



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

July 28, 2016

Mr. David A. Heacock  
President and Chief Nuclear Officer  
Dominion Nuclear  
Innsbrook Technical Center  
5000 Dominion Boulevard  
Glen Allen, VA 23060-6711

SUBJECT: MILLSTONE POWER STATION, UNIT NOS. 2 AND 3 - ISSUANCE OF  
AMENDMENTS RE: REMOVAL OF SEVERE LINE OUTAGE DETECTION  
FROM THE OFFSITE POWER SYSTEM (CAC NOS. MF6430 AND MF6431)

Dear Mr. Heacock:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Amendment No. 328 to Renewed Facility Operating License No. DPR-65 and Amendment No. 269 to Renewed Facility Operating License No. NPF-49 for Millstone Power Station (MPS), Unit Nos. 2 and 3 (MPS2 and MPS3), in response to your application dated June 30, 2015, as supplemented by letters dated February 25 and June 29, 2016.

The amendments revise the MPS2 and MPS3 Final Safety Analysis Reports to: (1) delete the information pertaining to the severe line outage detection special protection system, (2) update the description of the tower structures associated with the four offsite transmission lines feeding MPS, and (3) describe how the current offsite power source configuration and design satisfies the requirements of General Design Criteria (GDC) -17, "Electric Power Systems," and GDC-5, "Sharing of Structures, Systems, and Components." A new technical requirements manual (TRM) section, "Offsite Line Power Sources," will be added to the MPS2 and MPS3 TRM supporting the licensing basis change. Specifically, with one offsite transmission line nonfunctional, the TRM requirement would allow 72 hours to restore the nonfunctional line with a provision to allow up to 7 days (for Lines 310, 348, and 383) or up to 14 days (for Line 371/364) if specific TRM action requirements are met.

D. Heacock

- 2 -

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

Sincerely,

A handwritten signature in black ink, appearing to read "R. Guzman", with a long horizontal flourish extending to the right.

Richard V. Guzman, Senior Project Manager  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-336 and 50-423

Enclosures:

1. Amendment No. 328 to DPR-65
2. Amendment No. 269 to NPF-49
3. Safety Evaluation

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

DOMINION NUCLEAR CONNECTICUT, INC.

DOCKET NO. 50-336

MILLSTONE POWER STATION, UNIT NO. 2

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 328  
Renewed License No. DPR-65

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Dominion Nuclear Connecticut, Inc. dated June 30, 2015, as supplemented by letters dated February 25 and June 29, 2016, 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.

Enclosure 1

2. Accordingly, 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. 328 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 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Travis L. Tate, Chief  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the License

Date of Issuance: July 28, 2016

ATTACHMENT TO LICENSE AMENDMENT NO. 328

MILLSTONE POWER STATION, UNIT NO. 2

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

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Insert

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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. 328 are hereby incorporated in the renewed license. The licensee shall operate the facility in accordance with the Technical Specifications.

Renewed License No. DPR-65  
Amendment No. 328



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

DOMINION NUCLEAR CONNECTICUT, INC.

DOCKET NO. 50-423

MILLSTONE POWER STATION, UNIT NO. 3

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 269  
Renewed License No. NPF-49

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Dominion Nuclear Connecticut, Inc. dated June 30, 2015, as supplemented by letters dated February 25 and June 29, 2016, 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.

Enclosure 2

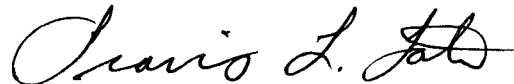
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Renewed Facility Operating License No. NPF-49 is hereby amended to read as follows:

- (2) Technical Specifications

The Technical Specifications contained in Appendix A, revised through Amendment No. 269 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 60 days of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Travis L. Tate, Chief  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the License

Date of Issuance: July 28, 2016



ATTACHMENT TO LICENSE AMENDMENT NO. 269

MILLSTONE POWER STATION, UNIT NO. 3

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.

Remove

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Insert

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(2) Technical Specifications

The Technical Specifications contained in Appendix A, revised through Amendment No. 269 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 cannot be amended in any material respect without 30 days prior written notification to the Director of the Office of Nuclear Reactor Regulation.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 328

TO RENEWED FACILITY OPERATING LICENSE NO. DPR-65

AND AMENDMENT NO. 269

TO RENEWED FACILITY OPERATING LICENSE NO. NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.

DOCKET NOS. 50-336 AND 50-423

MILLSTONE POWER STATION, UNIT NOS. 2 AND 3

1.0 INTRODUCTION

By application dated June 30, 2015, as supplemented by letters dated February 25 and June 29, 2016 (Agencywide Documents Access and Management System (ADAMS) Accession Nos. ML15183A022, ML16061A007, and ML16189A076, respectively), Dominion Nuclear Connecticut, Inc. (DNC, the licensee) submitted to the U.S. Nuclear Regulatory Commission (NRC, the Commission) a license amendment request (LAR) for changes to the licensing basis for Millstone Power Station (MPS), Unit Nos. 2 and 3 (MPS2 and MPS3).

The proposed changes would revise the MPS2 and MPS3 Final Safety Analysis Reports (FSARs) to: (1) delete the information pertaining to the severe line outage detection (SLOD) special protection system (SPS), (2) update the description of the tower structures associated with the four offsite transmission lines feeding MPS, and (3) describe how the current offsite power source configuration and design satisfies the requirements of General Design Criteria (GDC)-17, "Electric Power Systems," and GDC-5, "Sharing of Structures, Systems, and Components." In addition, a new section, "Offsite Line Power Sources," would be added to the MPS2 and MPS3 Technical Requirements Manual (TRM) supporting the licensing basis change. Specifically, with one offsite transmission line nonfunctional, the TRM actions would allow 72 hours to restore the nonfunctional line with a provision to allow up to 7 days (for Lines 310, 348, and 383) or up to 14 days (for Line 371/364) if specific TRM action requirements are met.

The supplemental letters dated February 25 and June 29, 2016, provided additional information that clarified the application, did not expand the scope of the application as originally noticed, and did not change the NRC staff's original proposed no significant hazards consideration determination as published in the *Federal Register* on October 13, 2015 (80 FR 61478).

## 2.0 REGULATORY EVALUATION

### 2.1 System Description

#### Background

MPS is a three unit site with two operating reactors. MPS, Unit No. 1, which received its provisional operating license on October 7, 1970, was permanently shut down on July 21, 1998. MPS2, which received its initial operating license on September 26, 1975, has a licensed reactor power output of 2,700 megawatts thermal (MW<sub>t</sub>) with a gross electrical output of approximately 935 megawatts electrical (MW<sub>e</sub>). MPS3, which received its initial operating license on January 31, 1986, has a licensed reactor power output of 3,650 MW<sub>t</sub> with a gross electrical output of approximately 1,296 MW<sub>e</sub>.

The SLOD was originally installed at the time of the licensing of MPS3 to address grid stability concerns by ensuring that offsite power could be maintained in the MPS switchyard. At that time the four 345-kilovolt (kV) transmission lines leaving the MPS switchyard followed a common row to Hunts Brook Junction on double circuit towers (DCTs). As directed in the Northeast Power Coordinating Council (NPCC) Regional Reliability Directory #1, "Design and Operation of the Bulk Power System," a phase-to-ground fault on two adjacent transmission lines on multiple circuit towers is to be considered a normal contingency. Studies showed that with one circuit out of service, offsite power stability would not be maintained with the loss of two 345-kV lines on the other DCT with MPS output greater than 1,200 MW<sub>e</sub>. The SLOD function was credited in both the MPS2 and MPS3 Updated Final Safety Analysis Reports (UFSARs) for GDC-17 compliance by ensuring that offsite power was maintained under certain scenarios. The SLOD was designed to automatically trip MPS3 if three transmission lines were lost and, thus, maintain stability of offsite power to MPS. Since that time, tower configurations have been modified such that every line is on a separate single circuit tower (SCT). With the SCT modification, Independent System Operator (ISO)-New England no longer considers double-line-to-ground faults a normal contingency. Northeast Utilities considered maintaining SLOD as a defense-in-depth measure; however, since SLOD created an unnecessary risk of mis-operation and transmission operator burdens, Northeast Utilities decided to remove SLOD from service. DNC agreed since potential mis-operation could cause an inadvertent trip of MPS3. Therefore, SLOD was removed.

MPS experienced a dual unit loss of offsite power (LOOP) to the facility on May 25, 2014. Following the event, an NRC special inspection team concluded that the removal of the SLOD may have resulted in a more than minimal increase in the likelihood of an offsite power malfunction. The team also concluded that the licensee should have performed a full Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.59 evaluation when eliminating SLOD that may have changed the licensee's determination that SLOD removal did not require a license amendment in accordance with 10 CFR 50.59(c)(2).

SLOD is described in both MPS facilities' FSARs. The FSAR is a licensee-controlled document and may be modified by the licensee in accordance with 10 CFR 50.59 requirements. The licensee proposes to remove the SLOD from the MPS FSARs and include TRM action requirements to limit the amount of time that the licensee can operate with one of the four

designated offsite lines into the MPS switchyard nonfunctional when MPS electrical power output exceeds 1650 MW<sub>e</sub> (net).

### Offsite Power System

The electrical output of MPS2 and MPS3 is delivered to the 345-kV switchyard located adjacent to the plant. The switchyard consists of ten 345-kV breakers and four 345-kV transmission lines arranged in a combination “breaker-and-a-half” and “double-breaker-double” bus switching arrangement. In addition, there are two 345-kV tie lines to the generator step-up transformers, and two 345-kV tie lines to the reserve station service transformers (RSSTs). The four 345-kV transmission lines, numbered 348, 310, 371, and 383, which comprise the MPS offsite power supply, connect to the Eversource (formerly Northeast Utilities) 345-kV transmission network, and terminate at four separate substations, are:

- a) Millstone to Haddam and Beseck Substation (Line No. 348)
- b) Millstone to Card Substation (Line No. 383)
- c) Millstone to Montville substation (Line No. 371) (with Line Number 364: Montville Substation to Haddam Neck)
- d) Millstone to Manchester Substation (Line No. 310)

The four 345-kV transmission lines (348, 310, 371, and 383) proceed north, in parallel, on a common right-of-way (ROW). After approximately nine miles, two of the four lines change direction (Line 371 turns east and Line 348 turns west) at the Hunts Brook Junction. Line 364, which proceeds east-west through Hunts Brook Junction, is considered part of Line 371 since it is the only other 345-kV line connected to the Montville Substation. Therefore, because of this configuration, Line 371 is crossed over by Lines 383 and 310 at Hunts Brook Junction. At the time of initial MPS3 licensing, the four 345-kV transmission lines leaving the MPS switchyard followed a common ROW to Hunts Brook Junction. From MPS to Daniels Avenue, the four lines were routed on DCTs (i.e., two transmission lines sharing a common tower). From Daniels Avenue to Interstate 95, the lines were routed on one DCT and two SCTs.

During normal operation, MPS2 auxiliary loads are powered by the MPS2 Normal Station Service Transformer (NSST). The preferred offsite power supply for MPS2 is through an RSST which is fed directly from the MPS switchyard. Upon a unit trip, a fast transfer scheme directs offsite power from the NSST to RSST. An alternate offsite source can be manually aligned to either 24C or 24D safety bus via a 4-kV cross-tie from the MPS3 non-safety-related 4-kV buses (34A or 34B). This power source directly feeds Bus 24E which can then be directed to either Bus 24C or 24D.

For MPS3, there are two physically independent transmission lines installed from the MPS switchyard to the onsite distribution system. The preferred offsite power supply through the MPS3 NSST is immediately available upon unit trip via the non-safety related 4-kV buses 34A and 34B which then directly feed the safety related 4-kV buses through bus ties. The alternate offsite source is the MPS3 RSST. The MPS3 RSST feeds power directly to the 4 kV safety-related buses 34C and 34D. This power source is available via transfer schemes after a plant trip, if the preferred offsite power source is not available.

## NRC Enforcement Action

On December 20, 2012, the licensee implemented a design change to the offsite power system by removing the SLOD (described in the UFSAR), and failed to conduct a written safety evaluation (SE) or provide a basis for the determination that the change did not require an LAR in accordance with 10 CFR 50.59(c)(2). During an NRC special inspection conducted between June 2, 2014, and July 15, 2014, a violation of NRC requirements was identified<sup>1</sup> as a Severity Level III violation.<sup>2</sup>

In a letter dated March 31, 2015 (ADAMS Accession No. ML15097A084), in response to the NRC's Notice of Violation (NOV), EA-14-126, dated August 28, 2014, DNC committed to submit an LAR to address: (1) the basis for continued compliance with GDC-17 after modifying the DCTs to SCTs and disabling SLOD, and (2) proposed FSAR changes to reflect the currently installed configuration of the offsite power sources, including the modifications that replaced the DCT design with SCTs and removed SLOD. Additionally, DNC stated that a proposed allowed outage time would be applicable during the periods when a single offsite line is not in service (due to either an unplanned event or for planned maintenance activities on the transmission system) in conjunction with appropriate operational limitations designed to minimize the risk to the plant and maintain offsite grid stability. The June 30, 2015, LAR submittal, is intended to meet the commitment made in the NOV response.

### 2.2 Description of Proposed Changes

DNC proposes to revise the MPS2 and MPS3 FSARs to: (1) delete the information pertaining to the SLOD SPS, which was removed from service in December 2012, (2) update the description of the tower structures associated with the four offsite transmission lines feeding MPS, and (3) describe how the current offsite power source configuration and design satisfies the requirements of GDC-17 and GDC-5. The proposed changes to the MPS2 and MPS3 FSARs are provided in the LAR, Attachments 2 and 3, respectively, as revised in the June 29, 2016, supplemental letter.

The licensee also proposed to add a new technical requirement, "Offsite Line Power Sources," to the MPS2 and MPS3 TRMs. The TRMs would require that the four offsite transmission lines be functional when MPS output exceeds 1650 MW<sub>e</sub> (net). With one offsite transmission line nonfunctional, the TRM requirements would allow 7 days to restore the nonfunctional transmission line with compensatory measures in place except for transmission line 371/364. The TRM would allow up to 14 days for transmission line 371/364 to be nonfunctional.

### 2.3 Applicable Regulatory Requirements and Guidance

The regulatory requirements in Appendix A to 10 CFR Part 50, which the NRC staff considered in assessing the LAR, are as follows:

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<sup>1</sup> Trapp, James M, Acting Director, USNRC letter to David Heacock, President, Dominion Resources, "Millstone Power Station Units 2 and 3 - NRC Special Inspection Report 05000336/2014011 and 05000423/2014011," dated August 28, 2014 (ADAMS Accession No. ML14240A006).

<sup>2</sup> USNRC Enforcement Policy, Section 2.2.2, dated June 7, 2012 (ADAMS Accession No. ML12132A394).

GDC 5, "Sharing of structures, systems, and components" requires that structures, systems, and components important to safety shall not be shared among nuclear power units unless it can be shown that such sharing will not significantly impair their ability to perform their safety functions, including, in the event of an accident in one unit, an orderly shutdown and cooldown of the remaining units.

GDC 17, "Electric power systems," requires, in part, that an offsite electric power system shall be provided to permit functioning of structures, systems, and components important to safety. The safety function for each system shall be to provide sufficient capacity and capability to assure that (1) specified acceptable fuel design limits and design conditions of the reactor coolant pressure boundary are not exceeded as a result of anticipated operational occurrences and (2) the core is cooled and containment integrity and other vital functions are maintained in the event of postulated accidents.

Provisions shall be included to minimize the probability of losing electric power from any of the remaining supplies as a result of, or coincident with, the loss of power generated by the nuclear power unit, the loss of power from the transmission network, or the loss of power from the onsite electric power supplies.

Per 10 CFR 50.63 "Loss of all alternating current power," each light-water-cooled nuclear power plant must be able to withstand for a specified duration and recover from a station blackout as defined in 10 CFR 50.2.

NRC Regulatory Guide 1.32, "Criteria for Power Systems for Nuclear Power Plants" (ADAMS Accession No. ML040680488), describes a method acceptable to the NRC staff for complying with GDC Criteria 17 and 18 with respect to the design, operation, and testing of electric power systems in nuclear power plants.

Section 182a of the Atomic Energy Act of 1954, as amended, requires applicants for nuclear power plant operating licenses to include the Technical Specifications (TSs) as part of the operating license. The Commission's regulatory requirements related to the content of TSs are set forth in 10 CFR 50.36, "Technical specifications." The regulations require that the TSs include items in specific categories, including: (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 Commission published its "Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors" on July 22, 1993 (58 FR 39132). The final policy statement provided four criteria for determining which design features and information should be located in the TSs as LCOs. These criteria are located at 10 CFR 50.36(c)(2)(ii).

Licensee-controlled TRMs contain requirements similar in format to TSs but the requirements contained in the TRM do not meet the criteria of 10 CFR 50.36(c)(2)(ii) for inclusion into the TS.

Per 10 CFR 50.36(c)(2)(i), TS LCOs are the lowest functional capability or performance levels of equipment required for the safe operation of the facility.

Per 10 CFR 50.36(c)(2)(ii) a TS LCO must be established for each item meeting one or more of the following criteria:

(A) 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.

(B) 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.

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

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

NUREG-0800, Standard Review Plan (SRP), Branch Technical Position (BTP) 8-3, "Stability of Offsite Power Systems," March 2007 (ADAMS Accession No. ML070710446), provides guidance for the NRC staff in reviewing power systems with supporting grid interties. It states, in part, that, if the power system's available capacity is judged marginal in its ability to provide adequate stability of the grid, additional measures should be taken.

The following NUREG guidance documents were also used during the review:

- NUREG-0800, SRP 8.1, "Electrical Power - Introduction," Revision 4, February 2012 (ADAMS Accession No. ML113640121).
- NUREG-0800, SRP 8.2, "Offsite Power System," Revision 5, May 2010 (ADAMS Accession No. ML100740246).
- NUREG-1431, Revision 4, "Standard Technical Specifications – Westinghouse Plants," (ADAMS Accession Nos. ML12100A222 and ML12100A228).
- NUREG-1432, Revision 4, "Standard Technical Specifications – Combustion Engineering Plants," (ADAMS Accession Nos. ML12102A165 and ML12102A169).

### 3.0 TECHNICAL EVALUATION

#### 3.1 Evaluation of Proposed Changes and Compliance with GDC-17

The NRC staff reviewed the current configuration of MPS and the design criteria for preferred power supplies and transmission lines. The NRC staff also reviewed the modification of the



DCTs to SCTs, including the removal of SLOD protection, and the proposed licensing basis changes to the FSARs as provided in the LAR, Attachments 2 and 3, as well as the licensee's submitted supplemental responses.

MPS2 FSAR 8.1.1.1 describes the design criteria for the preferred power supplies as follows:

The 345 kV switchyard and the associated transmission lines provide the offsite sources that are the preferred power supplies, as outlined in Section 5.2.3 of IEEE [Institute of Electrical and Electronics Engineers] Standard 308-1971 and Criterion 17 of Appendix A of 10 CFR Part 50. The conventional and accepted design of these facilities has been shown to be conservative and reliable.

Transmission facilities connecting the Millstone generating units to the main transmission grid are designed in accordance with the "Basic Criteria for Design and Operation of Interconnected Power Systems," developed by the Northeast Power Coordinating Council (NPCC).

The NRC staff notes that the above standards have been superseded by NPCC Directory 1, "Design and Operation of the Bulk Power System," and ISO New England Planning Procedure No. 3, "Reliability Standards for the New England Area Bulk Power Supply System."

The MPS2 UFSAR Section 8.1.2 provides the following description of the four transmission lines (348, 310, 371, and 383) as constructed during the licensing phase of MPS2:

These circuits connect the station to the 345 kV system transmission grid and follow a common right-of-way from Millstone to Hunts Brook Junction (9.0 miles). For the first 1.7 miles of this right-of-way (to Daniels Avenue), the four lines travel upon two double-circuit steel-pole transmission lines separated by 330 feet. The double-circuit steel-pole lines consist of two independent single-circuit structures at locations where the right-of-way changes direction (angle structure) and of a single common structure at all other locations. For the next 2.4 miles, the construction consists of one double-circuit steel-pole transmission line (Line Nos. 348 and 310) and two single-circuit wood-pole H-frame transmission lines (Line Nos. 371 and 383). For the remaining 4.9 miles, single-circuit wood-pole H-frame construction is used for all four circuits.

The current MPS2 UFSAR section 8.1.2.2 states:

The simultaneous loss of two Millstone circuits on common structures following a previous (non-simultaneous) outage of either of the other Millstone circuits (or any other critical element) must not result in instability. All of the critical outages of this type effectively result in the loss of three of the four Millstone circuits and leave the Millstone station weakly tied to the transmission grid. To prevent instability for these extremely severe (and highly improbable) disturbances, it is necessary for the SLOD SPS to be in-service when the loss of the two circuits on common structures takes place.

....

With the SLOD generation rejection scheme in service, it is permissible to operate with a net Millstone Station output of 2500 MW, when any one of four critical line circuits is out of service. Depending upon conditions in other areas, it may also be necessary to limit the output of Millstone Unit 3 to the Maximum Allowable Millstone Generation Contingency (MAMGC). The MAMGC limit is determined based on NYPP and Pennsylvania-Jersey-Maryland system conditions. As a member of ISO New England and the NPCC, the Licensee is required to comply with either of the following operability requirements with one element out of the service:

1. have SLOD fully operational, limit the net station output to  $\leq 2500$  MW and limit the output of Unit 3 to the MAMGC limit, if applicable, or
2. reduce load to a total station output of  $\leq 1750$  MW (Gross) 1650 MW (Net) within 30 minutes after the element is removed from service.

With all lines in-service, the net station output is limited to 2520 MW. This will ensure transient stability is maintained in the event of a double-circuit contingency.

These instructions are documented as part of the CONVEX [Connecticut Valley Electric Exchange] operating instructions for the Millstone switchyard and are regulated by CONVEX. To facilitate regulation, CONVEX is aware of the condition of all lines and the status of the SLOD scheme via an annunciator located at CONVEX.

The operability requirements specified above ensures that, upon loss of a double circuit line with a third line out of service and generation in excess of 1750 MW (Gross) 1650 MW (Net), off site power is available for safe shutdown; maintaining system stability minimizes the probability of coincident loss of both off site supplies. This is consistent with the requirements of General Design Criterion (GDC) 17.

GDC 17 also requires that the probability of losing an offsite supply coincident with loss of the nuclear power unit be minimized. Because of the necessity for SLOD to complete its function within 18 cycles, SLOD trips Millstone 3 by tripping the switchyard breakers instead of the generator breaker (this eliminates the extra time required for relay and communication channel operation in a transfer trip scheme). Under these conditions, station auxiliary loads high speed transfer to the reserve station service transformers, and the normal station service transformer (which is tripped when SLOD trips Unit 3) can be reenergized by CONVEX closing a switchyard breaker. Therefore, both off site supplies are available to ensure safe shutdown of the unit in accordance with GDC 17.

Similar licensing basis information is reflected in the current MPS3 UFSAR.

### 3.2 Licensee's Justification for SLOD Removal

The licensee stated in its LAR that, in 2010, Northeast Utilities began the approval process for removal of SLOD and modification of the DCT design which was viewed by the transmission line owner and operator as an overall improvement to grid reliability. Although SLOD was designed as an NPCC Type I SPS, over time, the transmission system had evolved with new contingencies that SLOD would not detect. In addition, it was determined that SLOD could unintentionally arm, as had occurred in early 2011. As a result, Northeast Utilities obtained transmission system regulatory approval to modify the transmission tower design from DCTs to SCTs and to disable SLOD.

In addition, the licensee stated in its supplement dated February 25, 2016, that SLOD would not have detected the contingency related to the initial condition of Line 364 out of service. One of the four critical transmission paths was Line 371 from Millstone to Montville connected to Line 364 from Montville to Haddam Neck via the closed Montville circuit breaker 4J-1T-2. The SLOD design was used in power relays at MPS to determine whether a path was in service or not. Since the load at Montville alone often exceeded the Line 371 power relay setting, the SLOD system considered the 371/364 path in service even when Line 364 was out of service. A mis-operation of SLOD could have a negative effect on the grid by causing the loss of the entire MPS3 output and could have a negative impact on the plant by causing turbine/reactor protection systems to generate an automatic turbine and reactor trip in response to the loss of load. It was subsequently noted by the grid operator that SLOD did not address all instability concerns and that SLOD could not adequately supervise the status of each path under all conditions.

The licensee also stated that ISO-New England Operations also identified that SLOD may not have operated when required if the Beseck terminal on the Beseck to Haddam section of Line 348 was open. The grid operator's assessment of transmission lines feeding the MPS2 and MPS3 indicated that no automatic actions are required to maintain grid stability. The licensee stated that (1) the removal of the DCT contingency, (2) the operating restrictions contained in the ISO-New England Millstone Facility Out Guide, and (3) the new proposed TRM actions effectively minimize the risk of losing offsite power from the loss of any of the remaining power supplies and provide reasonable assurance of continued grid stability.

### 3.3 Normal and Severe Contingencies

The licensee stated that the transmission line routing for the approximately 9-mile ROW between MPS and Hunts Brook Junction was walked down in 2015 to identify any circuit towers/lines in close enough proximity to allow potential interaction. The licensee's walkdown identified the following areas of concern:

- Proximity of Two Lines: Within the approximately 9-mile ROW going north of the MPS switchyard, there are four AC circuit conductor locations where two lines are supported from different towers in close proximity (horizontal clearance less than about 40 feet) with one line supported at a higher vertical location (vertical clearance more than 40 feet). This combination of horizontal proximity and support at different vertical heights could potentially allow a dropped or broken conductor from one line to contact a

conductor on an adjacent line assuming conditions with sufficient wind velocity and direction.

- Line Cross-Overs: There are three locations of AC circuit conductor crossovers at Hunts Brook Junction. There are two failure modes for conductors and shield wires that could allow them to fall onto a lower line. If an insulator or cross arm on the support tower on either side of the crossing span were to fail, the conductor or shield wire could drop onto the second line. If a conductor or shield wire were to break within the crossing span, the broken conductor or shield wire could drop onto the second line.
- Tower Failures: There are various locations within the ROW where one tower is in close enough proximity to affect another tower in the event of total failure.

Based on the above contingencies, the staff asked the licensee to explain the scenario involving two lines that are impacted by a single point vulnerability while another line is out of service in which the remaining line trips due to its relays experiencing large swings in power and voltage, resulting in a LOOP to MPS. In its response dated February 25, 2016, the licensee stated that for this scenario, a LOOP would not be avoided. However, the licensee stated that the aforementioned contingencies represent an abnormal condition in accordance with grid procedures and standards and that the postulated contingencies would be addressed by the proposed TRM requirements.

The licensee also stated that these unstable conditions are mitigated by limiting the MPS generators to a station output level that supports both system and generator stability. For instance, when two lines are in service, the transmission system will remain stable assuming the additional loss of a third 345 kV line as long as Millstone Station output is less than the value provided in Millstone Facility Out Guide-Text Document. In its supplemental response dated June 29, 2016, the licensee updated the TRM actions associated with the Millstone Station output limit to be less than or equal to 1650 MW<sub>e</sub> net.

Specifically, the licensee submitted a proposed revision to the TRM actions for MPS2 and MPS3 along with updated FSAR pages to include a description of the proposed new TRM actions as follows:

In order to ensure the interconnected system will remain stable and offsite power circuits meet GDC-17 requirements, the following technical requirement actions and generation output restrictions will be implemented when both Millstone Power Station Unit 2 and Unit 3 are at power:

With any of the 345 kV offsite transmission lines (310, 348, 371 (includes 364 line), and 383) out of service or nonfunctional, the nonfunctional transmission line shall be restored to functional status within 72 hours or total station output shall be reduced to  $\leq 1650$  MW<sub>e</sub> net within the next 6 hours; or, alternatively, within 7 days for Lines 310, 348, and 383 or 14 days for Line 371/364 with the following action requirements in place:

- a. Once per shift, verify the remaining lines are functional,
- b. Once per shift, perform a weather assessment,

- c. Once per 24 hours, verify the EDGs [emergency diesel generators] are operable and the SBO diesel is available.

If any of the above actions cannot be met or if a weather assessment predicts adverse or inclement weather will exist while a transmission line is nonfunctional (i.e., out of service), total station output shall be reduced to  $\leq 1650 \text{ MW}_e$  net within the next 6 hours to ensure the stability and availability of the electrical grid is maintained.

With two 345 kV offsite transmission lines nonfunctional, total output shall be reduced to  $\leq 1650 \text{ MW}_e$  net within the next 30 minutes.

The allowed outage times (AOT) for Lines 310, 348, 371/364, and 383 are based on the configuration of the transmission lines at Hunts Brook Junction where Lines 383 and 310 cross over Line 371/364 and Line 348 runs to the west of the crossover. With Line 348, 310, or 383 nonfunctional, the possibility exists that either Line 383 or 310 could drop on Line 371/364 and result in three lines nonfunctional. This condition would impact grid stability and therefore, a 7-day AOT is allowed with the specified action requirements in place. When Line 371/364 is nonfunctional, if either Line 310 or 383 drops, two transmission lines remain functional. Therefore, a 14-day AOT is allowed with the specified action requirements in place.

The NRC staff determined that the proposed revisions to the FSAR as supported with the TRM actions reduce the potential for the simultaneous loss of two or more circuits due to a single event. The NRC staff finds that the proposed manual actions in lieu of the automatic protection afforded by the SLOD minimize the probability of losing electric power consistent with GDC-17 for the following reasons:

1. The licensee modified the design for the four 345 kV transmission lines leaving MPS. Specifically, the modification entailed relocating one of the two 345 kV transmission lines from each of the two existing DCTs onto a new SCT so that each 345 kV transmission line was on its own separate transmission tower. Thus, the modification minimizes the potential for the simultaneous loss of two circuits when one line is taken out of service for maintenance.
2. The transmission towers that support the four 345 kV lines are designed to the National Electric Safety Code, Part C2, which provides reasonable assurance that the towers will withstand typical severe weather conditions.
3. The licensee's administrative controls, transmission operating guides, and procedures are appropriately established to minimize the potential for a severe event to impact grid reliability with one offsite line nonfunctional. Specifically, the procedural controls require restoration of the nonfunctional 345 kV line to functional status prior to arrival of inclement weather or that total station output is reduced to  $\leq 1650 \text{ MW}_e$  net.
4. Based on the operating experience of transmission line disturbances or line failures for the four offsite lines from 2005 through May 2015, forced line outages from 2005 through 2014,

and planned transmission line outages from 2009 through May 2015, there have been no contingency events at Hunts Brook Junction. In addition, no instability or LOOP events have occurred due to transmission element failures at Hunts Brook Junction.

5. The licensee has confirmed that the grid operator performs assessments using North American Electric Reliability Corporation (NERC) reliability standard TPL-001-4, NPCC Directory #1, ISO-New England Planning Procedure 3, and ISO-New England Operating Procedure OP-19 and has concluded that the system will remain stable following the most severe of normal contingencies such as a permanent three-phase fault on any generator, transmission circuit, transformer, or bus section with normal fault clearing.

Therefore, the NRC staff concludes that the proposed changes satisfy GDC-17.

### 3.4 Inclusion of TRM Actions

The NRC staff also reviewed the proposed actions for inclusion into the MPS TRM along with the licensee's evaluation that determined that the actions as LCOs did not meet the threshold for inclusion into the TS. The staff assessed the licensee's evaluation against the four regulatory criteria in 10 CFR 50.36(c)(2)(ii). Additionally, the staff evaluated the proposed changes against the guidance in NUREGs 1432, Rev. 4, and 1431, Rev. 4, for MPS2 and MPS3, respectively.

The TRM actions proposed in the LAR limit operations with any transmission line outage to 72 hours or, when instituting additional measures, 7 days with Line 348, 310, or 383 being nonfunctional or 14 days with Line 371/364 being nonfunctional. Part of the additional measures would require the licensee to limit MPS power output from the site, when adverse weather is predicted during a simultaneous single transmission line outage, to  $\leq 1650 \text{ MW}_e$  net as a conservative measure to maintain grid stability.

Current TSs require two physically independent circuits between the offsite transmission system and the onsite Class 1E distribution system to be operable in Modes 1 through 4 (TS 3.8.1.1). With one offsite circuit inoperable, the TSs require the performance of Surveillance Requirement (SR) 4.8.1.1.1 to ensure that the licensee verifies correct breaker alignments within 1 hour of entering the inoperable condition and at least every 8 hours thereafter.

Additionally, MPS2 and MPS3 each have two independent safety grade EDGs that automatically start and load following an interruption of power to their respective 4 kV emergency buses. No requirements for the EDGs would be changed as a result of the proposed LAR, and this equipment would still function as designed for accident mitigation and recovery. The EDGs would continue to be the credited source of power to meet 10 CFR 50.36(c)(2)(ii)(C) (Criterion 3).

The NRC staff has reviewed the proposed TRM requirements against the licensee's analysis of each of the four criteria for inclusion into the TSs located at section 5.2 of its LAR and against the guidance in NUREGs 1432, Rev. 4, and 1431, Rev. 4, for MPS2 and MPS3, respectively. The NRC staff finds that the proposed TRM requirements do not meet any of the criteria for inclusion into the TSs and that there are no similar TS LCOs in the guidance documents. Based on this finding, the NRC staff concludes that the proposed TRM requirements do not need to be

included in the TSs and that, therefore, there is reasonable assurance that the requirements of 10 CFR 50.36 will continue to be met.

### 3.5 NRC Staff Conclusion

The licensee proposes to revise the MPS2 and MPS3 FSARs to: (1) delete the information pertaining to the SLOD SPS, (2) update the description of the tower structures associated with the four offsite transmission lines feeding MPS, and (3) describe how the current offsite power source configuration and design satisfies the requirements of GDC-17 and GDC-5. In addition, the licensee proposes to add a new section, "Offsite Line Power Sources," to the MPS2 and MPS3 TRM, allowing, with one offsite transmission line nonfunctional, 72 hours to restore the nonfunctional line with a provision to allow up to 7 days (for Lines 310, 348, and 383) or up to 14 days (for Line 371/364) if specific TRM action requirements are met.

Based on the above evaluation, the NRC staff concludes that the proposed changes to the MPS2 and MPS3 licensing bases are acceptable because they minimize the probability of losing electric power consistent with GDC-17. The NRC staff has also determined that the proposed TRM requirements do not meet the criteria of a TS LCO as established in 10 CFR 50.36(c)(2)(ii), and, therefore, that the proposed TRM requirements do not need to be included in the MPS2 and MPS3 TSs. Thus, the NRC staff concludes that the licensee remains in compliance with 10 CFR 50.36 for MPS2 and MPS3.

### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Connecticut State official was notified of the proposed issuance of the amendments. The State official provided comments via e-mail on July 24, 2015. The State official's comments concerned: (1) the external risk of a common mode failure that could result from brush fires (e.g., brush fires caused by lightning) along the approximately 9-mile common ROW for the four transmission lines; (2) the licensee's transmission line outage review being limited to the Millstone specific transmission path without including an industry operating experience review; and (3) the PRA impact of a loss of offsite power at Millstone warranting the need for a quantitative risk assessment to support the determination of whether the proposed TRM requirements meet the 10 CFR 50.36(c)(2)(ii) criteria for inclusion in the TS.

The State official's comments were considered as part of the NRC staff's review of the LAR. The NRC staff determined that the State official's concern regarding the short-circuiting of conductors due to hot gases is a scenario that is enveloped by the scenario of the loss of one transmission line or the simultaneous loss of two transmission lines, which was evaluated by the staff. While the staff noted that this scenario is not part of the NERC normal contingency, and is considered an extreme event, the staff issued an RAI to the licensee asking it to address the technical concern associated with this scenario. The staff determined that the licensee's supplemental responses adequately addressed this RAI.

Regarding the State official's concerns with the licensee's transmission line outage review being limited to the site's specific transmission path (i.e., not including industry operating experience such as the events leading to the August 2003 blackout) and the review not including a quantitative risk assessment, the staff noted that while the licensee's PRAs for MPS2 and MPS3

do not specifically model the four offsite power transmission lines, LOOP frequency and consequential LOOP probability values that are based on industry LOOP events occurring with a certain time period are applied in the MPS PRA models. As discussed in Section 3.3 of this SE, the NRC staff also considered the licensee's operating experience in its review of the proposed license amendment and noted that, based on the operating experience of transmission line disturbances or line failures for the four offsite transmission lines from 2005 to May 2015, forced line outages from 2005 to 2014, and planned transmission line outages from 2009 to May 2015, there have been no contingency events at Hunts Brook Junction. In addition, no instability or LOOP events have occurred due to transmission element failures at Hunts Brook Junction.

As discussed in section 2.3 of this SE, per 10 CFR 50.36(c)(2)(i), LCOs are the lowest functional capability or performance levels of equipment required for the safe operation of the facility. Both MPS2 and MPS3 are permitted by their TSs to have any power source out of service for 72 hours. The 72-hour allowed outage time is based in part on MPS having multiple sources of power. While offsite power is the preferred power source for plant equipment, it is usually not the safety-related source used to mitigate accidents in the accident analysis. TSs are derived from the accident analysis; MPS2 and MPS3 each have two independent safety grade emergency diesel generators that automatically start and load following an interruption of power to their respective 4 kV emergency buses. No TS requirements for the EDGs are being changed as part of the proposed amendment and the associated equipment is expected to function as designed for accident mitigation and recovery. The EDGs are the credited source of power that meet 10 CFR 50.36(c)(2)(ii)(C).

The proposed TRM change to allow 72 hours to restore a nonfunctional line, with a provision to allow up to 7 days (for Lines 310, 348, and 383) or 14 days (for Line 371/364) if specific TRM action requirements are met, does not impact offsite power availability and does not adversely impact the primary success path associated with offsite power availability. With one offsite line nonfunctional, offsite power remains available and the existing analyses remain bounding. The staff found the licensee's evaluation of the four 10 CFR 50.36(c)(2)(ii) criteria to be acceptable; that is, the proposed TRM action requirements for offsite line power sources do not meet the criteria for inclusion into the TSs (section 3.4 of this SE). Additionally, the staff evaluated the proposed changes against the guidance in NUREG-1432, Rev. 4, and NUREG-1431, Rev. 4, for MPS2 and MPS3, respectively, and noted that requirements associated with offsite power systems not being included in the TSs is consistent with the NUREG guidance documents. Therefore, the staff concluded that the proposed changes comply with GDC-17 and do not necessitate changes to the TSs and, thus, that 10 CFR 50.36 will continue to be met.

The NRC staff's complete response to the State official's comments can be viewed in ADAMS at ADAMS Accession No. ML16197A459. The State official replied to the NRC staff's response in an e-mail dated July 5, 2016 (ADAMS Accession No. ML16207A388) and requested that the NRC indicate his differing professional opinion (DPO) should the amendment be issued as proposed. Specifically, the State official's DPO concerned the exclusion of brush fire threats from the "Avoidance of Plant Configurations that Could Degrade Defense-in-Depth Using Appropriate Mitigating Measures," and stated that:

As a former electrical engineer, senior reactor operator license holder and senior station manager at Millstone, I can remember specifically at least two instances



when multiple offsite power lines were threatened by brush fire in the common ROW. In the same period, offsite lines were never threatened by winds or other storms. Your assessment that the fire risk is appropriately treated as a loss of 1 or 2 lines seems to disregard that a fire in the ROW will not selectively trip just one or two lines, but represents a common mode issue that could potentially affect all offsite lines. Conditions that represent an unusually high fire risk should, therefore, not be allowed to occur simultaneously with the extended AOT for line outages.

As discussed above, the State official's comments were considered in the NRC staff's review. The NRC staff finds that the concerns identified by the State official do not impact the staff's safety conclusions for the proposed license amendment and that there is reasonable assurance that the activities proposed in the LAR can be conducted without endangering the health and safety of the public and will be conducted in compliance with the Commission's regulations.

#### 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. 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 in the *Federal Register* (FR) on October 13, 2015 (80 FR 61478). 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) there is reasonable assurance that 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 Contributors: H. Kodali  
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Date: July 28, 2016

D. Heacock

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

Sincerely,

*/RA/*

Richard V. Guzman, Senior Project Manager  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket Nos. 50-336 and 50-423

Enclosures:

1. Amendment No. 328 to DPR-65
2. Amendment No. 269 to NPF-49
3. Safety Evaluation

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**ADAMS Accession No.: ML16193A001**

\*SE and concurrence transmitted by email

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