



December 15, 2006

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

Serial No. 06-506  
KPS/LIC/GR: R2  
Docket No. 50-305  
License No. DPR-43

**DOMINION ENERGY KEWAUNEE, INC.**  
**KEWAUNEE POWER STATION**  
**LICENSE AMENDMENT REQUEST - 222**  
**INCORPORATION OF GENERIC TITLES AND RELOCATION OF ADMINISTRATIVE**  
**CONTROLS RELATED TO QUALITY ASSURANCE PROGRAM**

Pursuant to 10 CFR 50.90, Dominion Energy Kewaunee, Inc. (DEK) requests an amendment to Facility Operating License Number DPR-43 for the Kewaunee Power Station (Kewaunee). This amendment will permit DEK to incorporate changes to the Kewaunee Technical Specifications (TS) associated with previously approved industry initiatives. The first change relocates the Safety Limit Violation specifications from the administrative controls TS section to the safety limit TS sections as approved by TSTF-05-A, "Deletion of Safety Limit Violation Requirements." The second change incorporates generic position titles, as approved by TSTF-65-A, "Use of Generic Titles for Utility Positions," and incorporates changes approved by NRC Administrative Letter (AL) 95-06, "Relocation of Technical Specification Administrative Controls Related to Quality Assurance."

The proposed amendment would relocate and change TS administrative requirements as previously approved or communicated by the NRC. Therefore, DEK concludes that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c) and, accordingly, a finding of "no significant hazards" is justified.

DEK requests approval of the proposed amendment by August 30, 2007. Once approved, the amendment shall be implemented within 60 days.

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 Technical Specification pages. Attachment 3 contains the proposed Technical Specification pages, as revised. Attachments 4 and 5 contain marked-up and revised TS Bases pages for information only.

The Plant Operations Review Committee has approved the proposed change and a copy of this submittal has been provided to the State of Wisconsin in accordance with 10 CFR 50.91(b).

If you have any questions or require additional information, please contact Mr. Gerald Riste at (920) 388-8424.

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 Pages for License Amendment Request 222
3. Affected TS Pages for License Amendment Request 222
4. Marked-up TS Bases Pages for License Amendment Request 222
5. Affected TS Bases Pages for License Amendment Request 222

Commitments made in this letter: None

cc: Administrator, Region  
U. S. Nuclear Regulatory Commission  
Region III  
2443 Warrenville Road  
Suite 210  
Lisle, Illinois 60532-4352

Mr. L. Raghavan  
U.S. Nuclear Regulatory Commission  
Mail Stop O-8-H-4A  
Washington, D. C. 20555

Mr. S. C. Burton  
NRC Senior Resident Inspector  
Kewaunee Power Station

Public Service Commission of Wisconsin  
Electric Division  
P.O. Box 7854  
Madison, WI 53707



**ATTACHMENT 1**

**LICENSE AMENDMENT REQUEST – 222**

**INCORPORATION OF GENERIC TITLES AND RELOCATION OF ADMINISTRATIVE  
CONTROLS RELATED TO QUALITY ASSURANCE PROGRAM**

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

**KEWAUNEE POWER STATION**

**DOMINION ENERGY KEWAUNEE, INC.**

## **DISCUSSION OF CHANGES**

### **1.0 DESCRIPTION**

This letter is a request to amend Facility Operating License Number DPR-43 for Kewaunee Power Station (Kewaunee).

This amendment will permit Dominion Energy Kewaunee, Inc. (DEK) to incorporate changes to the Kewaunee Technical Specifications (TS) associated with previously approved industry initiatives. The first change relocates the Safety Limit Violation technical specifications, currently located in the administrative controls TS section, to the safety limit TS section as approved by TSTF-05-A, "Deletion of Safety Limit Violation Notification Requirements." The second change incorporates generic position titles, as approved by TSTF-65-A, "Use of Generic Titles for Utility Positions," and incorporates items approved by Nuclear Regulatory Commission (NRC) Administrative Letter (AL) 95-06, "Relocation of Technical Specification Administrative Controls Related to Quality Assurance."

### **2.0 PROPOSED CHANGE**

DEK proposes to make the following changes to the Kewaunee TS:

1. Relocate the Safety Limit Violation technical specifications from the administrative TS section to the safety limit TS section by:
  - a. Adding a new TS 2.1.d to provide required actions if one or more of the reactor core safety limits are violated.
  - b. Designating the reactor coolant system pressure safety limit as TS 2.2.a and adding a new TS 2.2.b to provide required actions if the reactor coolant system pressure safety limit is violated.
  - c. Deleting TS 6.7, "Safety Limit Violation." The necessary technical specifications are being added to TS 2.1 and TS 2.2.
2. Modify the Kewaunee TS to incorporate industry initiatives and the use of Dominion's Nuclear Facility Quality Assurance Program Description (Topical Report DOM-QA-1) by:
  - a. Modifying TS 6.1.a and 6.1.b to change "Manager – Kewaunee Plant" to the generic position title of "plant manager."
  - b. Modifying TS 6.2.a and TS 6.2.b to change "Operational Quality Assurance Program Description" to "quality assurance program."
  - c. Modify TS 6.2.b.1, TS 6.2.b.3, and 6.2.b.7, to change the proper titles of "Shift Manager," "Reactor Operators," "Nuclear Auxiliary Operators," "Shift Technical Advisor," and "Radiation Technologist," to generic position titles.

- d. Designating the current TS 6.2.c, "Organizational Changes," as TS 6.2.d.
- e. Adding a new TS 6.2.c, "Plant Specific Titles," to designate that plant specific titles for those fulfilling the responsibilities of generic position titles in the TS shall be maintained in appropriate administrative documents.
- f. Modifying TS 6.3.a.1 and TS 6.3.b to change the proper titles of "Radiation Protection Manager" and "Shift Technical Advisor" to generic position titles.
- g. Modifying TS 6.8, "Procedures," to remove the reference to ANSI N18.7-1976 and add a reference to the quality assurance program.
- h. Deleting TS 6.10, "Record Retention."
- i. Modifying TS 6.13.a.3 and TS 6.13.b to change the proper titles of "Health Physicist" and "Shift Manager" to generic position titles.
- j. Modifying TS 6.17.b.1 and TS 6.18.b.1 references to TS 6.10 to reference the "quality assurance program" for record retention requirements.

The first change is consistent with NUREG 1431, "Standard Technical Specifications – Westinghouse Plants," (STS), and with Technical Specification Task Force (TSTF) traveler TSTF-05-A, "Deletion of the Safety Limit Violation Notification Requirements." Because Kewaunee TS mode definitions differ from those used in STS, the STS modes have been replaced with the appropriate Kewaunee TS mode.

The second change incorporates industry initiatives promulgated by the TSTF process and by the NRC Administrative Letter process. TSTF-65-A, "Use of Generic Titles for Utility Positions," allowed the use of generic position titles in TS in lieu of specific position titles. This change is also consistent with STS. NRC Administrative Letter (AL) 95-06, "Relocation of Technical Specification Administrative Controls Related to Quality Assurance," was issued pursuant to NRC staff efforts related to technical specification improvements. AL 95-06 informed the industry of the potential for relocating TS that have other adequate regulatory controls, such as those imposed by 10 CFR 50, Appendix B. Two of the TS identified by the NRC for potential relocation were the procedure review process, and records and record retention.

In summary, DEK is requesting NRC approval of proposed changes to the Kewaunee TS that incorporate industry initiatives associated with safety limit violation notification requirements, procedure change and review, record retention, and the use of generic position titles. Additionally, DEK requests the title of the quality assurance plan in the Kewaunee TS be changed from "Operational Quality Assurance Program Description," to a generic title of "quality assurance program."

DEK is also proposing to modify the TS Bases (section 2.1 and 2.2) for the Safety Limits to include information associated with action required in the event of a safety limit violation. These proposed changes are included in Attachments 4 and 5 for information only.

### 3.0 BACKGROUND

Kewaunee Power Station employs a two-loop pressurized water reactor nuclear steam supply system furnished by Westinghouse Electric Corporation.

### 4.0 TECHNICAL ANALYSIS

#### 4.1 Relocation of the Safety Limit Violation Specifications

DEK proposes to relocate the safety limit violation TS from section 6.7 "Safety Limit Violation" section of the Kewaunee TS to section 2.0, "Safety Limits and Limiting Safety System Settings." This proposed change is consistent with STS and incorporates changes approved by the NRC under TSTF-05-A, "Deletion of Safety Limit Violation Notification Requirements."

In addition, this proposed change deletes certain requirements contained in TS 6.7 that are duplicated or contained in other regulations or required to comply with regulations (10 CFR 50.36, 50.72, or 50.73).

Kewaunee TS 6.7, "Safety Limit Violation," states:

*"The following actions shall be taken in the event a SAFETY LIMIT is violated:*

- a. The reactor shall be shut down and operation shall not be resumed until authorized by the Commission.*
- b. The Report shall be prepared in accordance with 10 CFR 50.72 and 10 CFR 50.73."*

TS 6.7.a, currently states that if a safety limit is violated the reactor shall be shutdown. The proposed changes to TS 2.1 and TS 2.2 add an action statement that requires the reactor to be placed in the Hot Shutdown condition (fission power approximately 0%, required shutdown margin as specified in the core operating limits report (COLR)) if the reactor is critical at the time of a safety limit violation.

Additionally, TS 6.7.a currently states that following a safety limit violation, reactor operation shall not be resumed until authorized by the Commission. This is duplicative of the regulations contained in 10 CFR 50.36(c)(1), "Safety limits, limiting safety system settings, and limiting control settings," item (i)(A), which states in part:

*"If any safety limit is exceeded, the reactor must be shut down. The licensee shall notify the Commission, review the matter, and record the*

*results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. Operation must not be resumed until authorized by the Commission."*

TS 6.7.b, currently states that a report shall be prepared in accordance with 10 CFR 50.72 and 10 CFR 50.73. This TS is duplicative of the regulations, which are contained in 10 CFR 50.72 and 10 CFR 50.73, and is therefore not necessary to be in Kewaunee TS.

#### **4.2 Quality Assurance Program Associated Modifications**

DEK proposes to modify TS 6.1, "Responsibility," TS 6.2, "Organization," TS 6.3, "Plant Staff Qualifications," and 6.13, "High Radiation Area," by changing the position specific title of "Manager – Kewaunee Plant," "Shift Manager," "Reactor Operators," "Nuclear Auxiliary Operators," "Radiation Technologist," "Radiation Protection Manager," "Health Physicist," and "Shift Technical Advisor" to generic position titles of "plant manager," "shift manager," "reactor operators," "nuclear auxiliary operators," "radiation technologist," "radiation protection manager," "health physicist," and "shift technical advisor." This change is consistent with STS and TSTF-65-A, "Use of Generic Titles." TSTF-65-A, references a letter (reference 1) in which the NRC staff concluded that the use of lower case titles for all titles in STS was acceptable. The NRC stated that the titles used in the TS should agree with those titles in the ANSI standard committed to in STS 5.3, which is similar to Kewaunee TS 6.3, "Plant Staff Qualifications." Kewaunee TS 6.3 states that the qualification of each member of the Plant Staff shall meet or exceed the minimum acceptable levels of ANSI N18.1-1971 for comparable positions, except for the positions of the Radiation Protection Manager and operator license applicants.

TSTF-65-A states that TS should be modified to provide a link between the generic position titles in the TS and the FSAR/QA Plan. DEK proposes TS 6.2.c be added to provide this link. The relationship between the titles in the TS and the titles used by DEK are described in appropriate administrative documents.

DEK is proposing to revise TS 6.2, "Organization," to change the title of the quality assurance plan from "Operational Quality Assurance Program Description," to the generic title of "quality assurance program."

DEK is proposing to revise TS 6.8, "Procedures," to relocate the requirements and recommendations that procedures must meet to the quality assurance program. This change is consistent with NRC AL 95-06. NRC Administrative Letter 95-06 (reference 2) was issued by the NRC to inform licensees about experiences involving the relocation of technical specification administrative controls related to quality assurance. This AL informed licensees that the NRC staff had reviewed and approved many recent amendment requests that involved incorporating parts of the improved Standard Technical Specifications, relocating requirements that do not satisfy the criteria of 10 CFR 50.36 for inclusion as limiting conditions for operation, and relocating requirements that are controlled directly by regulations and related licensee programs.

Many licensees have revised their technical specifications to remove excessive detail, thereby gaining flexibility in making certain changes to the quality assurance program without the need for a license amendment.

NRC AL 95-06 states that the quality assurance program is a logical candidate for such relocations due to the controls imposed by such regulations as Appendix B to 10 CFR Part 50 and the established quality assurance program change control process in 10 CFR 50.54(a). The relocation of technical specification requirements in cases where adequate controls are provided by such other methods can reduce the resources spent by licensees and the NRC staff in preparing and reviewing license amendment requests.

One of the items listed as a candidate for relocation was the process for review and approval of procedures and the process for changes to procedures. NRC AL 95-06 states:

*“Existing technical specifications typically contain requirements for the processes related to the review and approval of procedures and changes to procedures. These requirements may be relocated to the quality assurance plan. The review of license amendments related to the relocation of the procedure review processes can be facilitated by licensee references to an existing quality assurance plan commitment or the simultaneous submittal of a revision of the quality assurance plan including a commitment related to the relocated technical specification requirements. As a minimum, the quality assurance plan should contain a commitment to process procedures and procedure changes in accordance with an accepted standard such as ANSI N18.7. Site-specific aspects currently in technical specifications, that do not duplicate ANSI N18.7 provisions, should be relocated to the quality assurance plan. Relocation of the technical specification requirements in this manner, basically relocating them intact to the quality assurance plan, simplifies the U.S. Nuclear Regulatory Commission license amendment review. Any subsequent changes to these provisions would be controlled in accordance with 10 CFR 50.54(a).”*

In reference 11, DEK notified the NRC that the Dominion Fleet Nuclear Facility Quality Assurance Program Description (NFQAPD) (designated as Topical Report DOM-QA-1, Revision 1) was implemented at Kewaunee on June 30, 2006. In DOM-QA-1, section 5.5, “Quality Standards Commitment,” DEK committed to meeting the standard for instructions, procedures, and drawings of NQA-1-1994, Basic Requirement 5. In DOM-QA-1, section 6.6, “Quality Standards Commitment,” DEK is committed to meeting the quality assurance standards for document control of NQA-1-1994, Basic Requirement 6 and Supplement 6S-1.

DEK is also requesting to change TS 6.10, “Record Retention,” TS 6.17, “Process Control Program (PCP),” and TS 6.18, “Off-Site Dose Calculation Manual (ODCM),” to

relocate the record retention requirements contained in these TS to the quality assurance program. This change reflects one of the items listed in NRC AL 95-06 as a candidate for relocation to the licensees quality assurance program. NRC AL 95-06 states:

*“Technical specification administrative controls typically contain record requirements for particular specifications (such as independent safety engineering group and review and audit functions), as well as a section on general requirements for record retention. These sections may be removed from the technical specifications and placed in the quality assurance plan. The review of any license amendments related to the relocation of requirements related to records or record retention can be facilitated by licensee references to an existing quality assurance plan commitment or by the simultaneous submittal of a revision of the quality assurance plan that incorporates the relocated technical specification requirements. As mentioned above, the review process is less complicated if the requirements are moved intact to the quality assurance plan. For those current technical specification requirements that are explicitly duplicated in accepted industry standards, reference to those standards is sufficient. Any subsequent changes to these provisions would be controlled in accordance with 10 CFR 50.54(a).”*

The Dominion NFQAPD (Topical Report DOM-QA-1, Revision 1) contains the record retention requirements for Kewaunee. Section 17.2, “Records of Activities,” states that records and the retention time are based on Regulatory Position C.2, Table 1 of NRC Regulatory Guide 1.28, Revision 3. Additional requirements are contained in Topical Report DOM-QA-1, Revision 1, Appendix E, “Additional QA Records Requirements for Operating Facilities.”

Two record retention time requirements, as currently stated in the KPS TS would be reduced from 5 years to 3 years as a result of the proposed change. The first is, “Periodic checks, inspections, and calibrations required by these technical specifications,” (refer to Table 1). Reducing this record retention time requirement from 5 years to 3 years is acceptable since the 3-year requirement duplicates the applicable retention time requirement in Regulatory Guide 1.28, Revision 3, Regulatory Position C.2, Table 1. The second is, “Records of radioactive shipments,” (refer to Table 1). There is no duplicate retention time requirement in Regulatory Guide 1.28 for this type of record. However, this record retention time requirement is contained in Topical Report DOM-QA-1, Revision 1, Appendix E which was reviewed and approved by the NRC (reference 4) and is currently applicable to Kewaunee. Therefore, reducing this retention time requirement from 5 years as currently stated in the Kewaunee TS, to three years as stated in DOM-QA-1, is acceptable.

Because these records and their retention times are based on Regulatory Guide 1.28, Revision 3 or have been previously approved in DOM-QA-1 this change is considered acceptable.

## 5.0 REGULATORY SAFETY ANALYSIS

### 5.1 No Significant Hazards Consideration

Dominion Energy Kewaunee, Inc. (DEK) proposes to change the Kewaunee Power Station (Kewaunee) technical specifications (TS). These changes are based on industry initiatives and the NRC staff's effort to improve technical specifications.

The first change relocates the Safety Limit Violation specification, TS 6.7, to TS section 2.0 and deletes the current TS requirement to report safety limit violations in accordance with 10 CFR 50.72 and 10 CFR 50.73 and to obtain authorization from the NRC to restart after a safety limit has been violated. This change is consistent with NUREG 1431, "Standard Technical Specifications – Westinghouse Plants," (STS), and is consistent with Technical Specification Task Force (TSTF) traveler TSTF-05-A, "Deletion of the Safety Limit Violation Notification Requirements." Because Kewaunee TS mode definitions differ from those used in STS, the STS modes have been replaced with the appropriate Kewaunee TS modes.

The second change relocates or changes the current requirements of TS section 6.0, "Administrative Controls." This change incorporates industry initiatives promulgated by either the TSTF process or by the NRC Administrative Letter process. TSTF-65-A, "Use of Generic Titles for Utility Positions," allowed the use of position generic titles in TS in place of specific position titles. This change is also consistent with STS. NRC Administrative Letter (AL) 95-06, "Relocation of Technical Specification Administrative Control Related to Quality Assurance," was issued pursuant to the NRC staff's effort related to technical specification improvements. AL 95-06 informed the industry of the potential for relocating TS that have other adequate regulatory controls, such as those imposed by 10 CFR 50, Appendix B. Two of those identified by the NRC were, 1) the procedure review process and, 2) records and record retention.

DEK has evaluated whether or not a significant hazards consideration is involved with the proposed amendment 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?**

No. The proposed amendment consists of changes to and relocation of administrative TS requirements that were previously generically approved by the NRC. The proposed amendment would not change any of the previously evaluated accidents in the updated safety analysis report (USAR). The administrative controls that are affected by the proposed amendment do not have any function related to preventing or mitigating

any of these previously evaluated accidents. The proposed amendment does not affect any systems, structures, or components (SSCs) that have the function of preventing or mitigating any of these previously evaluated accidents. The proposed amendment does not increase the likelihood of the malfunction of an SSC, thus the potential impact on analyzed accidents need not be considered.

Because the proposed amendment is a relocation of administrative requirements that are not associated with preventing or mitigating the consequences of any previously evaluated accidents, there is no affect on the probability or consequences of an accident previously evaluated.

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?**

No. The proposed amendment consists of changes to and relocation of administrative TS requirements previously generically approved by the NRC. This amendment will not change the design function of any SSC or the manner that any SSC is operated. Because this amendment does not change the design function or operation of any SSC, the amendment would not create the possibility of a new or different kind of accident due to credible new failure mechanisms, malfunctions, or accident initiators not considered in the design and licensing bases.

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?**

No. The proposed amendment consists of changes to and relocation of administrative TS requirements previously generically approved by the NRC. The amendment does not alter any design basis safety limit and no safety margins are affected.

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

## **Conclusion**

Based on the above, DEK concludes that the proposed amendment does not involve a 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**

10 CFR 50.36(c)(5), *Administrative controls*. Administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner.

This proposed change would not affect the Kewaunee TS compliance with this regulation. The change relocates administrative requirements from Kewaunee TS section 6.0, “Administrative Controls,” to either another section of Kewaunee TS or to another licensee controlled document that has other regulatory controls (e.g., 10 CFR 50 Appendix B, 10 CFR 50.36(c)(1), or 10 CFR 50.54(a)).

10 CFR 50.36(c)(1), *Safety limits, limiting safety system settings, and limiting control settings*. (i)(A) Safety limits for nuclear reactors are limits upon important process variables that are found to be necessary to reasonably protect the integrity of certain of the physical barriers that guard against the uncontrolled release of radioactivity. If any safety limit is exceeded, the reactor must be shut down. The licensee shall notify the Commission, review the matter, and record the results of the review, including the cause of the condition and the basis for corrective action taken to preclude recurrence. Operation must not be resumed until authorized by the Commission. The licensee shall retain the record of the results of each review until the Commission terminates the license for the reactor, except for nuclear power reactors licensed under § 50.21(b) or § 50.22 of this part. For these reactors, the licensee shall notify the Commission as required by § 50.72 and submit a Licensee Event Report to the Commission as required by § 50.73. Licensees in these cases shall retain the records of the review for a period of three years following issuance of a Licensee Event Report.

This proposed change would not affect compliance regulation. The proposed change relocates the administrative requirement to shutdown the reactor if a safety limit is exceeded to the technical specification for safety limits. The proposed change maintains direction to the operators to shut down the reactor if a safety limit is exceeded. It removes the administrative requirement to obtain authorization from the NRC prior to restart of the unit and to prepare a report in accordance with 10 CFR 50.72 and 10 CFR 50.73. The requirements to obtain restart authorization and submit a report are contained in 10 CFR 50.36(c)(1)(i)(A).

10 CFR 50.54, Conditions of licenses. Whether stated therein or not, the following shall be deemed conditions in every license issued:

(a)(1) Each nuclear power plant or fuel reprocessing plant licensee subject to the quality assurance criteria in Appendix B of this part shall implement, pursuant to § 50.34(b)(6)(ii) of this part, the quality assurance program described or referenced in the Safety Analysis Report, including changes to that report.

This proposed change satisfies this regulation. Kewaunee has a quality assurance program that meets the regulations contained in 10 CFR 50.54(a). This program has been approved by the NRC with revisions performed in accordance with 10 CFR 50.54(a). This program is contained in Topical Report DOM-QA-1, Revision 1.

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**

The proposed amendment is confined to (i) changes to surety, insurance, and/or indemnity requirements, or (ii) changes to record keeping, reporting, or administrative procedures or requirements. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(10). 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 PRECEDENTS**

- 7.1. Letter from Stephen Monarque, (NRC) to David Christian (VEPCO), "Surry Power Station, Units 1 and 2 - Issuance of Amendments to Revise the Administrative Controls Section (TAC NOS. MC4412 and MC4413)," dated September 15, 2005 (ADAMS Accession Nos. ML052490134 and ML052580520).
- 7.2. Letter from Stephen Monarque, (NRC) to David Christian (VEPCO), "North Anna Power Station, Units 1 and 2 - Issuance of Amendments to Revise the Administrative Controls Section (TAC NOS. MC4410 AND MC4411)," dated September 15, 2005 (ADAMS Accession Nos. ML052570115 and ML052630104).

## 8.0 REFERENCES

1. Letter from Christopher I. Grimes (NRC) to Industry Owners Group Chairpersons (Bush, Mann, Szabo, & Maron), dated November 10, 1994.
2. NRC Administrative Letter 95-06, "Relocation of Technical Specification Administrative Controls Related to Quality Assurance," dated December 12, 1995.
3. TSTF-05-A, "Delete Safety Limit Violation Notification Requirements."
4. Letter from Cornelius F. Holden (NRC) to David Christian (DNC), "Approval of Dominion Nuclear Connecticut and Virginia Electric and Power Company Quality Assurance Program Description Topical Report for Millstone Power Station, Unit Nos. 1, 2 and 3, North Anna Power Station Unit Nos. 1 and 2, and Surry Power Station, Unit Nos. 1 and 2 (TAC NOS. MC4414, MC4415, MC4416, MC4417, MC4418, MC4419, AND MC4420)," dated September 9, 2005 (ADAMS Accession No. ML052490337).
5. Letter from W. R. Matthews (DEK) to Document Control Desk (NRC), "Clarification of Commitments Regarding Planned Changes to the Kewaunee Quality Assurance Program," dated January 13, 2006 (ADAMS Accession No. ML060320203).
6. Letter from John Lamb (NRC) to Thomas Coutu (NMC) Kewaunee Nuclear Power Plant - Issuance of Amendment (TAC NO. MB7225), dated July 8, 2003 (ADAMS Accession Nos. ML031530734 and ML032030458).
7. Letter from John Lamb (NRC) to Thomas Coutu (NMC), "Kewaunee Nuclear Power Plant - Issuance of Amendment Regarding Stretch Power Uprate (TAC NO. MB9031)," dated February 27, 2004 (ADAMS Accession Nos. ML040430633 and ML041660004).
8. Letter from Carl F. Lyon (NRC) to Michael G. Gaffney (DEK), "Kewaunee Nuclear Power Plant - Issuance of Conforming Amendment Re: Transfer of the Facility Operating License from Nuclear Management Company, LLC, Wisconsin Public Service Corporation, and Wisconsin Power and Light Company to Dominion Energy Kewaunee, Inc. (TAC NO. MC7238)," dated July 5, 2005 (ADAMS Accession Nos. ML050810546 and ML051880106).
9. Letter from W.R. Matthews (DEK) to Document Control Desk (NRC), "Notification of Quality Assurance Plan Change and Request for Implementation Date Extension," dated October 17, 2005 (ADAMS Accession No. ML052910179).
10. Letter from Eugene S. Grecheck (DEK) to Document Control Desk (NRC), "Response to Requests for Additional Information on Nuclear Facility Quality Assurance Program Description and Associated Proposed Technical Specifications Changes," dated May 5, 2005 (ADAMS Accession Nos. ML051300513 and ML051300552).

11. Letter from W.R. Mathews (DEK) to Document Control Desk (NRC), "Notification of Implementation of Dominion Fleet Quality Assurance Program at Kewaunee," dated July 25, 2006 (ADAMS Accession No. ML062070037).

TABLE 1				
DESCRIPTION OF RECORD(S) FROM KPS TS 6.10	ASSOCIATED KPS TS 6.10 ITEM	KPS TS 6.10 RETENTION PERIOD	DOM QA-1 RETENTION REQUIREMENT LOCATION <sup>1</sup>	DOM QA-1 RETENTION PERIOD
Records and logs of plant operation, including power levels and periods of operation at each power level.	a.1	5 years	Appendix E <sup>2</sup>	5 years
Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment pertaining to nuclear safety.	a.2	5 years	Appendix E <sup>3</sup>	5 years
Reports of all REPORTABLE EVENTS.	a.3	5 years	Appendix E <sup>4</sup>	5 years
Records of periodic checks, inspections, and calibrations required by these Technical Specifications.	a.4	5 years	RG 1.28 Revision 3, Table 1, Record Type 6, "Preoperational and Startup Test Records."	3 years
Records of nuclear safety-related tests or experiments.	a.5	5 years	Appendix E <sup>5</sup>	5 years
Records of radioactive shipments.	a.6	5 years	Appendix E <sup>6</sup>	3 years
Records of changes to OPERATING procedures.	a.7	5 years	Appendix E <sup>7</sup>	5 years

<sup>1</sup> Record retention schedules may change as allowed by 10 CFR 50.54a(3)

<sup>2</sup> Appendix E currently states, "Records of normal plant operation, including power levels and periods of operation at each power level."

<sup>3</sup> Appendix E currently states, "Records of principal maintenance activities, including inspection, repair, substitution or replacement of principal items of equipment important to safety."

<sup>4</sup> Appendix E currently states, "Records of reportable events."

<sup>5</sup> Appendix E currently states, "Records of Special Reactor Tests or Experiments."

<sup>6</sup> Appendix E currently states, "Records of radioactive material shipments."

<sup>7</sup> Appendix E currently states, "Records of changes made in procedures pursuant to 10 CFR 50.59 or 72.48."

TABLE 1				
DESCRIPTION OF RECORD(S) FROM KPS TS 6.10	ASSOCIATED KPS TS 6.10 ITEM	KPS TS 6.10 RETENTION PERIOD	DOM QA-1 RETENTION REQUIREMENT LOCATION <sup>1</sup>	DOM QA-1 RETENTION PERIOD
Records of sealed source leak tests and results.	a.8	5 years	Appendix E <sup>8</sup>	5 years
Records of annual physical inventory of all source material of record.	a.9	5 years		
Records of Quality Assurance activities required by the Operational Quality Assurance Program (OQAP) except where it is determined that the records should be maintained for a longer period of time.	a.10	5 years	Section 17.4, "Quality Standards Commitment." <sup>9</sup>	
Records of a complete set of as-built drawings for the plant as originally licensed and all print changes showing modifications made to the plant.	b.1	Lifetime	Appendix E <sup>10</sup>	Lifetime <sup>(A)</sup>
Records of new and spent fuel inventory, fuel transfers, and assembly burnup histories.	b.2	Lifetime	Appendix E <sup>11</sup>	Lifetime plus 5 years
Records of plant radiation and contamination surveys.	b.3	Lifetime	Appendix E	Lifetime
Records of radiation exposure of all plant personnel, and others who enter radiation control areas.	b.4	Lifetime	Appendix E <sup>12</sup>	Lifetime
Records of radioactivity in liquid and gaseous wastes released to the environment.	b.5	Lifetime	Appendix E <sup>13</sup>	Lifetime

<sup>8</sup> Appendix E currently states, "Records of sealed source leak test results and physical inventories of sealed source material."

<sup>9</sup> Topical Report Dom-QA-1, section 17.4, currently states, "The Company is committed to implementing a quality assurance records program in accordance with the quality standards described in NQA-1-1994, Basic Requirement 17 and Supplement 17S-1. The Company will also meet the NRC Regulatory Position C.2 of Regulatory Guide 1.28, Revision 3, August 1985 except that the reference to ASME NQA-1 will be to the 1994 edition."

<sup>10</sup> Appendix E currently states, "Records and drawing changes reflecting plant design modifications made to systems and equipment described in the SAR."

<sup>11</sup> Appendix E currently states, "Records of new, irradiated, and spent fuel inventory, transfers of fuel, and assemblies history."

<sup>12</sup> Appendix E currently states, "Records of radiation exposure to all individuals who enter radiation control area."

<sup>13</sup> Appendix E currently states, "Records of radioactive levels of liquid and gaseous waste released to the environs."

TABLE 1				
DESCRIPTION OF RECORD(S) FROM KPS TS 6.10	ASSOCIATED KPS TS 6.10 ITEM	KPS TS 6.10 RETENTION PERIOD	DOM QA-1 RETENTION REQUIREMENT LOCATION <sup>1</sup>	DOM QA-1 RETENTION PERIOD
Records of transient or operational cycles for these facility components.	b.6	Lifetime	Appendix E <sup>14</sup>	Lifetime
Records of training and qualification for current members of the plant staff.	b.7	Lifetime	Appendix E <sup>15</sup>	Lifetime or as otherwise noted in Appendix E
Records of in-service inspections performed pursuant to these Technical Specifications.	b.8	Lifetime	RG 1.28 Revision 3, Table 1, Record Type 5, "Preoperational and Startup Test Records."	Lifetime
Records of meetings of the JOSRC and PORC.	b.9	Lifetime	Appendix E <sup>16</sup>	Lifetime
Records for Environmental Qualification.	b.10	Lifetime	Appendix E <sup>17</sup>	Lifetime
Records of reviews performed for changes made to the ODCM and the PCP.	b.11	Lifetime	Appendix E <sup>18</sup>	Lifetime

<sup>14</sup> Appendix E currently states, "Records of transient or operational cycles for those facility components designated to operate safely for a limited number of transients or operational cycles."

<sup>15</sup> Appendix E currently states, "Records of current individual plant staff members qualifications, experience, training and retraining."

<sup>16</sup> Appendix E currently states, "Records of meetings of the facility safety review committee and the Management Safety Review Committee."

<sup>17</sup> Appendix E currently states, "Records of Environmental Qualification in accordance with 10 CFR 50.49."

<sup>18</sup> Appendix E currently states, "Records of reviews performed for changes made to the offsite dose calculation manual and the process control program."

**ATTACHMENT 2**

**LICENSE AMENDMENT REQUEST – 222**

**INCORPORATION OF GENERIC TITLES AND RELOCATION OF ADMINISTRATIVE  
CONTROLS RELATED TO QUALITY ASSURANCE PROGRAM**

**MARKED-UP TS PAGES FOR LICENSE AMENDMENT REQUEST 222**

**KEWAUNEE POWER STATION**

**MARKED-UP TS PAGES:**

**TS iv  
TS 2.1-1  
TS 2.2-1  
TS 6.1-1  
TS 6.2-1 to TS 6.2-2  
TS 6.3-1  
TS 6.7-1  
TS 6.8-1  
TS 6.10-1 to TS 6.10-2  
TS 6.13-1  
TS 6.17-1  
TS 6.18-1**

**DOMINION ENERGY KEWAUNEE, INC.**

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	6.2.c <del>Organizational Changes</del> <u>Plant-Specific Titles</u> .....	6.2-1
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7/8.0	Deleted	

## 2.0 SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS

### 2.1 SAFETY LIMITS - REACTOR CORE

#### APPLICABILITY

Applies to the limiting combination of thermal power, Reactor Coolant System pressure and coolant temperature during the OPERATING and HOT STANDBY MODES.

#### OBJECTIVE

To maintain the integrity of the fuel cladding.

#### SPECIFICATION

- a. The combination of RATED POWER level, coolant pressure, and coolant temperature shall not exceed the limits specified in the COLR. The SAFETY LIMIT is exceeded if the point defined by the combination of Reactor Coolant System average temperature and power level is at any time above the appropriate pressure line.
- b. The departure from nucleate boiling ratio (DNBR) shall be maintained  $\geq 1.14$  for the HTP DNB correlation and 1.17 for the WRB-1 DNB correlation.
- c. The peak fuel centerline temperature shall be maintained  $< 5080^{\circ}\text{F}$  decreasing by  $58^{\circ}\text{F}$  per 10,000 MWD/MTU of burnup.
- d. If SAFETY LIMIT 2.1.a, 2.1.b, or 2.1.c is violated, restore compliance and be in HOT SHUTDOWN within 1 hour.

## 2.2 SAFETY LIMIT - REACTOR COOLANT SYSTEM PRESSURE

### **APPLICABILITY**

Applies to the maximum limit on Reactor Coolant System pressure.

### **OBJECTIVE**

To maintain the integrity of the Reactor Coolant System.

### **SPECIFICATION**

a. The Reactor Coolant System pressure shall not exceed 2735 psig with fuel assemblies installed in the reactor vessel.

b. IF SAFETY LIMIT 2.2.a is violated then:

1. If in the OPERATING or HOT STANDBY modes, restore compliance and be in HOT SHUTDOWN within 1 hour.

2. If in the HOT SHUTDOWN, INTERMEDIATE SHUTDOWN, COLD SHUTDOWN, or REFUELING modes, restore compliance within 5 minutes.

## 6.0 ADMINISTRATIVE CONTROLS

### 6.1 RESPONSIBILITY

- a. The ~~Manager – Kewaunee Plant~~ plant manager shall be responsible for overall plant operation and shall delegate in writing the succession of this responsibility during his absence.
- b. The ~~plant manager~~ ~~Manager – Kewaunee Plant~~, or his designee, shall approve prior to implementation, each proposed test, experiment or modification to structures, systems or components that affect nuclear safety.

## 6.2 ORGANIZATION

### a. Off-Site Staff

The off-site organization for plant management and technical support shall be as described in the Operational Quality Assurance Program Description.

### b. Facility Staff

The plant organization shall be as described in the Operational Quality Assurance Program Description.

1. Each on-duty shift complement shall consist of at least:
  - A. One sShift manager (SRO)
  - B. Two licensed rReactor operators
  - C. Two nuclear auxiliary operators
  - D. Deleted
  - E. One radiation technologist
2. While above COLD SHUTDOWN, the on-duty shift complement shall consist of the personnel required by TS 6.2.b.1 and an additional SRO.
3. In the event that one of the shift members becomes incapacitated due to illness or injury or the radiation technologist has to accompany an injured person to the hospital, reactor operations may continue with the reduced complement until a replacement arrives. In all but severe weather conditions, a replacement is required within two hours.
4. At least one licensed operator shall be in the control room when fuel is in the reactor.
5. Two licensed operators, one of which shall be an SRO, shall be present in the control room when the unit is in an operational MODE other than COLD SHUTDOWN or REFUELING.
6. REFUELING OPERATIONS shall be directed by a licensed SRO assigned to the REFUELING OPERATION who has no other concurrent responsibilities during the REFUELING OPERATION.
7. When the reactor is above the COLD SHUTDOWN condition, a qualified shift technical advisor shall be within 10 minutes of the control room.

### c. Plant-Specific Titles

The plant-specific titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications shall be maintained in appropriate administrative documents.

d. Organizational Changes

Changes not affecting safety may be made to the off-site and facility staff organizations. Such changes that are described in the Technical Specifications shall be reported to the Commission in the form of an application for license amendment within 60 days of the implementation of the change.

### 6.3 PLANT STAFF QUALIFICATIONS

- a. Qualification of each member of the Plant Staff shall meet or exceed the minimum acceptable levels of ANSI N18.1-1971 for comparable positions, except for:
  1. The rRadiation protection manager who shall meet or exceed the recommendation of Regulatory Guide 1.8, Revision 1-R, September 1975, or their equivalent as further clarified in Attachment 1 to the Safety Evaluation Report enclosed with Amendment No. 46 to Facility Operating License DPR-43.
  2. The education and experience eligibility requirements for operator license applicants, changes thereto, shall be those previously reviewed and approved by the NRC, specifically those referenced in NRC Safety Evaluation letter dated October 2, 2003 (K-03-140).
- b. The shift technical advisor shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in the design of the Kewaunee Plant and plant transient and accident analysis.

6.7 **~~SAFETY LIMIT VIOLATION~~DELETED**

~~The following actions shall be taken in the event a SAFETY LIMIT is violated:~~

- ~~a. The reactor shall be shut down and operation shall not be resumed until authorized by the Commission.~~
- ~~b. The Report shall be prepared in accordance with 10 CFR 50.72 and 10 CFR 50.73.~~

## 6.8 PROCEDURES

- a. Written procedures and administrative policies shall be established, implemented and maintained that meet the requirements and recommendations of the quality assurance program ~~Section 5.2.2, 5.2.5, 5.2.15 and 5.3 of ANSI N18.7-1976.~~
- b. Changes to procedures are made in accordance with the provisions of ~~ANSI N18.7-1976 Section 5.2.2,~~ except temporary changes which clearly do not change the intent of the procedure shall, as a minimum, be approved by two individuals knowledgeable in the area affected one of which holds an active SRO license at Kewaunee the quality assurance program.
- c. Procedures are reviewed in accordance with the provisions of ~~ANSI N18.7-1976, Section 5.2.15.~~ The biennial review requirement is accomplished through alternate programs as described in the ~~OGAPD~~ the quality assurance program.

## 6.10 ~~RECORD RETENTION~~DELETED

~~a. The following records shall be retained for at least five years:~~

- ~~1. Records and logs of plant operation, including power levels and periods of operation at each power level.~~
- ~~2. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment pertaining to nuclear safety.~~
- ~~3. Reports of all REPORTABLE EVENTS.~~
- ~~4. Records of periodic checks, inspections, and calibrations required by these Technical Specifications.~~
- ~~5. Records of nuclear safety related tests or experiments.~~
- ~~6. Records of radioactive shipments.~~
- ~~7. Records of changes to OPERATING procedures.~~
- ~~8. Records of sealed source leak tests and results.~~
- ~~9. Records of annual physical inventory of all source material of record.~~
- ~~10. Records of Quality Assurance activities required by the Operational Quality Assurance Program (OQAP) except where it is determined that the records should be maintained for a longer period of time.~~

~~b. The following records shall be retained for the duration of the Plant Operating License.~~

- ~~1. Records of a complete set of as built drawings for the plant as originally licensed and all print changes showing modifications made to the plant.~~
- ~~2. Records of new and spent fuel inventory, fuel transfers, and assembly burnup histories.~~
- ~~3. Records of plant radiation and contamination surveys.~~
- ~~4. Records of radiation exposure of all plant personnel, and others who enter radiation control areas.~~
- ~~5. Records of radioactivity in liquid and gaseous wastes released to the environment.~~

- ~~6. Records of transient or operational cycles for these facility components.~~
- ~~7. Records of training and qualification for current members of the plant staff.~~
- ~~8. Records of in service inspections performed pursuant to these Technical Specifications.~~
- ~~9. Records of meetings of the JOSRC and PORC.~~
- ~~10. Records for environmental qualification.~~
- ~~11. Records of reviews performed for changes made to the ODCM and the PCP.~~

## 6.13 HIGH RADIATION AREA

- a. In lieu of the "control device" or "alarm signal" required by Paragraph 20.1601(a) of 10 CFR Part 20, each high radiation area in which the intensity of radiation is  $> 100$  mrem/hr, but  $< 1000$  mrem/hr, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a radiation work permit (RWP).<sup>(1)</sup> Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following.
1. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
  2. A radiation monitoring device which continuously integrates the radiation dose in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
  3. A health physics qualified individual (i.e., qualified in radiation protection procedures) with a radiation dose rate monitoring device who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility hHealth pPhysicist in the RWP.
- b. In addition to the requirements of 6.13.a., areas accessible to personnel with radiation levels such that a major portion of the body could receive in one hour a dose  $> 1000$  mrem shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the sShift mManager on duty and/or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work area and the maximum allowable stay time for individuals in that area. For individual areas accessible to personnel with radiation levels such that a major portion of the body could receive in one hour a dose  $> 1000$  mrem<sup>(2)</sup> that are located within large areas, such as PWR containment, where no enclosure exists for purposes of locking, and no enclosure can be reasonably constructed around the individual areas, then that area shall be roped off, conspicuously posted and a flashing light shall be activated as a warning device. In lieu of the stay time specification of the RWP, direct or remote (such as use of closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities within the area.

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<sup>(1)</sup> Health Physics personnel or personnel escorted by Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they are otherwise following plant radiation protection procedures for entry into high radiation areas.

<sup>(2)</sup> Measurement made at 30 centimeters from source of radioactivity.

**6.17 PROCESS CONTROL PROGRAM (PCP)**

- a. The PCP shall be approved by the Commission prior to implementation.
- b. Licensee initiated changes to the PCP:
  1. Shall be documented and records of reviews performed shall be retained as required by the quality assurance program~~TS 6.10.b.11~~. The documentation shall contain:
    - A. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s).
    - B. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
  2. Shall become effective upon review and acceptance by the PORC.

## 6.18 OFF-SITE DOSE CALCULATION MANUAL (ODCM)

- a. The ODCM shall be approved by the Commission prior to implementation.
- b. Licensee initiated changes to the ODCM:
  1. Shall be documented and records of reviews performed shall be retained as required by ~~TS 6.10.b.11~~ the quality assurance program. This documentation shall contain:
    - A. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change.
    - B. A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
  2. Shall become effective after review and acceptance by the PORC.
  3. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. The date the changes were made shall be indicated. In addition, a method such as redlining should be used to clearly identify the changes.

**ATTACHMENT 3**

**LICENSE AMENDMENT REQUEST – 222**

**INCORPORATION OF GENERIC TITLES AND RELOCATION OF ADMINISTRATIVE  
CONTROLS RELATED TO QUALITY ASSURANCE PROGRAM**

**AFFECTED TS PAGES FOR LICENSE AMENDMENT REQUEST 222**

**KEWAUNEE POWER STATION**

**AFFECTED TS PAGES:**

**TS iv**

**TS 2.1-1**

**TS 2.2-1**

**TS 6.1-1**

**TS 6.2-1 to TS 6.2-2**

**TS 6.3-1**

**TS 6.7-1**

**TS 6.8-1**

**TS 6.10-1**

**TS 6.13-1**

**TS 6.17-1**

**TS 6.18-1**

**DOMINION ENERGY KEWAUNEE, INC.**

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6.20	Containment Leakage Rate Testing Program.....	6.20-1
6.21	Technical Specifications (TS) Bases Control Program.....	6.21-1
7/8.0	Deleted	

## 2.0 SAFETY LIMITS AND LIMITING SAFETY SYSTEM SETTINGS

### 2.1 SAFETY LIMITS - REACTOR CORE

#### APPLICABILITY

Applies to the limiting combination of thermal power, Reactor Coolant System pressure and coolant temperature during the OPERATING and HOT STANDBY MODES.

#### OBJECTIVE

To maintain the integrity of the fuel cladding.

#### SPECIFICATION

- a. The combination of RATED POWER level, coolant pressure, and coolant temperature shall not exceed the limits specified in the COLR. The SAFETY LIMIT is exceeded if the point defined by the combination of Reactor Coolant System average temperature and power level is at any time above the appropriate pressure line.
- b. The departure from nucleate boiling ratio (DNBR) shall be maintained  $\geq 1.14$  for the HTP DNB correlation and 1.17 for the WRB-1 DNB correlation.
- c. The peak fuel centerline temperature shall be maintained  $< 5080^{\circ}\text{F}$  decreasing by  $58^{\circ}\text{F}$  per 10,000 MWD/MTU of burnup.
- d. If SAFETY LIMIT 2.1.a, 2.1.b, or 2.1.c is violated, restore compliance and be in HOT SHUTDOWN within 1 hour.

## 2.2 SAFETY LIMIT - REACTOR COOLANT SYSTEM PRESSURE

### **APPLICABILITY**

Applies to the maximum limit on Reactor Coolant System pressure.

### **OBJECTIVE**

To maintain the integrity of the Reactor Coolant System.

### **SPECIFICATION**

- a. The Reactor Coolant System pressure shall not exceed 2735 psig with fuel assemblies installed in the reactor vessel.
- b. IF SAFETY LIMIT 2.2.a is violated then:
  1. If in the OPERATING or HOT STANDBY modes, restore compliance and be in HOT SHUTDOWN within 1 hour.
  2. If in the HOT SHUTDOWN, INTERMEDIATE SHUTDOWN, COLD SHUTDOWN, or REFUELING modes, restore compliance within 5 minutes.

## 6.0 ADMINISTRATIVE CONTROLS

### 6.1 RESPONSIBILITY

- a. The plant manager shall be responsible for overall plant operation and shall delegate in writing the succession of this responsibility during his absence.
- b. The plant manager, or his designee, shall approve prior to implementation, each proposed test, experiment or modification to structures, systems or components that affect nuclear safety.

## 6.2 ORGANIZATION

### a. Off-Site Staff

The off-site organization for plant management and technical support shall be as described in the quality assurance program.

### b. Facility Staff

The plant organization shall be as described in the quality assurance program.

1. Each on-duty shift complement shall consist of at least:
  - A. One shift manager (SRO)
  - B. Two licensed reactor operators
  - C. Two nuclear auxiliary operators
  - D. Deleted
  - E. One radiation technologist
2. While above COLD SHUTDOWN, the on-duty shift complement shall consist of the personnel required by TS 6.2.b.1 and an additional SRO.
3. In the event that one of the shift members becomes incapacitated due to illness or injury or the radiation technologist has to accompany an injured person to the hospital, reactor operations may continue with the reduced complement until a replacement arrives. In all but severe weather conditions, a replacement is required within two hours.
4. At least one licensed operator shall be in the control room when fuel is in the reactor.
5. Two licensed operators, one of which shall be an SRO, shall be present in the control room when the unit is in an operational MODE other than COLD SHUTDOWN or REFUELING.
6. REFUELING OPERATIONS shall be directed by a licensed SRO assigned to the REFUELING OPERATION who has no other concurrent responsibilities during the REFUELING OPERATION.
7. When the reactor is above the COLD SHUTDOWN condition, a qualified shift technical advisor shall be within 10 minutes of the control room.

### c. Plant-Specific Titles

The plant-specific titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications shall be maintained in appropriate administrative documents.

d. Organizational Changes

Changes not affecting safety may be made to the off-site and facility staff organizations. Such changes that are described in the Technical Specifications shall be reported to the Commission in the form of an application for license amendment within 60 days of the implementation of the change.

### 6.3 PLANT STAFF QUALIFICATIONS

- a. Qualification of each member of the Plant Staff shall meet or exceed the minimum acceptable levels of ANSI N18.1-1971 for comparable positions, except for:
  1. The radiation protection manager who shall meet or exceed the recommendation of Regulatory Guide 1.8, Revision 1-R, September 1975, or their equivalent as further clarified in Attachment 1 to the Safety Evaluation Report enclosed with Amendment No. 46 to Facility Operating License DPR-43.
  2. The education and experience eligibility requirements for operator license applicants, changes thereto, shall be those previously reviewed and approved by the NRC, specifically those referenced in NRC Safety Evaluation letter dated October 2, 2003 (K-03-140).
- b. The shift technical advisor shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in the design of the Kewaunee Plant and plant transient and accident analysis.

6.7 DELETED

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|

**6.8 PROCEDURES**

- a. Written procedures and administrative policies shall be established, implemented and maintained that meet the requirements and recommendations of the quality assurance program.
- b. Changes to procedures are made in accordance with the provisions of the quality assurance program.
- c. Procedures are reviewed in accordance with the provisions of the quality assurance program.

6.10 DELETED

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## 6.13 HIGH RADIATION AREA

- a. In lieu of the "control device" or "alarm signal" required by Paragraph 20.1601(a) of 10 CFR Part 20, each high radiation area in which the intensity of radiation is  $> 100$  mrem/hr, but  $< 1000$  mrem/hr, shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a radiation work permit (RWP).<sup>(1)</sup> Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following.
1. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
  2. A radiation monitoring device which continuously integrates the radiation dose in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
  3. A health physics qualified individual (i.e., qualified in radiation protection procedures) with a radiation dose rate monitoring device who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility health physicist in the RWP.
- b. In addition to the requirements of 6.13.a., areas accessible to personnel with radiation levels such that a major portion of the body could receive in one hour a dose  $> 1000$  mrem shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the shift manager on duty and/or health physics supervision. Doors shall remain locked except during periods of access by personnel under an approved RWP which shall specify the dose rate levels in the immediate work area and the maximum allowable stay time for individuals in that area. For individual areas accessible to personnel with radiation levels such that a major portion of the body could receive in one hour a dose  $> 1000$  mrem<sup>(2)</sup> that are located within large areas, such as PWR containment, where no enclosure exists for purposes of locking, and no enclosure can be reasonably constructed around the individual areas, then that area shall be roped off, conspicuously posted and a flashing light shall be activated as a warning device. In lieu of the stay time specification of the RWP, direct or remote (such as use of closed circuit TV cameras) continuous surveillance may be made by personnel qualified in radiation protection procedures to provide positive exposure control over the activities within the area.

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<sup>(1)</sup> Health Physics personnel or personnel escorted by Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they are otherwise following plant radiation protection procedures for entry into high radiation areas.

<sup>(2)</sup> Measurement made at 30 centimeters from source of radioactivity.

**6.17 PROCESS CONTROL PROGRAM (PCP)**

- a. The PCP shall be approved by the Commission prior to implementation.
- b. Licensee initiated changes to the PCP:
  1. Shall be documented and records of reviews performed shall be retained as required by the quality assurance program. The documentation shall contain:
    - A. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s).
    - B. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
  2. Shall become effective upon review and acceptance by the PORC.

## 6.18 OFF-SITE DOSE CALCULATION MANUAL (ODCM)

- a. The ODCM shall be approved by the Commission prior to implementation.
- b. Licensee initiated changes to the ODCM:
  1. Shall be documented and records of reviews performed shall be retained as required by the quality assurance program. This documentation shall contain:
    - A. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change.
    - B. A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.1302, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
  2. Shall become effective after review and acceptance by the PORC.
  3. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. The date the changes were made shall be indicated. In addition, a method such as redlining should be used to clearly identify the changes.

**ATTACHMENT 4**

**LICENSE AMENDMENT REQUEST – 222**

**INCORPORATION OF GENERIC TITLES AND RELOCATION OF ADMINISTRATIVE  
CONTROLS RELATED TO QUALITY ASSURANCE PROGRAM**

**MARKED-UP TS BASES PAGES FOR LICENSE AMENDMENT REQUEST 222**

**KEWAUNEE POWER STATION**

**MARKED-UP TS BASES PAGES:**

**TS B2.1-2**

**TS B2.2-1**

**DOMINION ENERGY KEWAUNEE, INC.**

## **BASIS - Safety Limit - Reactor Coolant System Pressure (TS 2.2)**

The Reactor Coolant System<sup>(1)</sup> serves as a barrier preventing radionuclides contained in the reactor coolant from reaching the atmosphere. In the event of a fuel cladding failure, the Reactor Coolant System is the primary barrier against the release of fission products. By establishing a system pressure limit, the continued integrity of the Reactor Coolant System is ensured. The maximum transient pressure allowable in the reactor pressure vessel under the ASME Code, Section III, is 110% of design pressure. The maximum transient pressure allowable in the Reactor Coolant System piping, valves and fittings under USASI B.31.1.0 is 120% of design pressure. Thus, the SAFETY LIMIT of 2735 psig (110% of design pressure, 2485 psig) has been established.<sup>(2)</sup>

The settings of the power-operated relief valves, the reactor high pressure trip and the safety valves have been established to prevent exceeding the SAFETY LIMIT of 2735 psig for all transients except the hypothetical RCCA Ejection accident, for which the faulted condition stress limit acceptance criterion of 3105 psig (3120 psia) is applied. The initial hydrostatic test was conducted at 3107 psig to ensure the integrity of the Reactor Coolant System.

### **Safety Limit (SL) Violation**

If the RCS pressure SL is violated when the reactor is in the OPERATING or HOT STANDBY MODE, the requirement is to restore compliance and be in HOT SHUTDOWN within 1 hour. Exceeding the RCS pressure SL may cause immediate RCS failure and create a potential for radioactive releases in excess of 10 CFR 67, "Accident Source Term," limits. The allowable Completion Time of 1 hour recognizes the importance of reducing power level to a MODE of operation where the potential for challenges to safety systems is minimized. If the RCS pressure SL is exceeded in INTERMEDIATE SHUTDOWN, COLD SHUTDOWN or REFUELING MODES, RCS pressure must be restored to within the SL value within 5 minutes. Exceeding the RCS pressure SL in INTERMEDIATE SHUTDOWN, COLD SHUTDOWN or REFUELING MODES, is more severe than exceeding this SL in OPERATING or HOT STANDBY MODES, since the reactor vessel temperature may be lower and the vessel material, consequently, less ductile. As such, pressure must be reduced to less than the SL within 5 minutes. The action does not require reducing MODES, since this would require reducing temperature, which would compound the problem by adding thermal gradient stresses to the existing pressure stress.

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<sup>(1)</sup> USAR Section 4

<sup>(2)</sup> USAR Section 4.3

These limiting hot channel factors are higher than those calculated at full power for the range from all control rods fully withdrawn to maximum allowable control rod insertion. The control rod insertion limits are given in TS 3.10.d. Slightly higher hot channel factors could occur at lower power levels because additional control rods are in the core. However, the control rod insertion limits as specified in the COLR ensure that the increase in peaking factor is more than offset by the decrease in power level.

The Reactor Control and PROTECTION SYSTEM is designed to prevent any anticipated combination of transient conditions that would result in a DNBR less than the DNBR limit.

Two departure from nucleate boiling ratio (DNBR) correlations are used in the generation and validation of the safety limit curves: the WRB-1 DNBR correlation and the high thermal performance (HTP) DNBR correlation. The WRB-1 correlation applies to the Westinghouse 422 V+ fuel. The HTP correlation applies to FRA-ANP fuel with HTP spacers. The DNBR correlations have been qualified and approved for application to Kewaunee. The DNBR correlation limits are 1.14 for the HTP DNBR correlation, and 1.17 for the WRB-1 DNBR correlation.

#### Safety Limit (SL) Violations

The following SL violation responses are applicable to the reactor core SLs. If TS 2.1.a, 2.1.b, or 2.1.c is violated, the requirement to go to HOT SHUTDOWN places the unit in a MODE in which this SL is not applicable. The allowed Completion Time of 1 hour recognizes the importance of bringing the unit to a MODE of operation where this SL is not applicable, and reduces the probability of fuel damage.

**ATTACHMENT 5**

**LICENSE AMENDMENT REQUEST – 222**

**INCORPORATION OF GENERIC TITLES AND RELOCATION OF ADMINISTRATIVE  
CONTROLS RELATED TO QUALITY ASSURANCE PROGRAM**

**AFFECTED TS BASES PAGES FOR LICENSE AMENDMENT REQUEST 222**

**KEWAUNEE POWER STATION**

**AFFECTED TS BASES PAGES:**

**TS B2.1-2**

**TS B2.2-1**

**DOMINION ENERGY KEWAUNEE, INC.**

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