



April 13, 2009

L-PI-09-043
10 CFR 54.21(b)

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

Annual Update of the Application for Renewed Operating Licenses

By letter dated April 11, 2008, Northern States Power Company, a Minnesota Corporation, (NSPM) submitted an Application for Renewed Operating Licenses (LRA) for the Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2. 10 CFR 54.21(b) requires that each year following submittal of a license renewal application, and at least three months before scheduled completion of the NRC review, an amendment to the application shall be submitted that identifies any changes to the CLB that materially affect the contents of the LRA. This letter provides that amendment.

A review of the PINGP CLB changes since submittal of the LRA has been completed. Two CLB changes have been identified that materially affect the contents of the LRA. The LRA revisions to reflect these CLB changes are provided as follows:

Enclosure 1 provides a revised LRA Section 1.3 to reflect the transfer of the Facility Operating Licenses from Nuclear Management Company to NSPM.

Enclosure 2 provides revisions to LRA Sections A2.28 and B2.1.28, Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors Program, to reflect the incorporation of ASME Code Case N-729-1 as required by a change to 10 CFR 50.55a, published in the Federal Register on September 10, 2008 (73 FR 52730).

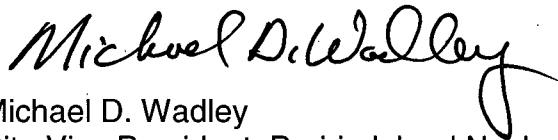
Enclosure 3 provides the list of License Renewal Commitments updated to reflect NSPM correspondence to date.

If there are any questions or if additional information is needed, please contact Mr. Eugene Eckholt, License Renewal Project Manager.

Summary of Commitments

This letter contains no new commitments. Commitment No. 22 in the list of Preliminary License Renewal Commitments contained in the LRA transmittal letter dated April 11, 2008 is withdrawn.

I declare under penalty of perjury that the foregoing is true and correct.
Executed on April 13, 2009.



Michael D. Wadley
Site Vice President, Prairie Island Nuclear Generating Plant Units 1 and 2
Northern States Power Company - Minnesota

Enclosures (3)

cc:

Administrator, Region III, USNRC
License Renewal Project Manager, Prairie Island, USNRC
Resident Inspector, Prairie Island, USNRC
Prairie Island Indian Community ATTN: Phil Mahowald
Minnesota Department of Commerce

Enclosure 1
Revision of LRA Section 1.3, Information Required by
10 CFR 54.17 and 10 CFR 54.19

In an application dated April 16, 2008, Nuclear Management Company, LLC, the operating licensee for the Prairie Island Nuclear Generating Plant (PINGP), requested a transfer of the Facility Operating Licenses No. DPR-42 for PINGP Unit 1 and DPR-60 for Unit 2, to the plant owner, Northern States Power Company. The conforming license amendments to affect the transfer of the operating licenses were issued on September 22, 2008, as Amendments 188 and 177 for Units 1 and 2, respectively. The LRA is being revised to reflect this license transfer.

LRA Section 1.3 is hereby revised in its entirety to read as follows:

1.3 Information Required by 10 CFR 54.17 and 10 CFR 54.19

1.3.1 Name of Applicant

Northern States Power Company, a Minnesota Corporation (NSPM), the operating licensee, hereby applies for renewed operating licenses for the Prairie Island Nuclear Generating Plant Units 1 and 2.

In any place in this application where Nuclear Management Company (NMC) is referenced, it shall be understood to mean NSPM.

1.3.2 Address of Applicant

Address of Owner and Licensee

Northern States Power Company
414 Nicollet Mall
Minneapolis, MN 55401

Address of Prairie Island Nuclear Generating Plant

Prairie Island Nuclear Generating Plant
1717 Wakonade Dr East
Welch, MN 55089

1.3.3 Description of Business or Occupation of Applicant

Northern States Power Company, a Minnesota corporation (NSPM), is a utility principally involved in the generation, purchase, transmission, distribution and sale of electricity. NSPM is a wholly owned utility operating company subsidiary of Xcel Energy, Inc. ("Xcel Energy"). Xcel Energy, a Minnesota corporation, is a major U.S. electric and natural gas company that operates in eight Western and Midwestern states and provides a comprehensive portfolio of energy-related products and services to approximately 3.3 million electricity customers and 1.8 million natural gas customers.

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NSPM is not owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government. NSPM makes this application on its own behalf and is not acting as an agent or representative of any other person.

1.3.4 Organization and Management of Applicant

NSPM is a Minnesota corporation. Its principal place of business is Minneapolis, Minnesota. The names and addresses of the directors and principal officers of NSPM, all of whom are U.S. citizens, are listed below:

NSPM Directors

<u>Name</u>	<u>Business Address</u>
Benjamin G.S. Fowke III	414 Nicollet Mall Minneapolis, MN 55401
Richard C. Kelly	414 Nicollet Mall Minneapolis, MN 55401
David M. Sparby	414 Nicollet Mall Minneapolis, MN 55401

NSPM Principal Officers

<u>Name</u>	<u>Business Address</u>
Richard C. Kelly Chairman	414 Nicollet Mall Minneapolis, MN 55401
David M. Sparby President and Chief Executive Officer	414 Nicollet Mall Minneapolis, MN 55401
Michael C. Connelly Vice President and General Counsel	414 Nicollet Mall Minneapolis, MN 55401
David M. Wilks Vice President	4653 Table Mountain Drive Golden, CO 80403
Benjamin G.S. Fowke III Vice President and Chief Financial Officer	414 Nicollet Mall Minneapolis, MN 55401
Dennis L. Koehl Vice President and Chief Nuclear Officer	250 Marquette Plaza Minneapolis, MN 55401

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Revision of LRA Section 1.3, Information Required by
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Legal Counsel

Peter M. Glass
Xcel Energy

414 Nicollet Mall
Minneapolis, MN 55401

David R. Lewis
Pillsbury Winthrop Shaw Pittman LLP

2300 N Street, NW
Washington, DC 20037

1.3.5 Class of License, Use of Facility, and Period of Time for which the License is Sought

NSPM requests renewal of the Class 104b operating licenses for the Prairie Island Nuclear Generating Plant (Facility Operating Licenses DPR-42 and DPR-60) for a period of 20 years beyond the expiration of the current license. This would extend the operating license for Unit 1 from midnight August 9, 2013, to midnight August 9, 2033, and for Unit 2 from midnight October 29, 2014 to midnight October 29, 2034. The facility will continue to be known as the Prairie Island Nuclear Generating Plant.

This application includes a request for renewal of those NRC source material, special nuclear material, and by-product material licenses included within the current operating licenses and issued pursuant to 10 CFR Parts 30, 40 and 70.

1.3.6 Earliest and Latest Dates for Alterations, if Proposed

NSPM does not propose to construct or alter any production or utilization facility in connection with this renewal application. The Current Licensing Basis (CLB) will be continued and maintained throughout the period of extended operation.

1.3.7 Listing of Regulatory Agencies Having Jurisdiction and News Publications

In addition to the Nuclear Regulatory Commission, the Federal Energy Regulatory Commission and the State of Minnesota Public Utilities Commission are the principal regulators of the company's electric operations in Minnesota.

Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, MN 55101-2147

News publications in circulation near PINGP which should be considered for public notices related to the application are as follows:

Enclosure 1
Revision of LRA Section 1.3, Information Required by
10 CFR 54.17 and 10 CFR 54.19

The Republican Eagle
2760 North Service Drive
Red Wing, MN 55066

The Saint Paul Pioneer Press
345 Cedar Street
St. Paul, MN 55101

The Star Tribune
425 Portland Avenue
Minneapolis, MN 55488-0002

Rochester Post-Bulletin
18 First Avenue, S.E.
Rochester, MN 55903-6118

Eau Claire Leader-Telegram
701 South Farwell Street
Eau Claire, WI 54701

Hastings Star - Gazette
741 Spiral Boulevard
Hastings, MN 55033

Pierce County Herald
126 South Chestnut Street
Ellsworth, WI 54011

1.3.8 Conforming Changes to Standard Indemnity Agreement

NSPM requests that conforming changes be made to indemnity agreement No. B-60 for the Prairie Island Nuclear Generating Plant Units 1 and 2, as required, to ensure that the indemnity agreement continues to apply during both the terms of the current licenses and the terms of the renewed licenses. NSPM understands that no changes may be necessary for this purpose if the current operating license numbers are retained.

1.3.9 Restricted Data Agreement

This application does not contain restricted data or other national defense information, nor is it expected that subsequent amendments to the license application will contain such information. However, pursuant to 10 CFR 54.17(g) and 10 CFR 50.37, NSPM, as a part of the application for a renewed operating licenses, hereby agrees that it will not permit any individual to have access to, or any facility to possess, Restricted Data or classified National Security Information until the individual and/or facility has been approved for such access under the provisions of 10 CFR Parts 25 and/or 95.

Enclosure 2
Revision of LRA Sections A2.28 and B2.1.28, Nickel-Alloy Penetration Nozzles
Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water
Reactors Program

Federal Register Notice 73 FR 52730 of September 10, 2008, published a change to 10 CFR 50.55a which incorporated a requirement to implement ASME Code Case N-729-1 for the inspection of PWR Reactor Vessel Upper Heads. This code case supersedes the previous inspection requirements embodied in the NRC First Revised Order EA-03-009, "Issuance of First Revised NRC Order (EA-03-009) Establishing Interim Inspection Requirements for Reactor Pressure Vessel Heads at Pressurized Water Reactors." Conforming changes are being made to the PINGP Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors Program, described in LRA Sections A2.28 and B2.1.28, to reflect the incorporation of ASME Code Case N-729-1.

LRA Section A2.28 on Page A-12 is revised in its entirety to read as follows:

A2.28 Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors Program

The Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors Program is a condition monitoring program that implements the requirements of ASME Code Case N-729-1, "Alternative Examination Requirements for PWR Reactor Vessel Upper Heads With Nozzles Having Pressure-Retaining Partial-Penetration Welds, Section XI, Division 1," modified by the conditions specified in 10 CFR 50.55a(g)(6)(ii)(D). This program manages the aging effect of cracking due to primary water stress corrosion cracking of the nickel-alloy vessel head penetration nozzles welded to the upper reactor vessel head. In addition, the program monitors the upper reactor vessel head surface for boric acid deposits.

This program is a mandated augmented inservice inspection program that supplements the leakage tests and visual VT-2 examinations required by ASME Section XI, Table IWB-2500-1, Examination Category B-P. The program incorporates the inspection methods, inspection frequencies, and acceptance standards in accordance with ASME Code Case N-729-1, subject to the conditions specified in 10 CFR 50.55a(g)(6)(ii)(D).

In LRA Section B2.0, Aging Management Programs Correlation, on Page B-8, line item XI.M11A of the NUREG-1801 program correlation table is revised to appear as follows:

NUREG-1801 ID	NUREG-1801 Program	PINGP Program	NUREG-1801 Comparison
XI.M11A	Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors	Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors Program [Section B2.1.28]	Existing Program, Consistent with NUREG-1801

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LRA Section B2.1.28 on Pages B-59 to B-61 is revised in its entirety to read as follows:

B2.1.28 Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors Program

Program Description

The Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors Program (Nickel-Alloy Vessel Head Penetration Nozzle Program) is a condition monitoring program that implements the requirements of ASME Code Case N-729-1, "Alternative Examination Requirements for PWR Reactor Vessel Upper Heads With Nozzles Having Pressure-Retaining Partial-Penetration Welds, Section XI, Division 1," modified by the conditions specified in 10 CFR 50.55a(g)(6)(ii)(D). This program manages the aging effect of cracking due to primary water stress corrosion cracking (PWSCC) of the nickel-alloy vessel head penetration nozzles welded to the upper reactor vessel head. The program also monitors the upper reactor vessel head surface for boric acid deposits. In addition, the Boric Acid Corrosion Program performs visual examinations of systems containing borated water for evidence of leakage and corrosion in the region above the reactor vessel head.

This program is a mandated augmented inservice inspection program that supplements the leakage tests and visual VT-2 examinations required by ASME Section XI, Table IWB-2500-1, Examination Category B-P. The program incorporates the inspection methods, inspection frequencies, and acceptance standards in accordance with ASME Code Case N-729-1, subject to the conditions specified in 10 CFR 50.55a(g)(6)(ii)(D).

Federal Register Notice 73 FR 52730 dated September 10, 2008, Industry Codes and Standards; Amended Requirements, states, "In March 2006, the ASME approved Code Case N-729-1, Alternative Examination Requirements for PWR Reactor Vessel Upper Heads With Nozzles Having Pressure-Retaining Partial-Penetration Welds, which provides an alternative long-term inspection program for RPV upper heads. The NRC participated in ASME Code development and approval of N-729-1. The NRC has reviewed the final version of Code Case N-729-1, and with conditions, finds it provides reasonable assurance of public health and safety from failure of the reactor pressure vessel upper head and penetration nozzles. Therefore, the NRC is pursuing this rulemaking activity to incorporate by reference the inspection requirements of Code Case N-729-1, as conditioned, into 10 CFR 50.55a." The Federal Register also states, "Paragraph 50.55a(g)(6)(ii)(D) is added to the regulation to require licensees to comply with the reactor vessel head inspection requirements of ASME Code Case N-729-1, subject to conditions, by December 31, 2008. Compliance to Code Case N-729-1; with conditions regarding inspection frequency, examination coverage, qualification of ultrasonic examination, and reinspection intervals; would be equivalent to complying with NRC Order EA-03-009, dated February 11, 2003, and First Revised Order EA-03-009, dated February 20, 2004. Thus, once a licensee implements Code Case N-729-1, with conditions, the First Revised NRC Order EA-03-009 no longer applies to that licensee and is deemed to be withdrawn."

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In addition the Federal Register states, "For licensees that have been granted a renewed operating license and have committed to an AMP that is based on both conformance with GALL AMP XI.M11A and compliance with First Revised Order EA-03-009, the licensees may update the program elements of their AMP to reflect compliance with the new requirements in 10 CFR 50.55a(g)(6)(ii)(D) and (E) without having to identify an exception to GALL AMP XI.M11A. For new or current license renewal applicants, they may reference conformance with GALL AMP XI.M11A and compliance with the new augmented inspection requirements in paragraphs 10 CFR 50.55a(g)(6)(ii)(D) and (E) without the need for taking an exception to the program elements in GALL AMP XI.M11A."

PINGP is in compliance with the new augmented inspection requirements in paragraph 10 CFR 50.55a(g)(6)(ii)(D) for the reactor vessel head inspections. 10 CFR 50.55a(g)(6)(ii)(E) does not apply to the PINGP upper reactor pressure vessel heads since the heads for both Units 1 and 2 have been replaced using Alloy 690 (versus Alloy 600) nozzles attached using A52 (versus A82/182) weld material.

Therefore, the use of ASME Code Case N-729-1 modified by the conditions specified in 10 CFR 50.55a(g)(6)(ii)(D), instead of the Order, as amended, is not considered an exception to NUREG-1801.

NUREG-1801 Consistency

The Prairie Island Nuclear Generating Plant Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors Program is an existing program. It is consistent with the recommendations of NUREG-1801, Chapter XI, Program XI.M11A, Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors.

Exceptions to NUREG-1801

None

Enhancements

None

Operating Experience

The upper reactor vessel heads for both Units 1 and 2 have been replaced. The Unit 1 head was replaced during the 1R24 refueling outage in 2006 and the Unit 2 head was replaced during the 2R23 refueling outage in 2005. The new heads now incorporate Nickel-Alloy 690 (SB167) for each of the reactor head penetration nozzles instead of the Nickel-Alloy 600 utilized in the previous heads. Inspections for the upper reactor vessel head surface and each nickel-alloy reactor head penetration nozzle are being implemented in accordance with the requirements of ASME Code Case N-729-1 modified by the conditions specified in 10 CFR 50.55a(g)(6)(ii)(D).

A review of operating experience for the Nickel-Alloy Vessel Head Penetration Nozzle Program identified no adverse trends or issues with program performance. A few

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minor non-relevant leaks from valves were identified and corrected prior to causing any significant impact to safe operation or loss of intended functions. Adequate corrective actions were taken to prevent recurrence.

The review of operating experience indicates the Nickel-Alloy Vessel Head Penetration Nozzle Program has been effective in monitoring and detecting degradation and taking effective corrective actions as needed when acceptance criteria are not met.

Conclusion

The Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors Program is an existing program that manages the effects of cracking due to PWSCC of the nickel-alloy vessel head penetration nozzles welded to the upper reactor vessel head. In addition the program provides for condition monitoring of the upper reactor vessel head surface for boric acid deposits.

Implementation of the Nickel-Alloy Penetration Nozzles Welded to the Upper Reactor Vessel Closure Heads of Pressurized Water Reactors Program provides reasonable assurance that aging effects will be managed such that structures, systems, and components within the scope of this program will continue to perform their intended function(s) during the period of extended operation.

In the list of License Renewal Commitments, Commitment 22 is deleted in its entirety. A revised commitment list which reflects this change is provided as Enclosure 3 to this letter.

Enclosure 3

License Renewal Commitment List

Prairie Island Nuclear Generating Plant License Renewal Commitments

The following table provides the list of commitments included in the Application for Renewed Operating Licenses (LRA) for Prairie Island Nuclear Generating Plant (PINGP) Units 1 and 2, as updated in subsequent correspondence.

The commitments in this list are anticipated to be the final commitments which will be confirmed in the NRC's Safety Evaluation Report (SER) for the renewed operating licenses. These commitments, as confirmed in the SER, will become effective upon NRC issuance of the renewed licenses. In addition, as stated in the LRA, the final commitments will be incorporated into the Updated Safety Analysis Report (USAR).

Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
1	Each year, following the submittal of the PINGP License Renewal Application and at least three months before the scheduled completion of the NRC review, NMC will submit amendments to the PINGP application pursuant to 10 CFR 54.21(b). These revisions will identify any changes to the Current Licensing Basis that materially affect the contents of the License Renewal Application, including the USAR supplements.	12 months after LRA submittal date and at least 3 months before completion of NRC review	1.4
2	Following the issuance of the renewed operating license, the summary descriptions of aging management programs and TLAAs provided in Appendix A, and the final list of License Renewal commitments, will be incorporated into the PINGP USAR as part of a periodic USAR update in accordance with 10 CFR 50.71(e). Other changes to specific sections of the PINGP USAR necessary to reflect a renewed operating license will also be addressed at that time.	First USAR update in accordance with 10 CFR 50.71(e) following issuance of renewed operating licenses	A1.0
3	An Aboveground Steel Tanks Program will be implemented. Program features will be as described in LRA Section B2.1.2.	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.2
4	Procedures for the conduct of inspections in the External Surfaces Monitoring Program, Structures Monitoring Program, Buried Piping and Tanks Inspection Program, and the RG	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.6

Prairie Island Nuclear Generating Plant License Renewal Commitments

Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
	1.127 Inspection of Water-Control Structures Associated with Nuclear Power Plants Program will be enhanced to include guidance for visual inspections of installed bolting.		
5	A Buried Piping and Tanks Inspection Program will be implemented. Program features will be as described in LRA Section B2.1.8.	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.8
6	<p>The Closed-Cycle Cooling Water System Program will be enhanced to include periodic inspection of accessible surfaces of components serviced by closed-cycle cooling water when the systems or components are opened during scheduled maintenance or surveillance activities. Inspections are performed to identify the presence of aging effects and to confirm the effectiveness of the chemistry controls. Visual inspection of component internals will be used to detect loss of material and heat transfer degradation. Enhanced visual or volumetric examination techniques will be used to detect cracking.</p> <p>[Revised in letter dated 1/20/2009 in response to RAI 3.3.2-13-01]</p>	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.9
7	<p>The Compressed Air Monitoring Program will be enhanced as follows:</p> <ul style="list-style-type: none"> Station and Instrument Air System air quality will be monitored and maintained in accordance with the instrument air quality guidance provided in ISA S7.0.01-1996. Particulate testing will be revised to use a particle size methodology as specified in ISA S7.0.01. 	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.10

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Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
	<ul style="list-style-type: none"> The program will incorporate on-line dew point monitoring. <p>[Revised in letter dated 2/6/2009 in response to Region III License Renewal Inspection]</p>		
8	An Electrical Cable Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Program will be completed. Program features will be as described in LRA Section B2.1.11.	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.11
9	An Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Program will be implemented. Program features will be as described in LRA Section B2.1.12.	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.12
10	An Electrical Cables and Connections Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Used in Instrumentation Circuits Program will be implemented. Program features will be as described in LRA Section B2.1.13.	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.13
11	<p>The External Surfaces Monitoring Program will be enhanced as follows:</p> <ul style="list-style-type: none"> The scope of the program will be expanded as necessary to include all metallic and non-metallic components within the scope of License Renewal that require aging management in accordance with this program. The program will ensure that surfaces that are inaccessible or not readily visible during plant operations will be inspected during refueling outages. The program will ensure that surfaces that are 	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.14

Prairie Island Nuclear Generating Plant License Renewal Commitments

Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
	<p>inaccessible or not readily visible during both plant operations and refueling outages will be inspected at intervals that provide reasonable assurance that aging effects are managed such that the applicable components will perform their intended function during the period of extended operation.</p> <ul style="list-style-type: none"> • The program will apply physical manipulation techniques, in addition to visual inspection, to detect aging effects in elastomers and plastics. • The program will include acceptance criteria (e.g., threshold values for identified aging effects) to ensure that the need for corrective actions will be identified before a loss of intended functions. • The program will ensure that program documentation such as walkdown records, inspection results, and other records of monitoring and trending activities are auditable and retrievable. <p>[Revised in letter dated 2/6/2009 in response to RAI B2.1.14-1 Follow Up question]</p>		
12	<p>The Fire Protection Program will be enhanced to require periodic visual inspection of the fire barrier walls, ceilings, and floors to be performed during walkdowns at least once every refueling cycle.</p> <p>[Revised in letter dated 12/5/2008 in response to RAI B2.1.15-3]</p>	<p>U1 - 8/9/2013 U2 - 10/29/2014</p>	B2.1.15
13	<p>The Fire Water System Program will be enhanced as follows:</p>	U1 - 8/9/2013	B2.1.16

Prairie Island Nuclear Generating Plant License Renewal Commitments

Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
	<ul style="list-style-type: none"> The program will be expanded to include eight additional yard fire hydrants in the scope of the annual visual inspection and flushing activities. The program will require that sprinkler heads that have been in place for 50 years will be replaced or a representative sample of sprinkler heads will be tested using the guidance of NFPA 25, "Inspection, Testing and Maintenance of Water-Based Fire Protection Systems" (2002 Edition, Section 5.3.1.1.1). Sample testing, if performed, will continue at a 10-year interval following the initial testing. 	U2 - 10/29/2014	
14	<p>The Flux Thimble Tube Inspection Program will be enhanced as follows:</p> <ul style="list-style-type: none"> The program will require that the interval between inspections be established such that no flux thimble tube is predicted to incur wear that exceeds the established acceptance criteria before the next inspection. The program will require that re-baselining of the examination frequency be justified using plant-specific wear rate data unless prior plant-specific NRC acceptance for the re-baselining was received. If design changes are made to use more wear-resistant thimble tube materials, sufficient inspections will be conducted at an adequate inspection frequency for the new materials. The program will require that flux thimble tubes that cannot be inspected must be removed from service. 	<p>U1 - 8/9/2013</p> <p>U2 - 10/29/2014</p>	B2.1.18

Prairie Island Nuclear Generating Plant License Renewal Commitments

Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
15	<p>The Fuel Oil Chemistry Program will be enhanced as follows:</p> <ul style="list-style-type: none"> • Particulate contamination testing of fuel oil in the eleven fuel oil storage tanks in scope of License Renewal will be performed, in accordance with ASTM D 6217, on an annual basis. • One-time ultrasonic thickness measurements will be performed at selected tank bottom and piping locations prior to the period of extended operation. 	<p>U1 - 8/9/2013</p> <p>U2 - 10/29/2014</p>	B2.1.19
16	A Fuse Holders Program will be implemented. Program features will be as described in LRA Section B2.1.20.	<p>U1 - 8/9/2013</p> <p>U2 - 10/29/2014</p>	B2.1.20
17	An Inaccessible Medium Voltage Cables Not Subject to 10 CFR 50.49 Environmental Qualification Requirements Program will be implemented. Program features will be as described in LRA Section B2.1.21	<p>U1 - 8/9/2013</p> <p>U2 - 10/29/2014</p>	B2.1.21
18	<p>An Inspection of Internal Surfaces in Miscellaneous Piping and Ducting Components Program will be implemented. Program features will be as described in LRA section B2.1.22. Inspections for stress corrosion cracking will be performed by visual examination with a magnified resolution as described in 10 CFR 50.55a(b)(2)(xxi)(A) or with ultrasonic methods.</p> <p>[Revised in letter dated 2/6/2009 in response to RAI B2.1.22-1 Follow Up question]</p>	<p>U1 - 8/9/2013</p> <p>U2 - 10/29/2014</p>	B2.1.22
19	The Inspection of Overhead Heavy Load and Light Load (Related to Refueling) Handling Systems Program will be enhanced as follows:	<p>U1 - 8/9/2013</p> <p>U2 - 10/29/2014</p>	B2.1.23

Prairie Island Nuclear Generating Plant License Renewal Commitments

Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
	<ul style="list-style-type: none"> Program implementing procedures will be revised to ensure the components and structures subject to inspection are clearly identified. Program inspection procedures will be enhanced to include the parameters corrosion and wear where omitted. 		
20	A Metal-Enclosed Bus Program will be implemented. Program features will be as described in LRA Section B2.1.26.	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.26
21	Number Not Used [Revised in letter dated 3/27/2009]		
22	Number Not Used [Revised in letter dated 4/13/2009]		
23	A One-Time Inspection Program will be completed. Program features will be as described in LRA Section B2.1.29.	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.29
24	A One-Time Inspection of ASME Code Class 1 Small-Bore Piping Program will be completed. Program features will be as described in LRA Section B2.1.30.	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.30
25	<p>For the PWR Vessel Internals Program, PINGP commits to the following activities for managing the aging of reactor vessel internals components:</p> <ul style="list-style-type: none"> Participate in the industry programs for investigating and managing aging effects on reactor internals; 	U1 - 8/9/2011 U2 - 10/29/2012	B2.1.32

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Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
	<ul style="list-style-type: none"> Evaluate and implement the results of the industry programs as applicable to the reactor internals; and Upon completion of these programs, but not less than 24 months before entering the period of extended operation, submit an inspection plan for reactor internals to the NRC for review and approval. 		
26	The Reactor Head Closure Studs Program will be enhanced to incorporate controls that ensure that any future procurement of reactor head closure studs will be in accordance with the material and inspection guidance provided in NRC Regulatory Guide 1.65.	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.33
27	<p>The Reactor Vessel Surveillance Program will be enhanced as follows:</p> <ul style="list-style-type: none"> A requirement will be added to ensure that all withdrawn and tested surveillance capsules, not discarded as of August 31, 2000, are placed in storage for possible future reconstitution and use. A requirement will be added to ensure that in the event spare capsules are withdrawn, the untested capsules are placed in storage and maintained for future insertion. 	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.34

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Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
28	<p>The RG 1.127, Inspection of Water-Control Structures Associated with Nuclear Power Plants Program will be enhanced as follows:</p> <ul style="list-style-type: none"> • The program will include inspections of concrete and steel components that are below the water line at the Screenhouse and Intake Canal. The scope will also require inspections of the Approach Canal, Intake Canal, Emergency Cooling Water Intake, and Screenhouse immediately following extreme environmental conditions or natural phenomena including an earthquake, flood, tornado, severe thunderstorm, or high winds. • The program parameters to be inspected will include an inspection of water-control concrete components that are below the water line for cavitation and erosion degradation. • The program will visually inspect for damage such as cracking, settlement, movement, broken bolted and welded connections, buckling, and other degraded conditions following extreme environmental conditions or natural phenomena. 	<p>U1 - 8/9/2013 U2 - 10/29/2014</p>	B2.1.35
29	<p>A Selective Leaching of Materials Program will be completed. Program features will be as described in LRA B2.1.36.</p>	<p>U1 - 8/9/2013 U2 - 10/29/2014</p>	B2.1.36

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Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
30	<p>The Structures Monitoring Program will be enhanced as follows:</p> <ul style="list-style-type: none"> • The following structures, components, and component supports will be added to the scope of the inspections: <ul style="list-style-type: none"> ○ Approach Canal ○ Fuel Oil Transfer House ○ Old Administration Building and Administration Building Addition ○ Component supports for cable tray, conduit, cable, tubing tray, tubing, non-ASME vessels, exchangers, pumps, valves, piping, mirror insulation, non-ASME valves, cabinets, panels, racks, equipment enclosures, junction boxes, bus ducts, breakers, transformers, instruments, diesel equipment, housings for HVAC fans, louvers, and dampers, HVAC ducts, vibration isolation elements for diesel equipment, and miscellaneous electrical and mechanical equipment items ○ Miscellaneous electrical equipment and instrumentation enclosures including cable tray, conduit, wireway, tube tray, cabinets, panels, racks, equipment enclosures, junction boxes, breaker housings, transformer housings, lighting fixtures, and metal bus enclosure assemblies ○ Miscellaneous mechanical equipment enclosures including housings for HVAC fans, louvers, and dampers ○ SBO Yard Structures and components including 	<p>U1 - 8/9/2013 U2 - 10/29/2014</p>	B2.1.38

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Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
	<p>SBO cable vault and bus duct enclosures.</p> <ul style="list-style-type: none"> ○ Fire Protection System hydrant houses ○ Caulking, sealant and elastomer materials ○ Non-safety related masonry walls that support equipment relied upon to perform a function that demonstrates compliance with a regulated event(s). <ul style="list-style-type: none"> • The program will be enhanced to include additional inspection parameters. • The program will require an inspection frequency of once every five (5) years for structures and structural components within the scope of the program. The frequency of inspections can be adjusted, if necessary, to allow for early detection and timely correction of negative trends. • The program will require periodic sampling of groundwater and river water chemistries to ensure they remain non-aggressive. 		
31	A Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS) Program will be implemented. Program features will be as described in LRA Section B2.1.39.	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.39
32	<p>The Water Chemistry Program will be enhanced as follows:</p> <ul style="list-style-type: none"> • The program will require increased sampling to be performed as needed to confirm the effectiveness of corrective actions taken to address an abnormal chemistry condition. 	U1 - 8/9/2013 U2 - 10/29/2014	B2.1.40

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Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
	<ul style="list-style-type: none"> The program will require Reactor Coolant System dissolved oxygen Action Level limits to be consistent with the limits established in the EPRI PWR Primary Water Chemistry Guidelines." <p>[Revised in letter dated 12/5/2008 in response to RAI B2.1.40-3]</p>		
33	<p>The Metal Fatigue of Reactor Coolant Pressure Boundary Program will be enhanced as follows:</p> <ul style="list-style-type: none"> The program will monitor the six component locations identified in NUREG/CR-6260 for older vintage Westinghouse plants, either by tracking the cumulative number of imposed stress cycles using cycle counting, or by tracking the cumulative fatigue usage, including the effects of coolant environment. The following locations will be monitored: <ul style="list-style-type: none"> Reactor Vessel Inlet and Outlet Nozzles Reactor Pressure Vessel Shell to Lower Head RCS Hot Leg Surge Line Nozzle RCS Cold Leg Charging Nozzle RCS Cold Leg Safety Injection Accumulator Nozzle RHR-to-Accumulator Piping Tee Program acceptance criteria will be clarified to require corrective action to be taken before a cumulative fatigue usage factor exceeds 1.0 or a design basis transient cycle limit is exceeded. <p>[Revised in letter dated 1/9/2009 in response to RAI 4.3.1.1-1]</p>	<p>U1 - 8/9/2013 U2 - 10/29/2014</p>	B3.2

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Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
34	Reactor internals baffle bolt fatigue transient limits of 1835 cycles of plant loading at 5% per minute and 1835 cycles of plant unloading at 5% per minute will be incorporated into the Metal Fatigue of Reactor Coolant Pressure Boundary Program and USAR Table 4.1-8.	U1 - 8/9/2013 U2 - 10/29/2014	B3.2
35	NSPM will perform an ASME Section III fatigue evaluation of the lower head of the pressurizer to account for effects of insurge/outsurge transients. The evaluation will determine the cumulative fatigue usage of limiting pressurizer component(s) through the period of extended operation. The analyses will account for periods of both "Water Solid" and "Standard Steam Bubble" operating strategies. Analysis results will be incorporated, as applicable, into the Metal Fatigue of Reactor Coolant Pressure Boundary Program. [Revised in letter dated 1/9/2009 in response to RAI 4.3.1.1-1]	U1 - 8/9/2013 U2 - 10/29/2014	4.3.1.3
36	NSPM will complete fatigue calculations for the pressurizer surge line hot leg nozzle and the charging nozzle using the methodology of the ASME Code (Subsection NB) and will report the revised CUFs and CUFs adjusted for environmental effects at these locations as an amendment to the PINGP LRA. Conforming changes to LRA Section 4.3.3, "PINGP EAF Results," will also be included in that amendment to reflect analysis results and remove references to stress-based fatigue monitoring. [Added in letter dated 1/9/2009 in response to RAI 4.3.1.1-1]	April 30, 2009	4.3.3
37	NSPM will revise procedures for excavation and trenching controls and archaeological, cultural and historic resource protection to identify sensitive areas and provide guidance for	8/9/2013	ER 4.16.1

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Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
	<p>ground-disturbing activities. The procedures will be revised to include drawings and illustrations to assist users in identifying culturally sensitive areas, and pictures of artifacts that are prevalent in the area of the Plant site. The revised procedures will also require training of the Site Environmental Coordinator and other personnel responsible for proper execution of excavation or other ground-disturbing activities.</p> <p>[Added in ER revision submitted in letter dated 3/4/2009]</p>		
38	<p>NSPM will conduct a Phase I Reconnaissance Field Survey of the disturbed areas within the Plant's boundaries. In addition, NSPM will conduct Phase I field surveys of areas of known archaeological sites to precisely determine their boundaries. NSPM will use the results of these surveys to designate areas for archaeological protection.</p> <p>[Added in ER revision submitted in letter dated 3/4/2009]</p>	8/9/2013	ER 4.16.2
39	<p>NSPM will prepare, maintain and implement a Cultural Resources Management Plan (CRMP) to protect significant historical, archaeological, and cultural resources that may currently exist on the Plant site. In connection with the preparation of the CRMP, NSPM will conduct botanical surveys to identify culturally and medicinally important species on the Plant site, and incorporate provisions to protect such plants into the CRMP.</p> <p>[Added in ER revision submitted in letter dated 3/4/2009]</p>	8/9/2013	ER 4.16.2
40	<p>NSPM will consult with a qualified archaeologist prior to conducting any ground-disturbing activity in any area</p>	8/9/2013	ER 4.16.2

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Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
	<p>designated as undisturbed and in any disturbed area that is described as potentially containing archaeological resources (as determined by the Phase I Reconnaissance Field Survey discussed in Commitment Number 38).</p> <p>[Added in ER revision submitted in letter dated 3/4/2009]</p>		
41	<p>During the first refueling outage following refueling cavity leak repairs in each Unit (scheduled for refueling outages 1R26 and 2R26), concrete will be removed from the sump C pit to expose an area of the containment vessel bottom head. Visual examination and ultrasonic thickness measurement will be performed on the portions of the containment vessels exposed by the excavations. An assessment of the condition of exposed concrete and rebar will also be performed. Degradation observed in the exposed containment vessel, concrete or rebar will be entered into the Corrective Action Program and evaluated for impact on structural integrity and identification of additional actions that may be warranted.</p> <p>[Added in letter dated 4/6/09 in response to Follow Up RAI B2.1.38]</p>	<p>U1 - 8/9/2013</p> <p>U2 - 10/29/2014</p>	B2.1.38
42	<p>During the two consecutive refueling outages following refueling cavity leak repairs in each Unit (scheduled for refueling outages 1R26 and 2R26), visual inspections will be performed of the areas where reactor cavity leakage had been observed previously to confirm that leakage has been resolved. The inspection results will be documented. If refueling cavity leakage is again identified, the issue will be entered into the Corrective Action Program and evaluated for identification of additional actions to mitigate leakage and monitor the condition of the containment vessel and internal structures.</p>	<p>U1 - 8/9/2013</p> <p>U2 - 10/29/2014</p>	B2.1.38

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Commitment Number	Commitment	Implementation Schedule	Related LRA Section Number
	[Added in letter dated 4/6/09 in response to Follow Up RAI B2.1.38]		
43	Preventive maintenance requirements will be implemented to require periodic replacement of rubber flexible hoses in the Diesel Generators and Support System that are exposed to fuel oil or lubricating oil internal environments. [Added in letter dated 4/6/09 in response to RAI 3.3.2-8-1]	U1 - 8/9/2013 U2 - 10/29/2014	Table 3.3.2-8