



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

October 22, 2010

Mr. Mark A. Schimmel
Site Vice President
Prairie Island Nuclear Generating Plant
Northern States Power Company - Minnesota
1717 Wakonade Drive East
Welch, MN 55089-9642

SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1 - ISSUANCE OF
EXIGENT AMENDMENT RE: TECHNICAL SPECIFICATION SURVEILLANCE
REQUIREMENT 3.8.1.10 (TAC NO. ME4871)

Dear Mr. Schimmel:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 198 to Facility Operating License No. DPR-42 for the Prairie Island Nuclear Generating Plant (PINGP), Unit 1. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated October 14, 2010, as supplemented by letters dated October 16, October 17, October 18, and October 20, 2010.

The amendment changes TS Surveillance Requirement (SR) 3.8.1.10(c), by allowing the PINGP Unit 1 12 Battery Charger to not be energized during the safety injection testing of emergency diesel generator D2, until a modification is completed during the Unit 1 2011 refueling outage. Prior to start up from the 2011 refueling outage, the 12 Battery Charger will be tested in accordance with SR 3.8.1.10(c).

A copy of the related Safety Evaluation (SE) is also enclosed. The SE describes the exigent circumstances under which the amendment was issued and the final determination of no significant hazards. A Notice of Issuance, addressing the final no significant hazards determination and opportunity for a hearing, will be included in the Commission's next regular biweekly *Federal Register* notice.

Sincerely,

A handwritten signature in black ink, reading "Thomas J. Wengert", is positioned above the typed name.

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

Docket No. 50-282

Enclosures:

1. Amendment No. 198 to DPR-42
2. Safety Evaluation

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

NORTHERN STATES POWER COMPANY - MINNESOTA

DOCKET NO. 50-282

PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 198
License No. DPR-42

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Northern States Power Company, a Minnesota Corporation (NSPM, the licensee), dated October 14, 2010, as supplemented by letters dated October 16, 17, 18, and 20, 2010, 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-42 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 198, are hereby incorporated in the license. NSPM 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 immediately upon NRC approval.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert J. Pascarelli, Chief
Plant Licensing Branch III-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Attachment: Changes to the Facility Operating License
and Technical Specifications

Date of Issuance: October 22, 2010

ATTACHMENT TO LICENSE AMENDMENT NO. 198

FACILITY OPERATING LICENSE NO. DPR-42

DOCKET NO. 50-282

Replace the following page of the Facility Operating License No. DPR-42 with the attached revised page. The changed area is identified by a marginal line.

REMOVE

INSERT

Page 3

Page 3

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

REMOVE

INSERT

3.8.1-10

3.8.1-10

- (4) Pursuant to the Act and 10 CFR Parts 30, 40, and 70, NSPM 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, NSPM to possess but not separate, such byproduct and special nuclear materials as may be produced by the operation of the facility;
- (6) Pursuant to the Act and 10 CFR Parts 30 and 70, NSPM to transfer byproduct materials from other job sites owned by NSPM for the purpose of volume reduction and decontamination.

C. This amended license shall be deemed to contain and is subject to the conditions specified in the following Commission regulations in 10 CFR Chapter I: Part 20, Section 30.34 of Part 30, Sections 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70; is subject to all applicable provisions of the Act and to 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

NSPM is authorized to operate the facility at steady state reactor core power levels not in excess of 1677 megawatts thermal.

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 198, are hereby incorporated in the license. NSPM shall operate the facility in accordance with the Technical Specifications.

(3) Physical Protection

NSPM shall fully implement and maintain in effect all provisions of the Commission-approved physical security, guard training and qualification, and safeguards contingency plans including amendments made pursuant to provisions of the Miscellaneous Amendments and Search Requirements revisions to 10 CFR 73.55 (51 FR 27817 and 27822) and to the authority of 10 CFR 50.90 and 10 CFR 50.54(p). The combined set of plans, which contains Safeguards Information protected under 10 CFR 73.21, is entitled: "Prairie Island Nuclear Generating Plant Security Plan, Training and Qualification Plan, Safeguards Contingency Plan, and Independent Spent Fuel Storage Installation Security Program," Revision 1, submitted by letters dated October 18, 2006, and January 10, 2007.

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.10 -----NOTES-----</p> <ol style="list-style-type: none"> 1. All DG starts may be preceded by an engine prelube period. 2. This Surveillance shall not be performed in MODE 1, 2, 3, or 4. 3. 12 Battery Charger not required to be energized in SR 3.8.1.10(c) until completion of Unit 1 2011 refueling outage.* <p>-----</p> <p>Verify on an actual or simulated loss of offsite power signal in conjunction with an actual or simulated safety injection actuation signal:</p> <ol style="list-style-type: none"> a. De-energization of emergency buses; b. Load shedding from emergency buses; and c. DG auto-starts from standby condition and energizes emergency loads in ≤ 60 seconds. 	<p>24 months</p>
<p>SR 3.8.1.11 -----NOTE-----</p> <p>All DG starts may be preceded by an engine prelube period.</p> <p>-----</p> <p>Verify on an actual or simulated loss of offsite power signal that the DG auto-starts from standby condition.</p>	<p>24 months</p>

*A modification will be installed during or prior to the Unit 1 2011 refueling outage to automatically shed the 12 Battery Charger from its normal bus and then automatically repower the charger from the bus within 60 seconds. Compliance with this SR will be demonstrated after implementation of the modification.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 198 TO FACILITY OPERATING LICENSE NO. DPR-42
NORTHERN STATES POWER COMPANY - MINNESOTA
PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1
DOCKET NO. 50-282

1.0 INTRODUCTION

By application dated October 14, 2010 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML102880105), as supplemented by letters dated October 16 (ADAMS Accession No. ML102910158), October 17 (ADAMS Accession No. ML102910564), October 18 (ADAMS Accession No. ML102930074), and October 20 (ADAMS Accession No. ML102930575), 2010, Northern States Power Company, a Minnesota Corporation (NSPM, the licensee), requested an exigent license amendment to change the Technical Specifications (TSs) for the Prairie Island Nuclear Generating Plant (PINGP), Unit 1. The proposed change would revise Technical Specification (TS) Surveillance Requirement (SR) 3.8.1.10(c), by allowing the PINGP Unit 1 12 Battery Charger to not be energized during the safety injection testing of D2 emergency diesel generator (EDG), until a modification is completed during the Unit 1 2011 refueling outage. Prior to start up from the 2011 refueling outage, the 12 Battery Charger will be tested in accordance with SR 3.8.1.10(c).

Specifically, a note (Note 3) will be added to SR 3.8.1.10 stating:

"12 Battery Charger not required to be energized in SR 3.8.1.10(c) until completion of Unit 1 2011 refueling outage*."

In addition, an accompanying footnote will be added to TS Page 3.8.1-10, stating:

"*A modification will be installed during or prior to the Unit 1 2011 refueling outage to automatically shed the 12 Battery Charger from its normal bus and then automatically repower the charger from the bus within 60 seconds. Compliance with this SR will be demonstrated after implementation of the modification."

In addition, the licensee has put interim compensatory measures in place to provide a reasonable assurance of the operability of the 12 Battery Charger and the D2 EDG.

The supplemental information dated October 16, 17, 18, and 20, 2010 contained clarifying information, did not change the scope of the October 14, 2010, application or the initial no significant hazards consideration determination.

Enclosure

2.0 EVALUATION

2.1 Electrical Engineering

2.1.1 Background

The licensee provided the following background for the license amendment request (LAR):

On June 24, 2010, PINGP Engineering staff identified a testing configuration that could prevent D2 EDG and 12 Battery Charger from fulfilling the required design functions following a Loss of Offsite Power (LOOP) coincident with a Loss of Coolant Accident (LOCA). This testing configuration had been in place since 1999. During review of the procedure for the PINGP Unit 1 Integrated Safety Injection (SI) Test with a simulated LOOP, it was determined that during the pre-initiation and restoration checks, 12 Battery Charger is manually turned off during pre-initiation and manually turned on during the equipment restoration section after completion of the test. The 12 Battery Charger is designed to remain connected to the bus upon LOOP and reenergize when the EDG repowers the bus during an SI and LOOP event. This condition brought into question the operability of 12 Battery Charger during an SI and LOOP event, and the adequacy of the surveillance procedure, as written, to meet SR 3.8.1.10 - verification of load sequencing every 24 months.

The licensee stated that in 1997, during performance of the Integrated SI test for Unit 1, the 12 Battery Charger stopped running about 30 seconds after being powered from the EDG. This coincides with step 4 of the load sequence scheme. The licensee concluded that a large motor start during step 4 caused the voltage at 12 Battery Charger to drop to about 387 Volts (V) Alternating Current (AC) (80.6 percent of 480V) and resulted in 'lock up' of the charger. The 12 Battery Charger is designed with a rated minimum AC input voltage of 422.4 VAC (88 percent of 480V).

The licensee has attributed the failure of the battery charger to an improper firing angle of the Silicon Controlled Rectifiers, internal to the charger control circuitry, when the input voltage to the battery charger drops below an acceptable value.

Based on the 1997 event, the licensee modified the Integrated SI test procedure to remove the 12 Battery Charger from the test and restore it after completion of the test. The licensee did not realize the impact of this change on TS SR 3.8.1.10. The licensee has separately tested 12 Battery Charger according to TS SR 3.8.4.2 and considers it to be operable. The Direct Current (DC) system associated with 12 Battery Charger is considered operable but non-conforming, because compensatory measures are required to restart the 12 Battery Charger.

The compensatory measures that have been put in place include changes to the plant emergency and abnormal operating procedures, to ensure that manual operator action is taken to restore a charger to service based on indication that the charger may have 'locked up' due to voltage perturbation.

2.1.2 Regulatory Evaluation

The NRC staff used the following requirements, guidance, and documents during the review of the Electrical Engineering portion of the LAR:

Title 10 of the *Code of Federal Regulations* (10 CFR), Part 50 includes the NRC's requirement that TS shall be included by applicants for a license authorizing operation of a production or utilization facility. 10 CFR 50.36 (d) requires that TS include items in five specific categories related to station operation. These categories are: (1) Safety limits, limiting safety system settings, and limiting control settings; (2) Limiting conditions for operations; (3) Surveillance Requirements; (4) Design features; and (5) Administrative controls. The proposed change to TS 3.8.1 concerns the third category associated with SRs.

General Design Criterion (GDC) 17, "Electric Power Systems," of Appendix A, "General Design Criteria for Nuclear Power Plants," to 10 CFR Part 50, requires, in part, that an onsite electric power system shall be provided to permit functioning of structures, systems, and components important to safety. The onsite electric power supplies and the onsite electric distribution system shall have sufficient independence, redundancy, and testability to perform their safety functions assuming a single failure. In addition, this criterion requires provisions to minimize the probability of losing electric power from any of the remaining supplies as a result of the loss of power from the unit, the transmission network, or the onsite electric power supplies.

GDC 18, "Inspection and Testing of Electric Power Systems," requires that electric power systems important to safety shall be designed to permit appropriate periodic inspection and testing to demonstrate operability and functional performance.

The PINGP Updated Safety Analysis Report (USAR), Revision 30, Section 1.5, "General Design Criteria," states that PINGP was designed and constructed to comply with the licensee's understanding of the intent of Atomic Energy Commission (AEC) GDC for Nuclear Power Plant Construction Permits, as proposed on July 10, 1967. Since the construction of the plant was significantly completed prior to the issuance of the GDC of 10 CFR Part 50, Appendix A, the plant was not reanalyzed and the Final Safety Analysis Report (FSAR) was not revised to reflect these later criteria. However, the AEC Safety Evaluation Report acknowledged that the AEC staff assessed the plant, as described in the FSAR, against the Appendix A design criteria and "...are satisfied that the plant design generally conforms to the intent of these criteria."

PINGP USAR, Section 1.5, AEC GDC 24, "Emergency Power for Protection Systems," states that in the event of loss of all offsite power, sufficient alternate sources of power shall be provided to permit the required functioning of the protection systems. The facility is supplied with normal, reserve and emergency power to provide for the required functioning of protection systems. In the event of a reactor and turbine trip, emergency power is supplied by two diesel generators per unit, as described in Section 8 of the PINGP USAR. Any one diesel generator is capable of supplying the emergency power requirements for that unit.

PINGP USAR, Section 1.5, AEC GDC 39, "Emergency Power for Engineered Safety Features (ESF)," states that alternate power systems shall be provided and designed with adequate independency, redundancy, capacity, and testability to permit the functioning required of the ESF. At a minimum, the onsite power system and the offsite power system shall each,

independently, provide this capacity assuming a failure of a single active component in each power system. Reliability of electric power supply is insured through two independent connections to the system grid, and a redundant source of emergency power from four diesel generators installed in the facility. Power to the ESF is assured even with the failure of a single active component in each system.

NRC Regulatory Guide (RG) 1.108, Revision 1, dated August 1977, "Periodic Testing of Diesel Generator Units Used as Onsite Electric Power Systems at Nuclear Power Plants," described a method acceptable to the NRC staff for complying with the Commission's regulations with regard to periodic testing of diesel electric power units.

AEC Safety Guide 9, dated March 1971, "Selection of Diesel Generator Set Capacity for Standby Power Supplies," described an acceptable basis for the selection of diesel generator sets of sufficient capacity and margin to implement GDC 17.

2.1.3 Technical Evaluation

2.1.3.1 Onsite Safety Related AC and DC Systems

2.1.3.1.1 Emergency Diesel Generators

Unit 1 EDGs D1 and D2 are sized per AEC Safety Guide 9, Paragraph C-2, which requires the predicted load seen by an EDG not to exceed the smaller of either the 2000 hour rating or 90 percent of the 30 minute rating. The D1/D2 2000 hour rating is unknown. The continuous rating, which bounds the 2000 hour rating conservatively, is 2750 KW. The D1/D2 30 minute rating is 3250 KW, and 90 percent of the 30 minute rating is 2925 KW. Therefore, the conservative limit of 2750 KW is placed on D1/D2 predicted loads.

Each EDG, as a backup to the normal standby AC power, supplies the power requirements of one of the redundant sets of ESF for its unit.

2.1.3.1.2 Safeguards Batteries

There are two safeguards station batteries in PINGP Unit 1, one per 125 VDC Subsystem. The batteries provide backup DC electrical power to the DC System in the event of the loss of AC power or when the associated battery charger cannot supply the total DC load. The batteries are flooded vented lead acid storage batteries. Each battery consists of 58 cells nominally. The batteries have a nominal rated capacity (to 1.75 volts per cell) of 1800 amp-hours at an 8 hour discharge rate.

2.1.3.1.3 Safeguards Battery Chargers

There is one safeguards battery charger per 125 VDC Subsystem plus one portable battery charger. The battery chargers are supplied from the associated safeguards 480 VAC system Motor Control Center (MCC). The battery chargers supply DC electrical power to the connected loads while maintaining the safeguards batteries in a fully charged condition during normal operation when AC charging power is available, except as allowed by TS.

Each battery charger has been sized to recharge its associated partially discharged battery from a voltage of 105 VDC within 24 hours, while carrying its normal load. The chargers have a nominal rated DC output of 300 amperes at 130 VDC. Both float and equalize voltages are adjustable. The charger input supply rating is 90 amperes at 480 VAC. The battery chargers normally operate in float condition, supplying power to the connected loads and charging power to their associated battery. Each battery charger has a three phase AC input circuit breaker and a two pole DC output circuit breaker.

The battery chargers function to give desired output, whether the battery is connected or not. The rectifier section of the battery charger ensures that the AC supply system does not become a load on the battery.

2.1.3.2 Technical Specification Requirements

TS 3.8.1 contains SRs that functionally test the EDGs. Specifically, TS SR 3.8.1.10(c) requires that the EDG automatically starts from standby conditions from an SI signal and energizes the emergency loads in less than 60 seconds. The SR demonstrates the EDG's capability to start, load, and successfully operate during a LOOP with an SI actuation signal. The basis for this test is to demonstrate that, in the event of a Design-Bases Accident (DBA) coincident with a LOOP, the EDGs are able to supply the necessary power to ESF systems so that the fuel, Reactor Coolant System (RCS), and containment design limits are not exceeded.

2.1.3.3 Technical Evaluation of the Proposed Changes

2.1.3.3.1 Proposed Technical Specification Change

The 12 Battery Charger locks up (due to undervoltage) during sequence step 4 of the Integrated SI test of EDG D2 while performing SR 3.8.1.10(c), and requires manual action to reconnect. The licensee has proposed interim compensatory measures to manually reconnect the 12 Battery Charger within one hour of disconnect. Specifically, the licensee has proposed the following note to SR 3.8.1.10(c)

Note (3): 12 Battery Charger not required to be energized in SR 3.8.1.10(c) until completion of Unit 1 2011 refueling outage.*

Footnote: *A modification will be installed during or prior to the Unit 1 2011 refueling outage to automatically shed the 12 Battery Charger from its normal bus and then automatically repower the charger from the bus within 60 seconds. Compliance with this SR will be demonstrated after implementation of the modification.

2.1.3.3.2 Emergency Diesel Generator D2 Operation

The LAR states that EDG D2 has a continuous rating of 2750 KW. PINGP USAR Table 8.4-1 shows the maximum predicted sequenced load during a LOCA coupled with a LOOP is 2573 KW which reduces to 2514 KW during steady state conditions. The licensee has stated in the LAR that the calculated battery charger contribution to the EDG load is 54.62 KW and the calculated load in step 1 of the EDG sequencer is 1221.73 KW. The battery charger is approximately 4.5 percent of the total load in step 1.

TS SR 3.8.1.10(c) demonstrates the EDG capability during a LOOP with an SI actuation signal. This test demonstrates that, in the event of a DBA coincident with a LOOP, the EDGs are able to supply the necessary power to the ESF systems to mitigate the consequences of the DBA. The proposed TS change requests testing the EDG SR without loading the 12 Battery Charger, which is one of the emergency loads. The reduction in EDG load during the load sequencing, without the battery charger, provides a higher bus voltage than would be seen with the maximum postulated loads. The licensee stated in the LAR that the change in voltage drop with the battery charger included in the sequencing is minimal, based on the following factors:

- a. The battery charger is a small percentage of the total load applied in step 1 of the sequencer.
- b. There is a margin of approximately 238 KW between the EDG rating and postulated loading during the worst case DBA.
- c. The associated bus voltages observed during EDG D2 Integrated SI tests were comparable to the bus voltages observed during tests that were performed prior to changing plant procedures to disconnect the 12 Battery Charger, and no significant adverse impact was observed on other loads.
- d. There is no starting inrush current contribution from the charger in step 4 when the large motor is started as the battery charger is preloaded. Hence the contribution to voltage drop from the charger is minimal.
- e. The voltage drop in steps 5 and 6 due to the sequenced loads is less than that in the preceding steps and the contribution from the battery charger is minimal.
- f. The downstream loads have not been adversely impacted by the observed voltage drops.

Based on its review of the licensee statements in its submittals, and by engineering judgment, the NRC staff concludes that the overall impact on voltage drop and EDG D2 loading would be minimal if the 12 Battery Charger was included in the D2 EDG loading during the performance of the TS SR 3.8.1.10(c). The staff finds the proposed temporary change to TS SR 3.8.1.10(c) to be acceptable.

2.1.3.3.3 Battery Charger Operation

The 12 Battery Charger locks-up during sequence step 4 of Integrated SI test of EDG D2 while performing SR 3.8.1.10(c), and requires manual action to reconnect. In the event of a DBA coupled with a LOOP, the 12 Battery Charger will not remain connected to the safety bus and perform its safety function. The licensee has proposed interim compensatory measures to manually reconnect the 12 Battery Charger within one hour of disconnect.

In the LAR, the licensee provided the following justification for the proposed change:

- a. There is another fully redundant train consisting of the 11 DC battery and the associated 11 Battery Charger. This redundant train is not impacted by the low voltage condition during EDG load sequencing that causes 12 Battery Charger to fail. Therefore, the failure of the 12 Battery Charger is not part of an overall loss of safety function for PINGP Unit 1.

- b. The low voltage input condition does not exist in the other battery chargers, as verified by repeated successful performance of the Integrated SI test without failure of other battery chargers. During step 4 of the load restoration, the scheme initiates restoration of the motor-driven Auxiliary Feedwater (MDAFW) Pump. The D1 EDG does not have this load, as a turbine-driven AFW pump is employed. For Unit 1, 11 Safeguards Bus does not include the MDAFW pump load and, therefore, the 11 Battery Charger does not experience the voltage drop that 12 Battery Charger experiences. Furthermore, the D5 and D6 EDGs for Unit 2 are not of a similar design to the D1 and D2 EDGs, and have a higher kilowatt rating than D1 and D2. Past surveillance test results indicate that step 4 for D5 and D6 have a minimal voltage drop. Therefore, the Unit 2 battery chargers are not susceptible to this low voltage input condition. Given the similarity in loading and response for D1 and D2 EDGs, it is expected that all load sequence steps on D2, other than step 4, would function properly with the battery charger loaded onto the EDG because they function properly on D1 with the battery charger connected.

PINGP USAR Section 8.5.2 states that each battery has been sized to carry the expected shutdown loads following a plant trip and a loss of AC battery charging power for a period of 1 hour without battery terminal voltage falling below the required minimum. In addition, the licensee performed an evaluation that concluded that 12 Battery can function up to two hours and 35 minutes without the charger, prior to reaching minimum terminal voltage. In its October 16, 2010, response to the NRC staff's questions, the licensee stated that the battery installation was completed on April 20, 2004 and that the aging factor was accounted for in the evaluation of the remaining capacity of the battery. Therefore, time is available to perform compensatory actions to restore the 12 Battery Charger following a low voltage related charger failure.

In the LAR, the licensee stated that in the event of a 12 Battery Charger failure, the Control Room will receive two alarms:

- 47024-1105, "12 DC System Trouble"
- 47024-1204, "12 DC Panel Undervoltage"

In its October 16, 2010, response to NRC staff question RAI EEEB-9 regarding the alarm setpoint for 12 DC Panel Undervoltage, the licensee stated that the setpoint for the alarm is 121.5V which is above the open circuit voltage of the fully charged battery without the battery charger. Hence the alarm annunciates as soon as the battery charger stops charging.

The annunciator response guides for these alarms provide detailed instructions for operators to restore the charger in the event that the failure was related to a low voltage perturbation. In the LAR, the licensee has indicated that a designated operator, in addition to the normal shift personnel, has been assigned to restore the battery charger. The licensee has further stated that the trained personnel can restore the charger within one hour of receiving the alarm in the control room. Based on the setpoint of alarm actuation indicating battery charger failure and prompt operator action, the NRC staff finds that the compensatory action is adequate to restore the battery charger in a timely manner.

In the event that the 12 Battery Charger cannot be restored, the licensee has stationed a portable battery charger in the 12 Battery room. The close proximity of the portable charger to

the 12 Battery Charger will facilitate replacement of the 12 Battery Charger prior to the 12 Battery being discharged.

As a long term solution, the licensee has planned a modification to the 12 Battery Charger that will automatically shed the battery charger during an undervoltage condition (e.g. LOOP, SI with LOOP or other undervoltage conditions) and then automatically repower the battery charger back on the bus within the 60 seconds required by the current TS. The licensee intends to perform the modification during the Unit 1 2011 refueling outage.

The licensee stated that the planned modification will restore plant design to comply with its licensing basis. Subsequent to the plant modification, compliance with the TS SR 3.8.1 will be demonstrated by performing TS SR 8.3.1.10 with 12 Battery Charger automatically loaded on D2 EDG. The licensee justified the time frame for completion of the modification in that the modification process needs time to order parts, prepare work packages and to perform work. Performing this modification in an outage provides the best opportunity to perform the modification because of the time out of service required for both the battery charger and the associated MCC to accommodate both installation and testing.

The NRC staff has reviewed the licensee's proposed compensatory measures and concludes that the proposed interim compensatory action to restore the 12 Battery Charger within 60 minutes will allow the DC system to perform its safety function during a DBA coupled with a LOOP and is, therefore, acceptable.

2.1.3.3.4 Impact on Other Station Battery Chargers

In its LAR, the licensee stated that "Other station battery chargers are not susceptible to this failure occurring, since the bus voltage on these battery chargers does not drop to these levels during EDG loading." PINGP USAR Section 8.4.2 states that the D1 and D2 EDGs were sized per the requirements of AEC Safety Guide 9 but takes exception to allowable voltage perturbations. This exception was based on results from calculations and surveillance testing, which indicated that the voltage drop during the first load block can yield bus voltages less than 75 percent of nominal. Based on the review of the information provided in the LAR, the USAR and TS values related to loss of voltage and degraded voltage relays, the NRC staff requested additional information from the licensee. The staff's concerns were related to generic implications associated with voltage perturbations either from the grid or during overlapping loading sequence on the EDGs. The licensee provided responses to the Request for Additional Information (RAIs) by letters dated October 16, 2010, October 17, 2010, October 18 and October 20, 2010. The following items have been entered in licensee's corrective action program for resolution:

- In staff question RAI EEEB-1, the staff asked the licensee to provide an evaluation of the impact of minimum voltage at 480 V level motor control centers (MCCs) and 120 V loads. The staff was concerned that, similar to the 12 Battery Charger, other downstream equipment may be impacted by undervoltage conditions expected during sequencing of loads.

In its response letter dated October 16, 2010, the licensee stated that adequate voltage was available at all electrical equipment except for four breakers. The licensee

evaluated these four breakers using revised degraded voltage values at the MCC and pickup voltages required for the specific contactors. This engineering evaluation identified that one of the four contactors continued to show that the required pickup voltage under degraded voltage conditions could not be satisfied by testing. The licensee evaluated this under a corrective action process (CAP) and an operability recommendation (OPR), and put appropriate additional compensatory measures in place to ensure that the ambient temperature at the identified MCC remained low enough to ensure adequate voltage would be present to pickup the MCC contactor. In its October 20, 2010, supplement, the licensee stated that they have identified and documented this issue for resolution under CAP No. 01243406.

- In its letter dated October 18, 2010, the licensee provided additional clarifications to its response dated October 16, 2010 relating to EEEB-1. In particular, the licensee stated that it does not currently have a dynamic model or dynamic analysis of the PINGP EDGs to accurately predict downstream voltages during EDG load sequencing. In its October 20, 2010, supplement, the licensee stated that they have identified and documented this issue for resolution under CAP No. 01254577. In addition, in the October 20, 2010, letter, the licensee provided a commitment to resolve this open item by December 15, 2011.
- In RAI EEEB-2, the NRC staff asked the licensee whether there are any process related loads that may be loaded simultaneously onto the EDGs along with other SI sequenced loads. The staff was concerned that such loads could result in degraded voltage conditions, which could adversely impact battery chargers and downstream loads.

In its response dated October 17, 2010, the licensee stated that in May 2010, the potential out of sequence starting of loads may not have been considered in the plant analyses. In its October 20, 2010, supplement, the licensee indicated that this issue has been entered into its CAP program and they have documented this issue under CAP Nos. 01233517 and 01254577 for resolution.

- In RAI EEEB-4, the NRC staff asked the licensee if the consequences of an accident signal causing a plant trip and a grid perturbation could result in a lockout of all safety related battery chargers similar to the 12 Battery Charger.

In its response dated October 17, 2010, the licensee stated that the September 2010 CAP, discussed in response to EEEB-2 above, identified a potential condition in that, while on offsite power, the condition experienced by 12 Battery Charger during the integrated SI test could exist for all four safety related chargers. The results of this evaluation have concluded that, based on current analysis of a DBA without a LOOP (dual unit trip with one unit in SI and one unit in hot shutdown), the voltage on the safety related battery charges that are on the SI unit could dip low enough such that the SI unit chargers potentially could experience a low voltage condition similar to that experienced by the 12 Battery Charger during the integrated SI test.

An operable but nonconforming condition, as documented in CAP No. 01250561, has been declared for the four safety related battery chargers due to the potential for multiple chargers to lockup while on offsite power during a DBA. The licensee has implemented additional compensatory measures to address this condition.

The licensee has generated corrective action plans for associated open items related to potential lock up of the battery chargers as a result of voltage perturbations in the safety related electrical systems. The NRC staff considers this an acceptable approach to resolution of the issues.

2.1.4 Conclusion

Based on the evaluation discussed above, the NRC staff determined that the proposed amendment to TS 3.8.1 is acceptable as the D2 EDG integrated SI testing, supplemented with the compensatory measures, provides assurance that the safety functions of the EDG and associated Class 1E station battery and battery charger are maintained. Hence, the NRC staff finds the proposed addition of Note (3) to TS SR 3.8.1.10(c) applicable to Unit 1, D2 EDG and 12 Battery Charger for the duration up to the next Unit 1 refueling outage 2011, to be acceptable. The licensee has implemented additional compensatory measures to address potential voltage perturbations that could result in the failure of the battery chargers to remain energized. The licensee has identified and documented the issues associated with the other station battery chargers, and will resolve them within its corrective action program. The NRC staff concludes that the proposed TS change meets the intent of AEC GDC 24 and GDC 39 with the interim compensatory measures. Therefore, the staff finds the proposed changes acceptable.

2.2 Health Physics and Human Performance

2.2.1 Regulatory Evaluation

The NRC staff from Health Physics and Human Performance reviewed the licensee's request using the guidance contained in NUREG-1764, Guidance for the Review of Changes to Human Actions, NRC Information Notice 97-78, "Crediting of Operator Actions in Place of Automatic Actions and Modifications of Operator Actions, Including Response Times;" ANSI/ANS 58.8-1994, "Time Response Design Criteria for Safety-Related Operator Actions;" and NUREG-0800, "Standard Review Plan [SRP]". Specific review criteria are contained in SRP Sections 13.2.1, 13.2.2, 13.5.2.1, and 18.0.

2.2.2 Technical Evaluation

2.2.2.1 Staffing

The licensee provided information regarding credit for an additional operator as a compensatory measure for the proposed amendment in its October 14, 2010 application. The licensee indicated that a designated operator will be utilized in addition to the nominal staffing, i.e., at least, the minimum staffing levels required by TS and by 10 CFR 50.54, "Conditions of licenses," paragraph (m)(2)(i) plus one additional operator, "the Battery Watch".

In its LAR, the licensee stated that a senior reactor operator (SRO), a reactor operator (RO), or equipment operator (i.e., non-licensed operator) will be assigned to the compensatory actions that must be implemented to provide the 12 Battery Charger functions if the 12 Battery Charger fails. The licensee stated that the Battery Watch operator will not be assigned any other tasks that cannot be immediately abandoned. The Battery Watch operator will be located inside the protected area to provide back up to the nominal staff. The Battery Watch operator will report directly to the Unit 1/2 Supervisor. Standard three-way communication protocol will be used. Communications from the Unit Supervisor to the Battery Watch operator will be accomplished using the normal pager system, telephone, or plant loudspeaker, all of which have backup power sources and are expected to be available and operable when needed.

The Unit 1/2 Supervisor will inform the designated operator if the entry conditions for the compensatory actions have been reached, and that the associated abnormal operating procedures must be implemented. Because the designated operators' duties will supplement nominal staff positions, the NRC staff finds the licensee's additional staffing commitment, and the command, control, and communication arrangement with the additional designated operators to be acceptable.

2.2.2.2 Operator Actions

The licensee provided a list of proposed actions to be performed by designated personnel. These tasks are included in the expected scenario described below:

If the 12 Battery Charger stops running, the control room will receive two alarms: 47024-1 105, "12 DC System Trouble" and 47024-1204, "12 DC Panel Undervoltage." Annunciator response guides for both of these annunciators direct the operations' crew to the same abnormal operations procedure, 1C20.9 AOP4, "12 Battery Charger Failure." The designated operator will be directed to go to the 12 Battery Room, which is classified as a mild service environment and implement 1C20.9 AOP4, i.e.:

- Check indications on 12 Battery Charger.
- Verify indications are acceptable.
- Verify 480V Bus 121 voltage is stable and greater than 430 VAC.
- Open 12 Battery Charger AC Input Breaker.
- Wait about 10 seconds.
- Close 12 Battery Charger AC Input Breaker.
- Ensure the battery chargers are maintaining the batteries on a float charge.

Note: Proper operation can be determined by the use of Emergency Response Computer System, control board alarms, or local observation. Therefore, both the operator in the 12 Battery Room and staff in the control room will be immediately aware of whether the actions have been successful.

The licensee also provided an analysis of the time necessary to perform the required tasks, with travel time included. The time required was obtained from a simulation of LOOP/SI, as well as timed walkdowns using Operations staff.

The times required to accomplish the tasks were within the time available. The results reported by the licensee were as follows:

- Time available to re-establish operability of the 12 Battery Charger is one hour. This is a procedurally-controlled, USAR-defined time constraint based on the fact that each battery has been sized to: 1) carry expected shutdown loads following a plant trip, and 2) cope with a loss of AC battery charging power for a period of 1 hour without battery terminal voltage falling below the required minimum.
- Time required was established by simulation. A simulation of a LOOP and SI event with a 12 Battery Charger failure was performed on July 2, 2010. The result of the simulation was that operators were able to complete Emergency Operating Procedure 1 E-0 up to the identification of abnormal battery charger status in Attachment L within 8 minutes, 36 seconds. This is the time that lapses from SI initiation until operators know that the failed Battery Charger compensatory actions are necessary.
- Walkdowns of the compensatory actions were done with and without the available Portable Battery Charger. This resulted in times of 10 minutes and 53 seconds and 16 minutes and 38 seconds, respectively. The total required time from SI initiation to re-establishment of the failed Battery Charger was 19 minutes and 29 seconds when the Portable Charger was not needed, and 25 minutes and 14 seconds when the Portable Charger was needed. Both of these total times are within the one hour time constraint established in the USAR.

Based on its review of the licensee's operator actions described in its submittals, the NRC staff is satisfied that the proposed operator actions are within the operators' capability to complete within the time constraints used in the analysis.

2.2.2.3 Preparation and Pre-staging

In order to minimize the time and complexity of the compensatory actions, the licensee will stage the Portable Battery Charger in the 12 Battery Room, and, as stated above, assign a designated operator to the Battery Charger compensatory actions. This operator will not be allowed into areas of the plant where immediate access to the Battery Rooms would be difficult, e.g. radiation areas.

2.2.2.4 Training and Procedures

The licensee indicated that control room and equipment operators already receive training on procedures related to re-establishing battery chargers after failure:

- Initial Non-licensed operators received training on DC distribution. This was taught in September 2010, May 2009, and December 2008.
- Non-Licensed Operators received continuing training on DC distribution. This training was completed in December 2009. This lesson plan specifies "How to respond to a loss of AC to Battery Charger." 1 C20.9 AOP4

- Non-Licensed Operators performed job performance measures to "Shutdown of the portable battery charger and Restart of the 11 (12) Battery charger" in Cycle 08C in April and May 2009 and again with cycle 10A in November 2009.
- Assistant Plant Equipment Operator (APEQ) performed OJT-TPE "Install and remove portable battery charger" January 2009 through May 2010.
- APEO performed On the Job Training - Task Performance Evaluation (OJT-TPE) "Respond to a Battery Charger AC failure," February 2009 through May 2010.
- APEO performed OJT-TPE "Operate the DC distribution system," February 2009 through March 2010.

Additionally, the pool of operators who may be assigned to Battery Watch have all performed walkdowns of the compensatory actions in preparation for the proposed license amendment.

Changes were made to procedures 1 C20.9 AOP4, "12 Battery Charger Failure" and 1 E-0, "Reactor Trip of Safety Injection" - Attachment L, "SI Alignment Verification." The licensee provides controlled copies of the relevant procedures in the Battery Rooms. Additionally, an Operations Instruction (OI) was implemented to instruct each operator that the action to place the failed Battery Charger in service within one hour after it fails is the USAR stated mission time. This OI also provides guidance to have the Unit 2 Turbine Building Operator assist with Attachment J of 1 E-0 so that the Unit 1 operator will not be delayed in restarting the failed Battery Charger (Attachment L).

Based on its review of the licensee's descriptions of its procedures and training programs, the NRC staff finds the licensee's proposed actions regarding training and procedures to be acceptable.

2.2.2.5 Equipment and Environmental Conditions

The licensee indicated that equipment to be used by the control room to communicate with the designated equipment operator will be normal paging systems, telephone, or plant loudspeaker page. These systems have backup power sources, are used frequently, and therefore, based on operational experience, they can be verified to be operational in real-time and have proven to be adequate over the long-term.

The licensee stated that the operator actions are performed in the 12 Battery Room, which is classified as a mild service environment. A Portable Battery Charger will be stationed in the 12 Battery Room, so that if it is needed for replacing the 12 Battery Charger, it will be immediately available.

Because some pathways to the Battery Rooms could be impassable under High Energy Line Break (HELB) or flooding, NSPM has designated where the Battery Watch operator will be stationed and has specified that the operator use pathways through the non-SI unit if appropriate. There are multiple paths to access the 12 Battery Room from Unit 1, and each level from Unit 2 provides access to Unit 1 (695 feet, 715 feet, and 735 feet building elevations). NSPM has verified that travel times using any of the specified pathways will allow enough time to complete the compensatory actions within the required one hour. Based on its review of the licensee's submittals, the NRC staff finds the equipment use and environmental conditions described by the licensee to be acceptable.

2.2.3 Conclusion

The NRC staff has reviewed the licensee's planned use of an additional operator as a compensatory measure for coping with a 12 Battery Charger failure. The staff concludes that the licensee has adequately considered the impact of the proposed license amendment on operator staffing, procedures, equipment, and associated training to provide reasonable assurance for allowing credit for the proposed actions to be performed by the additional, designated operator. Therefore, the NRC staff finds that the proposed compensatory actions are within the capability of operators to perform within the time constraints assumed in the licensee's analysis.

3.0 EXIGENT CIRCUMSTANCES

3.1 Background

The Commission's regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) 50.91 contain provisions for issuance of amendments when the usual 30-day public comment period cannot be met. One of these provisions is exigency. An exigency is a case where the licensee and the NRC staff must act quickly and there is insufficient time to process the license amendment request within the normal time frame. Pursuant to the provisions in 10 CFR 50.91(a)(6), the licensee requested the proposed amendment on an exigent basis.

Under the provisions in 10 CFR 50.91(a)(6), the Commission notifies the public in one of two ways: (1) by issuing a *Federal Register* notice providing an opportunity for hearing and allowing at least 2 weeks from the date of the notice for prior public comments; or (2) by using the local media to provide reasonable notice to the public in the area surrounding the licensee's facility. In this case, because the time in which to act was less than two weeks, the Commission used the second approach and published a public notice in the local newspapers, the *Red Wing Republican Eagle* and the *Minneapolis Star Tribune*, on October 20, 2010.

As discussed in the licensee's application dated October 14, 2010, on June 24, 2010, PINGP Engineering staff identified a testing configuration that could prevent D2 Diesel Generator and 12 Battery Charger from fulfilling the required design functions following a Loss of Offsite Power (LOOP) coincident with a Loss of Coolant Accident. This testing configuration had been in place since 1999.

During the licensee's review of the procedure that performs the PINGP Unit 1 Integrated SI Test with a Simulated LOOP (hereafter called Integrated SI test), the licensee determined that, during the pre-initiation and restoration checks, 12 Battery Charger is manually turned off during pre-initiation and manually turned on during the equipment restoration section after load sequencing has occurred. The 12 Battery Charger is designed to remain connected to the bus upon LOOP and reenergize when the EDG repowers the bus during a SI and LOOP event. The licensee stated that this condition brings into question the operability of 12 Battery Charger during a SI and LOOP event, and the adequacy of the surveillance procedure as written to meet SR 3.8.1.10 (verification of load sequencing every 24 months).

The licensee further stated that,

On October 8, 2010, the NRC staff notified Northern States Power Minnesota (NSPM) during a telephone conference that without Integrated Safety Injection testing that included the 12 Battery Charger then Technical Specifications (TS) surveillance requirement (SR) 3.8.1.10(c) was not met. TS 3.8.1.10(c) requires the Emergency Diesel Generator (EDG) to start and load within 60 seconds all required loads. Since the 12 Battery Charger had not been loaded onto the bus during the test, the NRC indicated that this was not a missed surveillance test, but rather a failure to perform a surveillance test. Therefore, based on NSPM review of the NRC's position and after consultation with plant staff, NSPM determined on October 9, 2010, that this condition rendered the PINGP Unit 1, D2 EDG inoperable. Consequently, at 1434 CDT on October 9, 2010, NSPM voluntarily entered TS 3.8.1.B.

In Enclosure 3 of the letter dated October 14, 2010, the licensee provided the following reason for the exigent TS change:

Approval of the License Amendment Request (LAR) would restore PINGP Unit 1 into compliance with TS 3.8.1.B. If the LAR is not approved within the 14-day period current PINGP TS 3.8.1.F would require that NSPM initiate actions to place the unit in a MODE in which the TS 3.8.1.B does not apply by placing PINGP Unit 1, in at least HOT STANDBY within the next 6 hours, and at least COLD SHUTDOWN within the following 36 hours. Therefore, since there is no impact on plant safety and in order to prevent an unnecessary plant shutdown, review and approval of this LAR is requested to be completed by October 23, 2010 under the rules of 10 CFR 50.91(a)(6).

Also in Enclosure 3, the license provided the following explanation for why the need for the requested action could not reasonably have been identified earlier:

NSPM had previously recognized the condition of the battery charger and had been administratively controlling its function during the integrated safety injection testing procedure.

However, on October 8, 2010 during a telephone conference, NSPM was questioned by the NRC whether this constitutes failure to completely test the full capacity of the EDG during a postulated event. After review, NSPM voluntarily entered TS 3.8.1.B on October 9, 2010, 1434 CDT for PINGP Unit 1 EDG due to performance of SR 3.8.1.10(c) without including the 12 Battery Charger load. Therefore, the need for the exigent TS change request could not have reasonably been identified earlier.

3.2 NRC Staff Conclusion

The NRC staff has reviewed the circumstances leading to the LAR and has determined that an exigent condition exists in that failure to act in a timely manner will require the shutdown of PINGP Unit 1. The NRC staff reviewed the licensee's submittals and confirmed as much of the information in those submittals as possible with its regional staff and concluded that the licensee accurately reported the facts regarding the timing of the discovery of the issue regarding the testing configuration for PINGP Unit1 EDG D2 and the 12 Battery Charger. The NRC staff also

confirmed that, in the absence of approval of the LAR, TS 3.8.1.B will require shutdown by October 23, 2010. Finally, the NRC staff considered the licensee's reasons for failing to file an application sufficiently in advance to preclude an exigent amendment, and concluded that the licensee notified the NRC staff of the deficiency in a reasonable time and did not delay in notifying the NRC staff in order to create the exigent circumstances so as to take advantage of the exigency provisions. Therefore, the conditions needed to satisfy 10 CFR 50.91(a)(6) exist, and the amendment is being processed on an exigent basis.

4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

In accordance with 10 CFR 50.91(a)(6), the Commission may issue a license amendment before the expiration of the 60-day notice period provided that its final determination is that the amendment involves no significant hazards consideration. This amendment is being issued prior to the expiration of the 60-day period. Therefore, a final finding of no significant hazards consideration follows.

The Commission has made a final determination that the proposed amendment involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment does not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. As required by 10 CFR 50.91(a), the licensee has provided its analysis of the issue of no significant hazards consideration which is presented below.

As required by 10 CFR 50.91(a), the licensee provided its analysis of the issue of no significant hazards consideration in its letter dated October 14, 2010, as presented below:

1. Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

The probability or consequences of accidents previously evaluated in the Updated Safety Analysis Report are unaffected by this proposed change. There is no change to any equipment response or accident mitigation scenario, and this change results in no additional challenges to fission product barrier integrity. The proposed change does not alter the design, configuration, operation, or function of any plant system, structure, or component in a way that significantly increases the probability or consequences of an accident. As a result, the outcomes of previously evaluated accidents are unaffected.

The proposed change adds a Technical Specifications note for the emergency diesel generator integrated safety injection with a loss of offsite power test. The note will not require the 12 Battery Charger to be energized by the test until prior to entering MODE 4 during the 2011 refueling outage for PINGP Unit 1. The

analysis evaluates operator actions that may be taken in the event of a 12 Battery Charger failure and the ample time to implement such actions based on 12 Battery design.

Therefore, the proposed amendment does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No

No new accident scenarios, failure mechanisms, or limiting single failures are introduced as a result of the proposed change. The proposed change does not challenge the performance or integrity of any safety-related system. The proposed change does not install or remove any plant equipment. The proposed change has no adverse effects on any safety related systems or components and does not challenge the performance or integrity of any safety related system. No physical changes are being made to the plant, so no new accident causal mechanisms are being introduced.

The proposed change adds a Technical Specifications note for the emergency diesel generator integrated safety injection with a loss of offsite power test. The note will not require the 12 Battery Charger to be energized by the test until prior to entering MODE 4 during the 2011 refueling outage for PINGP Unit 1. The analysis evaluates operator actions that may be taken in the event of a 12 Battery Charger failure and the ample time required to implement such actions based on 12 Battery design.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed amendment involve a significant reduction in a margin of safety?

Response: No

Margin of safety is related to the ability of the fission product barriers to perform their design functions during and following accident conditions. These barriers include the fuel cladding, the reactor coolant system, and the containment. The proposed amendment request does not involve a change to any of these barriers.

12 Battery has been sized to carry expected shutdown loads following a plant trip, and a loss of AC battery charging power for a period of 1 hour without battery terminal voltage falling below the required minimum. The change to a manual action for restart of the 12 Battery Charger does not change or affect any margin associated with the 12 Battery.

The margin of safety associated with the acceptance criteria of any accident is unchanged. The proposed change will have no effect on the availability, operability, or performance of the safety-related systems and components. The ability of operable structures, systems, and components to perform their designated safety function is unaffected by this proposed change. The proposed change does not involve a significant reduction in a margin of safety because the proposed changes do not reduce the margin of safety that exists in the present PINGP Technical Specifications or USAR. The operability requirements of the Technical Specifications are consistent with the initial condition assumptions of the safety analyses.

Therefore, the proposed amendment does not involve a significant reduction in a margin of safety.

The NRC staff has reviewed the licensee's analysis and conducted its own analysis of the issues presented by this proposed amendment. Based on its review and analysis, the NRC staff concludes that the proposed actions will not initiate any previously analyzed accidents. Accordingly, they will not significantly increase the probability of a previously evaluated accident. Because the proposed amendment includes compensatory measures that restore the capability of the 12 Battery Charger, it will not increase the consequences of any accident previously evaluated. The NRC staff also finds that because the 12 Battery Charger and the associated battery system are not accident initiators, the proposed amendments with respect to them do not create the possibility of a new or different kind of accident. Finally, the NRC staff concludes that the proposed amendment involves no significant reduction in the margin of safety because the proposed amendment includes manual compensatory actions that restore the capability of the 12 Battery Charger so that it performs the safety functions that served as the basis for the margin of safety evaluation.

Therefore, the NRC staff concludes that the standards of 10 CFR 50.92 are satisfied and that the proposed amendment involves no significant hazards consideration.

5.0 REGULATORY COMMITMENTS

The following regulatory commitment was made by the licensee in its supplemental letter dated October 20, 2010:

Northern States Power Company, a Minnesota corporation, will develop a dynamic electrical model for the Prairie Island Nuclear Generating Plant Unit 1 emergency diesel generators by December 15, 2011.

6.0 STATE CONSULTATION

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

7.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a surveillance requirement with respect to 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 made a final determination that the amendment involves no significant hazards consideration as discussed above in Section 5.0. 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.

8.0 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) 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: P. Sahay, NRR
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T. Wengert, NRR

Date: October 22, 2010

Mr. Mark A. Schimmel
Site Vice President
Prairie Island Nuclear Generating Plant
Northern States Power Company - Minnesota
1717 Wakonade Drive East
Welch, MN 55089-9642

October 22, 2010

**SUBJECT: PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT 1 - ISSUANCE OF
EXIGENT AMENDMENT RE: TECHNICAL SPECIFICATION SURVEILLANCE
REQUIREMENT 3.8.1.10 (TAC NO. ME4871)**

Dear Mr. Schimmel:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 198 to Facility Operating License No. DPR-42 for the Prairie Island Nuclear Generating Plant (PINGP), Unit 1. The amendment consists of changes to the Technical Specifications (TSs) in response to your application dated October 14, 2010, as supplemented by letters dated October 16, October 17, October 18, and October 20, 2010.

The amendment changes TS Surveillance Requirement (SR) 3.8.1.10(c), by allowing the PINGP Unit 1 12 Battery Charger to not be energized during the safety injection testing of emergency diesel generator D2, until a modification is completed during the Unit 1 2011 refueling outage. Prior to start up from the 2011 refueling outage, the 12 Battery Charger will be tested in accordance with SR 3.8.1.10(c).

A copy of the related Safety Evaluation (SE) is also enclosed. The SE describes the exigent circumstances under which the amendment was issued and the final determination of no significant hazards. A Notice of Issuance, addressing the final no significant hazards determination and opportunity for a hearing, will be included in the Commission's next regular biweekly *Federal Register* notice.

Sincerely,

/RA/

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

Docket No. 50-282

Enclosures:

1. Amendment No. 198 to DPR-42
2. Safety Evaluation

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