



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

October 27, 2008

Mr. David A. Christian
President and Chief Nuclear Officer
Virginia Electric and Power Company
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNIT NOS. 2 AND 3 - ISSUANCE OF
AMENDMENT RE: DELETION OF E BAR DEFINITION AND REVISION TO
THE REACTOR COOLANT SYSTEM SPECIFIC ACTIVITY (TAC NOS. MD8492
AND MD8493)

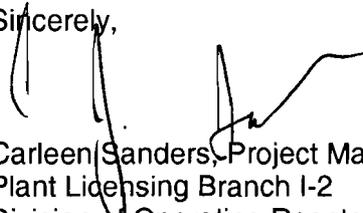
Dear Mr. Christian:

The Commission has issued the enclosed Amendment Nos. 307 and 246 to Renewed Facility Operating License No. DPR 65 for the Millstone Power Station, Unit No. 2, and to Renewed Facility Operating License No. NPF-49 for the Millstone Power Station, Unit No. 3, respectively, in response to your application dated March 25, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML080920781), as supplemented by letter dated September 30, 2008 (ADAMS Accession No. ML082750087).

The amendment revises the reactor coolant system-specific activity to utilize a new indicator, Dose Equivalent Xenon-133 and only take into account the noble gas activity in the primary coolant, instead of the current indicator, average disintegration energy (E Bar).

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,



Carleen Sanders, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-336 and 50-423

Enclosures:

1. Amendment No. 307 to DPR-65
2. Amendment No. 246 to NPF-49
3. Safety Evaluation

cc w/encls: Distribution via ListServ



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
WASHINGTON, D.C. 20555-0001

DOMINION NUCLEAR CONNECTICUT, INC., ET AL.

DOCKET NO. 50-336

MILLSTONE POWER STATION, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 307
Renewed License No. DPR-65

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the applicant dated March 25, 2008, as supplemented by letter dated September 30, 2008, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. DPR-65 is hereby amended to read as follows:

- (2) Technical Specifications

- The Technical Specifications contained in Appendix A, as revised through Amendment No. 307, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of issuance, and shall be implemented within 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Harold K. Chernoff, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the License
and Technical Specifications

Date of Issuance: October 27, 2008

ATTACHMENT TO LICENSE AMENDMENT NO. 307

RENEWED FACILITY OPERATING LICENSE NO. DPR-65

DOCKET NO. 50-336

Replace the following page of the Renewed Facility Operating License with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

Remove
Page 3

Insert
Page 3

Replace the following pages of the Appendix A Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

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Connecticut, in accordance with the procedures and limitations set forth in this renewed operating license;

- (2) Pursuant to the Act and 10 CFR Part 70, to receive, possess and use at any time special nuclear material as reactor fuel, in accordance with the limitations for storage and amounts required for reactor operation, as described in the Final Safety Analysis Report, as supplemented and amended;
- (3) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess and use at any time any byproduct, source and special nuclear material as sealed neutron sources for reactor startup, sealed sources for reactor instrumentation and radiation monitoring equipment calibration, and as fission detectors in amounts as required;
- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form for sample analysis or instrument and equipment calibration or associated with radioactive apparatus or components;
- (5) Pursuant to the Act and 10 CFR Parts 30 and 70, to possess, but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility.

C. This renewed operating license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter 1: Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Section 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; and is subject to all applicable provisions of the Act and the rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the additional conditions specified or incorporated below:

(1) Maximum Power Level

The licensee is authorized to operate the facility at steady-state reactor core power levels not in excess of 2700 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 307, are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

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DEFINITIONS

AZIMUTHAL POWER TILT - T_q

1.18 AZIMUTHAL POWER TILT shall be the difference between the maximum power generated in any core quadrant (upper or lower) and the average power of all quadrants in that half (upper or lower) of the core divided by the average power of all quadrants in that half (upper or lower) of the core.

$$\text{AZIMUTHALPOWER TILT} = \left[\frac{\text{Maximum power in any core quadrant (upper or lower)}}{\text{Average power of all quadrants (upper or lower)}} \right] - 1$$

DOSE EQUIVALENT I-131

1.19 DOSE EQUIVALENT I-131 shall be that concentration of I-131 (micro-curie/gram) that alone would produce the same dose when inhaled as the combined activities of iodine isotopes I-131, I-132, I-133, I-134, and I-135 actually present. The determination of DOSE EQUIVALENT I-131 shall be performed using Committed Dose Equivalent (CDE) or Committed Effective Dose Equivalent (CEDE) dose conversion factors from Table 2.1 of EPA Federal Guidance Report No. 11, "Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion and Ingestion."

DOSE EQUIVALENT XE-133

1.20 DOSE EQUIVALENT XE-133 shall be that concentration of Xe-133 (micro-curie/gram) that alone would produce the same acute dose to the whole body as the combined activities of noble gas nuclides Kr-85m, Kr-85, Kr-87, Kr-88, Xe-131m, Xe-133m, Xe-133, Xe-135m, Xe-135, and Xe-138 actually present. If a specific noble gas nuclide is not detected, it should be assumed to be present at the minimum detectable activity. The determination of DOSE EQUIVALENT XE-133 shall be performed using effective dose conversion factors for air submersion listed in Table III.1 of EPA Federal Guidance Report No. 12, 1993, "External Exposure to Radionuclides in Air, Water, and Soil."

STAGGERED TEST BASIS

- 1.21 A STAGGERED TEST BASIS shall consist of:
- a. A test schedule for n systems, subsystems, trains or other designated components obtained by dividing the specified test interval into n equal subinterval, and
 - b. The testing of one system, subsystem, train or other designated component at the beginning of each subinterval.

FREQUENCY NOTATION

1.22 The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1.2.

REACTOR COOLANT SYSTEM

SPECIFIC ACTIVITY

LIMITING CONDITION FOR OPERATION

3.4.8 The specific activity of the primary coolant shall be limited to:

- a. $\leq 1.0 \mu\text{Ci}/\text{gram}$ DOSE EQUIVALENT I-131, and
- b. $\leq 1100 \mu\text{Ci}/\text{gram}$ DOSE EQUIVALENT XE-133.

APPLICABILITY: MODES 1, 2, 3, 4.

ACTION:

- a. With the specific activity of the primary coolant $> 1.0 \mu\text{Ci}/\text{gram}$ DOSE EQUIVALENT I-131, verify DOSE EQUIVALENT I-131 $\leq 60 \mu\text{Ci}/\text{gram}$ once per 4 hours.
- b. With the specific activity of the primary coolant $> 1.0 \mu\text{Ci}/\text{gram}$ DOSE EQUIVALENT I-131 but $\leq 60 \mu\text{Ci}/\text{gram}$, operation may continue for up to 48 hours while efforts are made to restore DOSE EQUIVALENT I-131 to within the $1.0 \mu\text{Ci}/\text{gram}$ limit. Specification 3.0.4 is not applicable.
- c. With the specific activity of the primary coolant $> 1.0 \mu\text{Ci}/\text{gram}$ DOSE EQUIVALENT I-131 for more than 48 hours during one continuous time interval, or $> 60 \mu\text{Ci}/\text{gram}$ DOSE EQUIVALENT I-131, be in HOT STANDBY within 6 hours and in COLD SHUTDOWN within 36 hours.
- d. With the specific activity of the primary coolant $> 1100 \mu\text{Ci}/\text{gram}$ DOSE EQUIVALENT XE-133, operation may continue for up to 48 hours while efforts are made to restore DOSE EQUIVALENT XE-133 to within the $1100 \mu\text{Ci}/\text{gram}$ limit. Specification 3.0.4 is not applicable.
- e. With the specific activity of the primary coolant $> 1100 \mu\text{Ci}/\text{gram}$ DOSE EQUIVALENT XE-133 for more than 48 hours during one continuous time interval, be in HOT STANDBY within 6 hours and in COLD SHUTDOWN within 36 hours.

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

- 4.4.8.1 Verify the specific activity of the primary coolant $\leq 1100 \mu\text{Ci}/\text{gram DOSE}$ EQUIVALENT XE-133 once per 7 days.*
- 4.4.8.2 Verify the specific activity of the primary coolant $\leq 1.0 \mu\text{Ci}/\text{gram DOSE}$ EQUIVALENT I-131 once per 14 days,* and between 2 and 6 hours after a THERMAL POWER change of $\geq 15\%$ RATED THERMAL POWER within a one hour period.

* Surveillance only required to be performed for MODE 1 operation, consistent with the provisions of Specification 4.0.1.

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

DOMINION NUCLEAR CONNECTICUT, INC., ET AL.

DOCKET NOS. 50-423

MILLSTONE POWER STATION, UNIT NO. 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 246
Renewed License No. NPF-49

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the applicant dated March 25, 2008, as supplemented by letter dated September 30, 2008, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-49 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A, revised through Amendment No. 246 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated into the license. DNC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of issuance, and shall be implemented within 120 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Harold K. Chernoff, Chief
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the License
and Technical Specifications

Date of Issuance: October 27, 2008

ATTACHMENT TO LICENSE AMENDMENT NO. 246

RENEWED FACILITY OPERATING LICENSE NO. NPF-49

DOCKET NO. 50-423

Replace the following page of the Renewed Facility Operating License with the attached revised page. The revised page is identified by amendment number and contains marginal lines indicating the areas of change.

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Replace the following pages of the Appendix A Technical Specifications, with the attached revised pages. The revised pages are identified by amendment number and contain marginal lines indicating the areas of change.

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(2) Technical Specifications

The Technical Specifications contained in Appendix A, revised through Amendment No. 246 and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto are hereby incorporated into the license. DNC shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(3) DNC shall not take any action that would cause Dominion Resources, Inc. (DRI) or its parent companies to void, cancel, or diminish DNC's commitment to have sufficient funds available to fund an extended plant shutdown as represented in the application for approval of the transfer of the licenses for MPS Unit No. 3.

(4) Immediately after the transfer of interests in MPS Unit No. 3 to DNC, the amount in the decommissioning trust fund for MPS Unit No. 3 must, with respect to the interest in MPS Unit No. 3, that DNC would then hold, be at a level no less than the formula amount under 10 CFR 50.75.

(5) The decommissioning trust agreement for MPS Unit No. 3 at the time the transfer of the unit to DNC is effected and thereafter is subject to the following:

- (a) The decommissioning trust agreement must be in a form acceptable to the NRC.
- (b) With respect to the decommissioning trust fund, investments in the securities or other obligations of Dominion Resources, Inc. or its affiliates or subsidiaries, successors, or assigns are prohibited. Except for investments tied to market indexes or other non-nuclear-sector mutual funds, investments in any entity owning one or more nuclear power plants are prohibited.
- (c) The decommissioning trust agreement for MPS Unit No. 3 must provide that no disbursements or payments from the trust, other than for ordinary administrative expenses, shall be made by the trustee until the trustee has first given the Director of the Office of Nuclear Reactor Regulation 30 days prior written notice of payment. The decommissioning trust agreement shall further contain a provision that no disbursements or payments from the trust shall be made if the trustee receives prior written notice of objection from the NRC.
- (d) The decommissioning trust agreement must provide that the agreement can not be amended in any material respect without 30 days prior written notification to the Director of the Office of Nuclear Reactor Regulation.

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DEFINITIONS

CONTAINMENT INTEGRITY

1.7 CONTAINMENT INTEGRITY shall exist when:

- a. All penetrations required to be closed during accident conditions are either:
 - 1) Capable of being closed by an OPERABLE containment automatic isolation valve system^{*}, or
 - 2) Closed by manual valves, blind flanges, or deactivated automatic valves secured in their closed positions, except for valves that are opened under administrative control as permitted by Specification 3.6.3.
- b. All equipment hatches are closed and sealed,
- c. Each air lock is in compliance with the requirements of Specification 3.6.1.3,
- d. The containment leakage rates are within the limits of the Containment Leakage Rate Testing Program, and
- e. The sealing mechanism associated with each penetration (e.g., welds, bellows, or O-rings) is OPERABLE.

1.8 DELETED

CORE ALTERATIONS

1.9 CORE ALTERATIONS shall be the movement of any fuel, sources, reactivity control components, or other components affecting reactivity within the reactor vessel with the vessel head removed and fuel in the vessel. Suspension of CORE ALTERATIONS shall not preclude completion of movement of a component to a safe position.

DOSE EQUIVALENT I-131

1.10 DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microCurie/gram) that alone would produce the same dose when inhaled as the combined activities of iodine isotopes I-131, I-132, I-133, I-134, and I-135 actually present. The determination of DOSE EQUIVALENT I-131 shall be performed using Committed Dose Equivalent (CDE) or Committed Effective Dose Equivalent (CEDE) dose conversion factors from Table 2.1 of EPA Federal Guidance Report No. 11 (FGR 11), "Limiting Values of Radionuclide Intake and Air Concentration and Dose Conversion Factors for Inhalation, Submersion and Ingestion."

* In MODE 4, the requirement for an OPERABLE containment isolation valve system is satisfied by use of the containment isolation actuation pushbuttons.

DEFINITIONS

DOSE EQUIVALENT XE-133

1.11 DOSE EQUIVALENT XE-133 shall be that concentration of Xe-133 (microCurie/gram) that alone would produce the same acute dose to the whole body as the combined activities of noble gas nuclides Kr-85m, Kr-85, Kr-87, Kr-88, Xe-131m, Xe-133m, Xe-133, Xe-135m, Xe-135, and Xe-138 actually present. If a specific noble gas nuclide is not detected, it should be assumed to be present at the minimum detectable activity. The determination of DOSE EQUIVALENT XE-133 shall be performed using effective dose conversion factors for air submersion listed in Table III.1 of EPA Federal Guidance Report No. 12, 1993, "External Exposure to Radionuclides in Air, Water, and Soil."

1.12 DELETED

ENGINEERED SAFETY FEATURES RESPONSE TIME

1.13 The ENGINEERED SAFETY FEATURES (ESF) RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF Actuation Setpoint at the channel sensor until the ESF equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays where applicable. The response time may be measured by means of any series of sequential, overlapping, or total steps so that the entire response time is measured. In lieu of measurement, response time may be verified for selected components provided that the components and the methodology for verification have been previously reviewed and approved by the NRC.

1.14 DELETED

FREQUENCY NOTATION

1.15 The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1.1.

LEAKAGE

1.16 LEAKAGE shall be:

1.16.1 CONTROLLED LEAKAGE

CONTROLLED LEAKAGE shall be that seal water flow supplied to the reactor coolant pump seals, and

1.16.2 IDENTIFIED LEAKAGE

IDENTIFIED LEAKAGE shall be:

- a. Leakage (except CONTROLLED LEAKAGE) into closed systems, such as pump seal or valve packing leaks that are captured and conducted to a sump or collecting tank, or
- b. Leakage into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of Leakage Detection Systems or not to be PRESSURE BOUNDARY LEAKAGE, or

REACTOR COOLANT SYSTEM

3/4.4.8 SPECIFIC ACTIVITY

LIMITING CONDITION FOR OPERATION

3.4.8 The specific activity of the reactor coolant shall be limited to:

- a. Less than or equal to 1 microCurie per gram DOSE EQUIVALENT I-131, and
- b. Less than or equal to 81.2 microCuries per gram DOSE EQUIVALENT XE-133.

APPLICABILITY: MODES 1, 2, 3, and 4.

ACTION:

- a. With the specific activity of the reactor coolant greater than 1.0 microCurie per gram DOSE EQUIVALENT I-131, verify DOSE EQUIVALENT I-131 less than or equal to 60 microCuries per gram once per 4 hours.
- b. With the specific activity of the reactor coolant greater than 1.0 microCurie per gram DOSE EQUIVALENT I-131 but less than or equal to 60 microCuries per gram, operation may continue for up to 48 hours while efforts are made to restore DOSE EQUIVALENT I-131 to within the 1.0 microCurie per gram limit. Specification 3.0.4 is not applicable.
- c. With the specific activity of the reactor coolant greater than 1.0 microCurie per gram DOSE EQUIVALENT I-131 for more than 48 hours during one continuous time interval, or greater than 60 microCuries per gram DOSE EQUIVALENT I-131, be in HOT STANDBY within 6 hours and in COLD SHUTDOWN within 36 hours.
- d. With the specific activity of the reactor coolant greater than 81.2 microCuries per gram DOSE EQUIVALENT XE-133, operation may continue for up to 48 hours while efforts are made to restore DOSE EQUIVALENT XE-133 to within the 81.2 microCuries per gram limit. Specification 3.0.4 is not applicable.
- e. With the specific activity of the reactor coolant greater than 81.2 microCuries per gram DOSE EQUIVALENT XE-133 for more than 48 hours during one continuous time interval, be in HOT STANDBY within 6 hours and in COLD SHUTDOWN within 36 hours.

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS

- 4.4.8.1 Verify the specific activity of the reactor coolant less than or equal to 81.2 microCuries per gram DOSE EQUIVALENT XE-133 once per 7 days.*
- 4.4.8.2 Verify the specific activity of the reactor coolant less than or equal to 1.0 microCuries per gram DOSE EQUIVALENT I-131 once per 14 days,* and between 2 and 6 hours after a THERMAL POWER change of greater than or equal to 15% RATED THERMAL POWER within a one hour period.

* Surveillance only required to be performed for MODE 1 operation, consistent with the provisions of Specification 4.0.1.

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 307 AND 246

RENEWED FACILITY OPERATING LICENSE NOS. DPR-65 AND NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.

MILLSTONE POWER STATION, UNIT NOS. 2 AND 3

DOCKET NOS. 50-336 AND 50-423

1.0 INTRODUCTION

By letter dated March 25, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML080920781), as supplemented by letter dated September 30, 2008 (ADAMS Accession No. ML082750087), Dominion Nuclear Connecticut, Inc. (DNC or the licensee), submitted a request for changes to the Millstone Power Station, Unit Nos. 2 and 3 (MPS2 and MPS3) Technical Specifications (TSs). The requested changes are based on Technical Specification Task Force (TSTF) change traveler TSTF-490, Revision 0, "Deletion of E Bar [E-Average Disintegration Energy] Definition and Revision to RCS [Reactor Coolant System] Specific Activity Tech. Spec. [Technical Specification]."

By letter dated September 13, 2005, the TSTF committee submitted TSTF-490 for Nuclear Regulatory Commission (NRC or the Commission) staff review. The TSTF was approved by the NRC staff safety evaluation (SE) dated September 27, 2006 (ADAMS Accession No. ML062700612). TSTF-490 involves changes to NUREG-1430, NUREG-1431, and NUREG-1432 Standard TS (STS) Section 3.4.16, "RCS [Reactor Coolant System] Specific Activity," with the addition of a new limit for noble gas specific activity. The noble gas specific activity limit would be based on a new dose equivalent Xe-133 (DEX) definition that replaces the current E Bar definition. In addition, the current dose equivalent I-131 (DEI) definition would be revised to allow the use of additional thyroid dose conversion factors (DCFs). The licensee's letter stated that the changes are consistent with TSTF-490, Revision 0, and the model SE prepared by the NRC with minor variations because MPS2 and MPS3 have custom TS.

The supplemental letter dated September 30, 2008, 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 July 29, 2008 (73 FR 43955).

2.0 REGULATORY EVALUATION

The Steam Generator Tube Rupture (SGTR) accident and the Main Steam Line Break (MSLB) accident typically do not result in fuel damage and, therefore, the radiological consequence

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analyses are based on the release of primary coolant activity at maximum TS limits. For accidents that result in fuel damage, the additional dose contribution from the initial activity in the RCS is not normally evaluated and is considered to be insignificant in relation to the dose resulting from the release of fission products from the damaged fuel.

Since MPS2 and MPS3 incorporate the alternative source term (AST) in their dose consequence analyses, the NRC staff uses the regulatory guidance provided in NUREG-0800, Standard Review Plan (SRP), Section 15.0.1, "Radiological Consequence Analyses Using Alternative Source Terms," Revision 0, July 2000, and the methodology and assumptions stated in Regulatory Guide (RG) 1.183, "Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors," July 2000.

Licensees using the AST are evaluated against the dose criteria specified in Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.67(b)(2). The off-site dose criteria are 25 roentgen equivalent man (rem) total effective dose equivalent (TEDE) at the exclusion area boundary for any 2-hour period following the onset of the postulated fission product release and 25 rem TEDE at the outer boundary of the low population zone (LPZ) for the duration of the postulated fission product release. In addition, 10 CFR Part 50.67(b)(2)(iii) requires that adequate radiation protection be provided to permit access and occupancy of the control room under accident conditions without personnel receiving radiation exposures in excess of 5 rem TEDE for the duration of the accident.

For licensees adopting the guidance from RG 1.196, "Control Room Habitability at Light Water Nuclear Power Reactors," May 2003, an annual organ dose limit of 50 rem can be used for both the thyroid and skin dose equivalent of 5 rem whole body. This is defined in Section C.4.5 of RG 1.195 which states that in lieu of the dose equivalency guidelines from Section 6.4 of NUREG-0800, the 10 CFR 20.1201 limits may be used.

3.0 TECHNICAL EVALUATION

3.1 Technical Evaluation of TSTF-490 TS changes

3.1.1 Revision to the Definition of DEI

The list of acceptable DCFs for use in the determination of DEI include the following:

- Committed Dose Equivalent (CDE) or Committed Effective Dose Equivalent (CEDE)
- Dose conversion factors from Table 2.1 of Environmental Protection Agency (EPA) Federal Guidance Report (FGR) No. 11

3.1.2 Deletion of the Definition of E Bar and the Addition of a New Definition for DE Xe-133

The new definition for DEX is similar to the definition for DEI. The determination of DEX will be performed in a similar manner to that currently used in determining DEI, except that the calculation of DEX is based on the acute dose to the whole body and considers the noble gases Kr-85m, Kr-85, Kr-87, Kr-88, Xe-131m, Xe-133m, Xe-133, Xe-135m, Xe-135, and Xe-138 which are significant in terms of contribution to whole body dose. Some noble gas isotopes are not

included due to low concentration, short half-life, or small dose conversion factor. The calculation of DEX would use either the average gamma disintegration energies for the nuclides or the effective dose conversion factors from Table III.1 of EPA FGR No. 12. Using this approach, the limit on the amount of noble gas activity in the primary coolant would not fluctuate with variations in the calculated values of E Bar. If a specified noble gas nuclide is not detected, the new definition states that it should be assumed the nuclide is present at the minimum detectable activity. This will result in a conservative calculation of DEX. When E Bar is determined using a design basis approach in which it is assumed that 1.0% of the power is being generated by fuel rods having cladding defects, and it is also assumed that there is no removal of fission gases from the letdown flow, the value of E Bar is dominated by Xe-133. The other nuclides have relatively small contributions. However, during normal plant operation there are typically only a small amount of fuel clad defects and the radioactive nuclide inventory can become dominated by tritium and corrosion and/or activation products, resulting in the determination of a value of E Bar that is very different than would be calculated using the design basis approach. Because of this difference, the accident dose analyses become disconnected from plant operation and the limiting condition for operation (LCO) becomes essentially meaningless. It also results in a TS limit that can vary during operation as different values for E Bar are determined.

This change will implement an LCO that is consistent with the whole body radiological consequence analyses which are sensitive to the noble gas activity in the primary coolant but not to other non-gaseous activity currently captured in the E Bar definition. MPS2 and MPS3 TS LCO 3.4.8 on RCS specifies the limit for primary coolant gross specific activity as $100/E \text{ Bar } \mu\text{Ci/gm}$. The current E Bar definition includes radioisotopes that decay by the emission of both gamma and beta radiation. The current Action c for MPS2 TS LCO 3.4.8 and Action b for MPS3 TS LCO 3.4.8, would rarely, if ever, be entered for exceeding $100/E \text{ Bar}$ since the calculated value is very high (the denominator is very low) if beta emitters such as tritium (H-3) are included in the determination, as required by the E Bar definition. MPS2 TS Section 1.20 and MPS3 TS Section 1.11 definitions for E-AVERAGE DISINTEGRATION ENERGY (E Bar) are deleted and replaced with a new definition for DEX which states:

DOSE EQUIVALENT XE-133 shall be that concentration of Xe-133 (microcuries per gram) that alone would produce the same acute dose to the whole body as the combined activities of noble gas nuclides Kr-85m, Kr-85, Kr-87, Kr-88, Xe-131m, Xe-133m, Xe-133, Xe-135m, Xe-135, and Xe-138 actually present. If a specific noble gas nuclide is not detected, it should be assumed to be present at the minimum detectable activity. The determination of DOSE EQUIVALENT XE-133 shall be performed using effective dose conversion factors for air submersion listed in Table III.1 of EPA Federal Guidance Report No. 12, 1993, "External Exposure to Radionuclides in Air, Water, and Soil."

The change incorporating the newly defined quantity DEX is acceptable from a radiological dose perspective since it will result in an LCO that more closely relates the non-iodine RCS activity limits to the dose consequence analyses which form their bases.

3.1.3 LCO 3.4.8, "RCS Specific Activity"

MPS2 and MPS3 LCO 3.4.8 are modified to specify that iodine specific activity in terms of DEI and noble gas specific activity in terms of DEX shall be within limits. Currently the limiting indicators are not explicitly identified in the LCO, but are instead defined in current Actions a, b, and c for MPS2 TS LCO 3.4.8 and Actions a and b for MPS3 TS LCO 3.4.8, and Surveillance Requirement (SR) 4.4.8 for MPS2 and MPS3 for gross non-iodine specific activity and iodine specific activity.

I. For MPS2, DNC proposes the following changes to TS LCO 3.4.8:

- Revise LCO 3.4.8 to replace the gross specific activity limit with a DOSE EQUIVALENT XE-133 limit.
- Revise LCO 3.4.8 "Applicability" to specify the LCO is applicable in MODES 1, 2, 3, and 4.
- Delete Figure 3.4-1, "DOSE EQUIVALENT I-131 Primary Coolant Specific Activity Limit Versus Percent of RATED THERMAL POWER with the Primary Coolant Specific Activity > 1.0 μ Ci/gram DOSE EQUIVALENT I-131," and Table 4.4-2, "PRIMARY COOLANT SPECIFIC ACTIVITY SAMPLE AND ANALYSIS PROGRAM."

DNC proposes the following modifications to MPS2 TS LCO 3.4.8 ACTIONS:

- a. Renumber Action d as Action a, consistent with format of TSTF-490, and delete the references to a gross specific activity limit and Table 4.4-2.
- b. Modify Action b, formerly Action a, to delete the reference to Figure 3.4-1, and define an upper limit for DOSE EQUIVALENT I-131 that is applicable at all power levels.
- c. Modify Action c, formerly Action b, to delete the reference to Figure 3.4-1, and revise the required actions (Mode 3 within 6 hours, and Mode 5 within 36 hours) to agree with TSTF-490.
- d. Add a new Action d to provide a condition and required action (48 hour restoration time) for DOSE EQUIVALENT XE-I 33.
- e. Modify former Action c, now Action e, to replace reference to gross specific activity limit with DOSE EQUIVALENT XE-133 limit, and provide contingency actions (Mode 3 within 6 hours, and Mode 5 within 36 hours) in the event the 48-hour restoration time of new Action d is not met, consistent with TSTF-490.

Lastly, the licensee's letter proposes to revise SR 4.4.8 to replace Table 4.4-2 with two new requirements. SR 4.4.8.1 will verify DOSE EQUIVALENT XE-133 is within limits once per 7 days, and SR 4.4.8.2 will verify DOSE EQUIVALENT I-131 is within limits once per 14 days, and between 2 and 6 hours after a thermal power change of greater than or equal to 15% within a 1-hour period. A Note is added to both SRs, consistent with TSTF-490, to allow entry into MODES 2, 3, and 4 prior to performance of the respective SRs.

II. For MPS3, DNC proposes the following changes to TS LCO 3.4.8:

- Revise LCO 3.4.8 to replace the gross radioactivity limit with a DOSE EQUIVALENT XE-133 limit.
- Revise LCO 3.4.8 "Applicability" to specify the LCO is applicable in MODES 1, 2, 3, and 4.
- Delete Figure 3.4-1, "DOSE EQUIVALENT I-131 REACTOR COOLANT SPECIFIC ACTIVITY LIMIT VERSUS PERCENT OF RATED THERMAL POWER WITH THE REACTOR COOLANT SPECIFIC ACTIVITY $>1 \mu\text{Ci}/\text{gram}$ DOSE EQUIVALENT I-131," and Table 4.4-4, "REACTOR COOLANT SPECIFIC ACTIVITY SAMPLE AND ANALYSIS PROGRAM."

DNC proposes to replace the MPS3 TS LCO 3.4.8 ACTIONS with the following:

- a. An Action to verify DOSE EQUIVALENT I-131 less than an absolute upper limit of 60 microCi/gram for all power levels once per 4 hours when DOSE EQUIVALENT I-131 is >1 microCi/gram.
- b. An Action permitting continued operation for up to 48 hours if DOSE EQUIVALENT I-131 is >1 microCi/gram, but less than the specified upper limit, while efforts are made to restore DOSE EQUIVALENT I-131 to within the 1 microCi/gram limit.
- c. An Action to place the plant in Mode 3 within 6 hours, and Mode 5 within 36 hours, if DOSE EQUIVALENT I-131 is >1 microCi/gram for more than 48 continuous hours, or exceeds the absolute upper limit of 60 microCi/gram.
- d. An Action permitting continued operation for up to 48 hours if the new DOSE EQUIVALENT XE-133 limit is exceeded while efforts are made to restore DOSE EQUIVALENT XE-133 to within the new LCO limit.
- e. An Action to place the plant, in Mode 3 within 6 hours, and Mode 5 within 36 hours, if DOSE EQUIVALENT XE-133 exceeds the LCO limit for more than 48 continuous hours.

Lastly, the letter proposes to revise SR 4.4.8 to replace Table 4.4-4 with two new requirements. SR 4.4.8.1 will verify DOSE EQUIVALENT XE-133 is within limits once per 7 days, and SR 4.4.8.2 will verify DOSE EQUIVALENT I-131 is within limits once per 14 days, and between 2 and 6 hours after a thermal power change of $\geq 15\%$ within a 1-hour period. A Note is added to both SRs, consistent with TSTF-490, to allow entry into MODES 2, 3, and 4 prior to performance of the respective SRs.

3.1.4 TS 3.4.8 Applicability

MPS2 and MPS3 TS 3.4.8 Applicability is modified to include all of MODE 3 and MODE 4. It is necessary for the LCO to apply during MODES 1 through 4 to limit the potential radiological consequences of an SGTR or MSLB that may occur during these MODES. In MODE 5 with the RCS loops filled, the steam generators (SGs) are specified as a backup means of decay heat removal via natural circulation. In this mode, however, due to the reduced temperature of the RCS, the probability of a Design-Basis Accident (DBA) involving the release of significant quantities of RCS inventory is greatly reduced. Therefore, monitoring of RCS-specific activity is not required. In MODE 5 with the RCS loops not filled and in MODE 6 the SGs are not used for

decay heat removal, the RCS and SGs are depressurized and primary to secondary leakage is minimal. The change to modify MPS2 and MPS3 TS 3.4.8 Applicability to include all of MODE 3 and MODE 4 is necessary to limit the potential radiological consequences of an SGTR or MSLB that may occur during these MODES and is, therefore, acceptable from a radiological dose perspective.

3.1.5 TS 3.4.8 Action a

Per the licensee's letter dated March 25, 2008, neither MPS2 nor MPS3 has adopted the STS. DNC is proposing minor variations and/or deviations from the TS changes described in TSTF-490, Revision 0, to provide consistent terminology and format with the MPS2 and MPS3 TS. The proposed changes will not alter current TS requirements and is acceptable from a radiological dose perspective. TS 3.4.8 Required Action a is revised for MPS2 and MPS3 to remove the reference to Figure 3.4-1 "DOSE EQUIVALENT I-131 REACTOR COOLANT SPECIFIC ACTIVITY LIMIT VERSUS PERCENT OF RATED THERMAL POWER WITH THE REACTOR COOLANT SPECIFIC ACTIVITY >1 $\mu\text{Ci/gm}$ DOSE EQUIVALENT I-131" and insert a limit of less than or equal to the site specific DEI spiking limit. Radiological dose consequence analyses for SGTR and MSLB accidents that take into account the pre-accident iodine spike do not consider the elevated RCS iodine specific activities permitted by Figure 3.4.-1 for operation at power levels below 80% rated thermal power (RTP). Instead, the pre-accident iodine spike analyses assume a DEI concentration 60 times higher than the corresponding long-term equilibrium value, which corresponds to the specific activity limit associated with 100% RTP operation. It is acceptable that MPS2 and MPS3 TS 3.4.8 Required Action a should be based on the short term site-specific DEI spiking limit to be consistent with the assumptions contained in the radiological consequence analyses.

3.1.6 TS 3.4.8 Action b Revision to include Action for DEX Limit

DEX specific activity limits are required to be within limits as discussed above in Section 3.1.3. The DEX limit is site specific and the numerical value in units of $\mu\text{Ci/gram}$ is contained in revised SR 4.4.8.1. The site-specific limit of DEX in $\mu\text{Ci/gram}$ is established based on the maximum accident analysis RCS activity corresponding to 1% fuel clad defects with sufficient margin to accommodate the exclusion of those isotopes based on low concentration, short half life, or small dose conversion factors. The primary purpose of the TS LCO 3.4.8 on RCS specific activity and its associated Actions is to support the dose analyses for DBAs. The whole body dose is primarily dependent on the noble gas activity, not the non-gaseous activity currently captured in the E Bar definition.

The Completion Time for revised MPS2 and MPS3 LCO 3.4.8 Required Action b will require restoration of DEX to within limit in 48 hours. This is consistent with the Completion Time for current Required Action a for DEI. The radiological consequences for the SGTR and the MSLB accidents demonstrate that the calculated thyroid doses are generally at a greater percentage of the applicable acceptance criteria than the calculated whole body doses. It then follows that the Completion Time for noble gas activity being out of specification in the revised Required Action b should be at least as great as the Completion Time for iodine specific activity being out of specification in current Required Action a. Therefore, the Completion Time of 48 hours for revised Required Action b is acceptable from a radiological dose perspective.

3.1.6.1 MPS2 Non-applicability of Specification 3.0.4

In response to NRC staff's request for additional information, DNC responded with the following information regarding the non-applicability of Specification 3.0.4.

A statement specifying the non-applicability of Specification 3.0.4 for proposed MPS2 LCO 3.4.8 Action d is added to be consistent with the non-applicability statement in the proposed LCO 3.4.8 Action b. (currently Action a.). Consistent with NRC approved TSTF-490, Rev. 0, this exception to LCO 3.0.4 permits entry into the applicable MODE(s), relying on Action d, while the DOSE EQUIVALENT XE-133 LCO is not met. This exception is acceptable due to the significant conservatism incorporated into the RCS specific activity limit, the low probability of an event which is limiting due to exceeding this limit, and the ability to restore transient-specific activity excursions while the plant remains at, or proceeds to, power operation.

As written, the MPS2 TS 3.0.4 requires a specific statement of non-applicability be included in the individual specification in order to permit entry into an operational MODE or condition when the LCO is not met. This is accomplished in MPS3 TS by including statement that TS 3.0.4 is not applicable to this specification.

The non-applicability of Specification 3.0.4 is specified for MPS2, as opposed to the applicability of LCO 3.0.4.c which was specified in TSTF-490, Rev. 0, for Improved Technical Specifications (ITS) plants, due to the different structure of the TS. The MPS2 TS do not have an LCO 3.0.4.c. The non-applicability statement in MPS2 does not introduce any nonconservatism in the changes proposed for MPS2. Because MPS2 has not adopted ITS, minor variations and/or deviations from TS changes described in TSTF-490, Rev. 0, are necessary to provide consistent terminology, format, and usage of the MPS2 TS. The allowance for the applicability of LCO 3.0.4.c. stated in TSTF-490, Rev. 0, and the non-applicability of Specification 3.0.4 in the MPS2 TS, both permit entry into a MODE or other specified condition when an LCO is not met as discussed above.

The NRC staff finds the licensee's proposed changes to be acceptable due to the significant conservatism incorporated into the DEX specific activity limit, the low probability of an event occurring which is limiting due to exceeding the DEX specific activity limit, and the ability to restore transient specific excursions while the plant remains at, or proceeds to power operation.

3.1.6.2 MPS3 Non-applicability of Specification 3.0.4

In response to NRC staff's request for additional information, DNC responded with the following information regarding the non-applicability of Specification 3.0.4.

For MPS3, a statement in Action b indicates the provisions of LCO 3.0.4 are not applicable. Consistent with NRC approved TSTF-490, this exception to LCO 3.0.4 permits entry into the applicable MODE(s), relying on Actions a and b while the DOSE EQUIVALENT 1-131 LCO is not met. This exception is acceptable due to the significant conservatism incorporated into the RCS specific activity limit, the low probability of an event which is limiting due to exceeding this limit, and the ability to restore transient-specific activity excursions while the plant remains at, or proceeds to, power operation.

Similarly, consistent with NRC approved TSTF-490, Rev. 0, a statement in Action d. indicates the provisions of LCO 3.0.4 are not applicable. This exception to LCO 3.0.4 permits entry into the applicable MODE(s), relying on Action d, while the DOSE EQUIVALENT XE-133 LCO is not met. This exception is acceptable due to the significant conservatism incorporated into the RCS specific activity limit, the low probability of an event which is limiting due to exceeding this limit, and the ability to restore transient-specific activity excursions while the plant remains at, or proceeds to, power operation.

As written, the MPS3 TS 3.0.4 requires a specific statement of non-applicability be included in the individual specification in order to permit entry into an operational MODE or condition when the LCO is not met. This is accomplished in MPS3 TS by including statement that TS 3.0.4 is not applicable to this specification.

The non-applicability of Specification 3.0.4 is specified for MPS3, as opposed to the applicability of LCO 3.0.4.c which was specified in TSTF-490, Rev. 0, for ITS plants due to the different structure of the TS. The MPS3 TS do not have an LCO 3.0.4.c. The non-applicability statement in MPS3 does not introduce any nonconservatism in the changes proposed for MPS3. Because MPS3 has not adopted ITS, minor variations and/or deviations from TS changes described in TSTF-490, Rev. 0, are necessary to provide consistent terminology, format, and usage of the MPS3 TS. The allowance for the applicability of LCO 3.0.4.c stated in TSTF-490, Rev. 0, and the non-applicability of Specification 3.0.4 in the MPS3 TS, both permit entry into a MODE or other specified condition when an LCO is not met as discussed above.

The NRC staff finds the licensee's proposed changes to be acceptable due to the significant conservatism incorporated into the DEX specific activity limit, the low probability of an event occurring which is limiting due to exceeding the DEX specific activity limit, and the ability to restore transient specific excursions while the plant remains at, or proceeds to power operation.

3.1.7 TS 3.4.8 Action c

For MPS2, TS 3.4.8 Action c includes a shutdown statement for when the limits and required action and associated completion time of Action b (DEX not within limit) is not met. For MPS3, TS 3.4.8 Action c includes a shutdown statement if the limits and required action and associated completion time of Action b (DEX not within limit) is not met. These are consistent with the changes made to Action b which now provides the same completion time for both components of RCS specific activity as discussed in the revision to Action b. For MPS2 and MPS3, TS Action c. replaces the limit on DEI from the deleted Figure 3.4-1, with a site-specific value of > 60 $\mu\text{Ci}/\text{gram}$. This change makes Action c consistent with the changes made to TS 3.4.8 Required Action a.

The remainder of the changes are consistent with the changes made to the TS 3.4.8 Applicability. The revised LCO is applicable throughout all of MODES 1 through 4 to limit the potential radiological consequences of an SGTR or MSLB that may occur during these MODES. In MODE 5 with the RCS loops filled, the SGs are specified as a backup means of decay heat removal via natural circulation. In this mode, however, due to the reduced temperature of the RCS, the probability of a DBA involving the release of significant quantities of RCS inventory is greatly reduced. Therefore, monitoring of RCS specific activity is not required. In MODE 5, with the RCS loops not filled, and MODE 6, the SGs are not used for decay heat removal, the RCS

and SGs are depressurized, and primary to secondary leakage is minimal. Therefore, the monitoring of RCS specific activity is not required.

A new TS 3.4.8 Required Action c Completion Time of 36 hours is added for the plant to reach MODE 5. This Completion Time is reasonable, based on operating experience, to reach MODE 5 from full power conditions in an orderly manner and without challenging plant systems and the value of 36 hours is consistent with other TS which have a Completion Time to reach MODE 5.

3.1.8 SR 4.4.8 DEX Surveillance

The current MPS2 and MPS3 SR 4.4.8 for RCS gross specific activity is replaced with a surveillance to verify that the site specific reactor coolant DEX specific activity is $\leq 1100 \mu\text{Ci/gm}$ for MPS2, and $\leq 81.2 \mu\text{Ci/gm}$ for MPS3. This change provides a surveillance for the new LCO limit added to TS 3.4.8 for DEX. The revised SR 4.4.8 surveillance requires performing a gamma isotopic analysis as a measure of the noble gas specific activity of the reactor coolant at least once every 7 days, which is the same as evaluated in the approved TSTF. The surveillance provides an indication of any increase in the noble gas specific activity. The results of the surveillance on DEX allow proper remedial action to be taken before reaching the LCO limit under normal operating conditions. The NRC staff has reviewed the MPS2 and MPS3 revised specific activity limits and finds them acceptable.

SR 4.4.8 is modified by inclusion of a NOTE which states, "Only required to be performed in MODE 1." This NOTE modifies the SR to permit entry into the applicable MODE(s) while relying on the Actions. This allowance is acceptable due to the significant conservatism incorporated into the specific activity limit, the low probability of an event which is limiting due to exceeding this limit, and the ability to restore transient specific activity excursions while the plant remains at, or proceeds to power operation. This allows entry into MODE 2 through 4 prior to performing the surveillance. This allows the surveillance to be performed in any of those MODEs, prior to entering MODE 1, which is the same as evaluated in the approved TSTF.

3.1.9 SR 4.4.8 Table 4.4-2 (MPS2 TS)/Table 4.4-4 (MPS3 TS) Deletion

MPS2 TS Table 4.4-2 and MPS3 TS Table 4.4-4 in SR 4.4.8 which require the determination of E Bar, are deleted since LCO 3.4.8 on RCS specific activity supports the dose analyses for DBAs, in which the whole body dose is primarily dependent on the noble gas concentration, not the non-gaseous activity currently captured in the E Bar definition. With the elimination of the limit for RCS gross specific activity and the addition of the new LCO limit for noble gas specific activity, this SR to determine E Bar, is no longer required.

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 contacted DNC directly with his comments and through this conversation the State official was able to resolve all comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and changes surveillance requirements. 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 published July 29, 2008 (73 FR 43955-43956). 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.

Principal Contributor: R. P. Grover

Date: October 27, 2008

October 27, 2008

Mr. David A. Christian
President and Chief Nuclear Officer
Virginia Electric and Power Company
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNIT NOS. 2 AND 3 - ISSUANCE OF
AMENDMENT RE: DELETION OF E BAR DEFINITION AND REVISION TO
THE REACTOR COOLANT SYSTEM SPECIFIC ACTIVITY (TAC NOS. MD8492
AND MD8493)

Dear Mr. Christian:

The Commission has issued the enclosed Amendment Nos. 307 and 246 to Renewed Facility Operating License No. DPR 65 for the Millstone Power Station, Unit No. 2, and to Renewed Facility Operating License No. NPF-49 for the Millstone Power Station, Unit No. 3, respectively, in response to your application dated March 25, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML080920781), as supplemented by letter dated September 30, 2008 (ADAMS Accession No. ML082750087).

The amendment revises the reactor coolant system-specific activity to utilize a new indicator, Dose Equivalent Xenon-133 and only take into account the noble gas activity in the primary coolant, instead of the current indicator, average disintegration energy (E Bar).

A copy of the related Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly *Federal Register* notice.

Sincerely,

R/A
Carleen Sanders, Project Manager
Plant Licensing Branch I-2
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-336 and 50-423

Enclosures:

1. Amendment No. 307 to DPR-65
2. Amendment No. 246 to NPF-49
3. Safety Evaluation

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*Via memo

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