed concrete containments, including effectiveness of its corrosion protection medium, to ensure containment structural integrity. The program shall include baseline measurements prior to initial operations. The Tendon Surveillance Program, inspection frequencies, and acceptance criteria shall be in accordance with [Regulatory Guide 1.35, Revision 3, 1989].

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Tendon Surveillance Program inspection frequencies.

5.7.2 Programs and Manuals (continued)

5.7.2.11 Inservice Inspection Program Reactor Coolant Pump Flywheel Inspection Program

This program shall provides controls for inservice inspection of ASME Code Class 1, 2, and 3 components, including applicable supports. The program shall include the following:

- a. Provisions that inservice inspection of ASME Code Class 1, 2, and 3 components shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a:
- b. The provisions of SR 3.0.2 are applicable to the frequencies for performing inservice inspection activities;
- c. Inspection of each reactor coolant pump flywheel per the recommendations of Regulation Position c.4.b of Regulatory Guide 1.14, Revision 1, August 1975; and
- d. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any TS.

5.7.2.12 Inservice Testing Program

This program provides controls for inservice testing of ASME Code Class 1, 2, and 3 components including applicable supports. The program shall include the following:

- a. Provisions that inservice testing of ASME Code Class 1, 2, and 3 pumps, valves, and snubbers shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50.55a:
- b. Testing frequencies specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as follows:

5.7.2 12 Inservice Testing Program (continued)

ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice testing activities

Required Frequencies for performing inservice testing activities

Weekly
Monthly
Quarterly or every
3 months
Semiannually or
every 6 months
Every 9 months
Yearly or annually
Biennially or every
2 years

At least once per 7 days
At least once per 31 days
At least once per 92 days
At least once per 184 days
At least once per 276 days
At least once per 366 days

At least once per 731 days

- c. The provisions of SR 3.0.2 are applicable to the above required Frequencies for performing inservice testing activities;
- The provisions of SR 3.0.3 are applicable to inservice testing activities; and
- e. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any TS.

5.7.2.13 Steam Generator (SG) Tube Surveillance Program

TO BE EVALUATED ON A PLANT-SPECIFIC BASIS UNTIL GENERIC PRACTICES ARE APPROVED

Each SG shall be demonstrated OPERABLE by performance of an inservice inspection program. The program shall include the following:

a. SG tube sample size selection, sample size expansion, and inspection result classification criteria. Sample selection and testing shall be in accordance with [Regulatory Guide 1.83, Revision [], date].

5.7.2.13 Steam Generator (SG) Tube Surveillance Program (continued)

- b. The establishment of SG tube inspection frequency dependent upon inspection result classification. Inspection frequency shall be in accordance with [Regulatory Guide 1.83, Revision [], date].
- c. SG tube plugging/repair limits. These limits shall be [40]% of the nominal tube wall thickness consistent with [Regulatory Guide 1.83, Revision [], date].
- d. Specific definitions and limits for SG tube inservice inspection acceptance criteria consistent with [Regulatory Guide 1.83, Revision [], date].

The content and frequency of written reports shall be in accordance with Specification 5.9.2.

The provisions of SR 3.0.2 are applicable to SG Tube Surveillance Program inspection frequencies except those established by Category C 3 inspection results.

[Key elements to be discussed and provided.]

5.7.2.14 Secondary Water Chemistry

This program provides controls for monitoring secondary water chemistry to inhibit SG tube degradation and low pressure turbine disc stress corrosion cracking. The program shall include:

- Identification of a sampling schedule for the critical variables and control points for these variables;
- b. Identification of the procedures used to measure the values of the critical variables;
- c. Identification of process sampling points, which shall include monitoring the discharge of the condensate pumps for evidence of condenser in leakage;
- d. Procedures for the recording and management of data;
- e. Procedures defining corrective actions for all off control point chemistry conditions; and

5.7	Procedures,	Programs,	and	Manual	S
Name and Address of the Owner,		Name and Address of the Owner, where the Owner, which is th		THE RESERVE THE PERSON	-

- 5.7.2.14 Secondary Water Chemistry (continued)
 - f. A procedure identifying the authority responsible for the interpretation of the data and the sequence and timing of administrative events, which is required to initiate corrective action.
- 5.7.2.15 Ventilation Filter Testing Program (VFTP)

A program shall be established to implement the following required testing of Engineered Safety Feature (ESF) filter ventilation systems at the frequencies specified in [Regulatory Guide], and in accordance with [Regulatory Guide 1.52, Revision 2; ASME N510-1989; and AG-1].

Demonstrate for each of the ESF systems that an inplace test of the high efficiency particulate air (HEPA) filters shows a penetration and system bypass < [0.05]% when tested in accordance with [Regulatory Guide 1.52, Revision 2, and ASME N510-1989] at the system flowrate specified below [± 10%].

ESF Vent	ilation System	Flowrate		

b. Demonstrate for each of the ESF systems that an inplace test of the charcoal adsorber shows a penetration and system bypass < [0.5]% when tested in accordance with [Regulatory Guide 1.52, Revision 2, and ASME N510-1989] at the system flowrate specified below [\pm 10%].

ESF V	/entilation	System	Flow	rate
-				-
Lawrence .				

5.7 Proced	lures, Programs, and Manuals
5.7.2.15	Ventilation Filter Testing Program (VFTP) (continued)
	c. Demonstrate for each of the ESF systems that a laboratory test of a sample of the charcoal adsorber, when obtained as described in [Regulatory Guide 1.52, Revision 2], shows the methyl iodide penetration less than the value specified below when tested in accordance with [ASTM D3803-1989] at a temperature of ≤ [30°C] and greater than or equal to the relative humidity specified below.
	ESF Ventilation System Penetration RH
	Reviewer's Note: Allowable penetration = [100% - methyl iodide efficiency for charcoal credited in staff safety evaluation/ (safety factor).
	Safety factor = [5] for systems with heaters. = [7] for systems without heaters.
	d. Demonstrate for each of the ESF systems that the pressure drop across the combined HEPA filters, the prefilters, and the charcoal adsorbers is less than the value specified below when tested in accordance with [Regulatory Guide 1.52, Revision 2, and ASME N510-1989] at the system flowrate specified below [± 10%].
	ESF Ventilation System Delta P Flowrate
	e. Demonstrate that the heaters for each of the ESF systems dissipate the value specified below [± 10%] when tested in accordance with [ASME N510-1989].
	ESF Ventilation System Wattage

5.7.2.15 Ventilation Filter Testing Program (VFTP) (continued)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the VFTP test frequencies.

5.7.2.16 Explosive Gas and Storage Tank Radioactivity Monitoring Program

This program provides controls for potentially explosive gas mixtures contained in the [Waste Gas Holdup System], [the quantity of radioactivity contained in unprotected outdoor liquid storage tanks]. The gaseous radioactivity quantities shall be determined following the methodology in [Branch Technical Position (BTP) ETSB 11-5, "Postulated Radioactive Release due to Waste Gas System Leak or Failure"]. The liquid radwaste quantities shall be determined in accordance with [Standard Review Plan, Section 15.7.3, "Postulated Radioactive Release due to Tank Failures"].

The program shall include:

- a. The limits for concentrations of hydrogen and oxygen in the [Waste Gas Holdup System] and a surveillance program to ensure the limits are maintained. Such limits shall be appropriate to the system's design criteria (i.e., whether or not the system is designed to withstand a hydrogen explosion);
- b. A surveillance program to ensure that the quantity of radioactivity contained in [each gas storage tank and fed into the offgas treatment system] is less than the amount that would result in a whole body exposure of ≥ 0.5 rem to any individual in an unrestricted area, in the event of [an uncontrolled release of the tanks' contents]; and
- c. A surveillance program to ensure that the quantity of radioactivity contained in all outdoor liquid radwaste tanks that are not surrounded by liners, dikes, or walls, capable of holding the tanks' contents and that do not have tank overflows and surrounding area drains connected to the [Liquid Radwaste Treatment System] is less than the amount that would result in concentrations less than the limits of 10 CFR 20, Appendix B, Table II, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area, in the event of an uncontrolled release of the tanks' contents.

5 7 6 Explosive Gas and Storage Tank Radioactivity Monitoring Program (continued)

The provisions of SR 3.0.2 and SR 3.0.3 are applicable to the Explosive Gas and Storage Tank Radioactivity Monitoring Program surveillance frequencies.

5.7.2.17 Diesel Fuel Oil Testing Program

A diesel fuel oil testing program to implement required testing of both new fuel oil and stored fuel oil shall be established. The program shall include sampling and testing requirements, and acceptance criteria, all in accordance with applicable ASTM Standards. The purpose of the program is to establish the following:

- a. Acceptability of new fuel oil for use prior to addition to storage tanks by determining that the fuel oil has:
 - an API gravity or an absolute specific gravity within limits,
 - a flash point and kinematic viscosity within limits for ASTM 2D fuel oil, and
 - a clear and bright appearance with proper color;
- Other properties for ASTM 2D fuel oil are within limits within 30 days following sampling and addition to storage tanks; and
- c. Total particulate concentration of the fuel oil is \leq 10 mg/l when tested every 31 days in accordance with ASTM D-2276, Method A-2 or A-3.

5.7.2.18 Fire Protection Program

This program provides controls to ensure that appropriate fire protection measures are maintained to protect the plant from fire and to ensure the capability to achieve and maintain safe shutdown in the event of a fire is maintained.

- 5.0 ADMINISTRATIVE CONTROLS
- 5.8 Safety Function Determination Program (SFDP)
- This program ensures loss of safety function is detected and appropriate actions taken. Upon failure to meet two or more LCOs at the same time, an evaluation shall be made to determine if loss of safety function exists. Additionally, other appropriate actions may be taken as a result of the support system inoperability and corresponding exception to entering supported system Condition and Required Actions. This program implements the requirements of LCO 3.0.6.
- 5.8.2 The SFDP shall contain the following:
 - a. Provisions for cross train checks to ensure a loss of the capability to perform the safety function assumed in the accident analysis does not go undetected;
 - Provisions for ensuring the plant is maintained in a safe condition if a loss of function condition exists;
 - c. Provisions to ensure that an inoperable supported system's Completion Time is not inappropriately extended as a result of multiple support system inoperabilities; and
 - d. Other appropriate limitations and remedial or compensatory actions.
- A loss of safety function exists when, assuming no concurrent single failure, a safety function assumed in the accident analysis cannot be performed. For the purpose of this program, a loss of safety function may exist when a support system is inoperable, and:
 - A required system redundant to the system(s) supported by the inoperable support system is also inoperable (Case A); or
 - b. A required system redundant to the system(s) in turn supported by the inoperable supported system is also inoperable (Case B); or

5.8.3 (continued)

c. A required system redundant to the support system(s) for the supported systems (a) and (b) above is also inoperable (Case C).

Generic Example:

<u>Train A</u>		<u>Train B</u>	
System i		System i	←Case C
System ii	←(Support System Inoperable)	System ii	
System iii	Inoperable)	System iii	←Case A
System iv		System iv	←Case B

The SFDP identifies where a loss of safety function exists. If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which the loss of safety function exists are required to be entered.

5.9 Reporting Requirements

5.9.1 Routine Reports

The following reports shall be submitted in accordance with 10 CFR 50.4.

5.9.1.1 Startup Report

A summary report of plant startup and power escalation testing shall be submitted following:

- a. Receipt of an Operating License;
- b. Amendment to the license involving a planned increase in power level:
- c. Installation of fuel that has a different design or has been manufactured by a different fuel supplier; and
- d. Modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the unit.

The initial Startup Report shall address each of the startup tests identified in FSAR, Chapter [14], and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report. Subsequent Startup Reports shall address startup tests that are necessary to demonstrate the acceptability of changes and modifications.

Startup Reports shall be submitted within 90 days following completion of the Startup Test Program; 90 days following resumption or commencement of commercial power operation; or 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of Startup Test Program, and resumption or commencement of commercial operation), supplementary reports shall be submitted at least every 3 months until all three events have been completed.

5.9 Reporting Requirements

5.9.1 Routine Reports (continued)

5.9.1.2 Annual Reports

A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.

Annual Reports covering the activities of the unit as described below for the previous calendar year shall be submitted by March 31 of each year. [The initial report shall be submitted by March 31 of the year following initial criticality.]

Reports required on an annual basis include:

a. Occupational Radiation Exposure Report

A tabulation on an annual basis of the number of station. utility, and other personnel (including contractors) receiving exposures > 100 mrem/yr and their associated man rem exposure according to work and job functions (e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance [describe maintenance], waste processing, and refueling). This tabulation supplements the requirements of 10 CFR 20.407. The dose assignments to various duty functions may be estimated based on pocket dosimeter. thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totalling < 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources should be assigned to specific major work functions: and

[b. Any other unit unique reports required on an annual basis.]

5.9 Reporting Requirements

5.9.1 Routine Reports (continued)

5.9.1.3 Annual Radiological Environmental Operating Report

A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station.

The Annual Radiological Environmental Operating Report covering the operation of the unit during the previous calendar year shall be submitted by May 15 of each year. The report shall include summaries, interpretations, and analyses of trends of the results of the Radiological Environmental Monitoring Program for the reporting period. The material provided shall be consistent with the objectives outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I, Sections IV.B.2, IV.B.3, and IV.C.

The Annual Radiological Environmental Operating Report shall include the results of analyses of all radiological environmental samples and of all environmental radiation measurements taken during the period pursuant to the locations specified in the table and figures in the CDCM, as well as summarized and tabulated results of these analyses and measurements [in the format of the table in the Radiological Assessment Branch Technical Position, Revision 1, November 1979]. [The report shall identify the TLD results that represent collocated dosimeters in relation to the NRC TLD program and the exposure period associated with each result.] In the event that some individual results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted in a supplementary report as soon as possible.

5.9 Reporting Requirements

5.9.1 Routine Reports (continued)

5.9.1.4 Radioactive Effluent Release Report

A single submittal may be made for a multiple unit station. The submittal should combine sections common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

The Radioactive Effluent Release Report covering the operation of the unit shall be submitted in accordance with 10 CFR 50.36a. The report shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit. The material provided shall be consistent with the objectives outlined in the ODCM and Process Control Program and in conformance with 10 CFR 50.36a and 10 CFR 50, Appendix I, Section IV.B.1.

5.9.1.5 Monthly Operating Reports

Routine reports of operating statistics and shutdown experience[, including documentation of all challenges to the pressurizer power operated relief valves or pressurizer safety valves,] shall be submitted on a monthly basis no later than the 15th of each month following the calendar month covered by the report.

5.9.1.6 CORE OPERATING LIMITS REPORT (COLR)

a. Core operating limits shall be established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and shall be documented in the COLR for the following:

The individual specifications that address core operating limits must be referenced here.

b. The analytical methods used to determine the core operating limits shall be those previously reviewed and approved by the NRC, specifically those described in the following documents:

5.9.1.6 CORE OPERATING LIMITS REPORT (COLR) (continued)

Identify the Topical Report(s) by number, title, date, and NRC staff approval document, or identify the staff Safety Evaluation Report for a plant specific methodology by NRC letter and date.

- c. The core operating limits shall be determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, Emergency Core Cooling Systems (ECCS) limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.
- d. The COLR, including any midcycle revisions or supplements, shall be provided upon issuance for each reload cycle to the NRC.

5.9.1.7 Reactor Coolant System (RCS) PRESSURE AND TEMPERATURE LIMITS REPORT (PTLR)

RCS pressure and temperature limits, including heatup and cooldown rates, criticality, and hydrostatic and leak test limits, shall be established and documented in the PTLR. [The individual Specifications that address the reactor vessel pressure and temperature limits and the heatup and cooldown rates may be referenced.] The analytical methods used to determine the pressure and temperature limits including the heatup and cooldown rates shall be those previously reviewed and approved by the NRC in [Topical Report(s), number, title, date, and NRC staff approval document, or staff safety evaluation report for a plant specific methodology by NRC letter and date]. The reactor vessel pressure and temperature limits, including those for heatup and cooldown rates, shall be determined so that all applicable limits (e.g., heatup limits, cooldown limits, and inservice leak and hydrostatic testing limits) of the analysis are met. The PTLR, including revisions or supplements thereto, shall be provided upon issuance for each reactor vessel fluency period.

5.9.2 Special Reports

Special Reports may be required covering inspection, test, and maintenance activities. These special reports are determined on an individual basis for each unit and their preparation and submittal are designated in the Technical Specifications.

Special Reports shall be submitted in accordance with 10 CFR 50.4 within the time period specified for each report.

The following Special Reports shall be submitted:

- a. In the event an ECCS is actuated and injects water into the RCS in MODE 1, 2, or 3, a Special Report shall be prepared and submitted within 90 days describing the circumstances of the actuation and the total accumulated actuation cycles to date. The current value of the usage factor for each affected safety injection nozzle shall be provided in this Special Report whenever its value exceeds 0.70.
- b. If an individual emergency diesel generator (EDG) experiences four or more valid failures in the last 25 demands, these failures and any nonvalid failures experienced by that EDG in that time period shall be reported within 30 days. Reports on EDG failures shall include the information recommended in Regulatory Guide 1.9, Revision 3, Regulatory Position C.5, or existing Regulatory Guide 1.108 reporting requirement.
- when a Special Report is required by Condition 8 or G of LCO 3.3.[11], "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days from the time the action is required. The report shall outline the preplanned alternate method of monitoring, the cause of the inoperability, and the plans and schedule for restoring the instrumentation channels of the Function to OPERABLE status.

5.9.2 Special Reports (continued)

- d. Any abnormal degradation of the containment structure detected during the tests required by the Pre-stressed Concrete Containment Tendon Surveillance Program shall be reported to the NRC within 30 days. The report shall include a description of the tendon condition, the condition of the concrete (especially at tendon anchorages), the inspection procedures, the tolerances on cracking, and the corrective action taken.
- e. Following each inservice inspection of steam generator (SG) tubes, in accordance with the SG Tube Surveillance Program, the number of tubes plugged and tubes sleeved in each SG shall be reported to the NRC within 15 days.

The complete results of the SG tube inservice inspection shall be submitted to the NRC within 12 months following the completion of the inspection. The report shall include:

- 1. Number and extent of tubes inspected,
- Location and percent of wall-thickness penetration for each indication of an imperfection, and
- 3. Identification of tubes plugged and tubes sleeved.

Results of SG tube inspections that fall into Category C-3 shall be reported to the NRC prior to resumption of plant operation. This report shall provide a description of investigations conducted to determine cause of the tube degradation and corrective measures taken to prevent recurrence.

5.0 ADMINISTRATIVE CONTROLS

5.10 Record Retention

- 5.10.1 The following records shall be retained for at least 3 years:
 - a. All License Event Reports required by 10 CFR 50.73:
 - b. Records of changes made to the procedures required by Specific tion 5.7.1.1: and
 - c. Records of radioactive shipments.
- 5.10.2 The following records shall be retained for at least 5 years:
 - a. Records and logs of unit operation covering time intervals at each power level;
 - b. Records and logs of principal maintenance activities inspections, repair, and replacement of principal items of equipment related to nuclear safety:
 - c. Records of surveillance activities, inspections, and calibrations required by the Technical Specifications (IS) [and the Fire Protection Program];
 - Records of sealed source and fission detector leak tests and results; and
 - e. Records of annual physical inventory of all sealed source material of record.
- 5.10.3 The following records shall be retained for the duration of the unit Operating License:
 - a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the FSAR;
 - Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories;
 - Records of radiation exposure for all individuals entering radiation control areas;

5.10.3 (continued)

- d. Records of gaseous and liquid radioactive material released to the environs;
- Records of transient or operational cycles for those unit components identified in [FSAR, Section X];
- f. Records of reactor tests and experiments;
- g. Records of training and qualification for members of the unit staff;
- h. Records of inservice inspections performed pursuant to the TS;
- i. Records of quality assurance activities required by the Operational Quality Assurance (QA) Manual [not listed in Specification 5.10.1 and which are classified as permanent records by applicable regulations, codes, and standards];
- j. Records of reviews performed for changes made to procedures, equipment, or reviews of tests and experiments pursuant to 10 CFR 50.59;
- k. Records of the reviews and audits required by Specification 5.5.1 and Specification 5.5.2;
- Records of the service lives of all hydraulic and mechanical snubbers required by [document where snubber requirements relocated to], including the date at which the service life commences, and associated installation and maintenance records:
- [m. Records of secondary water sampling and water quality;]
- n. Records of analyses required by the Radiological Environmental Monitoring Program that would permit evaluation of the accuracy of the analysis at a later date (these records should include procedures effective at specified times and QA records showing that these procedures were followed);
- Records of reviews performed for changes made to the Offsite Dose Calculation Manual and the Process Control Program;

5.10 Record Retention

5.10.3 (continued)

- [q. Records of steam generator tube surveillances].

5.0 ADMINISTRATIVE CONTROLS

[5.11 High Radiation Area]

Pursuant to 10 CFR 20, paragraph 20.203(c)(5), in lieu of the requirements of 10 CFR 20.203(c), each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation is > 100 mrem/hr but < 1000 mrem/hr, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., [Health Physics Technicians]) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with exposure rates ≤ 1000 mrem/hr, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas.

Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device that continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device that continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and personnel are aware of them.
- An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the [Radiation Protection Manager] in the RWP.
- 5.11.2 In addition to the requirements of Specification 5.11.1, areas with radiation levels ≥ 1000 mrem/hr shall be provided with locked or continuously guarded doors to prevent unauthorized entry and the keys shall be maintained under the administrative control of the Shift Foreman on duty or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP that shall specify the dose rate levels in

[5.11 High Radiation Area]

5.11.2 (continued)

the immediate work areas and the maximum allowable stay times for individuals in those areas. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit IV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area:

5.11.3 For individual high radiation areas with radiation levels of > 1000 mrem/hr, accessible to personnel, that are located within large areas such as reactor containment, where no enclosure exists for purposes of locking, or that cannot be continuously guarded, and where no enclosure can be reasonably constructed around the individual area, that individual area shall be barricaded and conspicuously posted, and a flashing light shall be activated as a warning device.

October 25, 1993

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The staff requests that the Owners Groups review the proposed scope of administrative controls to be relocated, as depicted in the enclosed "strikeout" version of the STS, and develop corresponding details of the relocation process, consistent with the Commission's Final Policy Statement on Technical Specifications Improvements. These details should include the identification of the licensee-controlled documents (e.g., the FSAR, the QA Plan, the Security Plan) and the associated process for change control, e.g., the 50.59 change process. Particular attention should be given to the relocation of the alternative requirements for High Radiation Areas (5.11). In preparing this information, it is important to note that the NRC expects that the relocation of these provisions will not diminish the effectiveness of enforcement of the relocated provisions.

During the course of this review, the staff concluded that certain administrative programs should be restored to applicable surveillance requirements: Primary Coolant Sources Outside Containment (5.7.2.4), Pre-Stressed Concrete Containment Tendon Surveillance Program (5.7.2.10), Ventilation Filter Testing Program (5.7.2.15) and Diesel Fuel Oil Testing Program (5.7.2.17). These programs do not fit the general characteristics of an administrative control, rather they appear to have been developed as a convenient location for technical requirements. We would like the Owners Groups to propose appropriate relocation of these requirements.

Enclosed is a mark-up of Revision O of the STS. This mark-up does not include other changes to Section 5.0 which are being processed separately for other reasons. The enclosed markup also does not include changes to correct internal consistency (e.g., cross-references) or otherwise change the organization or structure of the administrative controls. We would like the Owners Groups to suggest possible changes to the organization and structure of the administrative controls to complement these changes.

The Technical Specifications Branch will discuss the proposed administrative control changes with the Owners Groups at the next scheduled meeting, including means to accommodate these changes for lead plant technical specification conversions. The staff is separately preparing documents that will explain the basis for retaining specific provisions of the Administrative Controls, and the basis and conditions for relocating the other provisions.

Original Signed By

William T. Russell, Associate Director for Inspection & Technical Assessment Office of Nuclear Reactor Regulation

Enclosure: As stated <u>Distribution</u>: See next page

* See Previous Concurrence Concurrence OTSB: DORS* SC:OTSB* C:OTSB:DORS* D:DE:NRR* D:DSSA:NRR* CSSchulten RHLO CIGrimes JTW iggins ACThadani 10/07/93 10/07/93 10/07/93 10/12/93 10/11/93/ DODEA NRR D:DRIL:NRR* D: DRCH: NRR* D:DRSS:NRR* D:0E* ADT: NRR CERossi EKGrimes BABoger FJCongel JLieberman WTRussell 10/25/93 10/12/93 10/19/93 10/22/93 10/24/93

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