

OCT 29 2007

L-PI-07-075
10 CFR 50.90

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

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

License Amendment Request (LAR) to Add a Power Factor to the Emergency Diesel Generators' (EDG) 24-hour Load Test (Surveillance Requirement 3.8.1.9)

References: 1) Supplement to License Amendment Request (LAR) For Extension Of Technical Specification (TS) 3.8.1, "AC Sources-Operating," Emergency Diesel Generator Completion Time (TAC Nos. MC9001 and MC9002), dated May 10, 2007, Accession No. ML071310108.

Pursuant to 10 CFR 50.90, the Nuclear Management Company, LLC (NMC) hereby requests an amendment to the Technical Specifications (TS) for the Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2 to revise Surveillance Requirement (SR) 3.8.1.9 to require that the test is performed at or below a power factor of 0.85. This LAR fulfills the commitment made in Reference 1 to submit an LAR by October 31, 2007 which requires the EDGs' 24-hour load test (SR 3.8.1.9) to be performed at or below a specified power factor. NMC has 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 contains the licensee's evaluation of the proposed changes.

NMC requests approval of this LAR within one calendar year of the submittal date. Upon NRC approval, NMC requests 90 days to implement the associated changes. In accordance with 10 CFR 50.91, NMC is notifying the State of Minnesota of this LAR by transmitting a copy of this letter and enclosure to the designated State Official.

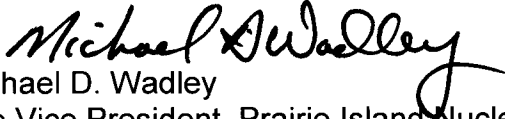
If there are any questions or if additional information is needed, please contact Mr. Dale Vincent, P.E., at 651-388-1121.

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 **OCT 29 2007**



Michael D. Wadley
Site Vice President, Prairie Island Nuclear Generating Plant Units 1 and 2
Nuclear Management Company, LLC

Enclosure: Evaluation of Proposed Changes

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

ENCLOSURE

Evaluation of the Proposed Changes

License Amendment Request (LAR) to Add a Power Factor to the Emergency Diesel Generators' (EDG) 24-hour Load Test (Surveillance Requirement 3.8.1.9)

1. SUMMARY DESCRIPTION
2. DETAILED DESCRIPTION
 - 2.1 Proposed Changes
 - 2.2 Background
3. TECHNICAL EVALUATION
4. REGULATORY SAFETY ANALYSIS
 - 4.1 Applicable Regulatory Requirements/Criteria
 - 4.2 Precedent
 - 4.3 Significant Hazards Consideration
 - 4.4 Conclusions
5. ENVIRONMENTAL CONSIDERATION
6. REFERENCES

ATTACHMENTS:

1. Technical Specification Pages (Markup)
2. Bases Pages (Markup) (For information only)
3. Technical Specification Pages (Retyped)

1. SUMMARY DESCRIPTION

This LAR is a request to amend Operating Licenses DPR-42 and DPR-60 for Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2.

The Nuclear Management Company, LLC (NMC) requests Nuclear Regulatory Commission (NRC) review and approval of proposed revisions to Technical Specification (TS) 3.8.1, "AC Sources-Operating", Surveillance Requirement (SR) 3.8.1.9 which will add a power factor to the test requirements. The TS, with the revisions proposed in this LAR, are more restrictive than the current TS and meet the intent of applicable regulatory guidance.

2. DETAILED DESCRIPTION

2.1 Proposed Changes

A brief description of the associated proposed TS changes is provided below along with a discussion of the justification for each change. The specific wording changes to the TS are provided in Attachments 1 and 3 to this enclosure.

TS 3.8.1, "AC Sources-Operating": This LAR proposes to revise the existing Note to SR 3.8.1.9 to allow momentary transients outside the power factor range and add a new Note which will require testing the EDGs at or below a power factor of 0.85. If grid conditions do not permit testing below this power factor, the Note allows testing at a power factor as close to the limit as practicable. The proposed TS change is consistent with the guidance provided in NUREG-1431, "Standard Technical Specifications, Westinghouse Plants", Revision 3.1 (NUREG-1431), SR 3.8.1.14. This change is acceptable because it is more restrictive than the current TS and is consistent with the intent of Regulatory Guide (RG) 1.9, "Application and Testing of Safety-Related Diesel Generators in Nuclear Power Plants", Revision 4 (RG 1.9).

Although Bases changes are not a part of this LAR, Attachment 2 to this enclosure includes marked up Bases pages 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 they are consistent with current regulatory guidance.

2.2 Background

Currently SR 3.8.1.9 requires the EDGs to be tested every 24 months to demonstrate they can start and run continuously at full load capability for an interval of not less than

24 hours. No power factor is specified for this load test which is not consistent with current regulatory guidance. In Reference 1, NMC made the following commitment:

NMC shall submit a License Amendment Request which proposes changes to the Technical Specifications in Appendix A which will require the 24-hour Emergency Diesel Generators load test (SR 3.8.1.9) to be performed at or below a specified power factor. These changes shall be consistent with the guidance in NUREG-1431, "Improved Technical Specifications, Westinghouse Plants", Revision 3.1, SR 3.8.1.14.

This LAR is submitted in fulfillment of the NMC commitment.

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 by the Northern States Power Company (NSP) and operated by NMC. 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.

The PINGP was designed and constructed to comply with NSP's understanding of the intent of the 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)."

EDG Description

Unit 1 EDGs

The Unit 1 EDGs, D1 and D2, are Fairbanks-Morse opposed piston EDGs which provide onsite standby power sources for 4 kV safeguards buses 15 and 16. These EDGs are each rated at 2750 kW continuous (8760 hour basis), 0.8 power factor, 900 rpm, 4160 Volt, three phase, 60 Hertz, synchronous generators. The 1,000 hour rating of each EDG is 3000 kilowatts. The 30 minute rating of each unit is 3250 kW maximum.

Unit 2 EDGs

The Unit 2 EDGs, D5 and D6, consist of two tandem-drive units (gensets) manufactured by Societe Alsacienne de Constructions Mecaniques de Mulhouse (SACM) which provide onsite standby power sources for 4 kV safeguards buses 25 and 26. These EDGs are each rated at 5400 kW continuous (8760 hour basis), 0.8 power factor, 1200 rpm, 4160V, 3-phase, 60 Hertz. Each engine is a SACM UD45 V-16, four-cycle diesel engine, that is, the 5400 kW generator is driven by two V-16 engines which share the load with a common electronic governor system.

Current TS Requirements and Basis

SR 3.8.1.9 requires that every 24 months each EDG operate for 24 hours or more with 2 hours at a load approximately 103 to 110% of the continuous duty rating and the remainder of the time at a load equivalent to (approximately 90%) the continuous duty rating of the EDG. The specification for the 24-month test does not include any requirement for the test to be performed at a specific power factor.

The TS requirement to perform a 24-hour load test was introduced into the PINGP TS with license amendments (LA) 103 and 96, for Units 1 and 2 respectively, issued December 17, 1992 (Reference 2). This LA required that every 18 months each EDG operate for 24 hours or more of which 2 hours are at a load equal to 105 to 110% of the continuous rating and 22 hours at a load equal to 90 to 100 percent of its continuous rating. Neither the LA, nor the supporting licensee LAR, provided a basis for the requirements included, or not included, in the TS requirements. LAs 113 and 106, issued January 5, 1995 (Reference 3), changed the 2-hour test range to 103 to 110%, and LAs 158 and 149, issued July 26, 2002 (Reference 4), changed the 24-hour test interval to 24 months. None of these LAs specified power factor test requirements.

Proposed Changes

This LAR proposes to specify a power factor requirement in the EDG 24-hour load test which is consistent with the guidance provided in NUREG-1431, "Standard Technical Specifications, Westinghouse Plants", Revision 3.1 (NUREG-1431), SR 3.8.1.14. Specifically, the SR 3.8.1.9 current Note will become Note 1 and be revised to include "power factor" as a variable for which a momentary transient outside the range does not invalidate the test. A new SR 3.8.1.9 Note 2 will be added which states:

If performed with DG synchronized with offsite power, it shall be performed at a power factor ≤ 0.85 . However, if grid conditions do not permit, the power factor limit is not required to be met. Under this condition the power factor shall be maintained as close to the limit as practicable.

Bases changes also consistent with NUREG-1431 will be made which support and amplify the basis for these proposed SR Note changes as follows:

Similarly, momentary power factor transients above the power factor limit will not invalidate the test. Note 2 ensures that the DG is tested under load conditions that are as close to design basis conditions as possible. When synchronized with offsite power, testing should be performed at a power factor of ≤ 0.85 . This power factor is representative of the actual inductive loading a DG would see under design basis accident conditions. Under certain conditions, however, Note 2 allows the Surveillance to be conducted as a power factor other than ≤ 0.85 . These conditions occur when grid voltage is high, and the additional field excitation needed to get the power factor to ≤ 0.85 results in voltages on the emergency buses that are too high. Under these conditions, the power factor should be maintained as close as practicable to 0.85 while still maintaining acceptable voltage limits on the emergency buses. In other circumstances, the grid voltage may be such that the DG excitation levels needed to obtain a power factor of 0.85 may not cause unacceptable voltages on the emergency buses, but the excitation levels are in excess of those recommended for the DG. In such cases, the power factor shall be maintained close as practicable to 0.85 without exceeding the DG excitation limits.

Technical Basis for Change

During the NRC Staff review of the PINGP LAR to extend the EDG Completion Time (Reference 5), NMC was requested to submit an LAR to include a power factor in the EDG 24 hour test, SR 3.8.1.9. This LAR fulfills NMC's commitment made in Reference 1 to submit an LAR by October 31, 2007 which requires the EDGs' 24-hour load test (SR 3.8.1.9) to be performed at or below a specified power factor. NMC has performed evaluations which determined that the power factor representative of the EDG post design basis event load is 0.85. The proposed change will make the TS testing requirements more restrictive than the current TS.

PINGP SR 3.8.1.9 provides the plant specific testing requirements equivalent to NUREG-1431 SR 3.8.1.14. As specified in the commitment in Reference 1, the proposed TS changes are consistent the format and content guidance of NUREG-1431, SR 3.8.1.14, for testing EDGs at or below a specified power factor. PINGP SR 3.8.1.9 provides the plant specific testing requirements equivalent to NUREG-1431 SR 3.8.1.14. The Bases will likewise be revised to be consistent with the guidance of NUREG-1431.

This change is also consistent with NRC guidance for EDG testing provided in RG 1.9, Revision 4; guidance for testing with a power factor is provided in Regulatory Position C 2.2.9, "Endurance and Load Margin Test", which states:

Clause 7.5.9 of IEEE Std 387-1995 should be supplemented as follows:

This test involves demonstrating the capability of the emergency diesel generator at continuous rating and worst case power factor for an interval of not less than 24 hours. Of this period, 2 hours are at a load equal to 105-110 percent of the

diesel generator's continuous rating, and 22 hours are at a load equal to 90-100 percent of the generator's continuous rating. The test process should verify that frequency and voltage requirements are maintained.

This LAR proposes to include a power factor which is representative of the EDG post design basis event loads and thus meets the intent of RG 1.9, Revision 4. The changes proposed in this LAR do not involve system modifications involving the plant EDGs. Although this LAR is consistent with the intent of RG 1.9 Revision 4 guidance for power factor test loading, this LAR does not commit to compliance with the provisions of RG 1.9, Revision 4.

The power factor proposed in this LAR was determined by revising the plant calculation which determines the EDG steady state loading for a loss of coolant accident (LOCA) concurrent with loss of offsite power (LOOP). This engineering calculation determined the power factor utilizing actual kW and kVA data from the motor database for motors on the safeguards buses which may operate following a design basis accident (DBA). The actual power loads (kW) and actual apparent power loads (kVA) on each bus were combined to determine the power factor which each EDG may experience following a DBA. The resulting power factors from this calculation were 0.872, 0.872, 0.861 and 0.866 for D1, D2, D5 and D6 respectively.

Since the lowest power factor value is 0.861, the power factor value of 0.85 is proposed as a conservative test value to be specified in SR 3.8.1.9 which allows margin for measurement uncertainties that may be included in the manufacturer's data provided in the motor database. This power factor is within the capability of the EDGs since D1 and D2 have a continuous duty rating of 2750 kW at a power factor of 0.8 and D5 and D6 have a continuous duty rating of 5400 kW at a power factor of 0.8.

NMC has initiated a project at PINGP to reconstitute the plant design basis calculations which should be concluded during 2008. This project includes reconstituting the calculation for EDG steady state loading for an SI event concurrent with a LOOP and may result in a different power factor value.

Test Performance Challenges

This submittal fulfills a commitment to submit an LAR proposing TS for testing the EDGs at a specified power factor. This LAR proposes to adopt the guidance of NUREG-1431 which requires performance of the EDG 24-hour test at or below a plant specific power factor (0.85) and stipulates that the power factor is not required to be met if grid conditions do not allow the specified power factor to be attained. As discussed in the following paragraphs, NMC anticipates that the specified power factor of 0.85 cannot be met when the EDGs are paralleled to the grid, under normal grid conditions, and the provisions for performing the test with the power factor not met will be routinely invoked.

When the EDGs are operating in parallel with the grid, increasing the exciter current

increases the generator reactive load (kVAR) and also increases the voltage of the associated bus. Increasing the reactive load (kVAR) at a given real load (kW) increases the apparent load (kVA) and decreases the power factor.

Current PINGP EDG operating procedures limit the Unit 1 EDGs (D1 and D2) to 1000 kVAR at loads of 2500 kW to 2700 kW which corresponds to a power factor of approximately 0.938. Unit 2 EDGs (D5 and D6) are limited to a maximum of 1250 kVAR when operated at 5100 kW to 5300 kW which corresponds to a power factor of approximately 0.973. The maximum kVA at which an EDG operates is dependent on the corresponding safeguards bus voltage that results from increasing the exciter current to attain the kVA. The safeguards buses are limited to 4400 V (approximately 105.8% of the bus nominal 4160 Volts) to protect the safeguards motors.

To achieve a test power factor of 0.85 would require 1673 kVAR on a Unit 1 EDG at 2700 kW and 3285 kVAR on a Unit 2 EDG at 5300 kW. These required kVAR will likely not be attainable due to the bus voltage limitations.

During preparation of this LAR, the grid and safeguards bus voltages were checked to assess typical bus voltages. The voltages on safeguards buses 15, 16, 25 and 26 were 4323, 4217, 4349 and 4223 V respectively with the nominal 345 kV grid voltage at 351.5 kV which are typical bus voltages. Due to the design and construction of the PINGP electrical distribution system, the safeguards bus voltages are controlled by the grid voltage when the plant is on line, that is, to reduce the safeguard bus voltage, the grid voltage must be reduced. The grid voltage is established by the minimum voltage required to maintain the safeguards bus voltage above the minimum voltage required by the safeguards motors.

Therefore to test the EDGs at a 0.85 power factor would require the grid voltage to be reduced to lower the safeguards bus voltages to allow the voltage to increase as the exciter current is increased to increase reactive load on the EDGs. NMC anticipates that these voltages cannot be maintained within their required limits and obtain the proposed TS test power factor of 0.85.

Conclusions

This LAR is submitted in fulfillment of a commitment to the NRC to propose TS changes which require testing the EDGs at or below a specified power factor. This change is more restrictive than the current TS which do not specify a test power factor. TS 3.8.1, SR 3.8.1.9 and Bases 3.8.1 changes are proposed which are consistent with the guidance of NUREG-1431. The proposed changes also meet the intent of the guidance in NRC-issued Regulatory Guide 1.9, Revision 4. NMC anticipates that normally existing grid conditions will require EDG testing at a power factor above the proposed TS specified power factor. Operation, maintenance and testing of the Prairie Island Nuclear Generating Plant with the proposed TS revisions 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":

(d) 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.

This license amendment request proposes to require testing the emergency diesel generators at a specified power factor in the 24-hour Surveillance Requirement for load testing. Provisions for performing the test when the power factor cannot be met are included consistent with industry guidance in NUREG-1431, "Standard Technical Specifications, Westinghouse Plants", Revision 3.1 (NUREG-1431), SR 3.8.1.14. With these 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 the emergency diesel generators 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 complete 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 Criterion 39 provides design guidance for the operating capability of alternate power systems.

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 four emergency diesel generators installed at the plant. This license amendment request proposes changes to the Technical Specifications which will require load testing at a specified power factor during the 24-hour test. This test will continue to assure that the emergency diesel generators have the capacity and capability to perform their required function. 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 39 continue to be met and the plant Technical Specifications will continue to provide the basis for safe plant operation.

Regulatory Guide 1.9, "Application and Testing of Safety-Related Diesel Generators in Nuclear Power Plants", Revision 4

Regulatory Guide 1.9, Revision 4, describes methods acceptable to the NRC Staff for implementing the requirements of NRC regulations with respect to emergency diesel generators. Regulatory Position C 2.2.9, "Endurance and Load Margin Test" of this Regulatory Guide provides guidance that the emergency diesel generator 24-hour test should be performed at the continuous rating and worst case power factor. This license amendment request proposes to revise the Prairie Island Nuclear Generating Plant Technical Specifications to include a power factor which is representative of the emergency diesel generator post design basis event loads and thus meets the intent of RG 1.9, Revision 4.

NUREG-1431, "Standard Technical Specifications, Westinghouse Plants", Revision 3.1 (NUREG-1431)

NUREG-1431, Surveillance Requirement (SR) 3.8.1.14, provides guidance for emergency diesel generator 24-hour testing and includes a Note that specifies testing to be performed at a plant specific power factor when connected to the grid. The Note also includes provisions for performing the test when grid conditions do not allow the power factor to be met. This license amendment request proposes changes to the Prairie Nuclear Generating Plant Technical Specification SR 3.8.1.9, which specifies the test requirements equivalent to NUREG-1431, SR 3.8.1.14, which incorporate the power factor testing guidance Note from NUREG-1431, SR 3.8.1.14.

Thus, with the changes proposed in this license amendment request, the guidance of NUREG-1431 is met as discussed above and the plant Technical Specifications will continue to provide the basis for safe plant operation.

4.2 Precedent

In a license amendment request dated January 10, 2007, the Kewaunee Power Station proposed Technical Specification testing requirements which included a new requirement to test the emergency diesel generators at a specified power factor during their 24-hour test. On May 1, 2007, the NRC issued License Amendment 191

(Reference 6) to the Kewaunee Power Station which included Technical Specification emergency diesel generator power factor test requirements. Like the Technical Specification changes proposed in this license amendment request, the Kewaunee Power Station testing requirements followed the format and content guidance of NUREG-1431 which includes provisions for performing the testing if the power factor value cannot be met due to grid conditions.

4.3 Significant Hazards Consideration

The Nuclear Management Company 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 more restrictive changes to the Technical Specification Surveillance Requirements for the emergency diesel generators which will require testing at a specified power factor, grid conditions permitting.

The emergency diesel generators are not accident initiators and therefore, these changes do not involve a significant increase in the probability of an accident. The proposed changes increase the load testing requirements, are consistent with the intent of current regulatory guidance for testing emergency diesel generators, and will continue to assure that this equipment performs its design function. Thus these changes 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 more restrictive changes to the Technical Specification Surveillance Requirements for the emergency diesel generators which will require testing at a specified power factor, grid conditions permitting.

The changes proposed for the emergency diesel generators do not change any system operations or maintenance activities. Testing requirements will be

revised and will continue to demonstrate that the Limiting Conditions for Operation are met and the system components are functional. These changes do not create new failure modes or mechanisms which are not identifiable during testing and no new accident precursors are generated.

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 more restrictive changes to the Technical Specification Surveillance Requirements for the emergency diesel generators which will require testing at a specified power factor, grid conditions permitting.

The current Technical Specification Surveillance Requirements do not specify testing at any power factor. The Technical Specification Surveillance Requirements proposed in this license amendment request are thus more restrictive in that they place additional restraints on the test conditions. These changes may make the testing more rigorous and thus more difficult for the emergency diesel generators to meet the test acceptance criteria. The addition of a power factor is consistent with the intent of current regulatory guidance for testing emergency diesel generators. Since these changes are an increase in the test requirements and are consistent with the intent of current regulatory guidance, these changes do not involve a significant reduction in a margin of safety.

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

Based on the above, the Nuclear Management Company 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

1. Prairie Island Nuclear Generating Plant, Units 1 and 2, Supplement to License Amendment Request (LAR) For Extension Of Technical Specification (TS) 3.8.1, "AC Sources-Operating," Emergency Diesel Generator Completion Time (TAC Nos. MC9001 and MC9002), dated May 10, 2007, Accession Number ML071310108.
2. Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2 – Amendment Nos. 103 and 96 to Facility Operating License Nos. DPR-42 and DPR-60 (TAC Nos. M83070 and M83071), dated December 17, 1992, Accession Number ML022240504.
3. Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2 – Issuance of Amendments RE: Emergency Diesel Generator Testing Requirements (TAC Nos. M90564 and M90565), dated January 5, 1995, Accession Number ML022250357.
4. Prairie Island Nuclear Generating Plant, Units 1 and 2 – Issuance of Amendments RE: Conversion to Improved Technical Specifications (TAC Nos. MB0695 and MB0696), dated July 26, 2002, Accession Number ML022070613.
5. Prairie Island Nuclear Generating Plant, Units 1 and 2, License Amendment Request (LAR) For Extension Of Technical Specification (TS) 3.8.1, "AC Sources-Operating," Emergency Diesel Generator Completion Time (TAC Nos. MC9001 and MC9002), dated November 21, 2005, Accession Number ML053260088.

6. Kewaunee Power Station - Issuance Of Amendment Regarding Emergency Diesel Generator Rated Load Testing (TAC No. MA3995), dated May 1, 2007, Accession Number ML071200186.

ENCLOSURE, ATTACHMENT 1

Technical Specification Page (Markup)

3.8.1-9

1 page follows

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE	FREQUENCY
<p>SR 3.8.1.9 -----NOTES-----</p> <p>1. <u>Momentary transients outside the load and power factor ranges do not invalidate this test.</u></p> <p>2. <u>If performed with DG synchronized with offsite power, it shall be performed at a power factor < 0.85. However, if grid conditions do not permit, the power factor limit is not required to be met. Under this condition the power factor shall be maintained as close to the limit as practicable.</u></p> <p>-----</p> <p>Verify each DG operates for ≥ 24 hours:</p> <p>a. For ≥ 2 hours loaded:</p> <p style="padding-left: 40px;">Unit 1 ≥ 2832 kW, and ≤ 3000 kW</p> <p style="padding-left: 40px;">Unit 2 ≥ 5562 kW, and ≤ 5940 kW; and</p> <p>b. For the remaining hours of the test loaded:</p> <p style="padding-left: 40px;">Unit 1 ≥ 2475 kW, and</p> <p style="padding-left: 40px;">Unit 2 ≥ 4860 kW; and</p> <p>c. Achieves steady state voltage ≥ 3740 V and ≤ 4580 V; and frequency ≥ 58.8 Hz and ≤ 61.2 Hz.</p>	<p>24 months</p>

ENCLOSURE, ATTACHMENT 2

Bases Pages (Markup)

(For Information Only)

B 3.8.1-21

1 page follows

BASES

SURVEILLANCE
REQUIREMENTS

SR 3.8.1.9 (continued)

The load band is provided to avoid routine overloading of the DG. Routine overloading may result in more frequent teardown inspections in accordance with vendor recommendations in order to maintain DG OPERABILITY.

The 24 month Frequency takes into consideration unit conditions required to perform the Surveillance, and is intended to be consistent with expected fuel cycle lengths.

This Surveillance is modified by two Notes. The Note 1 states that momentary transients due to changing bus loads do not invalidate this test. Similarly, momentary power factor transients above the power factor limit will not invalidate the test. Note 2 ensures that the DG is tested under load conditions that are as close to design basis conditions as possible. When synchronized with offsite power, testing should be performed at a power factor of < 0.85 . This power factor is representative of the actual inductive loading a DG would see under design basis accident conditions. Under certain conditions, however, Note 2 allows the Surveillance to be conducted as a power factor other than < 0.85 . These conditions occur when grid voltage is high, and the additional field excitation needed to get the power factor to < 0.85 results in voltages on the emergency buses that are too high. Under these conditions, the power factor should be maintained as close as practicable to 0.85 while still maintaining acceptable voltage limits on the emergency buses. In other circumstances, the grid voltage may be such that the DG excitation levels needed to obtain a power factor of 0.85 may not cause unacceptable voltages on the emergency buses, but the excitation levels are in excess of those recommended for the DG. In such cases, the power factor shall be maintained close as practicable to 0.85 without exceeding the DG excitation limits.

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

ENCLOSURE, ATTACHMENT 3

Technical Specification Page (Retyped)

3.8.1-9

1 page follows

SURVEILLANCE REQUIREMENTS (continued)

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