DEC 14 2006

L-PI-06-058
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 Revise Technical Specifications (TS) in Support of Containment Sump Resolution

Reference 1) Supplement to Nuclear Management Company Response to Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," for the Prairie Island Nuclear Generating Plant, dated December 13, 2005, Accession Number ML053480360.

Pursuant to 10 CFR 50.90, the Nuclear Management Company, LLC (NMC) hereby requests an amendment to the TS for the Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2 to revise the reference to "trash racks and screens" in TS 3.5.2, "ECCS [Emergency Core Cooling System] – Operating", Surveillance Requirement (SR) 3.5.2.8 and revise the required Refueling Water Storage Tank (RWST) level in TS 3.5.4, "Refueling Water Storage Tank (RWST)". This LAR fulfills the commitment made in Reference 1 to submit an LAR to revise SR 3.5.2.8 by December 31, 2006. NMC has evaluated the proposed changes in accordance with 10 CFR 50.92 and concluded that they involve no significant hazards consideration.

This LAR proposes two TS changes which support resolution of containment sump issues raised in NRC Bulletin 2003-01 and Generic Letter 2004-02. Changes are proposed in SR 3.5.2.8 to make the description consistent with the plant design following modifications to the containment sump inlet suction debris interceptors. The RWST level specified in SR 3.5.4.1 is proposed to be increased from 200,000 gallons (approximately 68%) to 265,000 gallons (approximately 90%) to provide additional margin in containment sump analyses. Plant administrative controls currently require maintaining the RWST at or above 90% level.

Exhibit A contains the licensee's evaluation of this LAR. Exhibit B provides marked up TS and Bases pages. Exhibit C provides retyped TS pages.

NMC requests approval of this LAR within one year of the submittal date. Upon Nuclear Regulatory Commission (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 attachments to the designated State Official.

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 DEC 14 2006

Thomas J. Palmisano
Site Vice President, Prairie Island Nuclear Generating Plant Units 1 and 2
Nuclear Management Company, LLC

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

Exhibits:

A. Licensee's Evaluation
B. Proposed Technical Specification and Bases Changes (markup)
C. Proposed Technical Specification Changes (retyped)

Exhibit A

LICENSEE'S EVALUATION

License Amendment Request (LAR) to Revise Technical Specifications (TS) in Support of Containment Sump Resolution

1.0 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 revised Surveillance Requirement (SR) 3.5.2.8 containment sump suction inlet debris interceptor description and SR 3.5.4.1 required Refueling Water Storage Tank (RWST) level. These changes support resolution of containment sump performance issues raised in NRC Bulletin (BL) 2003-01, "Potential Impact Of Debris Blockage On Emergency Sump Recirculation At Pressurized-Water Reactors" and Generic Letter (GL) 2004-02, "Potential Impact Of Debris Blockage On Emergency Recirculation During Design Basis Accidents At Pressurized-Water Reactors."

2.0 PROPOSED CHANGE

A brief description of the proposed TS and Bases changes is provided below along with a discussion of the justification for each change. The specific wording changes to the TS and Bases are provided in Exhibits B and C.

TS Limiting Condition For Operation (LCO) 3.5.2, "ECCS [Emergency Core Cooling System] – Operating", SR 3.5.2.8 and associated Bases: Currently SR 3.5.2.8 requires verification that the containment sump suction inlet "trash racks and screens" show no evidence of structural distress or corrosion. In response to GL 2004-02, new sump suction inlet debris interceptors, described more generically as "strainers", will be installed that do not include trash racks.

This LAR proposes to replace the words "trash racks and screens" with "strainers" in the SR. This change is acceptable since the revised SR will accurately describe the required verifications and ensure the new strainers will provide the necessary sump inlet protection.

TS LCO 3.5.4, "Refueling Water Storage Tank (RWST)", SR 3.5.4.1 and associated Bases: Currently SR 3.5.4.1 requires 200,000 gallons in the RWST which corresponds to an instrumentation level indication of approximately 68%. This LAR proposes to increase the required level to 265,000 gallons corresponding to approximately 90% instrumentation level indication. This change is acceptable since it will require each unit to maintain a larger inventory of water available to mitigate an accident and thus is a conservative change.

The Bases will also be revised to support these changes. Although the Bases changes are not a part of this LAR, marked up Bases pages are included for information.

In summary these changes are acceptable because they are associated with plant changes which may increase plant safety.

3.0 BACKGROUND

The NRC has requested pressurized water reactor (PWR) plants, including PINGP, to evaluate design basis accident mitigation with respect to the potential for containment sump blockage. On June 9, 2003, the NRC issued BL 2003-01, "Potential Impact Of Debris Blockage On Emergency Sump Recirculation At Pressurized-Water Reactors" which required licensees to "confirm their compliance with 10 CFR 50.46(b)(5) and other existing applicable regulatory requirements, or describe any compensatory measures implemented to reduce the potential risk due to post-accident debris blockage as evaluations to determine compliance proceed."

On September 13, 2004, the NRC issued GL 2004-02, "Potential Impact Of Debris Blockage On Emergency Recirculation During Design Basis Accidents At Pressurized-Water Reactors." This GL requested that the applicable licensees perform an evaluation of the ECCS and containment spray system (CSS) recirculation functions in light of the information provided in the GL, if appropriate, take additional actions to ensure system function, and submit requested information to the NRC. The sump blockage issues are collectively known as NRC Generic Safety Issue 191 (GSI-191).

This LAR proposes two TS changes which support resolution of GL 2004-02: 1) revise SR 3.5.2.8 to require verification that the containment sump "strainers" do not show evidence of structural distress or corrosion; and 2) revise SR 3.5.4.1 to require the plant to maintain a larger inventory of water in the RWST.

Currently SR 3.5.2.8 requires inspection of the containment sump suction inlet trash racks and screens. In the response to GL 2004-02 for PINGP, Reference 1, NMC

committed to evaluate and modify as appropriate the PINGP ECCS to support long-term decay heat removal and resolve the issues identified in GL 2004-02 by December 31, 2007. Based on analyses, NMC decided to replace the current containment sump suction inlet debris interceptors, referred to in SR 3.5.2.8 as "trash racks and screens", with new containment sump suction inlet debris interceptors which will be referred to with the more generic terminology "strainers". Since the new strainers do not include trash racks, in Reference 2 NMC committed to submit an LAR to change TS SR 3.5.2.8 to reflect the new design by December 31, 2006. This LAR fulfills the commitment to change SR 3.5.2.8.

The water provided by the RWST may be an important contributor to mitigation of postulated design basis accidents. The evaluations requested by BL 2003-01 and GL 2004-02 included assessment of the adequacy of the volume of water supplied by the RWST. In the response to BL-2003-01 for PINGP, Reference 3, NMC stated,

> The minimum refueling water storage tank (RWST) level for normal operation has been administratively increased. This was accomplished by revising the applicable Surveillance Procedures for operation above Mode 5 to raise the required minimum RWST volume from the Technical Specification value of greater than or equal to 68% (200,000 gallons) for Modes 1, 2, and 3. A new administrative limit has been implemented to require greater than or equal to 90%.

An additional volume of water in the RWST, available to mitigate design basis accidents, increases margins in ECCS analyses which credit containment sump suction. Thus NMC proposes to adopt the current RWST administrative level as the TS required level.

NMC requests the NRC approve the two proposed TS changes: revise the SR 3.5.2.8 description of equipment; and, increase the required SR 3.5.4.1 RWST level from 200,000 gallons (approximately 68% level) to 265,000 gallons (approximately 90% level). The NRC has previously reviewed and approved changes to other plant TS surveillance requirements similar to those proposed for SR 3.5.2.8 in this LAR. Similar changes were made for the Oconee Nuclear Station (Reference 4) and Wolf Creek Generating Station (Reference 5).

4.0 TECHNICAL ANALYSIS

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)."

Containment Sump Suction Inlet Debris Interceptors

The current Containment Sump B suction inlet debris interceptors, which are described in SR 3.5.2.8 as "trash racks and screens", are being replaced under the plant modification process with new structures known more generically as strainers. As discussed in Reference 1, the new structures do not include trash racks, thus this LAR proposes to change the SR.

RWST

The RWST supplies borated water to the Chemical and Volume Control System during abnormal operating conditions, to the refueling pool during refueling, and to the ECCS and the Containment Spray System during accident conditions.

One RWST for each unit supplies both trains of the ECCS and the Containment Spray System during the injection phase of a loss of coolant accident (LOCA). A motor operated isolation valve is provided in each header to isolate the RWST from the ECCS once the system has been transferred to the recirculation mode. The recirculation mode is entered when RHR pump suction is transferred to the containment sump following receipt of the RWST-Low Low Level alarm. Use of a single RWST to supply both trains of the ECCS and Containment Spray System is acceptable since the RWST is a passive component, and passive failures are not required to be assumed to occur coincidentally with initiation of design basis events.

During normal operation in MODES 1, 2, and 3, the safety injection (SI), residual heat removal (RHR), and Containment Spray (CS) pumps are aligned to take suction from the RWST.

Licensing Basis for RWST level – Acceptance Criteria

The TS requirement for RWST level, as stated in the Bases B 3.5.4, is specified to ensure that:

a. The RWST contains sufficient borated water to support the ECCS during the injection phase;

b. Sufficient water volume exists in the containment sump to support continued operation of the ECCS pumps at the time of transfer to the recirculation mode of

cooling; and

c. The reactor remains subcritical following a LOCA.

Sufficient water in the RWST assures adequate net positive suction head (NPSH) for the RHR pumps when the transfer to the recirculation mode occurs.

Basis for Proposed Licensing Basis Changes and TS Revisions

NRC GL-2004-02 requested PWR licensees to evaluate ECCS recirculation functions in consideration of the potential impact of debris blockage as identified in BL-2003-01 and GL-2004-02, and take appropriate actions to ensure system function. NMC has performed these evaluations and identified plant modifications.

The plant modifications are replacement of the Containment Sump B suction inlet debris interceptors with new strainers in both units. The new sump strainers will increase the flow area to reduce the head loss at the strainer and improve the safety of the plant. Currently, SR 3.5.2.8 requires inspection of the containment sump suction inlet trash racks and screens. For the reasons discussed in Reference 1, the design for the new containment sump suction inlet debris interceptors is known as strainers and does not include trash racks. This LAR proposes to change this SR to reflect that PINGP is installing new strainers in lieu of the current debris interceptors. Note that the previous configuration only included a "screen" with opening size more consistent with a trash rack and not a "trash rack and screen".

The new strainers are designed to withstand the vibratory motion of seismic loads assuming the maximum postulated debris loading and maximum pool liquid level without crediting a trash rack. The strainers are designed to withstand differential pressure loads imposed by the accumulation of debris without crediting a trash rack. The calculations for the strainers were reviewed as part of the NRC audit of implementation activities to resolve GSI-191 at PINGP conducted from October 23 through October 27, 2006.

Increasing the TS required RWST level also provides benefits in resolution of PWR containment sump blockage issues (NRC GSI-191) including:

- Increased injection time allows more time for potential debris sources to settle before recirculation is commenced. Raising the minimum level in the RWST provides a greater volume of water, and therefore, a longer injection time.

- Increased liquid level at the containment basement floor level reduces the velocity to the sump; thereby increasing the probability for potential debris sources to settle. Raising the minimum level in the RWST provides a greater volume of water to be injected, which raises the liquid level in the containment basement.

- Increase liquid level at the containment basement floor level increases the available

NPSH to the RHR pumps. As stated above, raising the minimum level in the RWST will correspond to a greater volume of liquid in the containment basement following the injection phase.

Current Technical Specifications do not impose a maximum RWST borated water volume. Thus, for analyses where maximum borated water volume is a conservative input, the RWST is assumed to be full. These analyses are not affected by this proposed change.

Conclusions

New Containment Sump B suction inlet strainers have been or will be installed in the PINGP units which increases the debris interceptor flow area to the sump and increases plant safety. The new design of the sump suction inlet strainers does not include trash racks and thus changes must be made to the TS surveillance requirements. The proposed TS required RWST level of 90% provides benefits in resolution of the PWR sump blockage issues. Increasing the TS required RWST level is a conservative change that increases the plant safety. Operation of the Prairie Island Nuclear Generating Plant with the proposed Technical Specification revisions will continue to protect the health and safety of the public.

5.0 REGULATORY SAFETY ANALYSIS

5.1 No 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. Do the proposed changes involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No

This license amendment request proposes to revise the Technical Specifications by changing the containment sump inlet debris interceptor description in Surveillance Requirement 3.5.2.8 and increasing the Refueling Water Storage Tank level in Surveillance Requirement 3.5.4.1 to 265,000 gallons which corresponds to approximately 90% indicated instrumentation level. These changes support resolution of containment sump blockage issues raised in Nuclear Regulatory Commission Bulletin 2003-01, "Potential Impact Of Debris Blockage On Emergency Sump Recirculation At Pressurized-Water Reactors" and Generic Letter 2004-02, "Potential Impact Of Debris Blockage On Emergency Recirculation During Design Basis Accidents At Pressurized-Water Reactors."

The containment sump inlet debris interceptor is a plant design feature which mitigates accidents and does not initiate accidents. Therefore, the proposed change does not involve a significant increase in the probability of an accident. The new sump strainers for use as debris interceptors have been evaluated to withstand the applicable post accident loads without trash racks and thus the description change in Surveillance Requirement 3.5.2.8 does not involve a significant increase in the consequences of an accident previously evaluated.

The Refueling Water Storage Tank is required for accident mitigation and is not an accident initiator, thus requiring additional water volume in the tank does not involve a significant increase in the probability of an accident previously evaluated. Since the proposed change increases the water volume in the Refueling Water Storage Tank available for accident mitigation, this change may decrease the consequences of an accident.

Thus, the changes proposed in this license amendment request do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Do the proposed changes 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 Technical Specifications by changing the containment sump inlet debris interceptor description in Surveillance Requirement 3.5.2.8 and increasing the Refueling Water Storage Tank level in Surveillance Requirement 3.5.4.1 to 265,000 gallons which corresponds to approximately 90% indicated instrumentation level. These changes support resolution of containment sump blockage issues raised in Nuclear Regulatory Commission Bulletin 2003-01, "Potential Impact Of Debris Blockage On Emergency Sump Recirculation At Pressurized-Water Reactors" and Generic Letter 2004-02, "Potential Impact Of Debris Blockage On Emergency Recirculation During Design Basis Accidents At Pressurized-Water Reactors."

The proposed Technical Specification containment sump suction inlet debris interceptor description revision does not create the possibility of a new or different kind of accident. There are no new failure modes or mechanisms created by the new strainers and there are no new accident precursors generated due to this change. The new strainers do not change the way in which the plant is operated.

The proposed Technical Specification Refueling Water Storage Tank level increase does not involve a change in system operation or the use of the

Refueling Water Storage Tank. It does increase the quantity of water in the Refueling Water Storage Tank available for accident mitigation. There are no new failure modes or mechanisms created by the availability or use of an additional water volume in the Refueling Water Storage Tank as proposed by this Technical Specification change. There are no new accident precursors generated with the storage of additional water in the Refueling Water Storage Tank.

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

3. Do the proposed changes involve a significant reduction in a margin of safety?

Response: No

This license amendment request proposes to revise the Technical Specifications by changing the containment sump inlet debris interceptor description in Surveillance Requirement 3.5.2.8 and increasing the Refueling Water Storage Tank level in Surveillance Requirement 3.5.4.1 to 265,000 gallons which corresponds to approximately 90% indicated instrumentation level. These changes support resolution of containment sump blockage issues raised in Nuclear Regulatory Commission Bulletin 2003-01, "Potential Impact Of Debris Blockage On Emergency Sump Recirculation At Pressurized-Water Reactors" and Generic Letter 2004-02, "Potential Impact Of Debris Blockage On Emergency Recirculation During Design Basis Accidents At Pressurized-Water Reactors."

The proposed Technical Specification containment sump debris interceptor description revision does not involve a significant reduction in a margin of safety. The new sump strainers for use as debris interceptors have been evaluated to withstand the applicable post accident loads without trash racks and thus do not involve a significant reduction in a margin of safety. The new strainers provide additional debris interceptor flow area to the sump and thus may improve plant margins of safety.

The proposed change will increase the required water volume to be stored in the Refueling Water Storage Tank which means additional water will be available to mitigate accidents. This change does not involve a decrease in the margin of safety, but may involve an increase in the 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 presents no 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.

5.2 Applicable Regulatory Requirements/Criteria

Title 10 Code of Federal Regulations (CFR) 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.

This license amendment request proposes a change to Surveillance Requirement 3.5.2.8 that revises the description of the containment sump inlet debris interceptor. This is a change to an inspection requirement to assure that the necessary quality of this component is maintained. This license amendment request also proposes to increase Refueling Water Storage Tank level to 265,000 gallons which corresponds to approximately 90% indicated instrumentation level. With this change, the Surveillance Requirement will continue to assure that the limiting conditions for operation of the Refueling Water Storage Tank 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 as proposed on July 10, 1967, (AEC GDC) as described in the plant Updated Safety Analysis Report. AEC GDC proposed criterion 44 provides design guidance applicable to the containment sump inlet debris interceptor and refueling water storage tank level considerations. Since the Prairie Island Nuclear Generating Plant does not use the containment spray system during the recirculation phase of accident mitigation, criterion applicable to long-term containment cooling are not applicable to the refueling water storage tank level.

AEC GDC proposed Criterion 44 – Emergency Core Cooling System Capability

> *At least two emergency core cooling systems, preferably of different design principles, each with a capability of accomplishing abundant emergency core cooling, shall be provided. Each emergency core cooling system and the core*

shall be designed to prevent fuel and clad damage that would interfere with the emergency core cooling function and to limit the clad metal-water reaction to negligible amounts for all sizes of breaks in the reactor coolant pressure boundary, including the double-ended rupture of the largest pipe. The performance of each emergency core cooling system shall be evaluated conservatively in each area of uncertainty. The systems shall not share active components and shall not share other features or components unless it can be demonstrated that (a) the capability of the shared feature or component to perform its required function can be readily ascertained during reactor operation, (b) failure of the shared feature or component does not initiate a loss-of-coolant accident, and (c) capability of the shared feature or component to perform its required function is not impaired by the effects of a loss-of-coolant accident and is not lost during the entire period this function is required following the accident.

The NRC has identified containment sump blockage in Bulletin 2003-01 and Generic Letter 2004-02 as an area of uncertainty in the performance of the emergency core cooling system. The Nuclear Management Company conservatively performed evaluations of containment sump blockage for the Prairie Island Nuclear Generating Plant and determined that replacement of the existing containment sump inlet suction debris interceptors with strainers which have a larger flow area would improve system performance. The new strainers are designed to withstand the vibratory motion of seismic loads assuming that the maximum postulated debris loading and maximum pool liquid level without crediting a trash rack. The strainers are also designed to withstand differential pressure loads imposed by the accumulation of debris without crediting a trash rack. Thus this license amendment request proposes a change to Surveillance Requirement 3.5.2.8 that makes the description of the containment sump inlet debris interceptors consistent with the plant design following installation of the new strainers.

This license amendment also proposes to increase the Technical Specification required Refueling Water Storage Tank level which will make more water available to the emergency core cooling systems and improve system performance. With the changes proposed in this license amendment request, the requirements of this Criterion continue to be met.

Regulatory Guide 1.82, "Water Sources for Long-Term Recirculation Cooling Following a Loss-of-Coolant Accident", Revision 3

Regulatory Guide 1.82 describes methods acceptable to the NRC Staff for implementing the requirements of NRC regulations with respect to the sumps performing the function of water source for emergency core cooling and evaluating the adequacy of the availability of the sump for long-tem recirculation cooling following a loss-of-coolant accident. Specifically, this Regulatory Guide provides guidance for design considerations for containment sump debris interceptors such as trash racks and screens. The new strainers at the Prairie Island Nuclear Generating Plant were evaluated for post-accident debris loading and demonstrated that the strainers can

withstand the applicable loads without the use of trash racks. The analyses for the new strainers were reviewed by the NRC as part of an audit of implementation activities to resolve containment sump issues at the Prairie Island Nuclear Generating Plant conducted from October 23 through October 27, 2006. Thus, this license amendment request proposes changes to Surveillance Requirement 3.5.2.8 to replace inspection requirements for "trash racks and screens" with requirements for inspection of "strainers". With the proposed changes, the guidance of this Regulatory Guide has been met.

Regulatory Requirements/Criteria Conclusions

In conclusion, based on the considerations discussed 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.

6.0 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.

7.0 REFERENCES

1. Nuclear Management Company Response to Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," for the Prairie Island Nuclear Generating Plant, dated August 31, 2005, Accession Number ML052440054.

2. Supplement 1 to Nuclear Management Company Response to Generic Letter 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," for the Prairie Island Nuclear Generating Plant, dated December 13, 2005, Accession Number ML053480360.

3. Nuclear Regulatory Commission Bulletin 2003-01: Potential Impact Of Debris Blockage On Emergency Sump Recirculation At Pressurized-Water Reactors – 60-Day Response, dated August 6, 2003, Accession Number ML032260664.

4. Oconee, Units 1 and 2, License Amendments 348 and 350 regarding Revising TS 3.5.2.6 and 3.5.3.6 to Accommodate the Replacement of the Reactor Building Emergency Sump Suction Inlet Trash Racks and Screens with Strainers, dated November 1, 2005, Accession Number ML052800170.

5. Wolf Creek – Issuance of License Amendment 168 Re: Revise Containment Sump Surveillance Requirement to Verify Strainer Integrity, dated October 5, 2006, Accession Number ML061780280.

Exhibit B

Proposed Technical Specification and Bases Changes (markup)

Technical Specification Pages

3.5.2-3
3.5.4-2

Bases pages
(for information only)

B 3.5.4-3

3 pages follow

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.5.2.4	Verify each ECCS pump's developed head at the test flow point is greater than or equal to the required developed head.	In accordance with the Inservice Testing Program
SR 3.5.2.5	Verify each ECCS automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	24 months
SR 3.5.2.6	Verify each ECCS pump starts automatically on an actual or simulated actuation signal.	24 months
SR 3.5.2.7	Verify each ECCS throttle valve listed below is in the correct position. Unit 1 Valve Number / Unit 2 Valve Number SI-15-6 / 2SI-15-6 SI-15-7 / 2SI-15-7 SI-15-8 / 2SI-15-8 SI-15-9 / 2SI-15-9	24 months
SR 3.5.2.8	Verify, by visual inspection, each ECCS train containment sump suction inlet is not restricted by debris and the suction inlet strainers ~~trash racks and screens~~ show no evidence of structural distress or abnormal corrosion.	24 months

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.5.4.1	Verify RWST borated water volume is ≥ ~~200~~265,000 gallons (~~90~~68%).	7 days
SR 3.5.4.2	Verify RWST boron concentration is ≥ 2600 ppm and ≤ 3500 ppm.	7 days

BASES

APPLICABLE SAFETY ANALYSES (continued)

The RWST must also meet volume and boron concentration requirements for non-LOCA events. The volume is not an explicit assumption in non-LOCA events since the required volume is a small fraction of the available volume. The deliverable volume limit is set by the LOCA and containment analyses. For the RWST, the deliverable volume is determined by the volume of water required in the containment sump to provide the necessary NPSH for the RHR pumps at the time of switchover to recirculation. The minimum boron concentration is an explicit assumption in the main steam line break (MSLB) analysis to ensure the required shutdown capability. The maximum boron concentration is an explicit assumption in the evaluation of chemical effects resulting from the operation of the CS System. Temperatures above freezing in the RWST in combination with the maximum boron concentration ensure that the boron will remain soluble while in the RWST.

For a large break LOCA analysis, ~~the minimum water volume limit of 200,000 gallons (68% of indicated level) and the lower boron concentration limit of 2600 ppm are used to compute~~ the post LOCA sump boron concentration necessary to assure subcriticality was computed using the lower boron concentration limit of 2600 ppm and a volume of water less than the minimum borated water volume of 265,000 gallons (90% indicated level). The large break LOCA is the limiting case since the safety analysis assumes that all control rods are out of the core.

The upper limit on boron concentration of 3500 ppm is used in calculations which verify boron precipitation does not occur in the core following a LOCA. The upper limit on boron concentration is also used in containment sump chemistry calculations to assure that post-LOCA pH is within acceptable limits.

The RWST satisfies Criterion 3 of 10 CFR 50.36(c)(2)(ii).

LCO

The RWST ensures that an adequate supply of borated water is available to cool and depressurize the containment in the event of a Design Basis Accident (DBA), to cool and cover the core in the

Exhibit C

Proposed Technical Specification and Bases Changes (retyped)

Technical Specification Pages

3.5.2-3
3.5.4-2

2 pages follow

SURVEILLANCE REQUIREMENTS (continued)

SURVEILLANCE		FREQUENCY
SR 3.5.2.4	Verify each ECCS pump's developed head at the test flow point is greater than or equal to the required developed head.	In accordance with the Inservice Testing Program
SR 3.5.2.5	Verify each ECCS automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	24 months
SR 3.5.2.6	Verify each ECCS pump starts automatically on an actual or simulated actuation signal.	24 months
SR 3.5.2.7	Verify each ECCS throttle valve listed below is in the correct position. Unit 1 Valve Number / Unit 2 Valve Number SI-15-6 / 2SI-15-6 SI-15-7 / 2SI-15-7 SI-15-8 / 2SI-15-8 SI-15-9 / 2SI-15-9	24 months
SR 3.5.2.8	Verify, by visual inspection, each ECCS train containment sump suction inlet is not restricted by debris and the suction inlet strainers show no evidence of structural distress or abnormal corrosion.	24 months

SURVEILLANCE REQUIREMENTS

SURVEILLANCE		FREQUENCY
SR 3.5.4.1	Verify RWST borated water volume is $\geq$ 265,000 gallons (90%).	7 days
SR 3.5.4.2	Verify RWST boron concentration is $\geq$ 2600 ppm and $\leq$ 3500 ppm.	7 days