

ATTACHMENT 1

PROPOSED TECHNICAL
SPECIFICATION CHANGES

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3.0 LIMITING CONDITIONS FOR OPERATION

3.0.1 In the event a Limiting Condition for Operation and/or associated modified requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the unit shall be placed in at least hot shutdown within six hours and in at least cold shutdown within the following 30 hours unless corrective measures are completed that permit operation under the permissible action statements for the specified time interval as measured from initial discovery or until the reactor is placed in a condition in which the specification is not applicable. Exceptions to these requirements shall be stated in the individual specifications.

3.0.2 When a system, subsystem, train, component or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered operable for the purpose of satisfying the requirements of its applicable Limiting Condition for Operation, provided: (1) its corresponding normal or emergency power source is operable; and (2) all of its redundant system(s), subsystem(s), train(s), component(s) and device(s) are operable, or likewise satisfy the requirements of this specification. Unless both conditions (1) and (2) are satisfied, the unit shall be placed

in at least hot shutdown within 6 hours and in at least cold shutdown within the following 30 hours. This specification is not applicable in cold shutdown or refueling shutdown conditions.

3.0.3 Entry into an operational condition shall not be made when the conditions for the Limiting Conditions for Operation are not met and the associated action statement requires a shutdown if they are not met within a specified time interval. Entry into an operational condition may be made in accordance with action statement requirements when conformance to them permits continued operation of the facility for an unlimited period of time. This provision shall not prevent passage through or to operational conditions as required to comply with action statement requirements. Exceptions to these requirements are stated in the individual specifications.

BASIS

3.0.1 This specification delineates the action to be taken for circumstances not directly provided for in the action statements and whose occurrence would violate the intent of the specification. For example, Specification 3.3 requires each Reactor Coolant System accumulator to be operable and provides explicit action requirements if one accumulator is inoperable. Under the terms of Specification 3.0.1, if more than one accumulator is inoperable, the unit is required to be in at least hot shutdown within 6 hours. As a further example, Specification 3.4 requires two Containment Spray Subsystems to be operable and provides explicit action requirements if one spray system is inoperable.

Under the terms of Specification 3.0.1, if both of the required Containment Spray Subsystems are inoperable, the unit is required to be in at least hot shutdown within 6 hours and in at least cold shutdown in the next 30 hours. It is assumed that the unit is brought to the required condition within the required times by promptly initiating and carrying out the appropriate action.

3.0.2 This specification delineates what additional conditions must be satisfied to permit operation to continue, consistent with the actions for power sources, when a normal or emergency power source is not operable. It specifically prohibits operation when one division is inoperable because its normal or emergency power source is inoperable and a system, subsystem, train, component or device in another division is inoperable for another reason.

The provisions of this specification permit the action statements associated with individual systems, subsystems, trains, components and devices to be consistent with the action statements of the associated electrical power source. It allows operation to be governed by the time limits of the action statement associated with the Limiting Condition for Operation for the normal or emergency power source, not the individual action statements for each system, subsystem, train, component or device that is determined to be inoperable solely because of the inoperability of its normal or emergency power source.

For example, Specification 3.16 requires in part that two emergency diesel generators be operable. The action statement provides for out-of-service time

when one emergency diesel generator is not operable. If the definition of operable were applied without consideration of Specification 3.0.2, all systems, subsystems, trains, components and devices supplied by the inoperable emergency power source would also be inoperable. This would dictate invoking the applicable action statements for each of the applicable Limiting Conditions for Operation. However, the provisions of Specification 3.0.2 permit the time limits for continued operation to be consistent with the action statement for the inoperable emergency diesel generator instead, provided the other specified conditions are satisfied. In this case, this would mean that the corresponding normal power source must be operable, and all redundant systems, subsystems, trains, components and devices must be operable, or otherwise satisfy Specification 3.0.2 (i.e, be capable of performing their design function and have at least one normal or one emergency power source operable). If they are not satisfied, shutdown is required in accordance with this specification.

As a further example, Specification 3.16 requires in part that two physically independent circuits between the off site transmission network and the on site Class 1E distribution system be operable. The action statement provides out-of-service time when one required offsite circuit is not operable. If the definition of operable were applied without consideration of Specification 3.0.2, all systems, subsystem, trains, components and devices supplied by the inoperable normal power source, one of the offsite circuits, would be inoperable. This would dictate invoking the applicable action statements for each of the applicable LCOs. However, the provisions of Specification 3.0.2 permit the time limits for continued operation to be consistent with the action statement for the

inoperable normal power source instead, provided the other specified conditions are satisfied. In this case, this would mean that for one division the emergency power source must be operable (as must be the components supplied by the emergency power source) and all redundant system, subsystems, trains, components and devices in the other division must be operable, or likewise satisfy Specification 3.0.2 (i.e., be capable of performing their design functions and have an emergency power source operable). In other words, both emergency power sources must be operable and all redundant systems, subsystems, trains, components and devices in both divisions must also be operable. If these conditions are not satisfied, shutdown is required in accordance with this specification.

In cold shutdown or refueling shutdown conditions, Specification 3.0.2 is not applicable, and thus the individual action statements for each applicable Limiting Condition for Operation in these conditions must be adhered to.

3.0.3 This specification establishes limitations on condition changes when a Limiting Condition for Operation is not met. It precludes placing the facility in a higher condition of operation when the requirements for a Limiting Condition for Operation are not met and continued noncompliance to these conditions would result in a shutdown to comply with the action statement requirements if a change in condition were permitted. The purpose of this specification is to ensure that facility operation is not initiated or that higher conditions of operation are not entered when corrective action is being taken to obtain compliance with a specification by restoring equipment to operable status or parameters to specified limits. Compliance with action statement requirements

that permit continued operation of the facility for an unlimited period of time provides an acceptable level of safety for continued operation without regard to the status of the plant before or after a condition change. Therefore, in this case, entry into an operational condition may be made in accordance with the provisions of the action statement requirements. The provisions of this specification should not, however, be interpreted as endorsing the failure to exercise good practice in restoring systems or components to operable status before plant startup.

Exceptions to Specification 3.0.3 allow entry into an operational condition when the requirements of a Limiting Condition for Operation are not met and the associated action statement requires a shutdown if they are not met within a specified time interval.

When a shutdown is required to comply with action statement requirements, the provisions of Specification 3.0.3 do not apply because they would delay placing the facility in a lower condition of operation.

- c. With the pressurizer otherwise inoperable, be in at least hot shutdown with the reactor trip breakers open within 6 hours and the reactor coolant system temperature and pressure less than 350°F and 450 psig, respectively, within the following 12 hours.

6. Relief Valves

- a. Two power operated relief valves (PORVs) and their associated block valves shall be operable whenever the reactor keff is ≥ 0.99 .
- b. With one or more PORVs inoperable, within 1 hour either restore the PORV(s) to operable status or close the associated block valve(s) and remove power from the block valve(s); otherwise, be in at least hot shutdown within the next 6 hours and in cold shutdown within the following 30 hours.
- c. With one or more block valve(s) inoperable, within 1 hour either restore the block valve(s) to operable status or close the block valve(s) and remove power from the block valve(s); otherwise, be in at least hot shutdown within the next 6 hours and in cold shutdown within the following 30 hours.
- d. The provisions of Specification 3.0.3 are not applicable.

7. Reactor Vessel Head Vents

- a. At least two Reactor Vessel Head vent paths consisting of two isolation valves in series powered from emergency buses shall be operable and closed whenever RCS temperature and pressure are $> 350^\circ\text{F}$ and 450 psig.

- b. With both PORV's inoperable, depressurize the RCS within 8 hours unless Specification 3.1.G.1.b.(4) is in effect. When the RCS has been depressurized, open one PORV or establish the conditions listed below. Maintain the RCS depressurized until both PORV's have been restored to operable status.
 - (1) A maximum pressurizer narrow range level of 33%.
 - (2) The series RHR inlet valves open and their respective breakers locked open or an alternate letdown path operable.
 - (3) Limit charging flow to < 150 gpm.
 - (4) Safety Injection accumulator discharge valves closed and their respective breakers locked open.
 - c. When the conditions noted in 3.1.G.2.b.(1) through 3.1.G.2.b.(4) above are required to be established, their implementation shall be verified at least once per 12 hours.
 - d. The provisions of Specification 3.0.3 are not applicable.
3. In the event that the Reactor Coolant System Overpressure Mitigating System is used to mitigate a RCS pressure transient, a Special Report shall be prepared and submitted to the Commission pursuant to Specification 6.6 within 30 days. The report shall describe the circumstances initiating the transient, the effect of the mitigating system or the administrative controls on the transient and any corrective actions necessary to prevent recurrence.

Basis

The operability of two PORV's or the RCS vented through an opened PORV ensures that the Reactor Vessel will be protected from pressure transients which could exceed the limits of Appendix G to 10 CFR Part 50 when the Reactor Coolant average temperature is $\leq 350^{\circ}\text{F}$ and the Reactor Vessel Head is bolted. When the Reactor Coolant average temperature is $> 350^{\circ}\text{F}$, overpressure protection is provided by a bubble in the pressurizer and/or pressurizer safety valves. A single PORV has adequate relieving

3. The requirements of Specification 3.0.1 and 6.6.2 are not applicable.
- F. The accident monitoring instrumentation for its associated operable components listed in TS Table 3.7-6 shall be operable in accordance with the following:
1. With the number of operable accident monitoring instrumentation channels less than the total number of channels shown in TS Table 3.7-6, either restore the inoperable channel(s) to operable status within 7 days or be in at least hot shutdown within the next 12 hours.
 2. With the number of operable accident monitoring instrumentation channels less than the minimum channels operable requirement of TS Table 3.7-6, either restore the inoperable channel(s) to operable status within 48 hours or be in at least hot shutdown within the next 12 hours.
 3. The provisions of Specification 3.0.3 are not applicable.

H. The containment hydrogen analyzers and associated support equipment shall be operable in accordance with the following:

1. Two independent containment hydrogen analyzers shall be operable during reactor critical and power operations.
 - a. With one hydrogen analyzer inoperable, restore the inoperable analyzer to operable status within 30 days or be in at least hot standby within the next 6 hours.
 - b. With both hydrogen analyzers inoperable, restore at least one analyzer to operable status within 7 days or be in at least hot standby within the next 6 hours.
 - c. The provisions of Specification 3.0.3 are not applicable.

Note: Operability of the hydrogen analyzers includes proper operation of the respective Heat Tracing System.

B. Power Distribution Limits

1. At all times except during low power physics tests, the hot channel factors defined in the basis must meet the following limits:

$$F_Q(Z) \leq 2.32/P \times K(Z) \text{ for } P > 0.5$$

$$F_Q(Z) \leq 4.64 \times K(Z) \text{ for } P \leq 0.5$$

$$F_{\Delta H}^N \leq 1.55 [1 + 0.3 (1-P)] \text{ for three loop operation}$$

$$\leq 1.55 [1 + 0.2 (1-P)] \text{ for two loop operation}$$

where P is the fraction of rated power at which the core is operating, $K(Z)$ is the function given in TS Figure 3.12-8, and Z is the core height location of F_Q .

Prior to exceeding 75% power following each core loading and during each effective full power month of operation thereafter, power distribution maps using the movable detector system shall be made to confirm that the hot channel factor limits of this specification are satisfied. For the purpose of this confirmation:

- a. The measurement of total peaking factor F_Q^{Meas} shall be increased by eight percent to account for manufacturing tolerances, measurement error and the effects of rod bow. The measurement of enthalpy rise hot channel factor $F_{\Delta H}^N$ shall be increased by four percent to account for measure error. If any measured hot channel factor exceeds its limit specified under Specification 3.12.B.1, the reactor power and high neutron flux trip setpoint shall be reduced until the limits under Specification 3.12.B.1 are met. If the hot channel factors cannot be brought to within the limits of $F_Q(Z) \leq 2.32 \times K(Z)$ and $F_{\Delta H}^N \leq 1.55$ within 24 hours, the Overpower ΔT and Overtemperature ΔT trip setpoints shall be similarly reduced.
- b. The provisions of Specification 4.0.4 are not applicable.

3. The reference equilibrium indicated axial flux difference (called the target flux difference) at a given power level P_0 is that indicated axial flux difference with the core in equilibrium xenon conditions (small or no oscillation) and the control rods more than 190 steps withdrawn. The target flux difference at any other power level P is equal to the target value at P_0 multiplied by the ratio P/P_0 . The target flux difference shall be measured at least once per equivalent full power quarter. The target flux difference must be updated during each effective full power month of operation either by actual measurements or by linear interpolation using the most recent value and the value predicted for the end of the cycle life. The provisions of Specification 4.0.4 are not applicable.
4. Except as modified by Specifications 3.12.B.4.a, b, c, or d below, the indicated axial flux difference shall be maintained within a $\pm 5\%$ band about the target flux difference (defines the target band on axial flux difference).
 - a. At a power level greater than 90 percent of rated power, if the indicated axial flux difference deviates from its target band, within 15 minutes either restore the indicated axial flux difference to within the target band or reduce the reactor power to less than 90 percent of rated power.
 - b. At a power level no greater than 90 percent of rated power,
 - (1) The indicated axial flux difference may deviate from its target band for a maximum of one hour (cumulative) in any 24-hour period provided the flux difference is within the limits shown on TS Figure 3.12-10.

4.0 SURVEILLANCE REQUIREMENTS

4.0.1 Surveillance requirements provide for testing, calibrating, or inspecting those systems or components which are required to assure that operation of the units or the station will be as prescribed in the preceding sections.

4.0.2 Surveillance requirement specified time intervals may be adjusted plus or minus 25 percent to accommodate normal test schedules.

4.0.3 Failure to perform a surveillance requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute noncompliance with the operability requirements for a Limiting Condition for Operation. The time limits of the action statement requirements are applicable at the time it is identified that a surveillance requirement has not been performed. The action statement requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the action statement requirements are less than 24 hours. Surveillance requirements do not have to be performed on inoperable equipment.

4.0.4 Entry into an operational condition shall not be made unless the surveillance requirement(s) associated with a Limiting Condition of Operation has been performed within the stated surveillance interval or as otherwise specified. This provision shall not prevent passage through or to operational conditions as required to comply with action statement requirements.

4.0.5 Surveillance requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:

- a. Inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves 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, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50, Section 50.55a(g)(6)(i).
- b. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda for the inservice inspection and testing activities required by the ASME Boiler and Pressure Vessel Code and applicable Addenda shall be applicable as follows in these Technical Specifications:

ASME Boiler and Pressure
Vessel Code and Applicable
Addenda Terminology for
Inservice Inspection and
Testing Activities

Required Frequencies
for Performing
Inservice Inspection
and Testing Activities

| | |
|-----------------------------|---------------------------|
| Monthly | At least once per 31 days |
| Quarterly or Every 3 months | At least once per 92 days |
| Cold Shutdown | At least once per CSD |
| Refueling Shutdown | At least once per RSD |

- c. The provisions of Specification 4.0.2 are applicable to the above required frequencies for pump and valve testing only. Extensions for inservice inspection of components will be to the requirements of Section XI of the ASME Boiler and Pressure Vessel Code.
- d. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements.
- e. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any Technical Specification.

BASES

- 4.0.1 This specification provides that surveillance activities necessary to ensure the Limiting Conditions for Operation are met and will be performed during all operating conditions for which the Limiting Conditions for Operation are applicable.
- 4.0.2 The provisions of this specification provide allowable tolerances for performing surveillance activities beyond those specified in the nominal surveillance interval. These tolerances are necessary to provide operational flexibility because of scheduling and performance considerations. The phrase "at least" associated with a surveillance frequency does not negate this allowable tolerance value and permits the performance of more frequent surveillance activities.
- 4.0.3 This specification establishes the failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, as a condition that constitutes a failure to meet the operability requirements for a Limiting Condition for Operation. Under the provisions of this specification, systems and components are assumed to be operable when surveillance requirements have been satisfactorily performed within the specified time interval. However, nothing in this provision is to be construed as implying that systems or components are operable when they are found or known to be inoperable although still meeting the surveillance requirements. This specification also clarifies that the action statement requirements are applicable when Surveillance Requirements have not been completed within the allowed surveillance interval and that the time limits of the action statement requirements apply from the point in time it

is identified that a surveillance has not been performed and not at the time that the allowed surveillance interval was exceeded. Completion of the surveillance requirement within the allowable outage time limits of the action statement requirements restores compliance with the requirements of Specification 4.0.3. However, this does not negate the fact that the failure to have performed the surveillance within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, was a violation of the operability requirements of a Limiting Condition for Operation. Further, the failure to perform a surveillance within the provisions of Specification 4.0.2 is a violation of a Technical Specification requirement and is, therefore, a reportable event under the requirements of 10 CFR 50.73(a)(2)(i)(B) because it is a condition prohibited by the plant's Technical Specifications.

If the allowable outage time limits of the action statement requirements are less than 24 hours or a shutdown is required to comply with action statement requirements, e.g., Specification 3.0.1, a 24 hour allowance is provided to permit a delay in implementing the action statement requirements. This provides an adequate time limit to complete surveillance requirements that have not been performed. The purpose of this allowance is to permit the completion of a surveillance before a shutdown is required to comply with action statement requirements or before other remedial measures would be required that may preclude completion of a surveillance. The basis for this allowance includes consideration for plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, and the safety significance of the delay in completing the required surveillance. This

provision also provides a time limit for the completion of surveillance requirements that become applicable as a consequence of condition changes imposed by action statement requirements and for completing surveillance requirements that are applicable when an exception to the requirements of Specification 4.0.4 is allowed. If a surveillance is not completed within the 24 hour allowance, the time limits of the action statement requirements are applicable at that time. When a surveillance is performed within the 24 hour allowance and the surveillance requirements are not met, the time limits of the action statement requirements are applicable at the time that the surveillance is terminated.

Surveillance requirements do not have to be performed on inoperable equipment because the action statement requirements define the remedial measures that apply. However, the surveillance requirements have to be met to demonstrate that inoperable equipment has been restored to operable status.

4.0.4 This specification establishes the requirement that all applicable surveillances must be met before entry into an operational condition specified in the applicability statement. The purpose of this specification is to ensure that system and component operability requirements or parameter limits are met before entry into a condition for which these systems and components ensure safe operation of the facility. This provision applies to changes in operational conditions associated with plant shutdown as well as startup.

Under the provisions of this specification, the applicable surveillance requirements must be performed within the specified surveillance interval to ensure that the Limiting Conditions for Operation are met during initial plant startup or following a plant outage.

Exceptions to Specification 4.0.4 allow performance of surveillance requirements associated with a Limiting Condition for Operation after entry into the applicable operational condition.

When a shutdown is required to comply with action statement requirements, the provisions of Specification 4.0.4 do not apply because this would delay placing the facility in a lower condition of operation.

4.0.5 This specification ensures that inservice inspection, repairs, and replacements of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves will be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a. Specific relief from portions of the above requirements has been provided in writing by the Commission and is not a part of these Technical Specifications.

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout these Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. For example, the Technical Specification definition of operable does not grant a grace period before a device that is not capable of performing its specified function is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provisions which allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.

TABLE 4.1-1

MINIMUM FREQUENCIES FOR CHECK, CALIBRATIONS AND
TEST OF INSTRUMENT CHANNELS

| <u>Channel Description</u> | <u>Check</u> | <u>Calibrate</u> | <u>Test</u> | <u>Remarks</u> |
|---|----------------|--------------------------|--------------|---|
| 1. Nuclear Power Range | S | D(1,5) Q(3,5) R(4) | M(2) | 1) Against a heat balance standard 2) Signal at ΔT ; bistable action (permissive, rod stop, trip) 3) Upper and lower chambers for symmetric offset by means of the movable incore detector system 4) Neutron detectors may be excluded from Channel Calibration 5) The provisions of Specification 4.0.4 are not applicable |
| 2. Nuclear Intermediate Range (below P-10 setpoint) | *S | R(2,3) | P(1) | 1) Log level; bistable action (permissive, rod stop, trip) 2) Neutron detectors may be excluded from Channel Calibration 3) The provisions of Specification 4.0.4 are not applicable |
| 3. Nuclear Source Range (below P-6 setpoint) | *S | R(2,3) | P(1) | 1) Bistable action (alarm, trip) 2) Neutron detectors may be excluded from Channel Calibration 3) The provisions of Specification 4.0.4 are not applicable |
| 4. Reactor Coolant Temperature | *S | R | M(1) M(2) | 1) Overtemperature ΔT 2) Overpower ΔT |
| 5. Reactor Coolant Flow | S | R | M | |
| 6. Pressurizer Water Level | S | R | M | |
| 7. Pressurizer Pressure (High & Low) | S | R | M | |
| 8. 4 KV Voltage and Frequency | N.A. | R | M | |
| 9. Analog Rod Position | *S(1,2) (4) | R | M(3) | 1) With step counters 2) Each six inches of rod motion when data logger is out of service 3) Rod bottom bistable action 4) N.A. when reactor is in hot, intermediate or cold shutdown |

4.2 AUGMENTED INSPECTIONS

Applicability

Applies to inservice inspections which augment those required by ASME Section XI.

Objective

To provide the additional assurance necessary for the continued integrity of important components involved in safety and plant operation.

Specifications

- A. Inspections shall be performed as specified in T.S. Table 4.2-1. Nondestructive examination techniques and acceptance criteria shall be in compliance with the requirements of TS 4.0.5.
- B. The normal inspection interval is 10 years.
- C. Detailed records of each inspection shall be maintained to allow a continuing evaluation and comparison with future inspections.

Bases

The inspection program for ASME Section XI of the ASME Boiler and Pressure Vessel Code limits its inspection to ASME Code Class 1, 2, and 3 components and supports. Certain components, under Miscellaneous Inspections in this section, were added because of no corresponding code requirement. This added requirement provides the inspection necessary to insure the continued integrity of these components.

- b. The leakage rate test will be performed at a pressure of at least 39.2 psig (P_a).
 - c. The measured leakage rate L_{am} shall not exceed 75% of the design basis accident leakage rate (L_a) of 0.1 weight percent per 24 hours at pressure P_a .
2. Type B and C tests will be performed at a pressure of at least 39.2 psig (P_a) in accordance with the provisions of Appendix J, Section III.B and C. Also, within 72 hours after use of the personnel airlock, the seals will be tested at least at the peak calculated accident pressure to verify that they are properly sealed.

C. Acceptance Criteria

Type A, B, and C tests will be considered to be satisfactory if the acceptance criteria delineated in Appendix J, Sections III.A.5(b), III.B.3, and III.C.3 are met.

D. Retest Schedule

The retest scheduled for Type A, B, and C tests will be in accordance with Section III.D of Appendix J.

E. Inspection and Reporting of Tests

Inspection and reporting of tests will be in accordance with Section V of Appendix J.

F. The provisions of Specification 4.0.2 are not applicable.

4.5 SPRAY SYSTEMS TESTS

Applicability

Applies to the testing of the Spray Systems.

Objective

To verify that the Spray Systems will respond promptly and perform their design function, if required.

Specification

- A. Each containment spray subsystem shall be demonstrated operable:
 - 1. By verifying, that on recirculation flow, each containment spray pump performs satisfactorily when tested in accordance with Specification 4.0.5.
 - 2. By verifying that each motor-operated valve in the containment spray flow path performs satisfactorily when tested in accordance with Specification 4.0.5.
 - 3. At least once per 5 years, coincident with the closest refueling outage, by performing an air or smoke flow test and verifying each spray nozzle is unobstructed.
 - 4. Coincident with the containment spray pump test described in Specification 4.5.A.1, by verifying that no particulate material clogs the test spray nozzles in the refueling water storage tank.
- B. Each recirculation spray subsystem shall be demonstrated operable:
 - 1. By verifying each recirculation spray pump performs satisfactorily when tested in accordance with Specification 4.0.5.

2. By verifying that each motor-operated valve in the recirculation spray flow paths performs satisfactorily when tested in accordance with Specification 4.0.5.
 3. At least once per 5 years, coincident with the closest refueling outage, by performing on air or smoke flow test and verifying each spray nozzle is unobstructed.
- C. Each weight-loaded check valve in the containment spray and outside containment recirculation spray subsystems shall be demonstrated operable at least once each refueling period, by cycling the valve one complete cycle of full travel and verifying that each valve opens when the discharge line of the pump is pressurized with air and seats when a vacuum is applied.
- D. A visual inspection of the containment sump and the inside containment recirculation spray pump wells and the engineered safeguards suction inlets shall be performed at least once each refueling period and/or after major maintenance activities in the containment. The inspection should verify that the containment sump and pump wells are free of debris that could degrade system operation and that the sump components (i.e., trash racks, screens) are properly installed and show no sign of structural distress or excessive corrosion.

Basis

The flow testing of each containment spray pump is performed by opening the normally closed valve in the containment spray pump recirculation line returning water to the refueling water storage tank. The containment spray pump is operated and a quantity of water recirculated to the refueling water storage tank. The discharge to the tank is divided into two fractions; one for the major portion of the recirculation flow and the other to pass a small quantity of water through test nozzles which are identical with those used in the containment spray headers. The purpose of the recirculation through the test nozzles is to assure that there are no particulate material in the refueling water storage tank small enough to pass through pump suction strainers and large enough to clog spray nozzles.

4.11 SAFETY INJECTION SYSTEM TESTS

Applicability

Applies to operational testing of the Safety Injection System.

Objective

To verify that the Safety Injection System will respond promptly and perform its design functions, if required.

Specification

- A. The safety injection system shall be demonstrated operable:
1. By verifying, that on recirculation flow, each low head safety injection pump performs satisfactorily when tested in accordance with Specification 4.0.5.
 2. By verifying, that on recirculation flow, each charging pump performs satisfactorily when tested in accordance with Specification 4.0.5.
 3. By verifying that each motor-operated valve in the safety injection flow path performs satisfactorily when tested in accordance with Specification 4.0.5.
 4. At least once per 18 months, during shutdown, by:
 - a. Verifying that each automatic valve in the flow path actuates to its correct position on a safety injection test signal. The charging and low head safety injection pumps may be immobilized for this test.
 - b. Verifying that each of the charging and safety injection pump circuit breakers actuate to its correct position on a safety injection test signal. The charging and low head safety injection pumps may be immobilized for this test.

4.17 SHOCK SUPPRESSORS (SNUBBERS)

Applicability

Applies to all hydraulic and mechanical shock suppressors (snubbers) which are required to protect the reactor coolant system and other safety-related systems. Snubbers excluded from this inspection are those installed on non-safety-related systems and then only if their failure or failure of the system on which they are installed would have no adverse effect on any safety-related system.

Objective

To specify the minimum frequency and type of surveillance to be applied to the hydraulic and mechanical snubbers required to protect the reactor coolant system and other safety-related systems.

Specification

Each snubber shall be demonstrated operable by performance of the following augmented inservice inspection program and the requirements of Specification 4.0.5. As used in this specification, "type of snubber" shall mean snubbers of the same design and manufacturer, irrespective of capacity.

A. Visual Inspections

1. Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently according to the schedule determined by Table 4.17-1. The visual inspection interval of each type of snubber shall be determined based upon the criteria provided in Table 4.17-1.

ATTACHMENT 2

**DISCUSSION AND
SIGNIFICANT HAZARDS
CONSIDERATION EVALUATION**

DISCUSSION

The proposed changes, detailed in the "Description of Changes," upgrade portions of Sections 3.0 and 4.0 of the Surry Power Station Technical Specifications (TS). These changes incorporate conclusions reached in Generic Letter 87-09, "Sections 3.0 and 4.0 of the Standard Technical Specifications (STS) on the Applicability of Limiting Conditions for Operation and Surveillance Requirements." In the Generic Letter, the Staff has previously evaluated these changes to achieve consistency and determined that the modifications will result in improved technical specifications. Standard Technical Specifications are not in use at Surry. This being the case, only Sections 3.0.4 (renumbered 3.0.3), 4.0.3, and 4.0.4 of the Generic Letter were incorporated.

Limiting Conditions for Operation (LCO) - 3.0.3

TS Section 3.0, "Limiting Conditions for Operation," does not address the subject of condition changes when the requirements for an LCO are not met. Inclusion of the requirements of the Generic Letter establishes more conservative operation by limiting changes in operational conditions when corrective action is being taken to obtain compliance with a specification. A restriction on changing operational condition applies only where the action statement establishes a specified time interval in which the LCO must be met or a shutdown of the affected unit would be required. For a LCO that has an action statement permitting continued operation for an unlimited period of time or an exception to Specification 3.0.3, entry into an operational condition may be made.

Exceptions to Specification 3.0.3 are added where such exceptions exist in Standard Technical Specifications (NUREG-0452 Revision 4) and would be permitted by Generic Letter 87-09 to be retained. An exception to Specification 3.0.3 is also added to Specification 3.7.H, Containment Hydrogen Analyzers. Although not present in Standard Technical Specifications, this exception is reasonable given the function these monitors perform. Power operation is not dependent upon operability of the containment hydrogen monitors. These monitors provide post-accident indication and recording only and do not perform any control or trip functions. The containment hydrogen monitors perform a function similar to that of the post-accident monitoring instrumentation which is allowed a Specification 3.0.3 exception by Generic Letter 87-09.

Surveillance Requirements - 4.0.2

TS Section 4.0.2 permits surveillance time intervals to be adjusted plus or minus 25 percent to accommodate normal test schedules. For TS Section 4.4 on containment leakage testing, the test interval is specified by 10 CFR 50, Appendix J, which does not permit such adjustment. Accordingly, the provisions of 4.0.2 are being specifically excluded from TS 4.4 as a clarification consistent with 10 CFR 50, Appendix J.

Surveillance Requirements - 4.0.3

TS Section 4.0, "Surveillance Requirements," does not address the consequences of failure to perform surveillance requirements within the allowed surveillance interval. Specifying the operability requirements and time limit applicability serves to clarify the intent of the specification. Revised TS 4.0.3 also permits delaying the requirement of an action statement for up to 24 hours to permit the completion of a missed surveillance when the allowable outage time limits of the action statement are less than 24 hours or require a shutdown. As discussed in the Generic Letter, it is overly conservative to assume that systems or components are immediately inoperable because a surveillance requirement has not been performed. The majority of surveillances confirm that the tested system or component is within requirements and operable. When a surveillance is missed, it is this positive verification of operability that has not been confirmed by the performance of the required surveillance.

Because the allowable outage time limits of some action statements do not provide an appropriate time limit for performing a missed surveillance before shutdown requirements may apply, the TS should include a time limit that would allow a delay of the required actions to permit the performance of the missed surveillance. This time limit should be based on considerations of plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, as well as the safety significance of the delay in completion of the surveillance. Generic Letter 87-09 states that, based on these considerations, 24 hours is an acceptable time limit for completing a missed surveillance when the allowable outage times of the action statements are less than this time limit or when shutdown action statements apply. The Generic Letter concludes that the 24 hour time limit adequately balances the risks associated with an allowance for completing the surveillance within this period against

the risks associated with the potential for a plant upset and challenge to safety systems when the alternative is a shutdown to comply with action statements before the surveillance can be completed.

Surveillance Requirements - 4.0.4

TS Section 4.0, "Surveillance Requirements," does not address the requirement to perform surveillance requirements associated with a LCO prior to entering into an operational condition.

Specifying these requirements serves to clarify the intent of the specification. Also included in the specification is the provision which allows passage through or to operational conditions as required to comply with action statement requirements. As discussed in the generic letter, the potential for a plant upset and challenge to safety systems may be heightened if surveillances are performed during actions to initiate a shutdown in order to comply with action statement requirements. It is not the intent of Specification 4.0.4 to prevent passage through or to operational conditions to comply with action statement requirements and it should not apply when condition changes are imposed by action statement requirements. Exceptions to Specification 4.0.4 are proposed for those surveillance requirements which must be performed after entry into the applicable operation condition.

Deletion of the Specification 4.4 footnotes concerning 10 CFR 50, Appendix J, Type C testing represents an administrative change. The deferral provisions of these footnotes expired on December 31, 1990, and April 30, 1991, for Units 1 and 2, respectively, in accordance with the NRC exemptions issued on June 22, 1990, and September 26, 1990.

No Significant Hazards Consideration

The standards used to arrive at a determination that a request for amendment involves no significant hazards consideration are included in the Commission's regulations, 10 CFR 50.92, which states that no significant hazards considerations are involved if the operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident

from any accident previously evaluated or (3) involve a significant reduction in a margin of safety. Each standard is addressed as follows:

- (1) Operation of the facility in accordance with the proposed amendment would not involve a significant increase in the probability or consequences of an accident previously evaluated.

Specification 3.0.3 has been added as a clarification to specifically limit entry into an operational condition when the conditions for the LCO are not met and the associated action statement requires a shutdown if they are not completed within a specified time interval. For a LCO that has action statement requirements permitting continued operation for an unlimited period of time or an exception to Specification 3.0.3, entry into an operational mode or other specified condition of operation should be permitted in accordance with those action statement requirements. This clarification is consistent with existing NRC regulatory requirements for a LCO.

Surveillances provide positive verification of operability. A 24-hour time limit has been included in Specification 4.0.3 allowing a delay of the required actions to permit the performances of the missed surveillance. This change is justified in that it is overly conservative to assume that systems or components are immediately inoperable when a surveillance requirement has not been performed. The NRC concluded in Generic Letter 87-09 that a 24-hour time limit balances the risks associated with an allowance for completing the surveillance within this period against the risks associated with the potential for a plant upset and challenge to safety systems when the alternative is a shutdown to comply with action statement requirements before the surveillance can be completed. The NRC concluded that the potential for a plant upset and challenge to safety systems is increased if surveillances are performed during actions to initiate a shutdown to comply with action statement requirements. We concur with this assessment and conclude that this change does not increase the probabilities or consequences of an accident.

Specification 4.0.4 has been modified to note that its provisions shall not prevent passage through or to operational conditions as required to comply with

action statement requirements. This is consistent with the intent of the existing Technical Specifications and only represents a clarification.

No previously analyzed accident scenario is changed by this amendment. Initiating conditions and assumptions remain as previously analyzed.

- (2) Use of the modified specification would not create the possibility of a new or different kind of accident from any accident previously evaluated.

As stated above, the proposed changes do not involve changes to the physical plant or operations.

The changes being proposed to achieve consistency with Generic Letter 87-09 are clarifications of existing specifications with the exception of the 24-hour time limit to perform a missed surveillance. As noted in the generic letter, that change addresses a balance between positive verification of operability and the potential risk of known transients or plant upsets which may occur during activities to initiate a shutdown. This change does not alter any accident scenarios. Therefore, the proposed changes do not create the possibility of a new or different kind of accident.

- (3) Use of the modified specification would not involve a significant reduction in a margin of safety.

For the changes intended to achieve consistency with the recommendation of Generic Letter 87-09 "Sections 3.0 and 4.0 of the Standard Technical Specification (STS) on the Applicability of Limiting Conditions or Operation and Surveillance Requirements," the NRC Staff has previously evaluated these changes in the generic letter and determined that the modifications will result in improved technical specifications. No other changes are proposed.

Therefore, use of the proposed specification would not involve a significant reduction in the margin of safety.

In addition, we believe this change request is of the type described in the Federal Register Notice of March 6, 1986 (51 FR 7744) as an example of

amendments that are considered not likely to involve significant hazards considerations. In particular, example (ii) applies to this change request by describing a change that constitutes additional limitations, restrictions, or controls not presently included in the technical specifications. Example (vii) also applies to this change by describing a change to conform a license to changes in the regulations (Generic Letter 87-09), where the license change results in very minor changes to facility operations clearly in keeping with the regulations. Example (i) applies to the deletion of expired footnotes, a purely administrative change to technical specifications.

Based on the above, we have determined that the amendment request does not (1) involve a significant increase in the probability or consequences of an accident previously evaluated, (2) create the possibility of a new or different kind of accident from any accident previously evaluated, or (3) involve a significant reduction in a margin of safety; and therefore does not involve a significant hazards consideration.