



MAR 30 2010

L-PI-10-023  
10 CFR 50.90

U S Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Prairie Island Nuclear Generating Plant Units 1 and 2  
Dockets 50-282 and 50-306  
License Nos. DPR-42 and DPR-60

Supplement to License Amendment Request (LAR) to Revise Emergency Diesel Generator (EDG) Test Loads in Surveillance Requirement (SR) 3.8.1.3 and SR 3.8.1.9 (TAC Nos. ME0086, ME0087)

Reference: 1. Northern States Power Company, a Minnesota corporation (NSPM), doing business as Xcel Energy, letter to US Nuclear Regulatory Commission (NRC), "License Amendment Request (LAR) to Revise Emergency Diesel Generator (EDG) Test Loads in Surveillance Requirement (SR) 3.8.1.3 and SR 3.8.1.9", dated November 4, 2008, Accession Number ML083110125.

In Reference 1, NSPM submitted an LAR for the Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2 requesting revisions to the Technical Specifications (TS) for PINGP to increase the 24 month test load for the Unit 1 EDGs, D1 and D2, reduce the monthly test load for the Unit 2 EDGs, D5 and D6, and reduce the 24 month test loads for the Unit 2 EDGs. NSPM requests that the LAR be split with some portions continuing in NRC review and other portions withdrawn from further NRC review. NSPM submits this supplement in accordance with the provisions of 10 CFR 50.90.

The LAR to revise EDG test loads in SR 3.8.1.3 and SR 3.8.1.9 proposed four testing changes for the EDGs: (1) reduce the Unit 2 EDG monthly test load requirements in SR 3.8.1.3.b; (2) reduce the lower test limit in the two hour portion of the Unit 2 EDG 24-month test load requirements in SR 3.8.1.9.a; (3) increase the test load in the remaining hours test portion of the Unit 1 EDG 24-month test in SR 3.8.1.9.b; and, (4) reduce test load in the remaining hours test portion of the Unit 2 EDG 24-month test in SR 3.8.1.9.b. NSPM requests withdrawal of proposed changes (1) and (4) from further NRC review. NSPM also requests the NRC to continue reviewing proposed changes (2) and (3). Specific guidance on the portions of the LAR on which continuing review is requested and the portions withdrawn is provided in Enclosure 1 to this letter.

The supplemental information provided in this letter does not impact the conclusions of the Determination of No Significant Hazards Consideration and Environmental Assessment presented in the November 4, 2008 submittal as supplemented August 10, 2009.

In accordance with 10 CFR 50.91, NSPM is notifying the State of Minnesota of this LAR supplement by transmitting a copy of this letter and Enclosure 1 to the designated State Official.

If there are any questions or if additional information is needed, please contact Mr. Dale Vincent, P.E., at 651-388-1121.

Summary of Commitments

The commitment proposed in the Reference 1 cover letter is withdrawn. This letter contains no new commitments.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on **MAR 30 2010**



Mark A. Schimmel  
Site Vice President  
Prairie Island Nuclear Generating Plant, Units 1 and 2  
Northern States Power Company - Minnesota

Enclosures (1)

cc: Administrator, Region III, USNRC  
Project Manager, PINGP, USNRC  
Resident Inspector, PINGP, USNRC  
State of Minnesota

## Enclosure 1

In Reference 1, Northern States Power, a Minnesota corporation (NSPM), proposed four changes to the Prairie Island Nuclear Generating Plant (PINGP) Technical Specifications (TS) related to emergency diesel generator (EDG) testing: (1) reduce the Unit 2 EDG monthly test load requirements in surveillance requirement (SR) 3.8.1.3.b to 4000 kW; (2) reduce the lower test limit in the two hour portion of the Unit 2 EDG 24-month test load requirements in SR 3.8.1.9.a to 5400 kW; (3) increase the test load in the remaining hours test portion of the Unit 1 EDG 24-month test in SR 3.8.1.9.b to 2500 kW; and, (4) reduce test load in the remaining hours test portion of the Unit 2 EDG 24-month test in SR 3.8.1.9.b to 4000 kW.

NSPM proposes to split the license amendment request in Reference 1 by requesting the NRC to continue review of changes (2) and (3) and withdrawing changes (1) and (4). Attachments 1, 2 and 3 to this enclosure provide a marked up TS page, a marked up Bases page, and a final TS page, respectively, for the NRC continuing review of proposed changes (2) and (3) and supersede in their entirety the TS and Bases changes proposed in Reference 1.

The enclosure to Reference 1 provided the licensee's evaluation of the four proposed changes. With the split of the Reference 1 license amendment request (LAR), NSPM requests the enclosure to Reference 1 to be considered modified as follows.

### Section 1. **SUMMARY DESCRIPTION**

Disregard the discussion of SR 3.8.1.3 and reduction of the remainder of the 24-hour test load for Unit 2 EDGs.

### Section 2. **DETAILED DESCRIPTION**

#### Subsection **2.1 Proposed Changes**

Disregard the first and fourth inset paragraphs.

#### Subsection **2.2 Background**

Disregard the discussion of testing at 4000 kW or testing greater than or equal to 4000 kW in the fifth paragraph (next to last paragraph in this section on page 4 of 30).

### Section 3. **TECHNICAL EVALUATION**

Under subheading: Proposed Surveillance Requirement changes and benefits

Disregard the discussion of SR 3.8.1.3 starting at the bottom of page 7 of 30 and ending on page 8 of 30.

Under SR 3.8.1.9, starting on page 8 of 30 and ending on page 9 of 30, disregard discussions of testing at 4000 kW (see Attachments 1 and 3 to this enclosure for the proposed TS changes for which continuing review is requested).

Under subheading: Technical basis for changes

Disregard the discussion of **Changes to SR 3.8.1.3** starting on page 10 of 30 and ending on page 16 of 30.

Under **Changes to SR 3.8.1.9**, in the third paragraph on page 17 of 30, disregard the discussion of continuous run load of greater than or equal to 4000 kW. Disregard the first paragraph at the top of page 18 of 30.

Under subheading: Conclusions

Disregard the first and second paragraphs. Disregard the discussion and considerations in the fourth paragraph (last paragraph on page 18 of 30) relating to testing at or above 4000 kW.

#### Section 4. **REGULATORY SAFETY ANALYSIS**

##### Subsection **4.1 Applicable Regulatory Requirements/Criteria**

Under subheading: Title 10 Code of Federal Regulations 50.36, "Technical specifications"

Disregard discussions of SR 3.8.1.3 and testing at 4000 kW in the first, second (on page 19 of 30) and third (top of page 20 of 30) paragraphs.

Under subheading: Title 10 Code of Federal Regulations 50.63, "Loss of all alternating current power"

Disregard discussions of SR 3.8.1.3 and testing at 4000 kW in the fourth paragraph (top of page 21 of 30).

Under subheading: General Design Criteria

Disregard discussions of SR 3.8.1.3 and testing at 4000 kW in the third inset paragraph (bottom of page 21 of 30 continuing to top of page 22 of 30).

Under subheading: Regulatory Guide 1.9, Revision 4, "Application and Testing of Safety-Related Diesel Generators in Nuclear Power Plants", March 2007 (RG 1.9)

In the first paragraph, disregard the discussion of a commitment. With the LAR split proposed in this letter and enclosure, a testing commitment is not needed and is withdrawn.

Under subheading: NUREG-1431 Standard Technical Specifications, Westinghouse Plants, Revision 3.0, Surveillance Requirement 3.8.1.3

Disregard all discussion.

#### Subsection **4.2 Precedent**

Disregard all discussion.

#### Subsection **4.3 Significant Hazards Consideration**

Disregard the discussion of reducing Unit 2 EDG monthly test loading and the remainder of the 24-hour test at or above 4000 kW in the first paragraph under each question. The considerations and conclusions of this subsection remain applicable.

### Section 6. **REFERENCES**

Disregard references 5 and 6.

#### References

1. NSPM letter to the NRC, "License Amendment Request (LAR) to Revise Emergency Diesel Generator (EDG) Test Loads in Surveillance Requirement (SR) 3.8.1.3 and SR 3.8.1.9", dated November 4, 2008, Accession Number ML083110125.

**ENCLOSURE, ATTACHMENT 1**

**Technical Specification Pages (Markup)**

3.8.1-9

1 page follows

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.9 -----NOTES-----</p> <ol style="list-style-type: none"> <li>1. Momentary transients outside the load and power factor ranges do not invalidate this test.</li> <li>2. If performed with DG synchronized with offsite power, it shall be performed at a power factor <math>\leq 0.85</math>. However, if grid conditions do not permit, the power factor limit is not required to be met. Under this condition the power factor shall be maintained as close to the limit as practicable.</li> </ol> <p>-----</p> <p>Verify each DG operates for <math>\geq 24</math> hours:</p> <ol style="list-style-type: none"> <li>a. For <math>\geq 2</math> hours loaded:               <ul style="list-style-type: none"> <li>Unit 1 <math>\geq 2832</math> kW, and <math>\leq 3000</math> kW</li> <li>Unit 2 <math>\geq 5400</math><del>5562</del> kW, and <math>\leq 5940</math> kW; and</li> </ul> </li> <li>b. For the remaining hours of the test loaded:               <ul style="list-style-type: none"> <li>Unit 1 <math>\geq 2500</math><del>2475</del> kW, and</li> <li>Unit 2 <math>\geq 4860</math> kW; and</li> </ul> </li> <li>c. Achieves steady state voltage <math>\geq 3740</math> V and <math>\leq 4580</math> V; and frequency <math>\geq 58.8</math> Hz and <math>\leq 61.2</math> Hz.</li> </ol>	<p>24 months</p>

**ENCLOSURE, ATTACHMENT 2**

**Bases Pages (Markup)**

(For Information Only)

B 3.8.1-20

1 page follows

BASES

---

SURVEILLANCE  
REQUIREMENTS

SR 3.8.1.8 (continued)

The noncritical trips are bypassed during DBAs and provide an alarm on an abnormal engine condition. This alarm provides the operator with sufficient time to react appropriately. The DG availability to mitigate the DBA is more critical than protecting the engine against minor problems that are not immediately detrimental to emergency operation of the DG.

The Frequency is modified by a Note which allows the SR 3.0.2 interval extension (1.25 times the specified interval) to be applied to the interval for this SR, that is, this SR may be performed at an interval up to 30 months within the guidance of SR 3.0.2 for interval extensions. This is an exception to the limitations stated in SR 3.0.2 for SRs with a 24 month Frequency. The 24 month Frequency is based on engineering judgment, taking into consideration unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths. Operating experience has shown that these components usually pass the SR when performed at the 24 month Frequency. Therefore, the Frequency was concluded to be acceptable from a reliability standpoint.

SR 3.8.1.9

Demonstrate once per 24 months that the DGs can start and run continuously at full load capability for an interval of not less than 24 hours,  $\geq 2$  hours of which is at a load equivalent to 103 - 110% (100 - 110% for Unit 2) of the continuous duty rating and the remainder of the time at a load equivalent to the continuous duty rating of the DG. The DG starts for this Surveillance can be performed either from standby or hot conditions. The provisions for prelubricating and warmup, discussed in SR 3.8.1.2, and for gradual loading, discussed in SR 3.8.1.3, are applicable to this SR.

**ENCLOSURE, ATTACHMENT 3**

**Technical Specification Pages (Retyped)**

3.8.1-9

1 page follows

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.9 -----NOTES-----</p> <ol style="list-style-type: none"> <li>1. Momentary transients outside the load and power factor ranges do not invalidate this test.</li> <li>2. If performed with DG synchronized with offsite power, it shall be performed at a power factor <math>\leq 0.85</math>. However, if grid conditions do not permit, the power factor limit is not required to be met. Under this condition the power factor shall be maintained as close to the limit as practicable.</li> </ol> <p>-----</p> <p>Verify each DG operates for <math>\geq 24</math> hours:</p> <ol style="list-style-type: none"> <li>a. For <math>\geq 2</math> hours loaded:           <ul style="list-style-type: none"> <li>Unit 1 <math>\geq 2832</math> kW, and <math>\leq 3000</math> kW</li> <li>Unit 2 <math>\geq 5400</math> kW, and <math>\leq 5940</math> kW; and</li> </ul> </li> <li>b. For the remaining hours of the test loaded:           <ul style="list-style-type: none"> <li>Unit 1 <math>\geq 2500</math> kW, and</li> <li>Unit 2 <math>\geq 4860</math> kW; and</li> </ul> </li> <li>c. Achieves steady state voltage <math>\geq 3740</math> V and <math>\leq 4580</math> V; and frequency <math>\geq 58.8</math> Hz and <math>\leq 61.2</math> Hz.</li> </ol>	<p>24 months</p>