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L-PI-11-016  
10 CFR 50.90

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

Prairie Island Nuclear Generating Plant Unit 1  
Docket 50-282  
License No. DPR-42

License Amendment Request (LAR) to Revise Surveillance Requirement (SR) Footnote in Technical Specification (TS) 3.8.1, "AC Sources – Operating"

Pursuant to 10 CFR 50.90, the Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy (hereafter "NSPM"), hereby requests an amendment to the TS for the Prairie Island Nuclear Generating Plant (PINGP), Unit 1, to revise the TS 3.8.1, "AC Sources – Operating", SR 3.8.1.10 footnote requiring battery charger modifications. Although the purpose of this SR is to demonstrate emergency diesel generator (EDG) operation during a loss of offsite power, the footnote relates specifically to the Unit 1 12 Battery Charger. NSPM evaluated the proposed changes in accordance with 10 CFR 50.92 and concluded that they involve no significant hazards consideration.

The enclosure to this letter, "Evaluation of the Proposed Changes" contains the licensee's evaluation of the proposed changes.

NSPM requests expedited review of this LAR and approval by May 6, 2011. The current SR 3.8.1.10 footnote requires testing of the Unit 1 D2 EDG following implementation of 12 Battery Charger modifications during the Unit 1 Spring 2011 refueling outage. While performing the engineering associated with the modifications required by the footnote, NSPM identified different battery charger modifications that are technologically superior to those considered when the footnote was added to the TS. These different battery charger modifications meet the intent of the footnote, that is, they assure that D2 and its associated 12 Battery Charger will perform their required safety functions, however, the modifications do not meet the letter of the current footnote wording. To meet TS requirements and allow D2 to be tested with the different battery charger modifications during the Spring 2011 refueling outage, approval of this LAR is requested by May 6, 2011. Upon NRC approval, NSPM requests 15 days to implement the associated changes. In accordance with 10 CFR 50.91, NSPM is

notifying the State of Minnesota of this LAR by transmitting a copy of this letter and enclosure to the designated State Official.

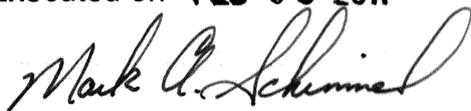
If there are any questions or if additional information is needed, please contact Mr. Dale Vincent, P.E., at 651-388-1121.

Summary of Commitments

This letter contains no new commitments and no revisions to existing commitments

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

Executed on **FEB 03 2011**



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

Enclosures (1)

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

## **ENCLOSURE**

### **Evaluation of the Proposed Changes**

#### **License Amendment Request (LAR) to Revise Surveillance Requirement (SR) Footnote in Technical Specification (TS) 3.8.1, "AC Sources – Operating"**

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1. Technical Specification Pages (Markup)
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3. Technical Specification Pages (Retyped)

## 1. SUMMARY DESCRIPTION

This LAR is a request to amend Operating License DPR-42 for Prairie Island Nuclear Generating Plant (PINGP) Unit 1.

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy (hereafter "NSPM"), requests Nuclear Regulatory Commission (NRC) review and approval of proposed revisions to TS 3.8.1, "AC Sources – Operating", SR 3.8.1.10 footnote. Although the purpose of the SR is to demonstrate the emergency diesel generator (EDG) operation during a loss of offsite power with safety injection, the SR footnote relates specifically to the Unit 1 12 Battery Charger modifications. The proposed changes will continue to assure that the D2 EDG and associated 12 Battery Charger perform their required safety functions, but allow use of different methods than required by the current footnote. NSPM requests review and approval of the revised SR footnote.

## 2. DETAILED DESCRIPTION

### 2.1 Proposed Changes

Brief descriptions of the associated proposed TS changes are provided below along with discussion of the justification for the changes. The specific wording changes to the TS are provided in Attachments 1 and 3 to this enclosure.

**TS 3.8.1, "AC Sources – Operating", SR 3.8.1.10 Footnote:** This LAR proposes to revise the SR 3.8.1.10 footnote by removing the requirement to automatically shed the 12 Battery Charger from its bus. This change is acceptable because NSPM proposes to install a modification which assures 12 Battery Charger will automatically perform its safety function without shedding from the bus.

Although Bases changes are not a part of this LAR, Attachment 2 to this enclosure includes a marked up Bases page for information. The changes proposed in Attachment 2 are directly related to the changes proposed to TS 3.8.1.

In summary these changes are acceptable because the revised SR will continue to demonstrate that the EDGs will perform their safety functions.

### 2.2 Background

In October 2010, NSPM determined that Unit 1 EDG D2 was inoperable due to incorrect alignment of the 12 Battery Charger during performance of the surveillance procedure (SP) which demonstrates the requirements of SR 3.8.1.10 are met. During

the course of NRC review and approval of an exigent LAR which allowed D2 to be considered operable without 12 Battery Charger included in performance of the SP, a footnote was added to SR 3.8.1.10 which specified installation of 12 Battery Charger modifications to "automatically shed" the battery charger from its normal bus and "then automatically repower" the charger from its normal bus. NSPM requests review and approval of a revised SR 3.8.1.10 footnote which will allow installation of battery charger modifications that assure 12 Battery Charger performs its safety functions without automatically shedding the charger from its bus.

NSPM requests expedited review of this LAR and approval by May 6, 2011. The current SR 3.8.1.10 footnote requires testing of the Unit 1 D2 EDG following installation of 12 Battery Charger modifications during the Unit 1 Spring 2011 refueling outage. While performing the engineering associated with the modifications required by the current footnote, NSPM identified different battery charger modifications that are technologically superior to those considered when the footnote was added to the TS. These different battery charger modifications meet the intent of the footnote, that is, they assure that D2 and its associated 12 Battery Charger will perform their required safety functions. To allow D2 to be tested during the Spring 2011 refueling outage with battery charger modifications that meet TS requirements, approval of this LAR is requested by May 6, 2011.

With the TS changes proposed in this LAR the plant will continue to operate safely and the health and welfare of the public is protected.

### **3. TECHNICAL EVALUATION**

PINGP is a two unit plant located on the right bank of the Mississippi River approximately 6 miles northwest of the city of Red Wing, Minnesota. The facility is owned and operated by NSPM. Each unit at PINGP employs a two-loop pressurized water reactor designed and supplied by Westinghouse Electric Corporation. The initial PINGP application for a Construction Permit and Operating License was submitted to the Atomic Energy Commission (AEC) in April 1967. The Final Safety Analysis Report (FSAR) was submitted for application of an Operating License in January 1971. Unit 1 began commercial operation in December 1973 and Unit 2 began commercial operation in December 1974.

PINGP was designed and constructed to comply with NSPM's understanding of the intent of the Atomic Energy Commission (AEC) General Design Criteria (GDC) for Nuclear Power Plant Construction Permits, as proposed on July 10, 1967. PINGP was not licensed to NUREG-0800, "Standard Review Plan (SRP)" and was not part of the NRC Systematic Evaluation Program (SEP).

### Current TS Requirements Basis and Limitations

TS 3.8.1 SR 3.8.1.10 footnote currently states:

\*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.

This footnote was incorporated into the TS by license amendment 198 (LA 198), ML102910206, for Unit 1, dated October 22, 2010. The purpose of this LA was to revise Technical Specification (TS) Surveillance Requirement (SR) 3.8.1.10(c) to allow D2 to be considered operable without the PINGP Unit 1 12 Battery Charger energized during the Unit 1 integrated safety injection (SI) test, until completion of a battery charger modification during the Unit 1 2011 refueling outage.

This TS relief in LA 198 was required because NSPM determined that during the pre-initiation and restoration checks for the integrated SI test surveillance procedure, the 12 Battery Charger was manually turned off during pre-initiation and manually turned on during the equipment restoration section after completion of the test. The 12 Battery Charger was designed to remain connected to the bus upon loss of offsite power (LOOP) and reenergize when the EDG repowers the bus during an SI and LOOP event. This condition brought into question the operability of D2 EDG, during an SI and LOOP event, and the adequacy of the surveillance procedure, as written, to meet SR 3.8.1.10 requirements for verification of load sequencing every 24 months.

This guidance to manually control the 12 Battery Charger during SP performance was incorporated into the procedures to address lockup of the 12 Battery Charger due to low input voltage during SP performance in the late 1990's. The intent of the SR footnote added by LA 198 was to assure that modifications are installed and tested prior to plant startup from the Unit 1 Spring 2011 refueling outage to assure the 12 Battery Charger will perform its safety functions through automatic controls in accordance with the original battery charger design intent without manual actions.

In the LAR dated October 14, 2010, ML102880105, which was the precursor to NRC issuance of LA 198, NSPM stated:

NSPM is planning a modification to the 12 Battery Charger that will automatically shed the battery charger during an undervoltage event (e.g. LOOP, SI with LOOP or other undervoltage condition) and then repower the battery charger back on the bus within the 60 seconds required by the current TS.

In the course of pursuing the modifications under consideration when the LAR dated October 14, 2010 was written, NSPM identified a different modification that assures the battery charger will perform its safety functions through automatic controls in accordance with the original design intent without manual actions and without shedding

from its bus. Since literal compliance with the wording of the current footnote would require shedding from the bus, NSPM requests the proposed revision to the SR 3.8.1.10 footnote to allow installation of the different modification.

### Proposed Changes

This LAR proposes to replace the TS 3.8.1 SR 3.8.1.10 footnote with the following footnote:

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

### Technical Basis for Change

The purpose of the footnote to SR 3.8.1.10 is to require installation of battery charger modifications to assure the 12 Battery Charger performs its safety function. As discussed in the October 14, 2010 LAR, ML102880105, the problem with the 12 Battery Charger is:

As the charger is starting up, the firing angle of the Silicon Controlled Rectifiers (SCRs) internal to the charger control circuitry advances to increase the charger output. The angle advances until the float voltage setpoint or current limit is reached. When the voltage drops on the incoming AC source, the firing angle of the SCRs advances further to compensate as it tries to maintain a constant DC output. When the AC input voltage drops low enough during sequence step 4, the firing angle actually advances further and up to the setpoint at which the SCRs become reverse biased. The SCRs need to be forward biased to be able to conduct and produce DC output. Therefore, when the SCRs become reverse biased, they no longer are able to conduct and produce any output. The condition essentially "locks up" the charger as the SCRs are stuck in a reverse biased condition and cannot return to a forward biased state without removing the AC input power from the charger to allow the control circuit capacitors to discharge. The charger can then be started up normally by returning AC power.

Various options for resolution of the 12 Battery Charger lockup issue were considered. One of the options considered for correction of the issue was battery charger replacement. During initial investigations this was identified as a desirable option. However, preliminary discussions with vendors led to the conclusion that this could not be done in the time allowed due to expected durations for engineering development, qualification, manufacturing, and testing.

The option described previously in the LAR dated October 14, 2010, ML102880105, which provided the basis for the SR 3.8.1.10 footnote, was to provide a new AC input power source and control the AC input power with a control circuit using an external

voltage sensing and load sequencing based control circuit. This control circuit would prevent the existing C&D Technologies, Inc. (C&D) battery chargers from being exposed to a low AC input voltage condition that could cause reverse biasing of the Silicone Controlled Rectifiers (SCRs) and result in lockup of the charger. This option was favored because it could be implemented with mostly standard catalog products and the work efforts were all within NSPM control. This option provided highest confidence in NSPM ability to meet the schedule to resolve the condition by the Unit 1 Spring refueling outage.

As the battery charger modification engineering efforts progressed, NSPM became aware of Ametek Solidstate Controls Incorporated (SCI) battery chargers installed at the Point Beach Nuclear Plant (PBNP) that could meet the PINGP detailed design requirements and would not be susceptible to the PINGP C&D charger lockup issue. However, the PBNP chargers did not meet the seismic and physical dimension requirements for application at PINGP. Discussions with Ametek identified Ametek SCI battery chargers installed at the Vogtle Electric Generating Plant (VEGP) for which the charger ratings and qualifications enveloped the PINGP requirements and the physical dimensions were also compatible with PINGP requirements. Also, Ametek confirmed that the PINGP expedited schedule could be met if NSPM ordered chargers based on the mature VEGP design.

Control features of the Ametek SCI chargers ensure that they are not susceptible to conditions which cause lockup of the C&D chargers at PINGP. The Ametek SCI chargers contain an internal control relay whose purpose is to prevent back feeding the control circuit board. The relay senses incoming AC line voltage and causes a shut off of the charger when the AC voltage drops below the relay dropout and restarts when the voltage returned to levels above the pickup. The shutoff is instantaneous and the reset is controlled by the startup time delay of a few seconds.

To provide assurance beyond engineering design review of the control circuit operation, the PBNP prototype charger was returned to Ametek for testing to demonstrate charger capabilities, operation, shutdown, and automatic restart during anticipated voltage transients outside the nameplate rating of the chargers. This information was used as a decision making aid for the final PINGP solution. Testing was performed above and below nameplate ratings to validate response because PINGP has known voltage excursions outside the nameplate range and automatic recovery of the charger following such transients is required for the battery charger to perform required safety functions. The prototype charger was tested under varying load conditions, current limit set points, voltage fluctuations, and transient conditions. The data collected was informational in nature. Final documentation of charger capabilities, shut off and reset points, time delays, and other operating conditions will be documented in factory acceptance test procedures under the Ametek Quality Assurance program according to the NSPM purchase specification.

NSPM proposes to replace the 12 Battery Charger with a new safety-related battery charger manufactured by Ametek SCI. Replacement of 12 Battery Charger is

technologically superior and economically advantageous over the option on which the SR 3.8.1.10 footnote was based: repowering the existing chargers and creating an external voltage sensing and load sequencing based control circuit. Technical and economic advantages include the following:

- The design is simpler and all required logic is internal to charger. This is very advantageous since the substance of the modification is performed in the controlled environment of a fabrication shop.
- Testing of the new battery charger will be performed in advance of installation.
- Engineering and procurement resources can be focused on the battery charger, its qualifications, performance and schedule as opposed to procurement of myriads of components and construction materials. This also reduces procurement risk since there are fewer components required to meet the schedule.
- Battery charger replacement is less intrusive on other plant systems. For example, the battery charger shedding modification would require use of the last spare breaker on Bus 16, new power cable installation, fire penetration work when routing new cables, and additions to the load sequencer cabinets.
- Simple component replacement does not require design coordination with existing bus voltage relay settings or logic.
- The current plant configuration includes maintenance sources at the 480V level which provide additional flexibility in outage electrical lineups. Simple replacement of the 12 Battery Charger preserves this plant feature.
- This proposed modification significantly reduces outage work time and outage testing time which frees management and engineering resources to focus on other safety significant activities.

Because the Ametek SCI battery charger is designed to cope with low input voltage, there is no need to pursue modifications which shed the battery charger from its bus. To allow installation of the Ametek SCI battery charger as the resolution of the 12 Battery Charger lockup issue, the SR 3.8.1.10 footnote requires revision since it specifically states that a modification will be installed that automatically sheds the 12 Battery Charger from its bus.

### Conclusions

The 12 Battery Charger lockup has been experienced during voltage transients associated with loss of offsite power and emergency diesel generator load sequencing tests which prevented the battery charger from automatically performing its safety function. In a previous LAR to allow D2 to be considered operable without including the 12 Battery Charger as a load during performance of SR 3.8.1.10, a footnote was added to this SR to require modifications to correct the 12 Battery Charger lockup issue.

Based on engineering considerations at the time the previous LAR was submitted, the footnote includes specific requirements for the battery charger to be automatically shed from and repowered by its normal bus. Subsequently NSPM has identified a

replacement battery charger that solves the lockup issue and determined that a battery charger replacement modification is technologically superior and economically advantageous to a modification which automatically sheds and repowers the battery charger.

In this LAR NSPM requests NRC review and approval of a revised SR 3.8.1.10 footnote that will allow installation of a different modification, that is, 12 Battery Charger replacement. The revised footnote assures that the D2 EDG and associated 12 Battery Charger perform their required safety functions without automatic shedding of the battery charger from its bus. Since the proposed modifications assure D2 and 12 Battery Charger perform their safety functions, operation, maintenance and testing of the Prairie Island Nuclear Generating Plant with the TS revisions proposed in this LAR will continue to protect the health and safety of the public.

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

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

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

(c) Technical specifications will include items in the following categories:

3) *Surveillance requirements.* Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions for operation will be met.

Technical Specification 3.8.1, "AC Sources – Operating", includes Surveillance Requirement (SR) 3.8.1.10, to demonstrate emergency diesel generator operation during a loss of offsite power in conjunction with a safety injection actuation. A footnote to SR 3.8.1.10 requires battery charger modifications that automatically shed and repower the 12 Battery Charger. This license amendment request proposes to revise the SR 3.8.1.10 footnote to allow implementation of a battery charger modification that assures the D2 emergency diesel generator and its associated 12 Battery Charger perform their safety function without shedding the battery charger from its bus. With these proposed changes, the Technical Specifications will continue to assure that the necessary quality of the emergency diesel generators and their components is maintained and the limiting conditions for operation of these systems will continue to be met.

Thus with the changes proposed in this license amendment request, the requirements of Title 10 CFR 50.36 continue to be met.

### General Design Criteria

The construction of the Prairie Island Nuclear Generating Plant was significantly completed prior to issuance of 10 CFR 50, Appendix A, General Design Criteria. The Prairie Island Nuclear Generating Plant was designed and constructed to comply with the Atomic Energy Commission General Design Criteria (AEC GDC) as proposed on July 10, 1967 as described in the plant Updated Safety Analysis Report. AEC GDC proposed Criteria 24 and 39 provide design guidance for the operating capability of on-site emergency power systems.

#### Criterion 24 - Emergency Power For Protection Systems

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.

During a loss of offsite power, AEC GDC Criterion 24 is met through the redundant source of emergency power from emergency diesel generators installed at the plant. The instrumentation and controls portions of the protection systems are supplied from the 125 VDC station batteries during the diesel startup period. This license amendment request proposes to revise a footnote to the Technical Specification surveillance requirements to demonstrate emergency diesel generator operation during a loss of offsite power in conjunction with a safety injection actuation. The revised footnote will allow implementation of a battery charger modification which assures the D2 emergency diesel generator and its associated 12 Battery Charger perform their safety function without shedding the battery charger from its bus. With these changes, the AEC GDC stated above will continue to be met when the plant is operated with the plant Technical Specifications revised as proposed.

#### Criterion 39 - Emergency Power For Engineered Safety Features

Alternate power systems shall be provided and designed with adequate independency, redundancy, capacity, and testability to permit the functioning required of the engineered safety features. As 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.

AEC GDC Criterion 39 is partially met through the redundant source of emergency power from emergency diesel generators installed at the plant. This license amendment request proposes to revise a footnote to the Technical Specification surveillance requirements to demonstrate emergency diesel generator operation during a loss of offsite power in conjunction with a safety injection actuation. The revised footnote will allow implementation of a battery charger modification which assures the D2 emergency diesel generator and its associated 12 Battery Charger perform their safety function without shedding the battery charger from its bus. With these changes, the AEC GDC stated above will continue to be met when the plant is operated with the plant Technical Specifications revised as proposed.

Thus with the changes proposed in this license amendment request, the requirements of AEC GDC 24 and 39 continue to be met and the plant Technical Specifications will continue to provide the basis for safe plant operation.

#### **4.2 Precedent**

The Surveillance Requirement 3.8.1.10 footnote is a one-time application Technical Specification requirement which is specific to Prairie Island Nuclear Generating Plant Unit 1. There are many industry examples of one-time plant specific Technical Specification footnotes, however, Northern States Power Company, a Minnesota corporation (hereafter "NSPM"), is not aware of any that apply specifically to battery charger modification requirements. Nor is NSPM aware of precedent for a license amendment request which modifies a one-time application Technical Specification footnote.

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

Northern States Power Company, a Minnesota corporation, doing business as Xcel Energy (hereafter "NSPM"), has evaluated whether or not a significant hazards consideration is involved with the proposed amendment by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

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

Response: No

This license amendment request proposes to revise the footnote to the emergency diesel generator Technical Specification surveillance requirement for loss of offsite power with safety injection actuation. The proposed footnote revision removes some specific requirements for battery charger modifications but will continue to assure that the applicable emergency diesel generator and its associated battery charger perform their required safety functions.

The emergency diesel generators and their associated battery chargers are not accident initiators and therefore, these changes do not involve a significant increase the probability of an accident.

The proposed changes to the Technical Specification footnote will assure that the emergency diesel generator and the associated battery charger continue to perform their required safety function. Since the emergency diesel generator and the associated battery charger will provide required electrical power as assumed in the accident analyses, the results of the previous accident analyses are not changed and the changes proposed in this license amendment request do not involve a significant increase in the consequences of an accident.

Therefore, the proposed changes do 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

This license amendment request proposes to revise the footnote to the emergency diesel generator Technical Specification surveillance requirement for loss of offsite power with safety injection actuation. The proposed footnote revision removes some specific requirements for battery charger modifications but will continue to assure that the applicable emergency diesel generator and its associated battery charger perform their required safety functions.

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 involve modification of plant battery chargers, however, failures of battery chargers has been previously considered and bounded by assuming one safety related train of equipment fails. The modified battery chargers do not create new failure modes or mechanisms and no new accident precursors are generated. Surveillance testing requirements for the emergency diesel generator and battery charger will continue to demonstrate that the Limiting Conditions for Operation are met and the system components are functional.

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

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

Response: No

This license amendment request proposes to revise the footnote to the emergency diesel generator Technical Specification surveillance requirement for loss of offsite power with safety injection actuation. The proposed footnote revision removes some specific requirements for battery charger modifications but will continue to assure that the applicable emergency diesel generator and its associated battery charger perform their required safety functions.

The proposed Technical Specification footnote change does not affect the availability, operability, or performance of safety-related systems and components: the affected emergency diesel generator and its associated battery will continue to perform their safety functions. 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 footnote changes do not reduce the margin of safety that exists in the present Technical Specifications or Updated Safety Analysis Report. The operability requirements of the Technical Specifications are consistent with the initial condition assumptions of the safety analyses and the surveillance testing requirements will continue to demonstrate the operability of the emergency diesel generator.

Therefore, the proposed changes do not involve a significant reduction in a margin of safety.

Based on the above, NSPM concludes that the proposed amendment does not involve a significant hazards consideration under the standards set forth in 10 CFR 50.92(c) and, accordingly, a finding of "no significant hazards consideration" is justified.

#### **4.4 Conclusions**

In conclusion, based on the considerations discussed in above, (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.

### **5. ENVIRONMENTAL CONSIDERATION**

A review has determined that the proposed amendment would change a requirement with respect to installation or use of a facility component located within the restricted area, as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed amendment does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

### **6. REFERENCES**

None

**ENCLOSURE, ATTACHMENT 1**

**Technical Specification Pages (Markup)**

3.8.1-10

1 page follows

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.10 -----NOTES-----</p> <ol style="list-style-type: none"> <li>1. All DG starts may be preceded by an engine prelube period.</li> <li>2. This Surveillance shall not be performed in MODE 1, 2, 3, or 4.</li> <li>3. 12 Battery Charger not required to be energized in SR 3.8.1.10(c) until completion of Unit 1 2011 refueling outage.*</li> </ol> <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"> <li>a. De-energization of emergency buses;</li> <li>b. Load shedding from emergency buses; and</li> <li>c. DG auto-starts from standby condition and energizes emergency loads in <math>\leq 60</math> seconds.</li> </ol>	<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~~ assure the 12 Battery Charger is automatically powered from its normal bus and then ~~automatically re-power the charger from the bus within 60 seconds.~~ Compliance with this SR will be demonstrated after implementation of the modification.

**ENCLOSURE, ATTACHMENT 2**

**Technical Specification Basis (Markup)**

**B 3.8.1-22**

1 page follows

BASES

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SURVEILLANCE  
REQUIREMENTS  
(continued)

SR 3.8.1.10

In the event of a DBA coincident with a loss of offsite power, the DGs are required to supply the necessary power to ESF systems so that the fuel, RCS, and containment design limits are not exceeded.

This Surveillance demonstrates the DG operation during a loss of offsite power actuation test signal in conjunction with an SI actuation signal. In lieu of actual demonstration of connection and loading of emergency loads, testing that adequately shows the capability of the DG system to perform these functions is acceptable. This testing may include any series of sequential, overlapping, or total steps so that the entire connection and loading sequence is verified.

The Frequency of 24 months takes into consideration unit conditions required to perform the Surveillance and is intended to be consistent with an expected fuel cycle length of 24 months.

This SR is modified by ~~two~~three Notes. The reason for Note 1 is to minimize wear and tear on the DGs during testing. The reason for Note 2 is that the performance of the Surveillance would remove a required offsite circuit from service, perturb the electrical distribution system, and challenge safety systems. Note 3 is provided to allow D2 DG to be OPERABLE without requiring the 12 Battery Charger to be energized until completion of the Unit 1 2011 refueling outage.

SR 3.8.1.11

This Surveillance demonstrates the as designed operation of the standby power sources during loss of the offsite source. This test verifies DG starts on the loss of offsite power. Tests of other design features associated with loss of offsite power are satisfied by SR 3.8.1.10.

**ENCLOSURE, ATTACHMENT 3**

**Technical Specification Pages (Retyped)**

3.8.1-10

1 page follows

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.10 -----NOTES-----</p> <ol style="list-style-type: none"> <li>1. All DG starts may be preceded by an engine prelube period.</li> <li>2. This Surveillance shall not be performed in MODE 1, 2, 3, or 4.</li> <li>3. 12 Battery Charger not required to be energized in SR 3.8.1.10(c) until completion of Unit 1 2011 refueling outage.*</li> </ol> <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"> <li>a. De-energization of emergency buses;</li> <li>b. Load shedding from emergency buses; and</li> <li>c. DG auto-starts from standby condition and energizes emergency loads in <math>\leq 60</math> seconds.</li> </ol>	<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 assure the 12 Battery Charger is automatically powered from its normal bus within 60 seconds. Compliance with this SR will be demonstrated after implementation of the modification.