



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

December 10, 2014

Mr. Christopher Costanzo
Site Vice President
Nine Mile Point Nuclear Station, LLC
P.O. Box 63
Lycoming, NY 13093

SUBJECT: NINE MILE POINT NUCLEAR STATION, UNIT NO. 1 - REQUEST FOR
ADDITIONAL INFORMATION REGARDING THE DIESEL GENERATOR
INITIATION – DEGRADED VOLTAGE TIME DELAY SETTING CHANGE
LICENSE AMENDMENT REQUEST (TAC NO. MF1022)

Dear Mr. Costanzo:

By letter dated March 8, 2013, as supplemented by letters dated May 16, 2013, July 8, and July 16, 2014, Nine Mile Point Nuclear Station, LLC submitted a license amendment request for Nine Mile Point Nuclear Station, Unit No. 1. The proposed amendment would modify Technical Specification Table 3.6.2i, "Diesel Generator Initiation," by revising the existing 4.16kV Power Board 102/103 Emergency Bus Under-voltage (Degraded Voltage) Operating Time value and updating the Set Point heading title.

The Nuclear Regulatory Commission (NRC) staff has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information (RAI). The NRC staff is requesting a response to the RAI within 45 days of the date of this letter.

If you have any questions regarding this matter, please contact me at (301) 415-1016.

Sincerely,

A handwritten signature in black ink that reads "Nadiyah S. Morgan".

Nadiyah S. Morgan, Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-220

Enclosure:
As stated

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REQUEST FOR ADDITIONAL INFORMATION
REGARDING DIESEL GENERATOR INITIATION –
DEGRADED VOLTAGE TIME DELAY SETTING CHANGE
LICENSE AMENDMET REQUEST
NINE MILE POINT NUCLEAR STATION, LLC
NINE MILE POINT NUCLEAR STATION, UNIT NO. 1
DOCKET NO. 50-220

By letter dated March 8, 2013 (Agencywide Documents Access & Management System (ADAMS) ML13073A103), Nine Mile Point Nuclear Station, LLC, the licensee, submitted a license amendment request (LAR) for Nine Mile Point Nuclear Station, Unit No. 1 (NMP1). The proposed amendment would modify Technical Specification (TS) Table 3.6.2i, "Diesel Generator Initiation," by revising the existing 4.16kV Power Board 102/103 Emergency Bus Under-voltage (Degraded Voltage) Operating Time value and updating the Set Point heading title. By letter dated May 16, 2013 (ADAMS Accession No. ML13144A068), the licensee submitted their response to the Nuclear Regulatory Commission (NRC) staff's request for supplemental information, required to complete the Acceptance Review in accordance with LIC-109. In addition, by letters dated July 8 (ADAMS Accession No. ML14203A050) and July 16, 2014 (ADAMS Accession No. ML14199A384), the licensee submitted responses to the NRC staff's requests for additional information and to confirm the results of the preliminary study referenced in the May 16, 2013, letter. Additionally, the NRC staff performed a Component Design Basis Inspection (CDBI) inspection at NMP1 and NMP2 from September 8, 2014, to October 10, 2014, and the licensee was made aware of its findings in the exit meeting on October 10, 2014. The Inspection Report No. 05000220/2014007 dated November 20, 2014, (ADAMS Accession No. ML14325A019) documents the findings.

The NRC staff has determined that the following information is needed to complete its review:

Inspection Report No. 05000220/2014007 describes the following findings/violations for NMP1 with respect to the failure to implement design control measures to verify that the connected Class 1E loads would not be damaged or become unavailable for a design-basis loss-of-coolant (LOCA) coincident with a sustained degraded voltage condition:

Enclosure

1. Failure to adequately evaluate the transient voltages to the Class 1E accident initiated motors and motor operated valves (MOVs) on the-safety related buses and motor control centers (MCCs). Specifically, the licensee's calculations incorrectly used 115 kilovolts (kV) grid voltage instead of incorporating the 3.5% grid voltage sag into calculation NIMO-ELMS-AC01. Consequently, the licensee did not verify and assure adequate voltages would be available to Unit 1 Class 1E accident initiated motors, MOVs, and control circuits powered from the 4160 V, 600 V, and 120 V distribution systems during a design-basis LOCA with subsequent unit trip and resulting sag of the 115 kV grid.
2. The inspection team noted that NMP1 electrical design calculations had not evaluated for the following conditions:
 - a. Connected Class 1E loads would not be degraded or rendered inoperable for a design-basis LOCA and a sustained degraded voltage condition between the degraded voltage dropout setting (3705 V) and the loss of voltage setting (3200 V) for the degraded voltage time delay of 21 +/- 3 seconds and subsequent reconnection to the emergency diesel generator.
 - b. Safety-related equipment that is operating or safety-related loads that are required to start (motors, MOVs, etc.) had not been evaluated to ensure that their protective devices would not actuate during a sustained degraded grid condition coincident with a design-basis LOCA.

For the conditions identified above, the required equipment may not be available after transfer of safety busses to the onsite power sources.

1. For CDBI finding 1 above, provide a summary of the preliminary evaluations provided during the CDBI to verify that the critical Class 1E loads that operate during the first 24 seconds of a LOCA would not be damaged or become unavailable for a design basis LOCA coincident with a sustained degraded voltage condition. Clearly identify each input and assumption used for each preliminary evaluation, including load tap changer performance during the 24 second period.
2. For CDBI finding 2 above, provide a summary of preliminary evaluations performed to evaluate conditions 2.a and 2.b described above. Clearly identify each input and assumption used for each associated preliminary evaluation.
3. For CDBI findings 1 and 2 above, please provide corrective actions planned and taken, including the review of the extent-of-condition for components required during a LOCA.

December 10, 2014

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Site Vice President
Nine Mile Point Nuclear Station, LLC
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SUBJECT: NINE MILE POINT NUCLEAR STATION, UNIT NO. 1 - REQUEST FOR ADDITIONAL INFORMATION REGARDING THE DIESEL GENERATOR INITIATION – DEGRADED VOLTAGE TIME DELAY SETTING CHANGE LICENSE AMENDMENT REQUEST (TAC NO. MF1022)

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/RA/

Nadiyah S. Morgan, Project Manager
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ADAMS ACCESSION NO: ML14342A097

*by email

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DATE	12/09/2014	12/08/2014	12/04/2014	12/10/2014

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