

January 31, 2007

Mr. Timothy J. O'Connor  
Vice President Nine Mile Point  
Nine Mile Point Nuclear Station, LLC  
P. O. Box 63  
Lycoming, NY 13093

SUBJECT: NINE MILE POINT NUCLEAR STATION, UNIT NO. 1 - ISSUANCE OF  
AMENDMENT RE: TECHNICAL SPECIFICATION 4.1.4 REGARDING CORE  
SPRAY INSTRUMENTATION (TAC NO. MC9626)

Dear Mr. O'Connor:

The Commission has issued the enclosed Amendment No. 192 to Facility Operating License No. DPR-63 for the Nine Mile Point Nuclear Station, Unit No. 1 (NMP-1). The amendment consists of changes to the Technical Specifications (TSs) in response to your application transmitted by letter dated December 16, 2005, as supplemented by letter dated October 25, 2006.

The amendment revises TS Surveillance Requirement 4.1.4d by relocating the periodic checking, calibration and testing requirements for the core spray header differential pressure instrumentation to the Updated Final Safety Analysis Report.

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

Sincerely,

*/RA/*

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

Docket No. 50-220

Enclosures:

1. Amendment No. 192 to DPR-63
2. Safety Evaluation

cc w/encls: See next page

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Package No.: ML070080053  
Amendment No.: ML063610033

OFFICE	LPLI-1\PM	LPLI-1\LA	EICA/BC*	OGC	LPLI-1/BC(A)
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DATE	01/26/07	1/18/07	12/15/06	1/29/07	1/30/07

\*SE transmitted by memo dated 12/15/2006.

OFFICIAL RECORD COPY

DATED: January 31, 2007

AMENDMENT NO. 192 TO FACILITY OPERATING LICENSE NO. DPR-63 NINE MILE POINT  
UNIT NO. 1

PUBLIC

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SLittle

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DPickett

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GHill (2)

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AHowe

RidsNrrDeEica

RBeacom

BSingal

RidsNrrDpr

ACRS

RidsNrrAcrsAcnwMailCenter

BMcDermott, RI

RidsRgn1MailCenter

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NINE MILE POINT NUCLEAR STATION, LLC (NMPNS)

DOCKET NO. 50-220

NINE MILE POINT NUCLEAR STATION, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 192  
License No. DPR-63

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by Nine Mile Point Nuclear Station, LLC (the licensee) dated December 16, 2005, as supplemented by letter dated October 25, 2006, 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 Facility Operating License No. DPR-63 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, which is attached hereto, as revised through Amendment No. 192, is hereby incorporated into this license. Nine Mile Point Nuclear Station, LLC shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance and shall be implemented within 60 days.

FOR THE NUCLEAR REGULATORY COMMISSION

*/RA/*

Douglas V. Pickett, Acting Chief  
Plant Licensing Branch I-1  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Attachment:  
Changes to the License and Technical  
Specifications

Date of Issuance: January 31, 2007

ATTACHMENT TO LICENSE AMENDMENT NO. 192

TO FACILITY OPERATING LICENSE NO. DPR-63

DOCKET NO. 50-220

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

Remove Page

55

Insert Page

55

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 192 TO FACILITY OPERATING LICENSE NO. DPR-63  
NINE MILE POINT NUCLEAR STATION, LLC (NMPNS)  
NINE MILE POINT NUCLEAR STATION UNIT NO. 1  
DOCKET NO. 50-220

## 1.0 INTRODUCTION

By letter dated December 16, 2005 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML053620288), as supplemented by letter dated October 25, 2006 (ADAMS Accession No. ML063070132), Nine Mile Point Nuclear Station, Unit 1 (NMP-1, the licensee) submitted a request for changes to the NMP-1 Technical Specifications (TSs). The requested changes would revise TS Surveillance Requirement (SR) 4.1.4d by relocating the periodic checking, calibration and testing requirements for the core spray header differential pressure ( $\Delta P$ ) instrumentation to licensee-controlled documents. This is consistent with the Standard Technical Specifications (STS), also known as the Improved Standard Technical Specifications, NUREG-1433, "STS, General Electric Plants, Boiling Water Reactor (BWR/4)," Revision 3, dated March 2004. By letter dated October 25, 2006, after a Nuclear Regulation Commission (NRC) staff verbal request, NMP-1 stated these requirements will be relocated to the NMP-1 Updated Final Safety Analysis Report (UFSAR). The TS Bases will be revised consistent with the proposed changes to the TSs. The TS Bases changes were provided for information only and do not require NRC approval.

The supplemental letter dated October 25, 2006, 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 March 28, 2006 (71 FR 15484).

## 2.0 REGULATORY EVALUATION

Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.36 provides the regulatory requirements for the contents of a licensee's TSs. 10 CFR Section 50.36 states, in part, that the TSs will include SRs to assure that the quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation (LCOs) will be met.

This regulation also requires that the TSs include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) LCOs; (3) SRs; (4) design features; and (5) administrative controls. However, the regulation does not specify the particular requirements to be included in a plant's TSs.

The proposed change to TS SR 4.1.4d relocates the surveillance testing requirements for the core spray header  $\Delta P$  instrumentation to the NMP-1 UFSAR. SR 4.1.4d currently requires that the core spray header  $\Delta P$  instrumentation be periodically tested such that a check of each sensor is performed at least once each day and each channel is calibrated and tested at least once every 3 months. The proposed change will allow future changes to these SRs to be controlled in accordance with 10 CFR 50.59, the change control process for the UFSAR.

Moving SR 4.1.4d to the UFSAR is consistent with the NRC issued Improved STSs in NUREG-1433, "STS, General Electric Plants, BWR/4" which does not include alarm-only equipment as necessary to support the operability of the core spray system.

Precedent changes have been approved by the NRC for plants revising their TSs based on NUREG-1433, which resulted in the core spray  $\Delta P$  instrumentation being moved to the licensee-controlled documents. This includes the Peach Bottom Nuclear Generating Station (ADAMS Accession No. ML011510084) and Edwin I. Hatch Nuclear Plant (ADAMS Accession No. ML013060412). Also, a change for James A. Fitzpatrick Nuclear Power Plant (ADAMS Accession No. ML010960408) was incorporated as part of a TS specific amendment moving various functions, including the core spray  $\Delta P$  instrumentation, from the TSs to a licensee-controlled document.

### 3.0 TECHNICAL EVALUATION

The licensee proposed deleting the periodic checking, calibration and testing requirements for the core spray header  $\Delta P$  instrumentation from TS SR 4.1.4d stating that these functions do not satisfy the criteria of 10 CFR 50.36 for inclusion in the TSs.

The core spray system, in conjunction with the automatic depressurization system, is one of the standby emergency core cooling systems for removal of decay heat from the reactor fuel assemblies in the event of a loss-of-coolant-accident (LOCA). The purpose of the core spray header  $\Delta P$  instrumentation is to monitor the integrity of the core spray piping between the core shroud and the reactor vessel by measuring the  $\Delta P$  between the top of the core support plate and the ring header. An alarm alerts the operator of the significant pipe break condition when the measured  $\Delta P$  exceeds the alarm setpoint value. The core spray system, including the core spray header  $\Delta P$  instrumentation, is described in Section VII-A, "Core Spray System," of the UFSAR.

The four criteria for inclusion of a requirement as a LCO in the TSs are set forth in 10 CFR 50.36(c)(2)(ii). These criteria are applied to the core spray header  $\Delta P$  instrumentation as follows:

*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.*

The core spray header  $\Delta P$  instrumentation monitors the integrity of the core spray piping within the reactor pressure vessel. It was not designed to detect leakage outside of the reactor coolant pressure boundary. Therefore, the core spray header  $\Delta P$  instrumentation is not required to assure core spray system operability as currently defined in TS 3.1.4 and does not meet Criterion 1 for retention in the TSs.

*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.*

The accident/transient analyses that could challenge the integrity of a fission product barrier when the core spray system is required to be operable are the main steam line break accident, LOCA, refueling accident, and control rod drop accident (per UFSAR, Section XV-C).

The operation of the core spray header  $\Delta P$  instrumentation or actuation of the alarm at its setpoint is not an initial condition or assumption of these analyses. Therefore, the core spray header  $\Delta P$  instrumentation is not required to assure core spray system operability as currently defined in TS 3.1.4 and does not meet Criterion 2 for retention in the TSs.

*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.*

As discussed in the analysis for Criterion 2, operation of the core spray header  $\Delta P$  instrumentation is not an assumption of the analyses for the accidents/transients that could challenge the integrity of a fission product barrier. As such, the core spray header  $\Delta P$  instrumentation is not part of a success path for the mitigation of the analyzed accidents/transients. Therefore, the core spray header  $\Delta P$  instrumentation is not required to assure core spray system operability as currently defined in TS 3.1.4 and does not meet Criterion 3 for retention in the TSs.

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

The unavailability of the core spray header  $\Delta P$  instrumentation does not directly affect the capability of the core spray systems to perform their intended safety functions. Furthermore, this instrumentation does not contribute to the probability of a LOCA and does not impact core damage frequency or large radionuclide releases. Therefore, the core spray header  $\Delta P$  instrumentation is not required to assure core spray system operability as currently defined in TS 3.1.4 and does not meet Criterion 4 for retention in the TSs.

In summary, the unavailability of the core spray header  $\Delta P$  instrumentation does not degrade the quality or performance of the core spray systems to mitigate an accident or assure operation within the safety limits. Moreover, the licensee has stated that the availability of the instrumentation is not an initial condition of any accident or transient analysis described in the UFSAR, nor is the instrumentation used to initiate actions in the emergency operating procedures.

As a result of comparing TSs to this criteria, existing TS requirements that fall within or satisfy any of the criteria of 10 CFR 50.36 must be retained in the TSs. Those TS requirements that do not fall within or satisfy these criteria may be relocated to other licensee-controlled documents.

The functions to be relocated only produce control room alarms, which are not relied upon for the detection of any transient or degradation of the reactor coolant pressure boundary. The

NRC staff finds this consistent with the Improved STSs in NUREG-1433. The operability requirements for these functions will be relocated to the NMP-1 UFSAR. Any future change to the design or SRs of these trip functions will be controlled under the requirements of 10 CFR 50.59. The NRC staff finds the proposed changes to be acceptable, since they are consistent with the standard established by NUREG-1433 and are not otherwise required by 10 CFR 50.36.

#### 4.0 STATE CONSULTATION

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

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to 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 (71 FR 15484). 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 staff 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. Beacom

Date: January 31, 2007