Dominion Energy Kewaunee, Inc.
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Dominion

June 28, 2006

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Serial No. 06-497
NL&OS/CDS: R4
Docket No. 50-305
License No. DPR-43

DOMINION ENERGY KEWAUNEE, INC.
KEWAUNEE POWER STATION
LICENSE AMENDMENT REQUEST - 226
SUBJECT: INCREASE IN TECHNICAL SPECIFICATION MINIMUM REQUIRED REFUELING WATER STORAGE TANK BORON CONCENTRATION

Pursuant to 10 CFR 50.90, Dominion Energy Kewaunee, Inc. (DEK) requests an amendment to Facility Operating License Number DPR-43 for Kewaunee Power Station (Kewaunee). The proposed amendment would change Kewaunee TS 3.3.b.3.B and TS 3.3.b.4.A to increase the minimum required boron concentration in the refueling water storage tank (RWST) from 2400 parts per million (ppm) to 2500 ppm.

The proposed amendment is required to support safe operation of the plant during the next operating cycle (Cycle 28). During the current operating cycle (Cycle 27), KPS has experienced two prolonged shutdown periods, the first between February 20 and July 2 of 2005 and the second between April 26 and May 23 of 2006. Due to these prolonged shutdown periods, the KPS core did not experience the fuel burnup that was anticipated when the Cycle 27 and 28 core designs were developed. Therefore, the fuel burned in Cycle 27 that will remain in the core during Cycle 28 will have more reactivity than originally anticipated. The proposed increase in the RWST minimum boron concentration is required to ensure that the containment sump boron concentration following a postulated large break loss of coolant accident (LOCA) would be greater than that required to maintain subcriticality of the Cycle 28 reload core during recirculation of coolant from the containment sump. KPS requests that this change be permanent to ensure post-LOCA subcriticality during operating cycles beyond Cycle 28.

Attachment 1 to this letter contains a description, a safety evaluation, a significant hazards determination, and environmental considerations for the proposed amendment. Attachment 2 contains the marked-up Kewaunee Technical Specification page TS 3.3-3. Attachment 3 contains the proposed new Kewaunee Technical Specification page TS 3.3-3.

The proposed amendment and supporting evaluation have been reviewed and approved by the Kewaunee Plant Operating Review Committee and the Management Safety Review Committee. DEK requests approval of the proposed amendment before September 15, 2006 to support implementation prior to the end of the next refueling outage.

In accordance with 10 CFR 50.91(b), a copy of this letter, with attachments, is being provided to the designated Wisconsin State official.

If you have any questions or require additional information, please contact Mr. Craig D. Sly at 804-273-2784.

Very truly yours,

Eugene S. Grecheck
Vice President – Nuclear Support Services

Attachments:

1. Discussion of Change, Safety Evaluation, Significant Hazards Determination and Environmental Considerations
2. Marked Up Technical Specification Page 3.3-3
3. Proposed Technical Specification Page 3.3-3

Commitments made in this letter: None

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COMMONWEALTH OF VIRGINIA)
)
COUNTY OF HENRICO)

The foregoing document was acknowledged before me, in and for the County and Commonwealth aforesaid, today by Eugene S. Grecheck, who is Vice President, Nuclear Support Services of Dominion Energy Kewaunee, Inc. He has affirmed before me that he is duly authorized to execute and file the foregoing document in behalf of that Company, and that the statements in the document are true to the best of his knowledge and belief.

Acknowledged before me this 28TH day of June, 2006.

My Commission Expires: May 31, 2010.

Vicki L. Hull
Notary Public

(SEAL)

Attachment 1

LICENSE AMENDMENT REQUEST - 226
INCREASE IN TECHNICAL SPECIFICATION MINIMUM REQUIRED REFUELING WATER STORAGE TANK BORON CONCENTRATION

DISCUSSION OF CHANGE, SAFETY EVALUATION, SIGNIFICANT HAZARDS DETERMINATION AND ENVIRONMENTAL CONSIDERATIONS

KEWAUNEE POWER STATION

DOMINION ENERGY KEWAUNEE, INC.

INCREASE IN TECHNICAL SPECIFICATION MINIMUM REQUIRED REFUELING WATER STORAGE TANK BORON CONCENTRATION

DISCUSSION OF CHANGE, SAFETY EVALUATION, SIGNIFICANT HAZARDS DETERMINATION AND ENVIRONMENTAL CONSIDERATIONS

INTRODUCTION

Pursuant to 10 CFR 50.90, Dominion Energy Kewaunee, Inc. (DEK) requests an amendment to the Kewaunee Power Station (KPS) Facility Operating License (DPR-43). The proposed amendment would change Kewaunee TS 3.3.b.3.B and TS 3.3.b.4.A to increase the minimum required boron concentration in the refueling water storage tank (RWST) from 2400 parts per million (ppm) to 2500 ppm. The amendment is needed to support safe operation of KPS during the next operating cycle (Cycle 28) and future operating cycles.

The proposed amendment qualifies for a no significant hazards consideration under the standards set forth in 10 CFR 50.92(c). The proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

1.0 DESCRIPTION

The proposed amendment would change Kewaunee TS 3.3.b.3.B and TS 3.3.b.4.A to increase the minimum required boron concentration in the RWST from 2400 ppm to 2500 ppm.

The proposed amendment is required to support safe operation of the plant during the next operating cycle (Cycle 28). During the current operating cycle (Cycle 27), KPS has experienced two prolonged shutdown periods, the first between February 20 and July 2 of 2005 and the second between April 26 and May 23 of 2006. Due to these prolonged shutdown periods, the KPS core did not experience the burnup that was anticipated when the Cycle 27 and 28 core designs were developed. Therefore, the fuel burned in Cycle 27 that will remain in the core during Cycle 28 will have more reactivity than originally anticipated. The proposed increase in the RWST minimum boron concentration is required to ensure that the containment sump boron concentration following a postulated large break loss of coolant accident (LOCA) would be greater than that required to maintain subcriticality of the Cycle 28 reload core. KPS requests that this change be permanent to ensure post-LOCA subcriticality during operating cycles beyond Cycle 28.

2.0 PROPOSED CHANGE

The proposed amendment would modify KPS Technical Specification (TS) 3.3.b.3 and TS 3.3.b.4.

The current KPS TS 3.3.b.3 states:

"The reactor shall not be made critical unless the following conditions are satisfied except for LOW POWER PHYSICS TESTING and as provided by TS 3.3.b.4.

A. The Refueling Water Storage Tank shall contain at least 272,500 gallons of water.

B. The Refueling Water Storage Tank has a boron concentration of at least 2400 ppm."

The proposed amendment would change the Refueling Water Storage Tank required minimum boron concentration in TS 3.3.b.3.B from "at least 2400 ppm" to "at least 2500 ppm."

The current KPS TS 3.3.b.4 states:

"*During power operation or recovery from an inadvertent trip, the following conditions of inoperability may exist during the time interval specified.*

A. The calculated Refueling Water Storage Tank boron concentration may be < 2400 ppm for 8 hours.

B. The Refueling Water Storage Tank may be inoperable for a reason other than that stated in TS 3.3.b.4.A for 1 hour. If OPERABILITY is not restored within the time specified, then within 1 hour action shall be initiated to:

- *Achieve HOT STANDBY within the next 6 hours.*
- *Achieve HOT SHUTDOWN within the following 6 hours.*
- *Achieve COLD SHUTDOWN within an additional 36 hours.*"

The proposed amendment would change the Refueling Water Storage Tank requirements in TS 3.3.b.4.A from "< 2400 ppm for 8 hours" to "< 2500 ppm for 8 hours."

3.0 BACKGROUND

Kewaunee Power Station is a two-loop Westinghouse Pressurized Water Reactor. Emergency core cooling is provided by the Emergency Core Cooling System (ECCS) whose systems, structures, and components (SSCs) operate in three modes. These modes are delineated as passive accumulator injection, active safety injection (SI), and containment sump recirculation. For active SI, an ECCS actuation signal sends an open signal to the required Safety Injection System isolation valves, and starts the SI pumps (high-head) and the residual heat removal (RHR) pumps (low-head). The high-head SI pumps and the low-head RHR pumps take suction from the RWST. The RWST contains borated water at a boron concentration of at least the minimum TS required concentration. The two RHR (low-head) pumps are used to inject borated water at low pressure to the reactor coolant system. When the water in the RWST is depleted, the RHR pumps are manually aligned to recirculate fluid from the containment sump and return it to the reactor.

The KPS Updated Safety Analysis Report (USAR) contains a detailed description of the ECCS system and its ability to meet its design criteria in Kewaunee USAR Section 6.2, "Safety Injection System." The LOCA and Main Steam Line Break (MSLB) accident analyses are presented in Kewaunee USAR Section 14. The design parameters for the RWST are provided in KPS USAR Table 6.2-5, "Refueling Water Storage Tank Design Parameters."

The Kewaunee plant design and licensing bases presently assume and require RWST boron concentration range of 2400 ppm to 2625 ppm as a precondition for successful mitigation of design basis accidents. A more restrictive refueling boron concentration requirement of 2500 ppm is stipulated in the plant's Core Operating Limits Report (COLR) to meet shutdown margin requirements during refueling operations. The proposed amendment described herein increases the minimum RWST boron concentration from 2400 ppm to 2500 ppm. The effect of this change is to further constrain the allowable RWST boron concentration within the range of RWST boron concentrations already considered in the plant design and licensing bases.

4.0 TECHNICAL ANALYSIS

The proposed change would increase the current minimum RWST boron concentration in TS 3.3.b.3.B and TS 3.3.b.4.A from 2400 ppm to 2500 ppm.

The current KPS design basis safety analyses assume RWST boron concentrations within the range of 2400 ppm to 2625 ppm. Analyses for reactor core shutdown (e.g. post-LOCA subcriticality and MSLB accident shutdown margin) use the minimum RWST boron concentration. The analysis of minimum Containment sump pH assumes the maximum RWST boron concentration. The proposed revised RWST minimum boron concentration (2500 ppm) remains within the current minimum and maximum RWST boron concentration limits for all affected analyses. As a result of selecting the revised required minimum RWST boron concentration within the current minimum and maximum limits, the safety analyses that use minimum (2400 ppm) or maximum (2625 ppm) RWST boron concentration as a design input will be unaffected and will remain bounding and valid except for the post-LOCA sump boron concentration analysis.

Dominion has evaluated the impact of the proposed Technical Specification change to the minimum required RWST boron concentration on the following:

- Non-LOCA USAR Chapter 14 transients and accidents;
- LOCA analyses;
- Post-LOCA boron precipitation (analysis to confirm that boron concentrations in the post-LOCA core remain below the boric acid solubility limit);
- Post-LOCA sump boron concentration limit (evaluated for each reload core design to ensure long-term post-LOCA subcriticality);
- Post-LOCA containment spray and containment sump pH (to ensure adequate atmospheric iodine removal and retention capability, and to minimize the potential for stress corrosion cracking of stainless steel components in containment);
- Environmental qualification of equipment installed in containment;
- Margin to the temperature-dependent boric acid solution solubility limit.

A discussion regarding each of the items above is presented below.

4.1 Non-LOCA Transients and Accidents

The non-LOCA transients and accidents were evaluated. The only non-LOCA transient analysis that credits ECCS and that relies on the RWST borated water for reactor shutdown is the MSLB accident. The increased boron concentration in the RWST and, hence, in the safety injection system, would make the MSLB analysis results less limiting since increased boron concentration provides increased negative reactivity for reactor shutdown margin and event mitigation. The core reactivity characteristics assumed in the MSLB safety analysis are bounding. This is verified in reload safety evaluations performed in accordance with currently approved methodologies. Thus, the current MSLB analysis that assumes 2400 ppm for RWST boron concentration remains bounding and valid.

4.2 LOCA Analyses

The effects of the proposed increased boron concentration on small- and large-break LOCA analyses were evaluated. The large-break LOCA (LBLOCA) is characterized by a rapid reactor coolant system (RCS) depressurization that causes the generation of significant voiding in the RCS. In accordance with 10CFR50 Appendix K, the LBLOCA analysis does not assume control rod insertion. As a result, heat generation in the core is reduced to decay heat levels by void reactivity. Therefore, during the blowdown phase of the LBLOCA, the core is shutdown and remains shutdown due to void reactivity.

The refill/reflood portion of the injection phase begins with the highly voided core and continues from downcomer refill through core reflood. Initially, void reactivity is of primary importance and gradually begins to be replaced by boron as the primary source of negative reactivity. The LBLOCA analysis shows that the peak cladding temperature (PCT) is reached prior to the time the boron becomes significant in maintaining core shutdown. Therefore, the current LBLOCA core response analysis remains bounding and valid.

The small-break LOCA (SBLOCA) analysis falls into the category of those transients that cause ECCS actuation. The SBLOCA analysis assumes the insertion of control rods in the calculation of core shutdown margin. Consequently, the boron concentration required to achieve the level of negative reactivity necessary to assure shutdown margin for the SBLOCA is significantly lower than the concentration required for shutdown during a LBLOCA. The increase in RWST boron concentration provides additional conservatism for the SBLOCA. The current SBLOCA analysis remains bounding and valid.

4.3 Post-LOCA Boron Precipitation

Following a LOCA, borated water from the RWST and accumulators enters the core region through the cold leg during the injection phase of the transient. Assuming a cold leg break, borated coolant enters the core region from the intact cold leg, down the downcomer, and into the core. Steam exits through the hot leg, and excess safety injection water spills out of the break. Although the water vapor exits the core and condenses in the containment, only a fraction of the dissolved boron is carried off in the steam. Therefore, the concentration of boron increases over time in the reactor vessel. If the boron concentration reaches the solubility limit, boron will begin to precipitate, forming a paste that can block the coolant flow channels in the core. Such a condition may lead to inadequate cooling of the fuel.

The current boron precipitation analyses were evaluated. These analyses assume a conservatively bounding maximum full power critical boron concentration in the RCS (2400 ppm) and in the RWST (2625 ppm) (A typical full power critical RCS boron concentration is on the order of 1500 ppm). The boron precipitation analyses are bounding and are not affected by an increased minimum in required RWST boron concentration to 2500 ppm since the maximum RWST boron concentration is unchanged. Therefore, the boron precipitation analyses remain bounding and valid.

4.4 Post-LOCA Sump Boron Concentration Limit

Following a SBLOCA or LBLOCA, fluid from various sources accumulates in the containment sump. These fluid sources include the RWST, the caustic standpipe, the ECCS accumulators, the safety injection system piping, and the reactor coolant system (RCS). All of these volumes contain boric acid solution with the exception of the caustic standpipe, which contains a sodium hydroxide solution. Depending on the magnitude of the LOCA, some or all of the liquid contained in these fluid sources will be introduced into containment, and will ultimately accumulate in the containment sump. It is assumed in the containment sump boron analysis for the design basis LBLOCA that all of the liquid in these fluid sources is transferred to the containment.

It is necessary to have a sufficiently high boric acid concentration in the containment sump mixture to ensure that the reactor remains subcritical following the accident. As more reactivity is loaded into the core, increased concentrations of boron are required. The proposed increased minimum required RWST boron concentration would increase the post-LOCA sump boron concentration and, hence, the shutdown margin of the core to ensure post-LOCA core subcriticality. This revised post-LOCA sump boron concentration limit will be incorporated into future reload safety evaluations as a constraint on reload core designs.

4.5 Post-LOCA Containment Spray and Containment Sump pH Analysis

Limits are placed on the containment spray and containment sump pH to ensure adequate post-LOCA radioiodine removal and retention, and to minimize the potential for stress corrosion cracking of stainless steel components in containment.

The pH of the post-LOCA sump is determined by a mass-weighted concentration of the boric acid and sodium hydroxide from each analyzed volume. The pH of the containment spray system is based upon the caustic standpipe and the RWST drawing down together in equilibrium.

Calculations of containment spray and containment sump pH consider the range of allowable and required RWST boron concentrations (i.e., a range of 2400 ppm to 2625 ppm). The containment spray and post-LOCA containment sump pH analysis limits continue to be satisfied with an increase in minimum RWST boron concentration to 2500 ppm.

4.6 Equipment Qualification

Containment spray is one of the environmental factors used to qualify class 1E electrical equipment to assure operation when required. This environmental factor is considered for equipment inside containment experiencing a LOCA environment. The containment spray system takes borated water from the RWST and sodium hydroxide from the caustic standpipe during injection mode of ECCS.

The calculation of containment spray pH considers the range of allowable and required RWST boron concentrations (i.e., 2400 ppm to 2625 ppm). Because the containment spray pH analysis bounds the proposed minimum RWST boron concentration change, the containment spray pH limits will continue to be satisfied. Therefore, increasing the minimum RWST boron concentration limit from 2400 to 2500 ppm will not have an adverse effect on equipment inside the containment.

4.7 Assessment of Boron Solubility in the RWST

The current maximum allowed RWST boric acid concentration of 2625 ppm is equivalent to approximately 1.5 weight percent boric acid. The maximum limit will remain unchanged. The proposed new minimum RWST boron concentration of 2500 ppm is well below the maximum allowed boric acid concentration of 2625 ppm. At 40°F the solubility limit of boric acid is approximately 3 weight percent. Therefore, the allowable concentrations of boric acid in the RWST (minimum required concentration, nominal operating concentration, and maximum allowed concentration) remain well below the solubility limit at 40°F.

4.8 Conclusions

A change to the Technical Specifications is required to implement minimum boron concentration increases in the RWST. Evaluations involving increased minimum boron concentration in the RWST from 2400 ppm to 2500 ppm have been completed.

A. The acceptance criteria of all non-LOCA transients continue to be satisfied. All current non-LOCA safety analyses remain bounding and valid.
B. LOCA considerations, including boron precipitation limits, the post-LOCA sump boron concentration limit, and post-LOCA sump pH have been evaluated. The boron precipitation and the post-LOCA sump pH analyses remain bounding and valid.
C. The new minimum RWST boron concentration will be used in calculations of post-LOCA sump boron concentration to ensure post-LOCA subcriticality for Cycle 28 and beyond.
D. Other considerations, such as boron solubility and equipment qualification were also evaluated and found to be acceptable.

Based on these evaluations, the proposed increase in minimum RWST boron concentration will not adversely affect the safe operation of the plant.

No changes to the Kewaunee Technical Specifications Bases are necessary to support this amendment request.

5.0 REGULATORY SAFETY ANALYSIS

5.1 No Significant Hazards Consideration

The proposed amendment would change Kewaunee TS 3.3.b.3.B and TS 3.3.b.4.A to increase the minimum required boron concentration in the Refueling Water Storage Tank (RWST) from 2400 parts per million (ppm) to a minimum of 2500 ppm.

Dominion Energy Kewaunee has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

Increasing the minimum required boron concentration in the RWST does not add, delete, or modify any KPS systems, structures, or components (SSCs). The RWST and its contents are not accident initiators. Rather, they are designed for accident mitigation. The effects of an increase in the minimum RWST boron concentration from 2400 ppm to 2500 ppm are bounded by existing evaluations and determined to be acceptable. Thus, the proposed increase in minimum RWST boron concentration has no adverse effect on the ability of the plant to mitigate the effects of design basis accidents.

Therefore, the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

Increasing the minimum required boron concentration in the RWST does not change the design function of the RWST or the SSCs designed to deliver borated water in the RWST to the core. Increasing the minimum required boron concentration in the RWST does not create any credible new failure mechanisms or malfunctions for plant equipment or the nuclear fuel. The safety function of the borated water in the RWST is not being changed.

Therefore, the proposed amendment does not create the possibility of a new or different kind of accident from any previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No.

An evaluation has been performed showing that maintaining RWST boron concentration above 2500 ppm continues to assure acceptable results for design basis accident analyses will be maintained considering the reactivity of the core. Increasing the minimum boron concentration in the RWST from 2400 ppm to 2500 ppm increases the margin of safety in the KPS safety analyses, since additional post-accident negative reactivity will be available to the core. This additional negative reactivity more than compensates for the additional reactivity in the core due to the unanticipated prolonged shutdown periods in Cycle 27. Additionally, the proposed new minimum boron concentration of 2500 ppm is within the range required by current safety analyses (i.e., 2400 ppm to 2625 ppm), and well below the currently acceptable maximum boron concentration of 2625 ppm.

The proposed amendment does not result in altering or exceeding a design basis or safety limit for the plant. All current fuel design criteria will continue to be satisfied, and the safety analyses of record (except for the post-LOCA sump boron concentration), including evaluations of the radiological consequences of design basis accidents, will remain applicable.

Therefore, the proposed amendment does not involve a significant reduction in a margin of safety.

Based on the above, Dominion Energy Kewaunee, Inc. concludes that the proposed amendment(s) present no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

The US Atomic Energy Commission (AEC) issued their Safety Evaluation (SE) of the Kewaunee Power Station (KPS) on July 24, 1972 with supplements dated December 18, 1972 and May 10, 1973. The SE, section 3.1, "Conformance with AEC General Design Criteria," described the conclusions the AEC reached associated with the General Design Criteria in effect at the time. The AEC stated:

The Kewaunee plant was designed and constructed to meet the intent of the AEC's General Design Criteria, as originally proposed in July 1967. Construction of the plant was about 50% complete and the Final Safety Analysis Report (Amendment No. 7) had been filed with the Commission before publication of the revised General Design Criteria in February 1971 and the present version of the criteria in July 1971. As a result, we did not

> *require the applicant to reanalyze the plant or resubmit the FSAR. However, our technical review did assess the plant against the General Design Criteria now in effect and we are satisfied that the plant design generally conforms to the intent of these criteria.*

The ECCS is designed to meet the following Kewaunee general design criterion.

Criterion:

> *An Emergency Core Cooling System with the capability for accomplishing adequate emergency core cooling shall be provided. This core cooling system and the core shall be designed to prevent fuel and clad damage that would interfere with the emergency core cooling function and to limit the clad metal-water reaction to acceptable amounts for all sizes of breaks in the reactor coolant piping up to the equivalent of a double-ended rupture of the largest pipe. The performance of such emergency core cooling systems shall be evaluated conservatively in each area of uncertainty (GDC-44).*

In conclusion, based on the considerations discussed above:

1. There is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner;
2. Such activities will be conducted in compliance with the Commission's regulations, and;
3. The issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

6.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

7.0 REFERENCES

None

Attachment 2

LICENSE AMENDMENT REQUEST - 226
INCREASE IN TECHNICAL SPECIFICATION MINIMUM REQUIRED REFUELING WATER STORAGE TANK BORON CONCENTRATION

PROPOSED CHANGE TO TECHNICAL SPECIFICATION PAGE 3.3-3
MARKED-UP PAGE

KEWAUNEE POWER STATION

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3. The reactor shall not be made critical unless the following conditions are satisfied except for LOW POWER PHYSICS TESTING and as provided by TS 3.3.b.4.

   A. The Refueling Water Storage Tank shall contain at least 272,500 gallons of water.

   B. The Refueling Water Storage Tank has a boron concentration of at least ~~2400~~2500 ppm.

4. During power operation or recovery from an inadvertent trip, the following conditions of inoperability may exist during the time interval specified.

   A. The calculated Refueling Water Storage Tank boron concentration may be < ~~2400~~2500 ppm for 8 hours.

   B. The Refueling Water Storage Tank may be inoperable for a reason other than that stated in TS 3.3.b.4.A for 1 hour. If OPERABILITY is not restored within the time specified, then within 1 hour action shall be initiated to:

      - Achieve HOT STANDBY within the next 6 hours.
      - Achieve HOT SHUTDOWN within the following 6 hours.
      - Achieve COLD SHUTDOWN within an additional 36 hours.

5. When the reactor is critical, an OPERABLE SI train may be used to fill one SI Accumulator, for a duration of less than one hour, provided the redundant SI train is also OPERABLE. The provisions of TS 3.7.c are not applicable.

Attachment 3

LICENSE AMENDMENT REQUEST - 226
INCREASE IN TECHNICAL SPECIFICATIONMINIMUM REQUIRED REFUELING WATER STORAGE TANK BORON CONCENTRATION

PROPOSED CHANGE TO TECHNICAL SPECIFICATION PAGE 3.3-3
RE-TYPED PAGE

KEWAUNEE POWER STATION

DOMINION ENERGY KEWAUNEE, INC.

3. The reactor shall not be made critical unless the following conditions are satisfied except for LOW POWER PHYSICS TESTING and as provided by TS 3.3.b.4.

   A. The Refueling Water Storage Tank shall contain at least 272,500 gallons of water.

   B. The Refueling Water Storage Tank has a boron concentration of at least 2500 ppm.

4. During power operation or recovery from an inadvertent trip, the following conditions of inoperability may exist during the time interval specified.

   A. The calculated Refueling Water Storage Tank boron concentration may be < 2500 ppm for 8 hours.

   B. The Refueling Water Storage Tank may be inoperable for a reason other than that stated in TS 3.3.b.4.A for 1 hour. If OPERABILITY is not restored within the time specified, then within 1 hour action shall be initiated to:

      - Achieve HOT STANDBY within the next 6 hours.
      - Achieve HOT SHUTDOWN within the following 6 hours.
      - Achieve COLD SHUTDOWN within an additional 36 hours.

5. When the reactor is critical, an OPERABLE SI train may be used to fill one SI Accumulator, for a duration of less than one hour, provided the redundant SI train is also OPERABLE. The provisions of TS 3.7.c are not applicable.