



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

June 26, 2009

Mr. Michael D. Wadley
Site Vice President
Prairie Island Nuclear Generating Plant
Northern States Power Company - Minnesota
1717 Wakonade Drive East
Welch, MN 55089

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2 -
REQUEST FOR ADDITIONAL INFORMATION RELATED TO LICENSE
AMENDMENT REQUEST FOR TECHNICAL SPECIFICATIONS CHANGES TO
REVISE EMERGENCY DIESEL GENERATOR TEST LOADS IN
SURVEILLANCE REQUIREMENT (SR) 3.8.1.3 AND SR 3.8.1.9
(TAC NOS. ME0086 AND ME0087)

Dear Mr. Wadley:

By letter to the U.S. Nuclear Regulatory Commission (NRC) dated November 4, 2008, Northern States Power Company, a Minnesota corporation (the licensee), doing business as Xcel Energy, submitted a request for Technical Specification (TS) changes to revise emergency diesel generator test loads in TS Surveillance Requirement (SR) 3.8.1.3 and SR 3.8.1.9 for the Prairie Island Nuclear Generating Plant, Units 1 and 2.

The NRC staff is reviewing your submittal and has determined that additional information is required to complete the review. The specific information requested is addressed in the enclosure to this letter. During a discussion with your staff on June 25, 2009, it was agreed that you would provide a response by August 14, 2009.

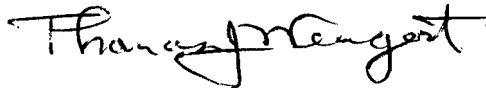
The NRC staff considers that timely responses to requests for additional information help ensure sufficient time is available for staff review and contribute toward the NRC's goal of efficient and

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effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-4037.

Sincerely,

A handwritten signature in black ink, appearing to read "Thomas J. Wengert". The signature is written in a cursive style with a horizontal line extending to the left.

Thomas J. Wengert, Senior Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-282 and 50-306

Enclosure:
Request for Additional Information

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REQUEST FOR ADDITIONAL INFORMATION

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNITS 1 AND 2

DOCKET NOS. 50-282 AND 50-306

In reviewing the Northern States Power Company, a Minnesota corporation (NSPM, the licensee), doing business as Xcel Energy, submittal dated November 04, 2008 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML083110125), which requested Technical Specification (TS) changes to revise emergency diesel generator test loads in TS Surveillance Requirement (SR) 3.8.1.3 and SR 3.8.1.9 for the Prairie Island Nuclear Generating Plant, Units 1 and 2 (PINGP), the U.S. Nuclear Regulatory Commission (NRC) staff has determined that the following information is needed to complete its review:

Background

Page 15 of 30 of the license amendment request (LAR) dated November 04, 2008, states:

"The design report did invoke Regulatory Guide (RG) 1.9, "Selection, Design and Qualification of Diesel Generator Units Used As Standby (On-site) Electric Power Systems at Nuclear Power Plants", Revision 2, December 1979, and RG 1.108, "Periodic Testing of Diesel Units Used As On-site Electric Power Systems at Nuclear Power Plants", Revision 1, August 1977; however, they were applied for design purposes and not committed to for operation or surveillance testing. The LAR which incorporated D5 and D6, Reference 7, submitted March 20, 1992, did not reference any regulatory guidance as the basis for the proposed emergency diesel generator (EDG) surveillance requirements. Likewise, license amendments 103 and 96, Reference 3, which approved use of D5 and D6 did not cite any regulatory guidance as the basis [for] the EDG surveillance test requirements."

The NRC staff has identified the following documents that demonstrate that the licensee intends to comply with RG 1.9:

1. Page 8.4-9 of Revision 29 of the PINGP Updated Safety Analyses Report (USAR) states that the Unit 2 EDGs meet the requirements of RG 1.9, Revision 2, except portions of the 1984 Edition of the Institute of Electrical and Electronics Engineers, Inc. (IEEE) Standard 387 were implemented in the factory testing.

RG 1.9 Revision 2 provides testing guidelines. Specifically, Section C Position 14 states: "Load equal to the continuous rating [of EDG] should be applied for the time required to reach engine temperature equilibrium, at which time, the rated short-time load should be applied for a period of two hours. Immediately following the 2-hour short-time load test, load equal to the continuous rating should be applied for 22 hours." The PINGP USAR does not take exception to any sections of RG 1.9, Revision 2.

2. The LAR submitted to the NRC on October 29, 2007 (ADAMS Accession No. ML073020289) to add power factor testing to the EDG 24-hour test cites the following:

Enclosure

The proposed TS change is consistent with the guidance provided in NUREG-1431, "Standard Technical Specifications, Westinghouse Plants", Revision 3.1 (NUREG-1431), SR 3.8.1.14. This change is acceptable because it is more restrictive than the current TS and is consistent with the intent of Regulatory Guide (RG) 1.9, "Application and Testing of Safety-Related Diesel Generators in Nuclear Power Plants", Revision 4 (RG 1.9).

3. The LAR submitted to the NRC on August 16, 2007 (ADAMS Accession No. ML072320401) to Increase the Unit 1 EDG Monthly Test Load identified RG 1.9 Rev. 4 as "Applicable Regulatory Requirements/Criteria" and specifically cited consistency with the guidance of RG 1.9, Revision 4, Section C, Regulatory Position 2.2.3, "Load Run (Load Acceptance) Test."

4. Nuclear Management Company, LLC (NMC) (a predecessor license holder to NSPM) submitted a LAR for extension of TS 3.8.1, "AC Sources-Operating," Emergency Diesel Generator Completion Time, dated November 21, 2005 (ADAMS Accession No. ML053260088). Page 32 of 33 of this application provides the following information in section 5.2 "Applicable Regulatory Requirements/Criteria":

- Regulatory Guide 1.9, "Selection, Design and Qualification of Diesel Generator Units Used as Standby (Onsite) Electric Power Systems at Nuclear Power Plants."

This Regulatory Guide describes an acceptable basis for the selection of diesel generator sets of sufficient capacity and margin to implement 10 CFR 50 Appendix A General Design Criterion 17. The changes proposed in the license amendment request will allow an emergency diesel generator to be inoperable for 14 days (7 days more than the current Technical Specifications allow). These changes do not impact the capacity or margin of the emergency diesel generators; thus this license amendment request does not change the plant compliance with this Regulatory Guide.

5. The NRC staff issued PINGP License Amendment Nos. 103 and 96 dated December 17, 1992 (ADAMS Accession No. ML022240504) based on the testing frequency and parameters submitted by the licensee in the amendment request dated March 20, 1992. The NRC staff approval of the amendment request delineates that TS section 4.6.A.3.c is revised to add 18-month full load carrying capacity tests of each EDG for an interval of not less than 24 hours, of which 2 hours are at a load equal to 105 -110 percent of the continuous rating of an EDG and 22 hours are at a load equal to 90 -100 percent of the continuous rating. This is in compliance with RG 1.9 Revision 2. The TS Basis document included with the submittal cites RG 1.9 as a compliance guide. The proposed test values satisfy the intent of RG 1.9 Revision 2 Section C Position 14. The NRC staff noted in the safety evaluation that the allowed outage time for the EDG was not reduced from seven days to the (then existing) criterion of three days due to the diversity in design and ratings provided by the D5 and D6 EDGs, and the increased reliability of the onsite power supply.

Request for Additional Information

In order for the NRC staff to complete its review of the amendment request, the following additional information is required.

1. Describe the differences between the apparent compliance with RG 1.9 cited in the above examples of LARs and the statements made in the proposed LAR dated November 04, 2008. Specifically, describe how the proposed changes for reducing the 2 hour and the 22 hour testing ranges for EDGs D5 and D6 maintain compliance with the requirements of RG 1.9.
2. On page 15 of 30 of the LAR, the licensee provides a discussion on why this proposed amendment "... does not involve a re-rate or de-rate ..." of the D5 and D6 EDGs at PINGP Unit 2. Provide an evaluation of the consequences of permanently de-rating EDGs D5 and D6 to comply with the testing requirement of RG 1.9, as well as enveloping the worst case accident load profile.
3. The discussion in the LAR indicates that the reliability of EDGs D5 and D6 has been impacted by the TS required load testing. Provide details for EDG target reliability assumed for compliance with 10 CFR 50.63 (Station Blackout Rule) and the reliability indicator for the last 20, 50, and 100 demands.

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effective use of staff resources. If circumstances result in the need to revise the requested response date, please contact me at (301) 415-4037.

Sincerely,

/RA/

Thomas J. Wengert, Senior Project Manager
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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Enclosure:
Request for Additional Information

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ADAMS Accession Number: ML091540227

OFFICE	LPL3-1/PM	LPL3-1/LA	NRR/DE/EEEE/BC	LPL3-1/BC
NAME	TWengert	BTully	GWilson	LJames
DATE	06/22/09	06/22/09	06/25/09	06/26/09

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