ATTACHMENT 1

To

Proposed Amendment No. 133

Letter from C. R. Steinhardt (WPSC)

To

Document Control Desk (NRC)

Dated

December 16, 1994

Description of the Proposed Change

Safety Evaluation

Significant Hazards Determination

Environmental Considerations

Description of Proposed Changes to TS 3.4.c, Table TS 4.1-1, Table TS 4.1-3, and the associated Bases Sections

Revisions to Technical Specification (TS) 3.4 and Tables TS 4.1-1 and TS 4.1-3 are being proposed for the Kewaunee Nuclear Power Plant (KNPP) to remove the Limiting Conditions for Operation (LCOs) and surveillance requirements for turbine valves and the Turbine Overspeed Protection System (TOPS). Specifically, this change would:

1) Delete TS 3.4.c and associated Basis, "Turbine Overspeed Protection System."

2) Delete items 28a, 28b, and 28c of Table TS 4.1-1, "Minimum Frequencies for Checks, Calibrations and Test of Instrument Channels."

3) Delete item number 10 of Table TS 4.1-3, "Minimum Frequencies for Equipment Tests."

4) Delete the "Turbine Overspeed Protection" section of the Basis for TS 4.1.

5) Administrative changes are being made to convert the Basis for TS Section 4.1 to the WordPerfect software and correct minor typographical errors and format inconsistencies. Also, the Bases pages for TS Section 3.4 and 4.1 will be renumbered for consistency. Some of the administrative changes reflected in this proposed amendment (PA) are similar to those previously submitted in PAs 120, 131, and 132. However, the technical changes associated with PAs 120, 131, and 132 are not included with this submittal.

Safety Evaluation for Proposed Changes to TS 3.4.c and Tahle TS 4.1-1 and Associated Bases Changes

The purpose of proposing this change is to relocate the requirements associated with Turbine Overspeed Protection System (TOPS) from the Technical Specifications (TS) to the Updated Safety Analysis Report (USAR) while maintaining Kewaunee's existing surveillance procedures. An evaluation of the Nuclear Regulatory Commission's (NRC's) Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors (58 FR 39132) was performed to determine if the TOPS and related requirements should remain in the TSs. This evaluation determined that the TOPS did not satisfy any of the NRC Policy Statement Criteria. As a result, it is recommended that the TOPS and related requirements be removed from the TSs.

The primary function of the TOPS is to prevent the generation of potentially damaging missiles from the turbine due to turbine overspeed. This is accomplished by tripping the turbine when it reaches excessive speeds. The potential effect of missile ejection due to turbine overspeed is damage to safety-related equipment, thus rendering the equipment inoperable.

This change removes the requirements associated with the TOPS from the TSs. Since turbine overspeed is not a Design Basis Accident (DBA), an evaluation was performed to address the issues included in the NRC Policy Statement Criteria. The intent of the evaluation was to determine whether or not the TOPS requirements should be in TSs or in some other controlled document. The evaluation found that:

1) The instrumentation for the TOPS is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. Therefore, the instrumentation for the TOPS does not meet Criterion 1 for inclusion in the TSs.

2) The instrumentation for the TOPS is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or Transient Analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. In addition, the USAR does not assume operation of the TOPS. The TOPS's instrumentation does not meet Criterion 2 for inclusion in the TSs.

3) The instrumentation for the TOPS is not a structure, system or component that is part of the primary success path and which functions or actuates to mitigate a DBA or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. In addition, the USAR does not assume operation of the TOPS or its instrumentation. The TOPS Instrumentation does not meet Criterion 3 for inclusion in the TSs.

TOPS requirements were evaluated as part of the Methodically Engineered, Restructured and Improved Technical Specifications (MERITS) program. The results of this MERITS program were published as NUREG 1431 Rev. 0, "Westinghouse Standard Technical Specifications."

The evaluation in the MERITS provided a Probable Risk Assessment (PRA) for the TOPS-related technical specifications to determine if the risk alone warrants inclusion of TOPS requirements in the TSs. This PRA found that safety-system damage due to turbine missile strike is not a significant contributor in the quantification of core damage frequency. In fact, the frequency of turbine missile ejection resulting in safety-system damage has little or no impact on the quantification of the core damage frequency and does not contain constraints of prime importance in a dominant risk sequence. In addition, neither turbine overspeed nor turbine

missile ejection is an initiator in any of the Kewaunee Nuclear Power Plant (KNPP) evaluations for PRAs of core damage frequency. Therefore, removing the TOPS-related requirements from KNPP's TSs will not adversely affect plant safety.

Significant Hazards Determination for Proposed Changes to TS 3.4.c and Table TS 4.1-1 and Associated Bases Changes

In accordance with 10 CFR Part 50, Section 50.91 and using the standards provided in Section 50.92, the proposed change has been reviewed to determine that no significant hazards exist as a result of this change. The analysis showed:

1) The proposed amendment will not involve a significant increase in the probability or consequence of an accident previously evaluated.

The purpose of the Turbine Overspeed Protection System (TOPS) is to prevent an overspeed event, which is a precursor to a potential turbine-generated missile. Neither Transient Analyses nor Design Basis Accidents (DBAs) evaluated in the accident analyses contained in Chapter 14 of the Kewaunee Nuclear Power Plant (KNPP) Updated Safety Analysis Report (USAR) assume operation of the TOPS. The calculations and probabilities associated with USAR section 14.2.7, "Turbine Missile Damage to the Spent Fuel Pool," are not affected by this amendment. This amendment does not implement physical changes to the plant and does not change the KNPP's existing requirements. As a result, this change will not increase the probability of a previously evaluated accident.

The purpose of the TOPS is preventative and it serves no function to mitigate the consequenees of any accident previously evaluated. Therefore, removing the requirements associated with the TOPS from the TSs will not affect the consequences of an accident previously evaluated.

2) The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

This amendment does not involve any changes in the operational characteristics of the surveillance tests and will impose no new requirements. This change will simply relocate the same testing requirements from the KNPP Technical Specifications to the KNPP USAR. Since this change is administrative in nature, it will not create a new or different kind of accident from any accident previously evaluated.

3) The proposed amendment will not involve a significant reduction in the margin of safety.

KNPP's USAR section 14.2.7, "Turbine Missile Damage to the Spent Fuel Pool," will not be affected by this amendment. Relocating the TOPS and related requirements is a change that is administrative in nature and does not alter the intent of any requirements. Therefore it can be concluded that this change will not involve a significant reduction in the margin of safety.

Safety Evaluation for Proposed Change to Table TS 4.1-3 and Associated Basis Change

This Technical Specification (TS) change will remove the turbine stop and governor valve operability testing requirements from the TSs. Approval of this amendment will not change the operational characteristics or the frequency of surveillance tests and will impose no new requirements. The purpose of the turbine stop and governor valves is to control steam flow to the turbine. This amendment will not adversely affect the steam flow control capability of the turbine valves. Approval of this amendment will simply relocate the testing requirements from the Kewaunee Nuclear Power Plant (KNPP) TSs to the KNPP Updated Safety Analysis Report (USAR).

Since turbine overspeed is not a Design Basis Accident (DBA), an evaluation was performed to address the issues included in the Nuclear Regulatory Commission's Final Policy Statement on Technical Specification Improvements for Nuclear Power Reactors (58 FR 39132). The intent of the evaluation was to determine whether or not turbine valve testing requirements should be in TSs or in some other controlled document. The evaluation found that:

1) The instrumentation for turbine valve testing is not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. Therefore the instrumentation for turbine valve testing does not meet Criterion 1 for inclusion in the TSs.

2) The KNPP USAR does not assume operability of turbine valves or the instrumentation for turbine valves. Additionally, the instrumentation for turbine valve testing is not a process variable, design feature, or operating restriction that is an initial condition of a DBA or Transient Analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore the instrumentation for turbine valve testing does not meet Criterion 2 for inclusion in the TSs.

3) The KNPP USAR does not assume operability of turbine valves or the instrumentation for turbine valves. Additionally, the instrumentation for turbine valve testing is not a structure, system or component that is part of the primary success path and which functions or actuates to mitigate a DBA or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore the instrumentation for turbine valve testing does not meet Criterion 3 for inclusion in the TSs.

The proposed change, as described above, will not result in any change in the configuration of the plant, equipment design, or use of equipment. This change will enhance the KNPP TS by making it more consistent with NUREG 1431 Revision 0, "Westinghouse Standard Technical Specifications." Relocating turbine valve testing requirements to the KNPP USAR will not adversely affect the health and safety of the public.

Significant Hazards Determination for Proposed Change to Table TS 4.1-3 and associated Basis Change

In accordance with 10 CFR Part 50, Section 50.91 and using the standards provided in Section 50.92, the proposed change has been reviewed to determine that no significant hazards exist as a result of this change. The analysis showed:

1) The proposed amendment will not involve a significant increase in the probability or consequence of an accident previously evaluated.

This amendment does not involve any changes in the operation or frequency of the turbine valve tests. This amendment will simply relocate the turbine valve testing requirements from the Kewaunee Nuclear Power Plant's (KNPP's) Technical Specifications (TSs) to the Updated Safety Analysis Report (USAR). This change is administrative in nature and therefore will not involve a significant increase in the probability or consequence of an accident previously evaluated.

2) The proposed amendment will not create the possibility of a new or different kind of accident from any accident previously evaluated.

This amendment is administrative in nature and will not change any requirements. This change will simply relocate the requirements from the KNPP TSs to the USAR. The purpose of the turbine stop and governor valves is to control steam flow to the turbine. This amendment will not adversely affect the steam flow control capability of the turbine valves. Therefore, this change will not create the possibility of a new or different type of accident from any accident previously evaluated.

3) The proposed amendment will not involve a significant reduction in the margin of safety.

This amendment will simply relocate the existing turbine valve testing requirements and will not result in any changes to the requirements. The KNPP will continue to follow the recommendations of WCAP 11525, "Probabilistic Evaluation of Reduction in Turbine Valve Test Frequency." As a result, KNPP will continue to maintain acceptably low probabilities of turbine valve failure. Since the same requirements still exist and turbine valve testing will continue to be consistent with the recommendations of WCAP 11525, this amendment will not involve a significant decrease in the margin of safety.

Environmental Considerations

This proposed amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area, as defined in 10 CFR part 20, or a change to a surveillance requirement. Wisconsin Pubic Service Corporation has determined that the proposed amendment involves no significant hazards considerations and no significant change in the types of any effluent that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. Accordingly, this proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with this proposed amendment.

ATTACHMENT 2

To

Proposed Amendment No. 133

Letter from C. R. Steinhardt (WPSC)

To

Document Control Desk (NRC)

Dated

December 16, 1994

TS 3.4-2

TS B3.4-1 through B3.4-2

TS Section 4.1 and Basis

Table TS 4.1-1

Table TS 4.1-3

b. Auxiliary Feedwater Pumps

1. The reactor shall not be heated > 350°F unless the following conditions are met:

   A. Both motor-driven auxiliary feedwater pumps, and their associated low discharge pressure trip channels, shall be OPERABLE.

   B. The turbine-driven auxiliary feedwater pump, and its associated low discharge pressure trip channel, shall be OPERABLE, or if not demonstrated OPERABLE prior to > 350°F, they shall be declared inoperable when 350°F is exceeded.

2. If, when the reactor is > 350°F, any one of the following conditions of inoperability may exist during the time interval specified. If OPERABILITY is not restored within the time specified, then within I hour action shall be initiated to:

   - Achieve HOT STANDBY within 6 hours
   - Achieve HOT SHUTDOWN within the following 6 hours
   - Achieve and maintain the Reactor Coolant System < 350°F within an additional 12 hours

   A. One auxiliary feedwater pump may be inoperable for 72 hours.

   B. Two auxiliary feedwater pumps may be inoperable for 4 hours.

3. If, when the reactor is > 350°F, three auxiliary feedwater pumps are discovered to be inoperable, all LIMITING CONDITIONS FOR OPERATION requiring MODE changes shall be suspended until at least one auxiliary feedwater pump is restored to OPERABLE status. Upon discovery, action shall be initiated immediately to restore at least one auxiliary feedwater pump to OPERABLE status.

4. When the reactor is > 350°F, an auxiliary feedwater pump low discharge pressure trip channel may be inoperable for a period not to exceed 4 hours. If this time period is exceeded, the associated auxiliary feedwater pump shall be declared inoperable and the appropriate LIMITING CONDITIONS FOR OPERATION of TS 3.4.b.2 entered.

c. Deleted

BASIS

Steam Generators (TS 3.4.a)

Two steam generators are required to be OPERABLE when the average reactor coolant temperature is > 350°F to ensure that sufficient heat removal capability exists for power operation and decay heat removal. Although one steam generator would provide sufficient decay heat removal capability, two steam generators are required in order to provide the necessary redundancy to meet the single failure criterion. An OPERABLE steam generator is defined by TS 3.4.a.

The ten main steam safety valves (five per steam generator) have a total combined rated capability of 7,660,380 lbs./hr at 1181 lbs. pressure. The maximum full-power steam flow at 1721 MWTH is 7,449,000 lbs./hr; therefore, the main steam safety valves will be able to relieve the total maximum steam flow if necessary. The requirement that five main steam safety valves per OPERABLE steam generator are available will assure sufficient steam relief capability.

Testing of the main steam system while the plant is in HOT SHUTDOWN conditions is permitted provided that at least two main steam safety valves associated with the steam generator under test are available to provide sufficient relief capacity to protect the system during the test.

The specified minimum water supply in the condensate storage tanks is sufficient for 4 hours of decay heat removal. The 4 hours are based on the Kewaunee site specific station blackout (loss of all AC power) coping duration requirement. When AC power is available, unlimited replenishment of the condensate storage supply is available from Lake Michigan through the Service Water System.

The secondary coolant activity is based on a postulated release of the contents of one steam generator to the atmosphere. This could happen, for example, as a result of a steam break accident combined with failure of a steam line isolation valve. The limiting dose for this case results from iodine-131 because of its low MPC, and because its long half-life relative to the other iodine isotopes results in its greater concentration in the liquid. The accident is assumed to occur at zero load when the steam generators contain maximum water. With allowance for plate-out retention in water droplets, one-tenth of the contained iodine is assumed released from the plant. The maximum inhalation dose at the site boundary is then as follows:

$$Dose\ (rem) = C \bullet V/10 \bullet B(t) \bullet X/Q \bullet DCF$$

where:

C = secondary coolant activity, 1.0 μCi/cc

V = water volume in one steam generator, 3,510 ft^3 = 99 m^3

$B(t)$ = breathing rate, 3.47 x 10^{-4} m^3/sec

$\frac{X}{Q}$ = 2.9 x 10^{-4} sec/m^3

DCF = 1.48 x 10^6 rem/Ci iodine-131 inhaled

The resultant dose is < 1.5 rem.

Auxiliary Feedwater Pumps (TS 3.4.b)

In the unlikely event of complete loss of electrical power to the plant, continued capability of decay heat removal would be assured by the availability of either the steam-driven auxiliary feedwater pump or one of the two motor-driven auxiliary feedwater pumps, and by steam discharge to the atmosphere through the main steam safety valves. Each motor-driven pump is normally aligned to both steam generators; the discharge of the turbine-driven pump, which starts automatically, is aligned to backup both motor-driven pumps. Any single auxiliary feedwater pump can supply sufficient feedwater for removal of decay heat from the reactor.

It is acceptable to exceed 350°F with an inoperable turbine-driven auxiliary feedwater pump. However, operability of the pump must be demonstrated within 72 hours after exceeding 350°F or a plant shutdown must be initiated.

With no auxiliary feedwater pumps OPERABLE, action shall be taken to restore a pump as soon as possible. The action with three pumps inoperable is to maintain the plant in an operating condition in which the auxiliary feedwater system is not needed for heat removal. When one pump is restored, then the LIMITING CONDITIONS FOR OPERATION specified in TS 3.4.b.2 are applied. Should the plant shutdown be initiated with no auxiliary feedwater pumps available, there would be no feedwater to the steam generator to cool the plant to 350°F when the Residual Heat Removal System could be placed in operation.

REFERENCES

USAR Section 10
USAR Section 14.1

4.0 SURVEILLANCE REQUIREMENTS

4.1 OPERATIONAL SAFETY REVIEW

APPLICABILITY

Applies to items directly related to safety limits and LIMITING CONDITIONS FOR OPERATION.

OBJECTIVE

To assure that instrumentation shall be checked, tested, and calibrated, and that equipment and sampling tests shall be conducted at sufficiently frequent intervals to ensure safe operation.

SPECIFICATION

a. Calibration, testing, and checking of protective instrumentation channels and testing of logic channels shall be performed as specified in Table TS 4.1-1.

b. Equipment and sampling tests shall be conducted as specified in Table TS 4.1-2 and TS 4.1-3.

c. Specified time intervals may be adjusted plus or minus 25% to accommodate normal test procedures. Schedules subject to limits of Table TS 4.1-2 and Table TS 4.1-3.

d. Whenever containment integrity is not required, only the asterisked items in Table TS 4.1-1, Table TS 4.1-2, and Table TS 4.1-3 are applicable.

e. Discrepancies noted during surveillance program testing will be recorded and corrective actions will be documented in accordance with Section 6 of the Technical Specifications.

BASIS - Operational Safety Review (TS 4.1)

Check

Failures such as blown instrument fuses, defective indicators, or faulted amplifiers which result in "upscale" or "downscale" indication can be easily recognized by simple observation of the functioning of an instrument or system. Furthermore, such failures are, in many cases, revealed by alarm or annunciator action, and a check supplements this type of built-in surveillance. Based on experience in operation of both conventional and nuclear plant systems, the minimum checking frequency of once per shift is regarded as adequate for reactor and steam system instrumentation when the plant is in operation.

Calibration

Calibration shall be performed to ensure the accuracy of information presented.

The nuclear flux (linear level) channels shall be calibrated at least daily against a heat balance standard to verify drift and effects of changing rod patterns.

Other channels are subject only to "drift" errors induced within the instrumentation itself and, consequently, can tolerate longer intervals between calibration. Process system instrumentation errors induced by drift can be expected to remain within acceptable tolerances if recalibration is performed at each REFUELING shutdown.

Substantial calibration shifts within a channel (essentially a channel failure) will be revealed during routine checking and testing procedures.

Thus, minimum calibration frequencies of once-per-day for the nuclear flux (linear level) channels, and once each REFUELING shutdown for the process system channels is considered acceptable.

Testing

Experience with this type of instrumentation has shown that the testing frequency as specified in Table TS 4.1-1 will assure the required level of performance.

Fuel Inspection

Two fuel assemblies per region will be selected as reference assemblies on which base line data will be taken prior to initial fuel loading. During each refueling, visual inspections will be made on a representative sample of assemblies and in addition on any suspect assembly. Any observed unexplained anomalies in the suspected assembly will determine the necessity to recheck the reference assemblies against the original base line data.

Seismic

The seismic instrumentation will be checked for proper operation once per operating cycle or once every 18 months, whichever occurs first. In the event of a seismic disturbance, written administrative procedures will be put into effect covering operation of the plant. Inspection of crucial areas and components will be made immediately with the results of this inspection documented. In the absence of any unusual observations the plant will continue to be operated.

Guard Pipes

Visual inspections will be made of the accessible portions of the hot process pipeline guard pipes once during each operating cycle or once every 18 months, whichever occurs first.

TABLE TS 4.1-1

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

CHANNEL DESCRIPTION	CHECK	CALIBRATE	TEST	REMARKS
22. Accumulator Level and Pressure	Each shift	Each refueling cycle not to exceed 18 months	Not applicable	
23. Steam Generator Pressure	Each shift	Each refueling cycle not to exceed 18 months	Monthly	
24. Turbine First Stage Pressure	Each shift	Annually(a)	Monthly	(a) Only if test indicates calibration required
25. Portable Radiation Survey Instruments	Monthly*	Annually	Quarterly	
26. Protective System Logic Channel Testing	Not applicable	Not applicable	Monthly	Includes auto load sequencer
27. Deleted				
28. Deleted				
29. Seismic Monitoring System	Each refueling cycle not to exceed 18 months	Each refueling cycle not to exceed 18 months	Not applicable	

* Reference TS 4.1.d

TABLE TS 4.1-1

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

CHANNEL DESCRIPTION	CHECK	CALIBRATE	TEST	REMARKS
30. Fore Bay Water Level	Not applicable	Each refueling cycle not to exceed 18 months(a)	Each refueling cycle not to exceed 18 months	(a) Only if test indicates calibration required
31. AFW Flow Rate	(a)	Each refueling cycle not to exceed 18 months	Not applicable	(a) Flow rate indication will be checked at each unit startup and shutdown
32. PORV Position Indication	Monthly	Each refueling cycle not to exceed 18 months	Not applicable	
a. Back-up (Temperature)	Monthly	Each refueling cycle not to exceed 18 months	Not applicable	
33. PORV Block Valve Position Indicator	Monthly	Each refueling cycle not to exceed 18 months	Not applicable	
34. Safety Valve Position Indicator (Acoustic)	Monthly	Each refueling cycle not to exceed 18 months	Not applicable	
a. Back-up (Temperature)	Monthly	Each refueling cycle not to exceed 18 months	Not applicable	

TABLE TS 4.1-1

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

CHANNEL DESCRIPTION	CHECK	CALIBRATE	TEST	REMARKS
35. FW Pump Trip (AFW Initiation)	Not applicable	Not applicable	Each refueling cycle not to exceed 18 months	
36. Reactor Coolant System Subcooling Monitor	Monthly	Each refueling cycle not to exceed 18 months(a)	Each refueling cycle not to exceed 18 months	(a) Only if test indicates calibration required
37. Containment Pressure (Wide Range)	Daily	Each refueling cycle not to exceed 18 months	Not applicable	
38. Containment Hydrogen Monitors	Daily	Each refueling cycle not to exceed 18 months	Monthly	
39. Containment Water Level (Wide Range)	Not applicable	Not applicable	Each refueling cycle not to exceed 18 months	
40. Reactor Vessel Level Indication	Monthly	Each refueling cycle not to exceed 18 months	Not applicable	
41. Core Exit Thermocouples	Monthly	Each refueling cycle not to exceed 18 months	Not applicable	

TABLE TS 4.1-1

MINIMUM FREQUENCIES FOR CHECKS, CALIBRATIONS AND TEST OF INSTRUMENT CHANNELS

CHANNEL DESCRIPTION	CHECK	CALIBRATE	TEST	REMARKS
42. Steam Generator Level (Wide Range)	Monthly	Each refueling cycle not to exceed 18 months	Not applicable	
43. AFW Pump Low Discharge Pressure Trip	Not Applicable	Each refueling cycle not to exceed 18 months	Each refueling cycle not to exceed 18 months	

TABLE TS 4.1-3

MINIMUM FREQUENCIES FOR EQUIPMENT TESTS

EQUIPMENT TESTS[1]	TEST	FREQUENCY	MAXIMUM TIME BETWEEN TEST (DAYS)
1. Control Rods	Rod drop times of all full length rods	Each REFUELING outage	N.A.
	Partial movement of all rods not fully inserted in the core	Every 2 weeks when at or above HOT STANDBY	17
1a. Reactor Trip Breakers	Independent test[2] shunt and undervoltage trip attachments	Monthly	37
1b. Reactor Coolant Pump Breakers-Open-Reactor Trip	OPERABILITY	Each REFUELING outage	N.A.
1c. Manual Reactor Trip	Open trip reactor[3] trip and bypass breaker	Each REFUELING outage	N.A.
2. Deleted			
3. Deleted			
4. Containment Isolation Trip	OPERABILITY	Each REFUELING outage	N.A.
5. Refueling System Interlocks	OPERABILITY	Prior to fuel movement each REFUELING outage	N.A.
6. Deleted 7. Deleted			
8. RCS Leak Detection	OPERABILITY	Weekly	8
9. Diesel Fuel Supply	Fuel Inventory[4]	Weekly	8

[1]Following maintenance on equipment that could affect the operation of the equipment, tests should be performed to verify OPERABILITY.

[2]Verify OPERABILITY of the bypass breaker undervoltage trip attachment prior to placing breaker into service.

[3]Using the Control Room push-buttons, independently test the reactor trip breakers shunt trip and undervoltage trip attachments. The test shall also verify the undervoltage trip attachment on the reactor trip bypass breakers.

TABLE TS 4.1-3

MINIMUM FREQUENCIES FOR EQUIPMENT TESTS

EQUIPMENT TESTS	TEST	FREQUENCY	MAXIMUM TIME BETWEEN TEST (DAYS)
10. Deleted			
11. Fuel Assemblies	Visual Inspection	Each REFUELING outage	N.A.
12. Guard Pipes	Visual Inspection	Each REFUELING outage	N.A.
13. Pressurizer PORVs	OPERABILITY	Each REFUELING cycle	N.A.
14. Pressurizer PORV Block Valves	OPERABILITY	Quarterly[5]	N.A.
15. Pressurizer Heaters	OPERABILITY[6]	Each REFUELING cycle	N.A.
16. Containment Purge and Vent Isolation Valves	OPERABILITY[7]	Each REFUELING cycle	N.A.

[4]See TS 4.1.d.

[5]Not required when valve is administratively closed.

[6]Test will verify OPERABILITY of heaters and availability of an emergency power supply.

[7]This test shall demonstrate that the valve(s) close in $\leq$ 5 seconds.