ENCLOSURES 1, 3 AND 5 CONTAIN PROPRIETARY INFORMATION WITHHOLD FROM PUBLIC DISCLOSURE IN ACCORDANCE WITH 10 CFR 2.390

2807 West County Road 75 Monticello, MN 55362

800.895.4999 xcelenergy.com



August 4, 2016

L-MT-16-037 10 CFR 50.90

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

Monticello Nuclear Generating Plant Docket 50-263 Renewed Facility Operating License No. DPR-22

License Amendment Request for AREVA Extended Flow Window Supplement to Provide Revised Analysis of Anticipated Transient Without Scram Instability (TAC No. MF5002)

- References: 1) Letter from Karen D. Fili (NSPM), to Document Control Desk (NRC), "License Amendment Request for AREVA Extended Flow Window," L-MT-14-044, dated October 3, 2014 (ADAMS Accession No. ML14283A125)
 - 2) Letter from Peter A. Gardner (NSPM) to Document Control Desk (NRC), "License Amendment Request for AREVA Extended Flow Window Supplement to Provide Revised Analysis of Anticipated Transient Without Scram Instability (TAC No. MF5002)," L-MT-15-081, dated December 8, 2015 (ADAMS Accession No. ML15345A407)

In Reference 1, Northern States Power Company, a Minnesota corporation (NSPM) doing business as Xcel Energy, requested approval of an amendment to the Monticello Nuclear Generating Plant (MNGP) Renewed Operating License (OL) and Technical Specifications (TS). The proposed change would revise MNGP TS and would approve certain analytical methods that together would support operation in the expanded power-flow operating domain described as the Extended Flow Window (EFW). The purpose of the requested amendment is to transition from the General Electric methodology called Maximum Extended Load Line Limit Analysis Plus (MELLLA+) to the AREVA methodology called EFW.

In Reference 2, Xcel Energy notified NRC of errors in AREVA's MICROBURN-B2 core depletion code, and explained that those errors affected inputs to Anticipated Transient

AOOI

Without Scram – Instability (ATWS-I) analysis that had been submitted in Reference 1. In Reference 2, Xcel Energy provided AREVA Report ANP-3435, Revision 1 to make the appropriate corrections to the ATWS-I analysis.

On June 21, 2016, AREVA identified in their corrective action program a new error in the MNGP ATWS-I analysis. The discovery started from a discrepancy in the value of power used in the linear stability test report versus the non-linear stability benchmarking, and was caused (in part) by misinterpretation of raw test data provided by the AREVA test facility in Germany (i.e., Karlstein Thermal Hydraulic test loop known as KATHY). In effect, the error caused the analysis to provide a heat transfer coefficient that was erroneously higher than actual. The benchmarking has been corrected and the MNGP ATWSi analyses revised (i.e., ANP-3435P/NP, ANP-3274P/NP, and ANP-3284P/NP). The results changed; however, the conclusions are not impacted. A telephone conference was held with NRC Staff on July 5, 2016 to explain this issue.

Enclosure 1 provides AREVA Report ANP-3435P, Revision 1. Enclosure 1 is proprietary to AREVA. Enclosure 2 provides the non-proprietary AREVA Report ANP-3435NP, Revision 1.

Enclosure 3 provides AREVA Report ANP-3274P, Revision 1. Enclosure 3 is proprietary to AREVA. Enclosure 4 provides the non-proprietary AREVA Report ANP-3274NP, Revision 1.

Enclosure 5 provides AREVA Report ANP-3284P, Revision 1. Enclosure 5 is proprietary to AREVA. Enclosure 6 provides the non-proprietary AREVA Report ANP-3284NP, Revision 1.

Enclosure 7 provides the affidavits executed to support withholding Enclosures 1, 3, and 5 from public disclosure. Enclosures 1, 3, and 5 contain proprietary information as defined by 10 CFR 2.390. The affidavits set forth the basis on which the information may be withheld from public disclosure by the NRC and addresses with specificity the considerations listed in 10 CFR 2.390(b)(4). Accordingly, NSPM respectfully requests that the AREVA proprietary information in Enclosures 1, 3, and 5 be withheld from public disclosure in accordance with 10 CFR 2.390(a)4, as authorized by 10 CFR 9.17(a)4. Correspondence with respect to the copyright or proprietary aspects of the AREVA information in Enclosures 1, 3, and 5 or the supporting AREVA affidavits in Enclosure 7 should be addressed to Mr. Alan Meginnis, Manager – Product Licensing, AREVA Inc., 2101 Horn Rapids Road, Richland, Washington 99354.

The information offered herein does not affect the conclusions of the Significant Hazards Consideration and the Environmental Consideration evaluations provided in the Reference 1 license amendment request.

In accordance with 10 CFR 50.91(b), a copy of this application supplement is being provided to the designated Minnesota Official without enclosures.

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If there are any questions or if additional information is needed, please contact Glenn Adams at 612-330-6777.

Summary of Commitments

This letter makes no new commitments and no revisions to existing commitments.

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

Executed on: August 4, 2016

Peter A. Gardner

Site Vice President, Monticello Nuclear Generating Plant

Northern States Power Company-Minnesota

Enclosures (7)

cc: Administrator, Region III, USNRC

Project Manager, Monticello Nuclear Generating Plant, USNRC Resident Inspector, Monticello Nuclear Generating Plant, USNRC

Minnesota Department of Commerce (w/o enclosures)

Enclosure 7

AREVA Affidavits

9 pages follow

AFFIDAVIT

STATE OF NORTH CAROLINA)	
·)	SS
COUNTY OF MECKLENBURG)	

- 1. My name is Thomas E Ryan. I am Manager, Product Licensing, for AREVA Inc. (AREVA) and as such I am authorized to execute this Affidavit.
- 2. I am familiar with the criteria applied by AREVA to determine whether certain AREVA information is proprietary. I am familiar with the policies established by AREVA to ensure the proper application of these criteria.
- 3. I am familiar with the AREVA information contained in the AREVA document ANP-3435P, Revision 2, "AREVA Responses to RAI-8 and RAI-32 from SRXB and SNPB on MNGP EFW LAR," and referred to herein as "Document." Information contained in this Document has been classified by AREVA as proprietary in accordance with the policies established by AREVA Inc. for the control and protection of proprietary and confidential information.
- 4. This Document contains information of a proprietary and confidential nature and is of the type customarily held in confidence by AREVA and not made available to the public. Based on my experience, I am aware that other companies regard information of the kind contained in this Document as proprietary and confidential.
- 5. This Document has been made available to the U.S. Nuclear Regulatory

 Commission in confidence with the request that the information contained in this Document be withheld from public disclosure. The request for withholding of proprietary information is made in accordance with 10 CFR 2.390. The information for which withholding from disclosure is

requested qualifies under 10 CFR 2.390(a)(4) "Trade secrets and commercial or financial information."

- 6. The following criteria are customarily applied by AREVA to determine whether information should be classified as proprietary:
 - (a) The information reveals details of AREVA's research and development plans and programs or their results.
 - (b) Use of the information by a competitor would permit the competitor to significantly reduce its expenditures, in time or resources, to design, produce, or market a similar product or service.
 - (c) The information includes test data or analytical techniques concerning a process, methodology, or component, the application of which results in a competitive advantage for AREVA.
 - (d) The information reveals certain distinguishing aspects of a process, methodology, or component, the exclusive use of which provides a competitive advantage for AREVA in product optimization or marketability.
 - (e) The information is vital to a competitive advantage held by AREVA, would be helpful to competitors to AREVA, and would likely cause substantial harm to the competitive position of AREVA.

The information in this Document is considered proprietary for the reasons set forth in paragraphs 6(b), 6(c) and 6(d) above.

- 7. In accordance with AREVA's policies governing the protection and control of information, proprietary information contained in this Document has been made available, on a limited basis, to others outside AREVA only as required and under suitable agreement providing for nondisclosure and limited use of the information.
- 8. AREVA policy requires that proprietary information be kept in a secured file or area and distributed on a need-to-know basis.

9. The foregoing statements are true and correct to the best of my knowledge, information, and belief.

Throw E. Sym

SUBSCRIBED before me this ____

day of

, 2016.

Thomas A. Casias

NOTARY PUBLIC, STATE OF NORTH CAROLINA, COUNTY OF MECKLENBURG

MY COMMISSION EXPIRES: 15 December 2019

#200935100003

THOMAS A CASIAS

Notary Public, North Carolina

Mecklenburg County

Mecklenburg County

My Commission Expires

December 15, 2019

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