November 24, 2003

Mr. David A. Christian
Sr. Vice President and Chief Nuclear Officer
Dominion Nuclear Connecticut, Inc.
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNIT NO. 2 - CORRECTION TO SAFETY EVALUATION RELATED TO AMENDMENT NO. 280: REACTIVITY CONTROL SYSTEMS, POWER DISTRIBUTION LIMITS, AND SPECIAL TEST EXCEPTIONS (TAC NO. MB6108)

Dear Mr. Christian:

On September 25, 2003, the U. S. Nuclear Regulatory Commission (NRC) issued Amendment No. 280 to Facility Operating License No. DPR-65 for the Millstone Power Station, Unit No. 2 (MP2). The amendment revised the Technical Specifications (TSs) related to reactivity control systems, power distribution limits, and special test exceptions.

In a conference call on November 5, 2003, the Dominion Nuclear Connecticut, Inc. (DNC) staff provided comments to the NRC regarding proposed corrections/clarifications to the Safety Evaluation (SE) which was enclosed with Amendment No. 280. In order to accurately reflect the current licensing basis for MP2, the NRC has revised the SE as follows:

1) In SE Section 3.7, the second paragraph discusses the proposed deletion of an Action Statement in TS 3.1.3.4 pertaining to control element assembly (CEA) drop time testing. This paragraph states, in part, that:

> DNC also proposed deleting TS 3.1.3.4.b, which states: "With the CEA drop times within limits but determined at less than full reactor coolant flow, operation may proceed provided THERMAL POWER is restricted to less than or equal to the maximum THERMAL POWER level allowable for the RCP [reactor coolant pump] combination operation at the time of CEA drop time determination." The licensee justified this deletion because DNC currently performs drop time testing in Modes 1 and 2 with all of their RCPs operating. Therefore, the plant would never have to go below 100 percent power. However, by deleting this TS, the licensee would technically be allowed to do drop time testing in Mode 2 with less than all of the RCPs operating.

The DNC staff stated that CEA drop time testing is actually performed in Mode 3. The NRC staff reviewed the licensee's submittals and agreed that the SE was in error. Therefore, the second paragraph of Section 3.7 of the SE has been revised to:

- replace "Modes 1 and 2" with "Mode 3" in the second sentence; and
- replace "Mode 2" with "Mode 3" in the third sentence.

2) The fifth and sixth paragraphs of SE Section 3.12, in part, discuss the TS-required actions for a dropped or severely misaligned CEA as follows:

> Because of the dropped or misaligned CEA, the licensee would be in TS 3.2.3, "Total Unrodded Integrated Radial Peaking Factor - F^T_r"; TS 3.1.3.1, "CEA Position"; and either TS 3.1.3.5, "Shutdown CEA Insertion Limit," or TS 3.1.3.6, "Regulating CEA Insertion Limit," depending upon which CEA was dropped or misaligned. Combining these TSs for a dropped or severely misaligned CEA, the licensee would have to:
>
> 1) reduce power to 70 percent within the first hour per TS 3.1.3.1.A.1;
>
> 2) reduce power to 50 percent within the second hour per TS 3.2.4.b.2;
>
> 3) recover the CEA to within its alignment limits within the second hour per TS 3.1.3.1.A.1;
>
> 4) recover the CEA to within its insertion limits within the second hour per TS 3.1.3.5.A.1 or TS 3.1.3.6.A.1; and
>
> 5) reduce power to bring the combination of thermal power and F^T_r to within the power dependent limit specified in the COLR and withdraw the CEAs to their Long Term Steady State Insertion Limits within the sixth hour.
>
> If these actions were not successful, then from the time of the drop, TSs 3.1.3.1, TS 3.1.3.5, TS 3.1.3.6, and TS 3.2.4 (via LCO 3.0.3) would require the plant to be in Mode 3 by the eighth hour. However, TS 3.2.3 would require the plant to be in Mode 3 by the sixth hour.

The DNC staff stated that the NRC's evaluation of the combined TSs for a dropped or severely misaligned CEA did not include all applicable actions and also suggested further changes for clarity. Based on this discussion and review of the licensee's submittals, the NRC has revised the SE as follows:

- In the first sentence of the fifth paragraph, the words "Because of the dropped or misaligned CEA, the licensee would be in" would be replaced with "In the event of a dropped or misaligned CEA which causes azimuthal power tilt to be greater than 0.10, the licensee would be in."

- In the first sentence of the fifth paragraph, TS 3.2.4, " Azimuthal Power Tilt - T_q" would be added to the listed TSs.

- A new action would be added to the existing five actions. Actions 1, 2, and 3 would remain as-is, a new action 4 would be added and actions 4 and 5 would be renumbered as 5 and 6, respectively. The new action would be as follows:

  4) verify F^T_r within its limit within the second hour per TS 3.2.4.b.1;

- The first sentence of the sixth paragraph:

  > If these actions were not successful, then from the time of the drop, TSs 3.1.3.1, TS 3.1.3.5, TS 3.1.3.6, and TS 3.2.4 (via LCO 3.0.3) would require the plant to be in Mode 3 by the eighth hour.

  would be revised to read:

  > If these actions were not successful, then from the time of the drop, TSs 3.1.3.1, TS 3.1.3.5, and TS 3.1.3.6 would require the plant to be in Mode 3 by the eighth hour.

A copy of the revised SE is enclosed with changes shown by marginal bars. The NRC staff has determined that the corrections to the original SE do not change our previous conclusions regarding the acceptability of the changes approved in Amendment No. 280.

Sincerely,

/RA/

Richard B. Ennis, Senior Project Manager, Section 2
Project Directorate I
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-336

Enclosure: As stated

cc w/encl: See next page

- The first sentence of the sixth paragraph:

  If these actions were not successful, then from the time of the drop, TSs 3.1.3.1, TS 3.1.3.5, TS 3.1.3.6, and TS 3.2.4 (via LCO 3.0.3) would require the plant to be in Mode 3 by the eighth hour.

  would be revised to read:

  If these actions were not successful, then from the time of the drop, TSs 3.1.3.1, TS 3.1.3.5, and TS 3.1.3.6 would require the plant to be in Mode 3 by the eighth hour.

A copy of the revised SE is enclosed with changes shown by marginal bars. The NRC staff has determined that the corrections to the original SE do not change our previous conclusions regarding the acceptability of the changes approved in Amendment No. 280.

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SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 280

TO FACILITY OPERATING LICENSE NO. DPR-65

DOMINION NUCLEAR CONNECTICUT, INC.

MILLSTONE POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

1.0 INTRODUCTION

By application dated August 14, 2002, as supplemented on March 11, May 16, and May 23, 2003, Dominion Nuclear Connecticut, Inc. (DNC or the licensee), requested changes to the Millstone Power Station, Unit No. 2 (MP2) Technical Specifications (TSs). The supplements dated March 11, May 16, and May 23, 2003, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on September 17, 2002 (67 FR 58640).

The proposed amendment would revise the TSs related to reactivity control systems, power distribution limits, and special test exceptions. The licensee's application states that the purpose of the proposed changes is to remove ambiguity and improve usability of the current TSs. The proposed changes would affect the following TSs:

- TS Definition 1.13, "SHUTDOWN MARGIN"
- TS 3/4.1.1.1, "Reactivity Control Systems, Shutdown Margin - $T_{avg} > 200$ °F"
- TS 3/4.1.1.2, "Reactivity Control Systems, Shutdown Margin - $T_{avg} \leq 200$ °F"
- TS 3/4.1.1.3, "Reactivity Control Systems, Boron Dilution"
- TS 3/4.1.1.5, "Reactivity Control Systems, Minimum Temperature For Criticality"
- TS 3/4.1.3.1, "Reactivity Control Systems, Movable Control Assemblies, Full Length CEA [control element assembly] Position"
- TS 3/4.1.3.3, "Reactivity Control Systems, Position Indicator Channels"
- TS 3/4.1.3.4, "Reactivity Control Systems, CEA Drop Time"

- TS 3/4.1.3.5 “Reactivity Control Systems, Shutdown CEA Insertion Limit”
- TS 3/4.1.3.6, “Reactivity Control Systems, Regulating CEA Insertion Limits”
- TS 3/4.2.1, “Power Distribution Limits, Linear Heat Rate”
- TS 3/4.2.3, “Power Distribution Limits, Total Unrodded Integrated Radial Peaking Factor - F^T_r”
- TS 3/4.2.4, “Power Distribution Limits, Azimuthal Power Tilt - T_q”
- TS 3/4.3.1.1, “Reactor Protective Instrumentation”
- TS 3/4.3.2.1, “Engineered Safety Feature Actuation System Instrumentation”
- TS 3/4.4.9, “Reactor Coolant System, Pressure/Temperature Limits”
- TS 3/4.9.1, “Refueling Operations, Boron Concentrations”
- TS 3/4.10.1, “Special Test Exceptions, Shutdown Margin”
- TS 3/4.10.3, “Special Test Exceptions, Pressure/Temperature Limitation - Reactor Criticality”
- TS 3/4.10.4, “Special Test Exceptions, Physics Tests”
- TS 3/4.10.5, “Special Test Exceptions, Center CEA Misalignment”
- TS 5.3.2, “Design Features, Control Element Assemblies”
- TS 6.9.1.8, “Administrative Controls, Core Operating Limits Report”

The corresponding TS Index pages and Bases sections would also be revised to reflect the proposed changes.

2.0 REGULATORY EVALUATION

The construction permit for MP2 was issued by the Atomic Energy Commission (AEC) on December 11, 1970. The plant was designed and constructed based on the proposed General Design Criteria (GDC) published by the AEC in the *Federal Register* on July 11, 1967 (32 FR 10213). On February 20, 1971, the final rule that added Appendix A to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, “General Design Criteria for Nuclear Power Plants,” was published by the AEC in the *Federal Register* (36 FR 3255). As discussed in Appendix 1A of the MP2 Final Safety Analysis Report (FSAR), since February 20, 1971, the applicants/licensees for MP2 have attempted to comply with the intent of the newer GDC, to the extent possible, recognizing previous design commitments. The extent to which this has been possible is reflected in the discussions of the 1971 GDC described in Appendix 1A of the FSAR, and in specific sections of the FSAR as applicable.

Based on a review of FSAR Appendix 1A, and NUREG-0800, "Standard Review Plan" Section 4.3, "Nuclear Design," the staff identified the following GDCs as being applicable to the proposed amendment:

- GDC 10, "Reactor design," which requires that the reactor core and associated coolant, control, and protection systems be designed with appropriate margin to assure that specified acceptable fuel design limits are not exceeded during any condition of normal operation, including the effects of anticipated operational occurrences.

- GDC 11, "Reactor inherent protection," which requires that the reactor core and associated coolant systems be designed so that in the power operating range the net effect of the prompt inherent nuclear feedback characteristics tends to compensate for a rapid increase in reactivity.

- GDC 25, "Protection system requirements for reactivity control malfunctions," which requires that the protection system be designed to assure that specified acceptable fuel design limits are not exceeded for any single malfunction of the reactivity control systems, such as accidental withdrawal (not ejection or dropout) of control rods.

- GDC 26, "Reactivity control system redundancy and capability," which requires that two independent reactivity control systems of different design principles be provided. GDC 26 also requires that: (1) one of the systems shall use control rods, preferably including a positive means for inserting the rods, and shall be capable of reliably controlling reactivity changes to assure that under conditions of normal operation, including anticipated operational occurrences, and with appropriate margin for malfunctions such as stuck rods, specified acceptable fuel design limits are not exceeded; (2) the second reactivity control system shall be capable of reliably controlling the rate of reactivity changes resulting from planned, normal power changes (including xenon burnout) to assure acceptable fuel design limits are not exceeded; and (3) one of the systems shall be capable of holding the reactor core subcritical under cold conditions.

- GDC 27, "Combined reactivity control systems capability," which requires that the reactivity control systems be designed to have a combined capability, in conjunction with poison addition by the emergency core cooling system, of reliably controlling reactivity changes to assure that under postulated accident conditions, and with appropriate margin for stuck rods, the capability to cool the core is maintained.

- GDC 28, "Reactivity limits," which requires that the reactivity control systems be designed with appropriate limits on the potential amount and rate of reactivity increase to assure that the effects of postulated reactivity accidents can neither (1) result in damage to the reactor coolant pressure boundary greater than limited local yielding, nor (2) sufficiently disturb the core, its support structures or other reactor pressure vessel internals to impair significantly the capability to cool the core. GDC 28 also requires that these postulated reactivity accidents shall include consideration of rod ejection (unless prevented by positive means), rod dropout, steam line rupture, changes in reactor coolant temperature and pressure, and cold water addition.

In 10 CFR 50.36, the U.S. Nuclear Regulatory Commission (NRC or the Commission) established its regulatory requirements related to the content of TSs. Pursuant to

10 CFR 50.36, TSs are required to include items in the following five specific categories: (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation (LCOs); (3) surveillance requirements (SRs); (4) design features; and (5) administrative controls. The regulation does not specify the particular requirements to be included in a plant's TSs.

On July 22, 1993 (58 FR 39132), the Commission published a "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" (Final Policy Statement) which discussed the criteria to determine which items are required to be included in the TSs as LCOs. The criteria were subsequently incorporated into the regulations by an amendment to 10 CFR 50.36 (60 FR 36953). Specifically, 10 CFR 50.36(c)(2)(ii) requires that a TS LCO be established for each item meeting one or more of the following criteria:

Criterion 1: Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary.

Criterion 2: A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Criterion 3: A structure, system, or component [SSC] that is part of the primary success path and which functions or actuates to mitigate a design basis accident [DBA] or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.

Criterion 4: A structure, system, or component which operating experience or probabilistic risk assessment has shown to be significant to public health and safety.

In general, there are two classes of changes to TSs: (1) changes needed to reflect modifications to the design basis (TSs are derived from the design basis), and (2) changes to take advantage of the evolution in policy and guidance as to the required content and preferred format of TSs over time. In determining the acceptability of such changes, the staff interprets the requirements of 10 CFR 50.36, using as a model the accumulation of generically-approved guidance in the improved Standard Technical Specifications (STS). For this review, the staff used NUREG-1432, Revision 2, "Standard Technical Specifications, Combustion Engineering Plants." The STS reflect the general guidance and LCO scoping criteria provided by the Commission's Final Policy Statement.

Within this general framework, licensees may remove material from their TSs if the material is not required to be in the TSs based on the staff's interpretation of 10 CFR 50.36, including judgements about the level of detail required in the TSs. As discussed in the Final Policy Statement, the NRC staff reviews, on a case-by-case basis, whether enforceable regulatory controls are needed for the relocated material (e.g., 10 CFR 50.59). Licensees may revise the remaining TSs to adopt current improved STS format and content provided that plant-specific review supports a finding of continued adequate safety because: (1) the change is editorial, administrative, or provides clarification (i.e., no requirements are materially altered); (2) the

change is more restrictive than the licensee's current requirement; or (3) the change is less restrictive than the licensee's current requirement, but nonetheless still affords adequate assurance of safety when judged against current regulatory standards.

3.0 TECHNICAL EVALUATION

The NRC staff has reviewed the licensee's justification for the proposed license amendment as described in the licensee's application dated August 14, 2002, as supplemented on March 11, May 16, and May 23, 2003 (References 7.1, 7.2, 7.3, and 7.4, respectively). The staff's detailed evaluation is provided in Safety Evaluation (SE) Sections 3.1 through 3.16.

3.1 TS Definition 1.13, "SHUTDOWN MARGIN"

TS 1.13 currently defines shutdown margin (SDM) as "the instantaneous amount of reactivity by which the reactor is subcritical or would be subcritical from its present condition assuming all full length control element assemblies (shutdown and regulating) are fully inserted except for the single assembly of highest reactivity worth which is assumed to be fully withdrawn." DNC proposed deleting the words, "full length" from this TS. The words "full length" were placed in the definition to prevent the licensee from using their partial length CEAs for the SDM calculation. However, MP2 no longer has partial length CEAs. Therefore, this distinction is not necessary. Because MP2 only possesses full length CEAs, the staff finds the removal of the distinction "full length" acceptable. However, should the licensee decide to reinstall partial length CEAs, it should reinstate the original definition of SDM in the TS.

3.2 TS 3/4.1.1.1, "Reactivity Control Systems, Shutdown Margin - $T_{avg} > 200\ ^{o}F$" and TS 3/4.1.1.2, "Reactivity Control Systems, Shutdown Margin - $T_{avg} \leq 200\ ^{o}F$"

The licensee proposed merging these two TSs into TS 3/4.1.1.1, "Shutdown Margin (SDM)." As part of this change, the licensee changed the Mode applicability from Modes 1, 2, 3, and 4 for current TS 3/4.1.1.1 and Mode 5 for current TS 3/4.1.1.2 to Modes 3, 4, and 5 for the new TS. The licensee justified this change by stating that for Modes 1 and 2, the shutdown and regulating CEA insertion limits ensure the SDM. Since the CEA insertion limits ensure the SDM is maintained in Modes 1 and 2, the staff finds the removal of Modes 1 and 2 from the applicability of the TS to be acceptable. In addition, the proposed Mode elimination is consistent with NUREG-1432.

DNC proposed the addition of a footnote to reference the applicability of Special Test Exception 3.10.1 in Mode 3. Since Special Test Exception 3.10.1 is already applied during this mode of operation, this change clarifies the TS, and is editorial in nature. Therefore, the staff finds the change acceptable.

The licensee proposed the deletion of the requirements currently contained in SR 4.1.1.1.1a. This SR requires that upon detection of an immovable or untrippable CEA, the SDM shall be increased by an amount at least equal to the withdrawn worth of the immovable or untrippable CEA. DNC justified this deletion by stating that TS 3.1.3.1.D would cover this requirement during Modes 1 and 2. Furthermore, DNC stated that this TS change would not affect the requirements for Modes 3, 4, and 5 since the reactor would be in a shutdown condition.

Proposed TS 3.1.3.1.D would require that with one or more CEAs untrippable, or two or more CEAs misaligned by ≥ 20 steps, the plant must be in Mode 3 within the next six hours.

As described in References 7.5 and 7.6, the staff raised the following issues regarding the proposed change associated with the requirements currently contained in SR 4.1.1.1.1a:

1) Since the current SR applies to immovable and untrippable CEAs and the proposed TS 3.1.3.1.D only addresses untrippable CEAs, address how immovable CEAs are accounted for in the proposed TSs (i.e., it is not clear what the difference is between use of the terms “immovable” and “untrippable”).

2) Explain why the proposed TSs do not include the current requirement to increase the SDM if the CEAs are immovable.

3) The TS 1.6 definition for “operable” implies that a CEA is operable when it is capable of performing its specified functions and when all necessary attendant equipment or functions required for a CEA to perform its function are also capable of performing their related support functions. A function of the CEAs would be to move in order to regulate core reactivity. An immovable but trippable CEA would, therefore, be considered inoperable. However, the proposed LCO 3.1.3.1 no longer contains action statements for CEAs that are immovable but trippable. Therefore, following the TS logic, an immovable but trippable CEA would require MP2 to enter LCO 3.0.3 for shutdown. The current TSs, on the other hand, allow for operation of up to seven days in this condition. Since it appeared that the licensee did not intend for this result, the staff asked DNC to provide a justification for removal of the operation limits for immovable but trippable CEAs.

In the supplement dated March 11, 2003, the licensee's response to Question 2 addressed issues 1 and 2. However, this response was withdrawn by the licensee in the supplement dated May 16, 2003. The licensee's supplement dated May 23, 2003, provided the response to all three issues as discussed below.

With respect to the first and second issues, the licensee's submittal dated May 23, 2003, stated, in part, that:

> Dominion Nuclear Connecticut, Inc. (DNC) has been unable to locate any definitive basis document discussing an intended difference between the terms "immovable" and "untrippable" as used in Current Technical Specification (CTS) Surveillance Requirement (SR) 4.1.1.1.1a. We note that the term "immovable" also appears in the required ACTIONs of CTS 3.1.3.1 but its usage is not consistent with that of SR 4.1.1.1.1a. Notably, CTS ACTION 3.1.3.1c allows continued operation for up to 7 days for any inoperable but trippable CEA so long as it is within the alignment requirement of LCO 3.1.3.1. In contrast, CTS 4.1.1.1.1a requires boration and resultant shutdown for the same condition if the CEA is declared "immovable" for reasons other than being untrippable. The lack of definitive guidance as to whether any meaningful difference should be applied in establishing compliance with SR 4.1.1.1.1a was, in part, motivation for the proposed change requested by DNC.

> The approach to classifying CEA malfunctions at Millstone Unit No. 2 is documented in Abnormal Operating Procedure (AOP) 2556, "CEA Malfunctions." The guidance of this procedure does not address the condition of a CEA being "immovable" beyond identifying failure of a CEA to respond to a demand for motion as an entry condition. Instead, the approach is to determine whether a CEA is "trippable" or "untrippable" with the distinction based on whether the cause of the malfunction is related to control system failure. While it is possible to trip individual CEAs during operation at power, this is highly undesirable due to the impact on core power distribution. In the case of CEA malfunctions caused by control system failure, the associated CEA remains trippable. In this case, the SDM is verified by ensuring that CEAs are withdrawn above the power dependent insertion limit [PDIL] or fully withdrawn in the case of shutdown CEAs. If the SDM requirements are not met, emergency boration is directed. If the cause of a CEA malfunction is not associated with control system failure, the CEA is declared untrippable and emergency boration is directed by the AOP.

With respect to the third issue, the licensee's submittal dated May 23, 2003, stated, in part, that:

> It should be noted that Millstone Unit No. 2 CEA control is a manual function only. For the CTS and PTS [proposed TS], a CEA would be declared inoperable based on application of the definition of OPERABLE - OPERABILITY. Thus, any condition capable of preventing a CEA from performing a function credited in the analyses and evaluations documented in the Final Safety Analysis Report (FSAR) would require the associated CEA to be declared inoperable. Any condition that could preclude CEA insertion (i.e., trippability) on a reactor trip signal satisfies this criterion. The inability to move a CEA due to an electrical or control system action or malfunction, or as consequence of being transferred to the 'hold bus' would not impact CEA OPERABILITY as "trippability" is retained for these conditions. Consequently, entry into LCO 3.0.3 would not be required.

The licensee's submittal also provided justification that the ability to move CEAs upon demand does not meet any of the 10 CFR 50.36(c)(2)(ii) criteria for inclusion in the TSs because:

> Criterion 1
>
> The ability to move CEAs upon demand is a non-safety function of the control element drive system. The control function of the control element drive system is not related to an instrument that is used to detect, and indicate in the control room, an abnormal degradation of the reactor coolant pressure boundary. Therefore, the non-safety function of the control element drive system does not meet Criterion 1.
>
> Criterion 2
>
> The ability to move CEAs upon demand is a non-safety function of the control element drive system. The ability to move CEAs upon demand is not required by Reactor Protection System or Engineered Safety Features Actuation System functions. Insertion of CEAs by action of gravity following removal of power from the drive motor is the function credited as an initial condition of a DBA or transient analysis documented in the FSAR. Movement of CEAs using the nonsafety control system is not an initial condition of a DBA or transient analysis, nor does it represent a process variable, design feature,

or operating restriction that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. Therefore, the non-safety function of the control element drive system does not meet Criterion 2.

Criterion 3

Insertion of CEAs by action of gravity following removal of power from the drive motor is the function credited for mitigation of DBA and transient analyses documented in the FSAR. Therefore, the trippability of CEAs is part of the primary success path, which functions or actuates to mitigate a DBA or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier. However, the ability to move CEAs using the non-safety control system is not required to fulfill this function. In fact this function is directly defeated by the action of the reactor protection system to open the reactor trip breakers in support of gravity insertion of the CEAs. Therefore, the non-safety function of the control element drive system does not meet Criterion 3.

Criterion 4

The ability to move CEAs upon demand given a manual control signal has not been shown to be risk significant to public health and safety by either operating experience or probabilistic safety assessment. The function of the non-safety control system is not a SSC requiring risk review/unavailability monitoring. This is justified on the basis that there is no failure within the non-safety control system that can by itself prevent CEA insertion upon a reactor trip signal. Therefore, the control (non-safety) function of the control element drive system does not meet Criterion 4.

The staff concludes that since an immovable but trippable CEA continues to perform its safety function, and since the ability to move CEAs upon demand does not meet any of the criteria in 10 CFR 50.36(c)(2)(ii) for inclusion in the TSs, the proposed deletion of the current requirements in SR 4.1.1.1.1a is acceptable. In addition, the proposed change is consistent with NUREG-1432.

To be consistent with the STSs, the licensee proposed to move the requirements of SR 4.1.1.1.1b to SR 4.1.3.6.1. This SR stated that the SDM shall be determined to be within the limits of the Core Operating Limits Report (COLR) while in Modes 1 or 2 at least once per 12 hours, by verifying that the CEA group withdrawal is within the Transient Insertion Limits of TS 3.1.3.6. The staff concludes that the proposed change is editorial in nature and, therefore, is acceptable. In addition, the proposed change is consistent with NUREG-1432.

To be consistent with the STSs, the licensee proposed the deletion of SR 4.1.1.1.1c. This SR requires that the SDM be determined to be within the limits of the COLR prior to initial operation above five percent rated thermal power after each refueling, with the CEA groups at the Transient Insertion Limits of TS 3.1.3.6, “Reactivity Control Systems, Regulating CEA Insertion Limits.” DNC justified this deletion by stating that the safety analyses confirm that the SDM is met when the CEA groups are above their Transient Insertion Limits. However, the staff noted that the purpose of this TS appears to be to verify that the SDM remains within the COLR limits when the rods are at their Transient Insertion Limits. Therefore, by Reference 7.5, the staff asked the licensee for further justification for removal of this SR. The licensee’s response, in Reference 7.2, basically restated the licensee’s original argument. Therefore, by

Reference 7.6, the staff asked the licensee to describe the purpose of this SR and to describe how this purpose would be satisfied with the deletion of this SR.

The licensee's response, in Reference 7.4, stated that this SR verifies that adequate SDM exists. However, as also discussed in Reference 7.4, other current TSs and processes verify SDM. For example, DNC uses approved core design and analysis methods to calculate SDM. As part of this calculation, the licensee uses inputs for CEA worth and CEA insertion limits. Then, during startup physics testing, DNC verifies that the CEA worths are within their acceptance criteria. Also, by SR 4.1.3.5 and SR 4.1.3.6.1, the licensee verifies that all CEAs are withdrawn beyond the insertion limits. These measurements, in turn, ensure that SDM is maintained. Furthermore, this deletion is consistent with the guidance of NUREG-1432.

Because the licensee verifies SDM using other approved processes prior to operation above five percent rated thermal power, the staff finds that the proposed change to delete SR 4.1.1.1.1c is acceptable. In addition, the proposed change is consistent with NUREG-1432.

To be consistent with the STSs, the licensee removed the description of how to meet SDM requirements in SR 4.1.1.1.1d. However, the TSs maintained the SDM requirements within the proposed SR 4.1.1.1. Since the removal of the description is consistent with NUREG-1432, and because the SR requirements remain within SR 4.1.1.1, the staff finds the removal acceptable.

To be consistent with the STSs, DNC proposed the replacement of the requirements of SR 4.1.1.1.2 with a new TS 3/4.1.1.2, "Reactivity Control Systems, Reactivity Balance." The current SR requires the licensee to determine that the core reactivity balance be within 1.0 percent $\Delta k/k$ of predicted values at least once per 31 Effective Full Power Days (EFPDs). The new TS, on the other hand, would require the licensee to evaluate the core reactivity balance prior to entry into Mode 1 after fuel loading and then every 31 EFPDs, after exceeding 60 EFPDs. This change could allow the licensee to have a longer interval between inspections than currently allowed. The staff asked the licensee to justify this increase in References 7.5 and 7.6. DNC responded, in Reference 7.4, by stating that the proposed SR 4.1.1.2 requires the licensee to perform a reactivity balance earlier (prior to entry into Mode 1 after fuel loading) than the current TS (prior to 31 EFPDs), which is more conservative for the initial performance interval. Therefore, the staff finds that the conservative change for the earlier reactivity balance, coupled with the slow rate of reactivity changes due to fuel burnup during the interval extension, would offset the increase in surveillance interval. Because the licensee offset the interval extension by performing an earlier reactivity balance, the staff finds this change acceptable. Additionally, this change is consistent with NUREG-1432.

In addition, upon determination that the reactivity balance is not within its limits, the new TS would allow DNC seven days to reevaluate core design and safety analyses to determine if the core is acceptable for continued operation, and to establish appropriate operating restrictions and perform appropriate SRs. Under the current TSs, had the reactivity balance been outside its limits, MP2 would have to be shut down within six hours. DNC justified this extension, in Reference 7.4, by stating that the actions to perform an evaluation would ensure appropriate corrective actions are taken rather than immediately borating, which might not resolve all of the issues associated with the reactivity anomaly. In TSTF-142 (Reference 7.9), the NRC

approved the seven day period for incorporation into the STS based on the conservatisms used in designing the reactor core and performing the safety analyses, and because of the low probability of a DBA or anticipated transient approaching the core design limits occurring during the proposed seven day period. For these same reasons, and since the seven day period allows for appropriate actions to resolve the reactivity anomaly issues, the staff finds the proposed change acceptable for MP2.

3.3 TS 3/4.10.3, "Special Test Exceptions, Pressure/Temperature Limitation - Reactor Criticality"; TS 3/4.10.4, "Special Test Exceptions, Physics Tests"; and TS 3/4.10.5, "Special Test Exceptions, Center CEA Misalignment"

TS 3/4.10.3 allows the reactor to be critical for the performance of low power physics tests at low temperature and pressure conditions. TS 3/4.10.4 allows the reactor to be critical for the performance of low power physics tests with less than four reactor coolant pumps (RCPs) operating (natural circulation tests). Additionally, TS 3/4.10.5 allows for the performance of Isothermal Temperature Coefficient measurements using only the center CEA to be inserted (misaligned) for reactivity control.

DNC proposed deleting these special test exceptions because it accomplishes the necessary testing using other methods, and the licensee does not anticipate needing these exceptions in the future. Furthermore, these TSs allow for the exception to certain TS safety requirements, which would make the deletion a conservative change. Because the licensee no longer requires these exceptions to perform the necessary testing, and because the deletion of the exceptions is conservative, the staff finds the proposed deletion acceptable.

3.4 TS 3/4.1.1.3, "Reactivity Control Systems, Boron Dilution," and TS 3/4.1.1.5, "Reactivity Control Systems, Minimum Temperature for Criticality"

TS 3/4.1.1.3 sets a limit on the minimum flow rate through the reactor coolant system (RCS) during reductions of the RCS boron concentration, and TS 3/4.1.1.5 sets the limit for RCS temperature when the reactor is critical. The licensee proposed deleting the special test exception TS 3.10.4 and TS 3.10.3 reference from these TSs, respectively. As stated above, the staff found the deletion of special test exception TS 3.10.4 and TS 3.10.3 acceptable. Therefore, as these references would no longer be valid and their deletion would be editorial in nature, the staff finds the proposed changes acceptable.

3.5 TS 3/4.1.3.1, "Reactivity Control Systems, Movable Control Assemblies, Full Length CEA Position"

TS 3/4.1.3.1 sets alignment limitations and operability requirements for the CEAs and the CEA Motion Inhibit function. DNC proposed modifying this TS to be more consistent with the STSs.

The current LCO states: "The CEA Motion Inhibit and all full length (shutdown and regulating CEAs shall be OPERABLE with each CEA of a given group positioned within 10 steps (indicated position) of all other CEAs in its group." In the application dated August 14, 2002, the licensee proposed to change the LCO to state: "All CEAs shall be OPERABLE and aligned to within 10 steps (indicated position) of their respective group, and the CEA Motion Inhibit and the CEA Deviation Circuit shall be OPERABLE."

DNC indicated that the difference between these two LCOs was the order in which the LCO was written, and the addition of a requirement for the CEA Deviation Circuit. The reordering of the LCO statement and the addition of an action statement to check CEA alignment upon finding an inoperable CEA Deviation Circuit is consistent with NUREG-1432. Additionally, adding the CEA Deviation Circuit Action statement enhances safety at the plant by ensuring that the licensee identifies improper CEA alignments before unacceptable power distribution occurs.

During the review, the staff noted that the current LCO only allows a maximum separation of 10 steps between CEAs, whereas the proposed LCO would allow this difference to be up to 20 steps (i.e., one CEA 10 steps below group position and one CEA 10 steps above group position). Therefore, by References 7.5 and 7.6, the staff asked DNC to evaluate this difference. DNC responded, in Reference 7.4, by rewording the TS to state, "All CEAs shall be OPERABLE with each CEA of a given group positioned within 10 steps (indicated position) of all other CEAs in its group..." This change effectively removes the increase in allowed misalignment.

The staff finds that the proposed change to the LCO will enhance safety and keeps the same alignment requirements as the current TSs. Therefore, the proposed change is acceptable. In addition, the proposed change is consistent with NUREG-1432.

The licensee has proposed to delete Action "c" of TS 3.1.3.1. This action statement currently allows operation in Modes 1 or 2 with one CEA inoperable (unless untrippable), but within its specified alignment requirements, for up to seven days per occurrence with a total accumulated time of up to 14 days per calendar year. In Reference 7.1, the licensee's justification states that continued operation without reducing power even with a small misalignment results in small effects on the time-dependent long-term power distributions, the available SDM, and the ejected CEA worth used in the accident analyses, and that these effects, although small, are undesirable. The staff concludes that deleting Action "c" is more conservative than the current TS requirements because the proposed change eliminates the undesirable small effects caused by operation for seven days with a misaligned CEA. Therefore, the proposed change is acceptable. In addition, the proposed change is consistent with NUREG-1432.

Similar to Action "c" of TS 3.1.3.1, DNC proposed deleting the allowances for operation for seven days with misaligned CEAs currently specified in Actions "d" and "e." Action "d" currently allows the plant to continue to run in Modes 1 and 2 for seven days with the rods between 10 and 20 steps misaligned. Action "e" currently allows continued operation for seven days for one rod misaligned greater than 20 steps. Continued operation with rods misaligned has an undesired effect on the time-dependent long-term power distributions, the available SDM, and ejected CEA worths. Therefore, deleting these allowances for operation for seven days with misaligned CEAs is conservative, and the staff finds that the proposed changes are acceptable.

In addition, DNC proposed combining some of the current requirements in Actions "d" and "e" into proposed TS 3.1.3.1.A. For CEAs misaligned greater than 10 and less than 20 steps, the current Action "d" requires the licensee to restore the CEAs to an operable condition and restore alignment within one hour. Otherwise, the licensee would have to declare the CEAs inoperable, verify the SDM requirements continue to be met, reduce the thermal power level to less than 70 percent within one hour, realign the rods to within 10 steps of the inoperable CEA while maintaining the CEA insertion limits within one additional hour, and verify the SDM every

12 hours. As mentioned above for Action "c," the plant could only operate in this mode for seven days per occurrence for up to 14 days per calendar year. The proposed TS 3.1.3.1.A, on the other hand, would require the licensee to reduce thermal power to less than 70 percent power within one hour and restore the CEA misalignment within two hours, or otherwise shut down to Mode 3 within the next six hours. This change effectively follows the original path of TS 3.1.3.1 Action "d." For example, under the current TS, if the licensee could not restore the CEA alignments within one hour, the licensee would have to achieve 70 percent power within one hour and restore the alignment limits to within 10 steps of an the inoperable CEA within one additional hour (two total hours to restore alignment limits). Under the new TS, the licensee must achieve 70 percent power within one hour and restore the alignment limits within two hours (two total hours). These requirements are virtually identical, except the current TS accounts for CEAs that are inoperable. The licensee's proposed TS 3.1.3.1.D acceptably covers inoperable CEAs. Since the new TS 3.1.3.1.A contains requirements on operable CEA misalignment identical to those in current TS 3.1.3.1.d, the staff finds this change acceptable. In addition, the proposed change is consistent with NUREG-1432.

For one CEA misaligned greater than 20 steps, the current Action "e" requires the licensee to reduce thermal power to less than 70 percent within one hour. Within one additional hour, it requires the licensee to restore the CEA to within alignment limits. Otherwise, DNC would have to declare the CEA inoperable, verify the SDM requirements continue to be met every 12 hours, and ensure that the remainder CEAs in the group remained aligned to within 10 steps of the inoperable CEA. The plant could only operate in this mode for seven days per occurrence up to 14 days per calendar year. These requirements are virtually identical to those of TS 3.1.3.1.A, which follows the guidance of NUREG-1432. Additionally, the proposed TS 3.1.3.1.D acceptably covers inoperable CEAs. Since the new TS 3.1.3.1.A contains requirements on operable CEA misalignment identical to those in current TS 3.1.3.1.e, the staff finds this change acceptable. In addition, the proposed change is consistent with NUREG-1432.

TSs 3.1.3.1.a, 3.1.3.1.d.2, and 3.1.3.1.e currently require the calculation of SDM upon determination of inoperable or misaligned CEAs. In TSTF-67 (Reference 7.7), the NRC approved the deletion of this requirement from the STS because the safety analyses assume that the scram worth available is that given by the PDIL at the initial power level. However, given inoperable or misaligned rods, this worth might not be available. Therefore, a calculation of the SDM in these conditions could lead the licensee to believe that they comply with their safety analyses when, in fact, they do not. For the same reasons the NRC approved these changes to the STS in TSTF-67, and because the changes help prevent a false indication of an acceptable condition, the staff finds them acceptable.

DNC also proposed to delete TS 3.1.3.1.d.2.b and relocate its requirements to the TS Bases. This TS describes how to restore CEA alignment. The NRC approved this modification to the STS in TSTF-143 (Reference 7.8) because details on how to restore alignment are not required in the TSs. For the same reason, and because the changes do not affect plant safety, the staff finds them acceptable.

For the new TS 3.1.3.1.B, "CEA Motion Inhibit Inoperable," the licensee proposed two changes. First, while working to restore the CEA Motion Inhibit to operable status, DNC added a requirement to verify the indicated position of each CEA to be within 10 steps of all other CEAs in its group within one hour and every four hours afterwards. This change is conservative and is consistent with NUREG-1432; therefore, the staff finds it acceptable. The second change

involves replacing the requirement "... fully withdraw all CEAs in group 7 to less than 5% insertion..." with "... withdraw all CEAs in group 7 to $\geq$ 172 steps..." This change clarifies the term five percent insertion and does not change the action requirement; therefore, the staff finds the change acceptable.

In order to be consistent with NUREG-1432, DNC also proposed implementing a new TS 3.1.3.1.C. For an inoperable CEA Deviation Circuit, this TS would set requirements to verify the indicated CEA position to be within 10 steps of all other CEAs in its group within one hour and every four hours thereafter or to be in Mode 3 within the next six hours. The addition of this TS would help ensure that CEA misalignments are identified before unacceptable power distributions occur. Because this addition is conservative and is consistent with NUREG-1432, the staff finds it acceptable.

Also, to be consistent with NUREG-1432, DNC moved the portion of SR 4.1.3.1.1 dealing with CEA Motion Inhibit and CEA Deviation Circuit inoperability to TSs 3.1.3.1.B and 3.1.3.1.C, respectively. The SR requires the verification of the individual CEA positions every four hours when one of these functions is inoperable. The proposed changes maintain the current SR requirements and are consistent with NUREG-1432; therefore, the staff finds them acceptable.

When the required actions for the new TS 3.1.3.1.B are not met, the licensee proposed allowing six additional hours to reach Mode 3. Though this request is consistent with the NUREG-1432 TS 3.1.3.1.B, "CEA Motion Inhibit Inoperable," it does not comply with the current MP2 TSs. For CEA Motion Inhibit Inoperability, DNC has only six hours to perform the required action statements or to achieve hot standby conditions. As proposed, the new TS would give the licensee up to six hours after failing to perform the action statements to achieve Hot Standby conditions.

The staff asked DNC to justify this six-hour extension in Reference 7.5. DNC responded, in Reference 7.2, by stating that the current TS 3.1.3.1.b could cause the licensee to work on two tasks simultaneously. In the case that the CEA motion inhibit cannot be restored to operable status, the licensee would be trying to restore the CEA Motion Inhibit operability while trying to achieve Mode 3 within the same six-hour period. The simultaneous nature of these tasks could increase the probability of human error. Additionally, to compensate for the six-hour extension, the licensee proposed a requirement to verify that the CEAs are aligned within 10 steps of each other within one hour and every four hours thereafter. This step would ensure that any CEA misalignment does not invalidate the plant safety analyses.

Since these changes are consistent with NUREG-1432, and since the proposed additional compensatory actions ensure that the accident analyses remain valid during the six-hour period, the staff finds the proposed changes acceptable.

3.6 TS 3/4.1.3.3, "Reactivity Control Systems, Position Indicator Channels"

TS 3/4.1.3.3 sets the operability requirements for the CEA reed switch position indicator channels and the CEA pulse counting position indicator channels. For Action "b.3," the TS states, "Reduce THERMAL POWER to $\leq$ 70% of the maximum allowable THERMAL POWER level for the existing Reactor Coolant Pump combination..." DNC proposed deleting the words, "for the existing Reactor Coolant Pump combination," because MP2 can only operate in Mode 1

with four RCPs per TS 3/4.4.1.1. Consequently, this deletion is editorial and has no effect on plant safety; therefore, the staff finds the deletion acceptable.

Furthermore, DNC proposed deleting the part of SR 4.1.3.3 requiring the comparison of the pulse counting position indicator and the reed switch position indicator channels every four hours when the Deviation Circuit is inoperable. The proposed TS 3.1.3.1.C incorporated this requirement for CEA Deviation Circuit inoperability, and the proposed TS is consistent with NUREG-1432. Since the TSs capture this requirement in TS 3.1.3.1.C, and since this modification is consistent with NUREG-1432, the staff finds the change acceptable.

3.7 TS 3/4.1.3.4, "Reactivity Control Systems, CEA Drop Time"

This TS sets the limits for CEA drop times. DNC proposed modifying the LCO and SR statements of "full length (shutdown and control)" and "of full length" for the applicability of these TS, because MP2 only has full length CEAs and the LCO is applicable to all CEAs. Consequently, these deletions do not affect the applicability of this TS, and the staff finds them acceptable. However, should the licensee decide to reinstall partial length CEAs, they should reinstate the CEA distinction in the TS.

DNC also proposed deleting TS 3.1.3.4.b, which states: "With the CEA drop times within limits but determined at less than full reactor coolant flow, operation may proceed provided THERMAL POWER is restricted to less than or equal to the maximum THERMAL POWER level allowable for the RCP combination operation at the time of CEA drop time determination." The licensee justified this deletion because DNC currently performs drop time testing in Mode 3 with all of their RCPs operating. Therefore, the plant would never have to go below 100 percent power. However, by deleting this TS, the licensee would technically be allowed to do drop time testing in Mode 3 with less than all of the RCPs operating. With fewer than four RCPs operating, there would be less hydraulic resistance on the CEAs, which would allow them to drop faster than when at full power operation. The staff asked the licensee to account for this problem, and the licensee responded, in Reference 7.4, by modifying its request.

The new proposal would add requirements that CEA drop time testing be performed with T_{avg} greater than, or equal to, 515 ^{o}F and all RCPs operating. These requirements would effectively simulate at power conditions, and would ensure that accurate drop times are calculated for the 100 percent power case. Since the proposed TSs would ensure that the drop times remain accurate for the 100 percent power case, the staff finds the proposed changes in Reference 7.4 acceptable.

3.8 TS 3/4.1.3.5, "Reactivity Control Systems, Shutdown CEA Insertion Limit"

This TS sets the Shutdown CEA insertion limits in order for the plant to meet plant safety analysis assumptions. The licensee proposed modifying the LCO to use the symbol "$\geq$" instead of the words "at least." Since these terms are equivalent and the symbol follows the guidance of NUREG-1432, the staff finds this change acceptable.

Associated with the implementation of TS 3.1.3.5.A, DNC proposed extending the completion time for restoring the shutdown CEAs to within their insertion limits from one hour to two hours. DNC justified this change, in Reference 7.4, based on the following: 1) the proposed two-hour completion time would allow the operator adequate time to restore the shutdown CEAs to within

limits in an orderly manner; 2) the proposed two-hour completion time is consistent with the completion times for other TSs which provide similar safety functions (i.e., restoring the regulating CEAs within their insertion limits (proposed TS 3.1.3.6, Action A.1) and restoring CEA misalignments within limits (proposed TS 3.1.3.1, Action A.1)); and 3) there is a low probability of a DBA or anticipated transient which would require the CEAs to perform their safety function during the proposed two-hour period. Additionally, when the shutdown CEA partially inserts into the core, its potential negative reactivity is also added to the core. Therefore, as long as the CEA remains trippable, it would still be capable of providing adequate SDM during the two-hour period. Furthermore, the two-hour period is consistent with NUREG-1432. Because the SDM should be maintained, the probability of an accident remains low, and the change is consistent with NUREG-1432, the staff finds the proposed modification acceptable.

Also, if the licensee cannot meet the Actions of TS 3.1.3.5.A, the plant would be required to achieve Mode 3 within six hours. This change is consistent with the current requirements in that DNC must declare the CEA inoperable and enter TS 3.1.3.1 upon failure to restore the insertion limits within one hour. TS 3.1.3.1 would then require the plant to shut down within six hours. Since this completion time is consistent with NUREG-1432 and is consistent with the licensee's current requirements, the staff finds it acceptable.

DNC proposed extending the applicability of the TS from, "With a maximum of one shutdown CEA withdrawn... to less than 176 steps," to "One or more shutdown CEAs not within limit." This change effectively allows multiple shutdown CEAs to be below the insertion limits without having to shut down the reactor. In Reference 7.4, the licensee stated that under the current TSs, if the plant were to have more than one CEA below its insertion limits, LCO 3.0.3 would require the plant to initiate actions to achieve shutdown within one hour and be in Mode 3 within the next six hours. However, as proposed, this TS would allow two hours to recover the CEAs or otherwise be in Mode 3 within the following six hours. This change, therefore, extends the allowed outage time from one hour to two hours. As discussed above, the two-hour period would allow adequate time for the operator to restore the CEAs to within limits in an orderly manner and is consistent with completion times of those of the regulating CEA insertion limits and those of the CEA alignment limits TSs, which provide similar safety functions. Additionally, there is a low probability of a DBA or anticipated transient which would require the CEAs to perform their safety function during the proposed 2-hour period. Furthermore, when the shutdown CEAs partially insert into the core, their potential negative reactivity is added to the core. Therefore, as long as the CEAs remain trippable, they would still be capable of providing adequate SDM during the two-hour period. The two-hour period is also consistent with NUREG-1432. Because the SDM should be maintained, the probability of an accident is low, and the change is consistent with NUREG-1432, the staff finds the proposed modification acceptable.

The licensee proposed moving the exception to the TS for performance of SR 4.1.3.1.2 from the action statement to a note at the bottom of the TS. This change is editorial in nature and has no effect on the substance of the TS; therefore, the staff finds this change acceptable.

Also, as part of the TS modification, DNC proposed deleting TS 3.1.3.5.b. This Action requires the licensee to declare the CEA inoperable and to apply TS 3.1.3.1 when DNC cannot restore the CEA to within the insertion limits. If the CEA is immovable or known to be untrippable, TS 3.1.3.1 currently requires determination of the SDM within one hour and requires the plant to

be in Hot Standby within six hours. Additionally, if the CEA is immovable or untrippable, the current SR 4.1.1.1.1a requires the SDM to be increased immediately by an amount equivalent to that of the inoperable CEA. The licensee accomplishes this task by borating, which effectively shuts down the reactor.

The proposed modification, in turn, would require the licensee to restore the CEA to within the insertion limits within two hours, or shut down to Mode 3 within the next six hours. Similar to the above arguments, this extension of one hour until the initiation of operations to achieve shutdown would allow adequate time for the operator to restore the CEAs to within limits in an orderly manner and is consistent with completion times of those of the regulating CEA insertion limits and those of the CEA alignment limits TSs, which provide similar safety functions. Additionally, there is a low probability of a DBA or anticipated transient which would require the CEAs to perform their safety function during this period. Furthermore, when the shutdown CEA partially inserts, its potential negative reactivity would also be added to the core. Therefore, as long as the CEA remains trippable, it would still be capable of providing adequate SDM during the two-hour period. The two-hour period is also consistent with NUREG-1432. Because the SDM would be maintained, the probability of an accident is low, and the change is consistent with NUREG-1432, the staff finds the proposed modification acceptable.

SR 4.1.3.5 requires the licensee to determine that the shutdown CEAs are withdrawn at least 176 steps prior to reactor criticality, and at least once every 12 hours thereafter. DNC proposed moving the “prior to reactor criticality” requirement to the Applicability statement from the SR itself. The proposal provides an equivalent requirement for the TS and is consistent with NUREG-1432. Therefore, the staff finds the change acceptable.

The licensee also proposed adding a reference to Special Test Exception 3.10.1, “Shutdown Margin,” to this TS. This exception enables the licensee to measure CEA worth and SDM without necessitating that all of the shutdown CEAs be withdrawn to at least 176 steps, which would allow for the measurement of the shutdown CEAs. The Special Test Exception itself requires adequate SDM during this mode of operation so as to provide safe operating conditions when the tests are performed. Additionally, this change is consistent with NUREG-1432. Since the change will continue to ensure safety during testing and is consistent with the STS, the staff finds the change acceptable.

3.9 TS 3/4.1.3.6, “Reactivity Control Systems, Regulating CEA Insertion Limits”

This TS sets the Regulating CEA insertion limits in order for the plant to meet plant safety analysis assumptions. In order to be consistent with the STS, the licensee proposed to modify this TS to include an operability requirement for the PDIL alarm circuit. This alarm notifies the plant operators that the CEAs are outside of their insertion limits. Currently, SR 4.1.3.6.1 covers the operability requirements and actions for the PDIL alarm circuit. When the circuit is inoperable, the new TS would require that the licensee increase the frequency of the CEA group position surveillance from once every four hours to within one hour, and every four hours thereafter. These proposed modifications are more conservative than the current TSs and are consistent with NUREG-1432. Therefore, the staff finds them acceptable.

Also for the LCO statement, the licensee proposed moving the sentence, “Regulating CEAs are considered to be fully withdrawn when withdrawn to at least 176 steps,” to the TS Bases. This sentence clarifies the definition of withdrawn. The relocation of this clarifying information has

no effect on the requirements of the TS and is consistent with NUREG-1432. Therefore, the staff finds it acceptable.

Furthermore, DNC proposed deleting the LCO statement, "CEA insertion between the Long Term Steady State Insertion Limits and the Transient Insertion Limits restricted to the limits provided in the CORE OPERATING LIMITS REPORT," because TS 3/4.1.3.6.B and TS 3/4.1.3.6.C already contain this information. Since Actions B and C of proposed TS 3/4.1.3.6 contain these limits on operation and because the proposal is consistent with NUREG-1432, the staff finds the change acceptable.

The licensee also proposed moving an exception, "except for surveillance testing pursuant to Specification 4.1.3.1.2," from Action "a" to a footnote. This change does not affect the requirements of the TS and is consistent with NUREG-1432. Therefore, the staff finds this change acceptable.

In TSs 3.1.3.6.b and 3.1.3.6.c, when the Regulating CEA groups insert between the Long Term Steady State Insertion Limit and the Transient Insertion Limit, the MP2 TSs have exceptions that allow continued operation under the provisions of TS 3.1.3.1 Actions "c" and "d." The proposed TS 3.1.3.6 does not contain these exceptions. The staff finds the deletion of these continued operation provisions of TS 3.1.3.1, acceptable, as set forth in the SE Section 3.5 above. Because the continued operation provisions of TS 3.1.3.1 would no longer exist, the staff finds the deletion of the exceptions acceptable.

Also in TS 3.1.3.6.b, when the regulating CEA groups are inserted between the Long Term Steady State Insertion limit and the Transient Insertion limits for greater than four hours per 24-hour period, the current TSs require two actions. These actions require the licensee to verify that the CEAs do not violate the Steady State Insertion Limits and to restrict increases in thermal power to less than five percent per hour. However, the current TSs do not contain a time limit for implementation of these requirements. In the new TS 3.1.3.6.B, DNC proposed to specify a 15 minute time limit for implementation of these two actions. This time limit: 1) provides adequate time for operator implementation; 2) does not allow an excessive time for licensees to operate outside of acceptable plant conditions; 3) adds enforceability to the TS; and 4) is consistent with NUREG-1432. Therefore, the staff finds this change acceptable.

Also as part of the TS change, the licensee proposed extending the time required to be in Hot Standby of TS 3.1.3.6.c from four hours to six hours. Furthermore, DNC proposed implementing a Hot Standby shutdown time of six hours for all TS 3.1.3.6 Actions that could not be met. In Reference 7.5, the staff asked the licensee to justify these completion times. In Reference 7.2, DNC stated these action times are acceptable because they are based upon the TS 3.0.3 action times of six hours to achieve Hot Standby. This six-hour period allows the plant shutdown to proceed in a controlled and orderly manner that is well within the specified maximum cooldown rate and within the cooldown capabilities of the facility assuming only the minimum required equipment is operable. The longer time period for the controlled cooldown reduces thermal stresses on components of the primary coolant system and reduces the potential for challenges to the safety systems. Because these cooldown periods to remove plants from potentially unsafe conditions comply with the basis for TS 3.0.3, while still assuring plant shutdown in a controlled and orderly manner, the staff finds them acceptable.

SR 4.1.3.6 contains three SRs pertaining to CEA group Transient Insertion Limits. DNC proposed modifying this SR to be more consistent with NUREG-1432 by dividing the SR into new SRs 4.1.3.6.1 and 4.1.3.6.2 and new action statement TS 3.1.3.6.D.1. In addition, the licensee added an applicability statement to the CEA insertion limit requirements of SR 4.1.3.6.1 to allow the plant to enter Mode 2 from Mode 3 without having to perform the insertion limits SR. Since CEA insertion limits do not apply in Mode 3, they cannot be verified by the SR. Therefore, this addition only serves to clarify the applicability of the current SR and does not affect the requirements of the SR. Because these changes to SR 4.1.3.6 do not affect the requirements, the staff finds them acceptable.

As part of the TS change request, the licensee proposed adding SR 4.1.3.6.3 to determine the operability of the PDIL alarm circuit every 31 days. This surveillance does not currently exist in the MP2 TSs, and adding it helps verify that the PDIL alarm circuit is operable. Furthermore, the PDIL alarm circuit informs operators when the CEA groups fall outside of their limits. The licensee chose the surveillance period because it takes into account other surveillances performed over shorter periods that identify improper CEA alignments. Furthermore, the 31-day period follows the guidance of NUREG-1432. Since the addition of this surveillance is conservative and follows the guidance of NUREG-1432, the staff finds it acceptable.

Finally, the licensee proposed adding Special Test Exception 3.10.1 to footnote “2” of TS 3.1.3.6 to eliminate the insertion limit requirements during CEA worth and SDM testing. As set forth in SE Section 3.14, the staff finds this change acceptable.

3.10 TS 3/4.2.1, “Power Distribution Limits, Linear Heat Rate”

This TS requires that the linear heat rate not exceed the limits specified in the licensee’s COLR. The licensee proposed modifying two of the surveillance requirements associated with this TS.

For SR 4.2.1.2.a, DNC proposed deleting the words “full length,” which describe the type of CEA that the licensee uses. MP2 no longer has partial length CEAs. Therefore, this distinction is not necessary. Because MP2 only possesses full length CEAs, the staff finds the removal of the distinction “full length” acceptable. However, should the licensee decide to reinstall partial length CEAs, the licensee should reinstate the CEA distinction in the TS.

The second change to SR 4.2.1.2 involves adding a footnote to clarify that this SR on the Excore Detector Monitoring System only applies when the licensee uses the excore system to determine the Linear Heat Rate. Performance of this SR verifies that the Excore Detector Monitoring System is available and can accurately monitor the linear heat rate. Since the licensee can use either the Excore or the Incore Detector Monitoring System for monitoring core power distributions, the surveillance on the excore system would not be applicable during periods when using the incore system for core monitoring. Additionally, the licensee’s clarification is consistent with NUREG-1432. Because this change clarifies the applicability of SR 4.2.1.2 and does not change its requirements, the staff finds the change acceptable.

Similarly, the licensee proposed adding a footnote to SR 4.2.1.3 to clarify that this SR on the Incore Detector Monitoring System only applies when the licensee uses the incore system to determine the Linear Heat Rate. Performance of this SR verifies that the Incore Detector Monitoring System is available and can accurately monitor the linear heat rate. Since the licensee can use either the Incore or the Excore Detector Monitoring System for monitoring

core power distributions, the surveillance on the incore system would not be applicable during periods when they use the excore system for core monitoring. Additionally, the licensee's clarification is consistent with NUREG-1432. Because this change clarifies the applicability of SR 4.2.1.2 and does not change its requirements, the staff finds the change acceptable.

DNC also proposed adding a footnote, "Not required to be performed below 20% RATED THERMAL POWER," to SR 4.2.1.3. This change would effectively eliminate the SRs for the Incore Detector Monitoring System below 20 percent power. On the other hand, as written, it would also prevent the use of the incore system for monitoring the linear heat rate below this power level. DNC stated that because the incore system is unreliable below 20 percent power, the licensee uses the excore system instead. SR 4.2.1.1 requires that the linear heat rate be determined to be within its limits by continuously monitoring the core power distribution with either the excore system or the incore system. SR 4.2.1.2 provides the requirements pertaining to the excore system and SR 4.2.1.3 provides the requirements pertaining to the incore system. Since the excore system is the system that will be used below 20 percent power, performance of SR 4.2.1.2 provides assurance that the linear heat rate is within limits. Performance of SR 4.2.1.3 is not necessary when the excore system is being used. Additionally, this change follows the guidance of NUREG-1432. The staff finds that the proposed change is acceptable because SR 4.2.1.2 will provide assurance that the linear heat rate is within limits for plant operation below 20 percent power and because the change is consistent with NUREG-1432.

Finally, DNC proposed to modify SR 4.2.1.3.b. Currently, the SR requires verifying that the incore detector Local Power Density alarms "Have their alarm setpoint adjusted to less than or equal to the limit when the factors specified in the CORE OPERATING LIMITS REPORT are appropriately included in the setting of these alarms." DNC proposed to change this requirement to state, "Have their alarm setpoint adjusted to less than or equal to the limits specified in the CORE OPERATING LIMITS REPORT." This change does not affect the requirements for the setpoints because the MP2 COLR already addresses both the limits and the factors included in the setting of the alarm. In addition, this change is consistent with NUREG-1432. Since the COLR addresses both the limits and the factors included in the setting of the alarms, and the change is consistent with NUREG-1432, the staff finds the change acceptable.

3.11 TS 3/4.2.3, "Power Distribution Limits, Total Unrodded Integrated Radial Peaking Factor - F^T_r"; TS 3/4.9.1, "Refueling Operations, Boron Concentrations"; and TS 5.3.2, "Design Features, Control Element Assemblies"

In SRs 4.2.3.3 and 4.9.1.1.b, DNC proposed deleting the words "full length" when referring to the applicable types of CEAs. In addition, in TS 5.3.2, the licensee proposed deleting the words, "full length and no part length," when describing the type of CEA. The licensee proposed these changes because MP2 no longer has partial length CEAs. Therefore, this distinction is not necessary. Because MP2 only possesses full length CEAs, the staff finds the removal of these distinctions acceptable. However, should the licensee decide to reinstall partial length CEAs, the licensee should reinstate the distinctions in the TS.

3.12 TS 3/4.2.4, "Power Distribution Limits, Azimuthal Power Tilt - T_q"

This TS sets the limits and associated actions for the azimuthal power tilt, to ensure that the core power distribution remains within the limits assumed in the accident analyses. As part of

this change, the licensee replaced the wording of the LCO statement from “shall not exceed” to “shall be $\leq$.” This change provides equivalent meaning and has no effect on plant safety; therefore, the staff finds it acceptable.

As part of new Action “a,” DNC proposed adding an option to reduce thermal power to less than, or equal to, 50 percent power within four hours if the plant does not meet the restoration or verification options of Action “a.” This change is consistent with NUREG-1432 and provides a reasonable time to reach 50 percent power in an orderly manner. Additionally, this step would limit reactor power to a level where azimuthal power tilt is not of concern. This power reduction would, in effect, take the reactor outside of the applicability limits of this TS. Because this proposed option would require power reduction to safe levels in a reasonable time period, and because this option is consistent with NUREG-1432, the staff finds the change acceptable.

A proposed change to Action “b” would allow the licensee two hours to verify that the total unrodded integrated radial peaking factor, F^T_r, is within the limit of TS 3.2.3. However, the current TS states that operation could continue for two hours, provided the value is within this limit, which indicates that the verification would have to be performed at some time prior to the two-hour interval. The licensee stated that the increase to the full two hours for verification provides adequate time for the operator to determine that this value is within its limit. However, NUREG-1432 indicates that one hour is sufficient to perform this verification, and the licensee provided no safety justification for this change. By References 7.5 and 7.6, the staff asked the licensee to provide this justification. In Reference 7.4, the licensee stated that the only event above 50 percent power that would cause tilt to be greater than 0.10 would be a misaligned CEA by more than 20 steps or a dropped CEA. Since the current TSs allow two hours to recover from these conditions, the licensee proposed maintaining two hours for checking the peaking factor.

However, the staff determined that per proposed TS 3.1.3.1, Action A and the current TS 3.1.3.1.d and TS 3.1.3.1.e, the licensee takes action within one hour to reduce the consequences of increased peaking factors caused by a misaligned rod (i.e., reducing thermal power level to 70 percent). Since the licensee takes action within one hour to reduce the problems with the peaking factors (i.e., F^T_r), it may be logical to relate the time to check the peaking factor F^T_r to the one hour for action specified in the rod misalignment TSs. On the other hand, the reduction in power would not solve the issue with F^T_r being outside its limit. The F^T_r value would only be within its limits once the dropped or misaligned CEA is recovered.

In the event of a dropped or misaligned CEA which causes azimuthal power tilt to be greater than 0.10, the licensee would be in TS 3.2.4, “Azimuthal Power Tilt - T_q”; TS 3.2.3, “Total Unrodded Integrated Radial Peaking Factor - F^T_r”; TS 3.1.3.1, “CEA Position”; and either TS 3.1.3.5, “Shutdown CEA Insertion Limit,” or TS 3.1.3.6, “Regulating CEA Insertion Limit,” depending upon which CEA was dropped or misaligned. Combining these TSs for a dropped or severely misaligned CEA, the licensee would have to:

1) reduce power to 70 percent within the first hour per TS 3.1.3.1.A.1;

2) reduce power to 50 percent within the second hour per TS 3.2.4.b.2;

3) recover the CEA to within its alignment limits within the second hour per TS 3.1.3.1.A.1;

4) verify F^T_r within its limit within the second hour per TS 3.2.4.b.1;

5) recover the CEA to within its insertion limits within the second hour per TS 3.1.3.5.A.1 or TS 3.1.3.6.A.1; and

6) reduce power to bring the combination of thermal power and F^T_r to within the power dependent limit specified in the COLR and withdraw the CEAs to their Long Term Steady State Insertion Limits within the sixth hour.

If these actions were not successful, then from the time of the drop, TSs 3.1.3.1, TS 3.1.3.5, and TS 3.1.3.6 would require the plant to be in Mode 3 by the eighth hour. However, TS 3.2.3 would require the plant to be in Mode 3 by the sixth hour.

Also, since the licensee would be outside of the F^T_r limits from the time of the CEA drop, the change to the timing of the verification of the F^T_r value would not make a difference in the timing of the mitigatory actions required by the TSs. Therefore, the one hour increase in F^T_r verification does not adversely affect the mitigatory actions required by the TSs when the azimuthal power tilt is out of specification. Furthermore, the purpose of the verification would be to ensure that the recovery of the dropped or misaligned CEAs solves the F^T_r issue. Because the verification ensures that the recovery process solves the CEA issues, and because the interval does not affect the mitigatory actions, the staff finds the proposed change to relate the interval to CEA recovery by increasing it from one to two hours acceptable.

Another change to Action “b” would allow the licensee two hours to achieve 50 percent of rated thermal power, whereas the current action statement allows the licensee two hours to achieve 20 percent power. In Reference 7.6, the staff asked the licensee to clarify the safety significance of changing these power reduction requirements. The licensee responded in Reference 7.4 by stating that below 50 percent power, the safety analyses do not use T_q as an input. Below this level, the specific core power distribution parameter used is F^T_r. LCO 3.2.3 controls this parameter down to the 20 percent power level, and as long as F^T_r is maintained within its power dependent limits, the plant can operate safely up to power levels of 50 percent. Also, the licensee stated that reducing thermal power to less than, or equal to, 50 percent of rated thermal power continues to provide conservative protection from increased peaking due to potential xenon redistribution. Because this proposed option would require power reduction to safe levels, and because it is consistent with NUREG-1432, the staff finds the change acceptable.

The third change to Action “b” included adding Action “b.3.” This new action would add the additional requirements to restore the azimuthal power tilt to within limits and to correct the cause of the out of limit condition prior to increasing thermal power. Additionally, it would allow subsequent power operation above 50 percent power, provided that the azimuthal power tilt is verified to be within limits at least once per hour for 12 hours, or until verified at 95 percent power. These required actions will prevent operators from increasing the thermal power above the conservative limit, but will allow for continued operation to diagnose the causes. The requirements for verification of the azimuthal power tilt will then ensure that the power distribution is responding as predicted. Overall, these additional requirements ensure that the azimuthal power tilt remains at acceptable levels during power operation and, therefore, help ensure that the core power distribution remains within the accident analysis limits. Furthermore, this change is consistent with NUREG-1432. Because the proposed action

maintains conservatism in operation and is consistent with NUREG-1432, the staff finds it acceptable.

The current SR 4.2.4.2 contains three requirements for calculating azimuthal power tilt. SR 4.2.4.2.a requires performing the calculation every seven days when the Channel High Deviation Alarm is operable. SR 4.2.4.2.b requires performing the calculation every 12 hours when the Channel High Deviation Alarm is inoperable. Additonally, SR 4.2.4.2.c requires using incore detectors to determine the Azimuthal Power Tilt every 12 hours when one excore channel is inoperable and thermal power is greater than 75 percent of rated thermal power. The proposed changes would eliminate the descriptive nature of this verification and impose a more conservative surveillance interval by requiring verification that the azimuthal power tilt is within limits every 12 hours, regardless of operability. Additionally, this change is consistent with NUREG-1432. Because this change eliminates the operability question, imposes a more conservative requirement upon the surveillance interval, and is consistent with NUREG-1432, the staff finds it acceptable.

3.13 TS 3/4.3.1.1, “Reactor Protective Instrumentation”; TS 3/4.3.2.1, “Engineered Safety Feature Actuation System Instrumentation”; and TS 3/4.4.9, “Reactor Coolant System, Pressure/Temperature Limits”

TS 3/4.3.1.1 sets the limits for operability of the Reactor Protective Instrumentation. This instrumentation activates to protect against violating acceptable fuel design limits and breaching the RCS pressure boundary during anticipated operational occurrences. TS 3/4.3.2.1, on the other hand, sets the limits for the Engineered Safety Feature Actuation System Instrumentation. This instrumentation initiates the necessary safety systems to protect against violating core design limits and breaching the RCS pressure boundary and to mitigate accidents. Furthermore, TS 3/4.4.9 sets the temperature, pressure, and cooldown rate limits on the RCS.

As part of the proposal, the licensee eliminated the references to Special Test Exceptions TS 3.10.3, “Pressure/Temperature Limitation - Reactor Criticality.” The staff finds the deletion of this TS acceptable as set forth in Section 3.3 of this SE. The licensee proposed deleting this special test exception because the licensee accomplishes its testing using other methods, and does not anticipate needing this exception in the future. Furthermore, TS 3.10.3 allows for exception to certain TS safety requirements, which would make its deletion a conservative change. Because the licensee no longer needs this exception to perform the necessary testing and because the deletion of this exception is conservative, the staff finds the changes acceptable.

3.14 TS 3/4.10.1, “Special Test Exceptions, Shutdown Margin”

This TS allows for the suspension of certain requirements for measurement of CEA worth and SDM during reactor physics testing. The physics testing requirements for reload fuel cycles ensure that the operating characteristics of the core are consistent with the design predictions, and that the core can be operated as designed.

As part of the proposal, the licensee deleted the words “shutdown margin” from the LCO statement. Deleting the words “shutdown margin” does not change the requirements of the TS and is editorial in nature; therefore, the staff finds it acceptable.

In the LCO, the licensee also added two TSs to the list of TSs whose requirements can be suspended for performing CEA worth and SDM measurements. These TSs are TS 3.1.3.5, "Shutdown CEA Insertion Limit," and TS 3.1.3.6, "Regulating CEA Insertion Limits." These suspensions are necessary when performing certain CEA worth testing, and the addition of these exceptions is consistent with NUREG-1432. Because the suspensions are necessary for performing certain physics tests, and because the modifications are consistent with NUREG-1432, the staff finds them acceptable.

Another change to the LCO statement involved adding a clarification statement, "(of those CEAs actually withdrawn)," to identify which CEA worth is immediately available for reactivity control when CEA worth measurement tests are being performed. This change only clarifies the requirements and is editorial in nature. Because this change is editorial in nature, and is consistent with NUREG-1432, the staff finds it acceptable.

To the applicability statement for the TS, the licensee proposed adding a footnote that would allow operation in Mode 3 for up to six consecutive hours during physics testing. Because performing CEA worth testing in Mode 2 may insert sufficient negative reactivity into the reactor to result in temporary entry into Mode 3, this modification clarifies the current applicability of the TS. The six-hour period effectively limits the amount of time in Mode 3, whereas the current TS does not limit this time. Because this change is more conservative than the current requirement, and because it is consistent with NUREG-1432, the staff finds it acceptable.

In addition to the footnote, the licensee added a clarification to the applicability statement that states that it only applies in Mode 3 during physics tests. Similarly, this change is more conservative than the current requirement and it is consistent with NUREG-1432. Therefore, the staff finds it acceptable.

DNC also proposed deleting the words "full length" from Actions "a" and "b" and SR 4.10.1.1. These words describe the type of CEA that the licensee uses, but MP2 no longer has partial length CEAs. Therefore, the distinction is not necessary. Because MP2 only possesses full length CEAs, the staff finds the removal of the distinction "full length" acceptable. However, should the licensee decide to reinstall partial length CEAs, the licensee should reinstate the CEA distinction in the TS.

For SR 4.10.1.2, DNC proposed adding the word "once" to clarify the frequency of performing the surveillance. This change does not alter the requirements of the SR and follows the guidance of NUREG-1432; therefore, the staff finds it acceptable.

The final proposed change to this TS involves adding footnote "2" to SR 4.10.1.2. This SR requires the demonstration of CEA insertion capability by tripping from greater than 50 percent withdrawn. The footnote would allow an exception to this requirement during initial power escalation following a refueling outage if the licensee performed drop time testing per SR 4.1.3.4. Since the drop time testing for each rod proves that the CEAs can insert fully, it effectively provides redundant testing to this SR. Since this testing is redundant, and the changes are consistent with NUREG-1432, the staff finds the proposed footnote acceptable.

3.15 TS 6.9.1.8, "Administrative Controls, Core Operating Limits Report"

TS 6.9.1.8.a lists the TSs containing cycle dependent parameters which are documented in the COLR. As described in Reference 7.2, the proposed amendment would change the title of TS 3/4.1.1.1 from "SHUTDOWN MARGIN - T_{avg} > 200 °F" to "SHUTDOWN MARGIN (SDM)" and would delete TS 3/4.1.1.2 from the list. These changes are editorial in nature, are consistent with the changes discussed in SE Section 3.2 and, therefore, are acceptable.

3.16 Technical Evaluation Summary/Conclusion

Based on the considerations discussed in Sections 3.1 through 3.15, the NRC staff concludes that the proposed changes are acceptable. For the same reasons, the NRC staff also concludes that the proposed changes do not affect MP2's compliance with the requirements of GDCs 10, 11, 25, 26, 27, and 28.

The licensee has also proposed to revise the TS Bases to address the proposed changes. The NRC staff has no objection to these Bases changes.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Connecticut State official was notified of the proposed issuance of the amendment. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes SRs. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration, and there has been no public comment on such finding (67 FR 58640). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (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.

7.0 REFERENCES

7.1 Letter from J. Alan Price, DNC, to NRC, "Millstone Nuclear Power Station, Unit No. 2, Technical Specifications Change Request 2-15-02, Changes in Technical Specifications

Related to Reactivity Control Systems, Power Distribution Limits, And Special Test Exceptions," dated August 14, 2002.

7.2 Letter from J. Alan Price, DNC, to NRC, “Millstone Nuclear Power Station, Unit No. 2, Technical Specifications Change Request 2-15-02, Changes in Technical Specifications Related to Reactivity Control Systems, Power Distribution Limits, And Special Test Exceptions, Response to Request For Additional Information,” dated March 11, 2003.

7.3 Letter from J. Alan Price, DNC, to NRC, “Millstone Nuclear Power Station, Unit No. 2, Technical Specifications Change Request 2-15-02, Changes in Technical Specifications Related to Reactivity Control Systems, Power Distribution Limits, and Special Test Exceptions, Retraction of Response to Question No. 2 in the First Request for Additional Information,” dated March 16, 2003.

7.4 Letter from W.R. Matthews, DNC, to NRC, “Millstone Power Station, Unit No. 2, Technical Specifications Change Request 2-15-02, Changes in Technical Specifications Related to Reactivity Control Systems, Power Distribution Limits, and Special Test Exceptions, Response to Second Request for Additional Information,” dated May 23, 2003.

7.5 Letter from R. Ennis, NRC, to J. Alan Price, DNC, “Request for Additional Information, Reactivity Control Systems, Power Distribution Limits, and Special Test Exceptions, Millstone Power Station, Unit No. 2 (TAC No. MB6108),” dated January 28, 2003.

7.6 Memorandum from R. Ennis, NRC, to J. Clifford, NRC, “Millstone Power Station, Unit No. 2, Facsimile Transmission, Issues to Be Discussed in an Upcoming Conference Call (TAC No. MB6108), dated April 15, 2003.

7.7 TSTF-67, “Correction of Shutdown Margin Definition,” dated August 11, 1997.

7.8 TSTF-143, “Consolidate Specification 3.1.5 Actions to Restore Misaligned CEAs,” dated March 14, 1997.

7.9 TSTF-142, “Increase the Completion Time When the Core Reactivity Balance is Not Within Limit,” dated August 11, 1997.

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