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WITHHOLD ENCLOSURE 4 FROM PUBLIC DISCLOSURE UNDER 10 CFR 2.390 and 9.17

May 13, 2009

L-MT-09-026
10 CFR 50.90

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

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

Monticello Extended Power Uprate: Response to NRC Instrumentation & Controls Branch Request for Additional Information (RAI) dated March 11, 2009, and April 6, 2009, and Fire Protection Branch RAIs dated March 12, 2009 (TAC No. MD9990)

Pursuant to 10 CFR 50.90, the Northern States Power Company, a Minnesota corporation (NSPM), requested in Reference 1 of Enclosure 1 an amendment to the Monticello Nuclear Generating Plant (MNGP) Renewed Operating License (OL) and Technical Specifications (TS) to increase the maximum authorized power level from 1775 megawatts thermal (MWt) to 2004 MWt.

On March 11, 2009, the U.S. Nuclear Regulatory Commission (NRC) Instrumentation & Controls Branch (EICB) provided two RAIs based on its review of NSPM's submittal described in Reference 2 of Enclosure 1. Following a conference call with NSPM on April 2, 2009, the EICB provided a third RAI on April 6, 2009 (Reference 3 in Enclosure 1). Enclosure 1 provides the non-proprietary version of the NSPM response to EICB RAI 1. Attachment 1 to Enclosure 1 provides a copy of the calculations discussed within Enclosure 1. A portion of one calculation, Attachment 3 to CA-08-050, Revision 0, is considered General Electric Hitachi (GEH) proprietary and a proprietary version of this GEH calculation is included in Enclosure 4. GEH requests this proprietary information be withheld from public disclosure in accordance with 10 CFR 2.390(a)4 and 9.17(a)4. An affidavit supporting this request is provided in Enclosure 3. Responses to EICB RAIs 2 and 3 will be answered in a separate letter.

On March 12, 2009, the NRC Fire Protection Review Branch provided four RAIs based on a review of the submittal described in Reference 2 of Enclosure 2. Enclosure 2 provides NSPM's response to the Fire Protection Branch RAIs.

In accordance with 10 CFR 50.91, a copy of this letter without the proprietary enclosure is being provided to the designated Minnesota Official.

A001
A004
NRR

Summary of Commitments

This letter makes no new commitments and does not change any existing commitments.

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

Executed on May 13, 2009.

Timothy J. O'Connor
Site Vice President, Monticello Nuclear Generating Plant
Northern States Power Company - Minnesota

Enclosures (4)

cc: Administrator, Region III, USNRC
Project Manager, Monticello, USNRC
Resident Inspector, Monticello, USNRC
Minnesota Department of Commerce

ENCLOSURE 1

MONTICELLO NUCLEAR GENERATING PLANT

RESPONSE TO INSTRUMENTATION & CONTROLS BRANCH RAIs
DATED MARCH 11, 2009 AND APRIL 6, 2009

(NON-PROPRIETARY)

EICB RAI No.1

Enclosure 5, [PUSAR] Page 2-104, Table 2.4-1, identifies various instrument setpoints where analytical and/or allowable values have been changed. Provide a summary calculation for the revised setpoints. This summary calculation should provide all the values calculated in accordance with the setpoint methodology, such as acceptable as found band, acceptable as left value, etc., and a reasoned quantitative or qualitative analysis for these values.

NSPM RESPONSE

Please note that Table 2.4-1 contains an error. The parameter entry for the Main Steam Line High Flow isolation is labeled as an Analytical Limit (AL) when it should have been labeled an Allowable Value (AV) as described on page 2 - 102 of the PUSAR. Therefore, the AV in Technical Specification Table 3.3.6.1-1, Item 1.c, Main Steam Line Flow - High, should be changed to be 123.6 % of rated steam flow (consistent with PUSAR pg 2-102). The associated TS changes and justification will be provided by NSPM in a supplemental letter to the EPU LAR.

The table below provides a listing of the calculations that support Table 2.4-1. These calculations are being provided as attachments to this response. Attachment 3 to Calculation CA-08-050 contains a GE report that is the basis for the APRM flow biased setpoints. These calculations have been recently revised. This was done to support recent plant modifications and to improve the quality of the calculation by adding more detail. For instance, CA-96-054 was revised to encompass CLTP conditions for P_{bypass} for the new turbine for the current outage. These revisions have not changed the EPU values shown in Table 2.4-1.

Calculation	Title
CA-95-073 R4	Reactor Low Water Level Scram Setpoint
CA-95-075 R1	Main Steam Line High Flow Setpoint
CA-96-054 R5	Turbine Stop Valve Close/Generator Load Reject Scram Bypass
CA-08-050 R0	Instrument Setpoint Calculation - Average Power Range Monitor (APRM) Non-Flow Biased PRNM Setpoints for CLTP and EPU

The table below provides a qualitative basis for the effects of EPU on the setpoints discussed in Table 2.4-1. The staff may find it helpful to reference Section 5.3 of the CPPU LTR with regard to the individual setpoints below. MNGP

employs NEDC-31336P-A, Class 3, General Electric Instrument Setpoint Methodology, in determining instrumentation setpoints.

<table>
<tr><th>Item</th><th>Setpoint</th><th>Description/Basis</th></tr>
<tr><td>1</td><td>Main Steam Line Flow - High</td><td>
<table>
<tr><th colspan="5">Main Steamline Flow -High</th></tr>
<tr><th>Parameter</th><th>CLTP</th><th>Reference</th><th>EPU</th><th>Reference</th></tr>
<tr><td>AL</td><td>160.63 psid</td><td>CA-95-075 R0</td><td>165 psid</td><td>CA-95-075 R1</td></tr>
<tr><td>AV</td><td>159.5 psid</td><td>CA-95-075 R0</td><td>159.5 psid</td><td>CA-95-075 R1</td></tr>
<tr><td>AV</td><td>142 %</td><td>CA-95-070 R0</td><td>123.64 % (round to 123.6%)</td><td>CA-95-075 R1</td></tr>
<tr><td>NTSP</td><td>143.0 psid</td><td>CA-95-075 R0</td><td>143.0 psid</td><td>CA-95-075 R1</td></tr>
</table>
CPPU Effect: Increased reactor power level and steam flow.
CPPU Basis: This setpoint is used to isolate the Group 1 primary containment isolation valves. The only safety analysis event that credits this trip is the main steamline break accident (MSLBA). The main steamline flow restrictor limits coolant lost through the break and the subsequent radioactive exposure.
The analytical limit for high main steamline flow isolation for EPU was raised slightly to account for error terms but was maintained well below the current rated steam flow for the flow restrictor in each main steam line. The main steamline high flow analytical limit is ~148% of CLTP steam flow or ~129% of uprated thermal power conditions which is well below the restrictor choke flow point specified as 3.227E6 lb/hr or 154.9% of EPU rated steam flow per line. The MSL flow rate is monitored using differential pressure. MNGP has elected to maintain the Allowable Value and Nominal Trip Setpoints at the same absolute steam flow and differential pressure values as currently implemented.
The allowable value has been calculated to maintain the value at essentially the same absolute steam flow by calculating the new value of percent steam flow at EPU conditions that provides the same differential pressure (151.95 psid) across the flow sensors as the current AV.
</td></tr>
</table>

<table>
<tr>
<td>2</td>
<td>TSV and TCV Fast Closure SCRAM Bypass based on Turbine First Stage Pressure at P_{Bypass}</td>
<td>
<table>
<tr><th colspan="5">Turbine 1st Stage Pressure TSV and TCV Fast Closure SCRAM Bypass Setpoint</th></tr>
<tr><th>Parameter</th><th>CLTP</th><th>Reference</th><th>EPU</th><th>Reference</th></tr>
<tr><td>P_{Bypass}</td><td>45% RTP</td><td>EPU Transient Analysis</td><td>40% RTP</td><td>EPU Transient Analysis</td></tr>
<tr><td>Bypass Capacity</td><td>14% RTP</td><td>EPU Transient Analysis</td><td>11.6% RTP</td><td>EPU Task Report (Pressure Control System)</td></tr>
<tr><td>Turbine Power for SCRAM Bypass Setpoint Analytical Limit (AL)</td><td>30% RTP</td><td>CA-96-054 R3</td><td>26.6% RTP</td><td>CA-96-054 R5</td></tr>
<tr><td>AL for Turbine First Stage Pressure</td><td>156.6 psig</td><td>CA-96-054 R3</td><td>125.7 psig</td><td>CA-96-054 R5</td></tr>
<tr><td>AV</td><td>150 psig</td><td>CA-96-054 R3</td><td>118 psig</td><td>CA-96-054 R5</td></tr>
<tr><td>NTSP</td><td>125 psig</td><td>CA-96-054 R3</td><td>95 psig</td><td>CA-96-054 R5</td></tr>
</table>
CPPU Effect: Increased reactor power level and potential change to turbine first-stage pressure.
CPPU Basis: The turbine first-stage pressure setpoint is used to reduce scrams at low power levels where the turbine steam bypass system is effective for turbine trips and generator load rejections. In the safety analysis, this trip bypass only applies to events at low power levels that result in a turbine trip or load rejection. The analytical limit for CPPU is maintained at the same absolute power as for the current setpoint, maintaining the same transient analysis basis and scram avoidance range of the bypass valves. The analytical limit is implemented based on the high pressure turbine (HPT) design. The HPT is being replaced as part of the EPU project at MNGP. To support achieving the uprated level, a new analytical limit (in psig) corresponding to the same absolute power as the current analytical limit has been established based on the turbine design relationship between First Stage Pressure and Power. The current instrument will be retained. Therefore, there are no effects of CPPU on the instrument errors or uncertainties. There is no change to the allowable value in terms of absolute power (or turbine first-stage pressure). However, a Technical Specification change is required to reduce the Technical Specification allowable value in terms of relative percent</td>
</tr>
</table>

		power. To assure that the new value is appropriate, power uprate plant ascension startup test or normal plant surveillance is used to validate that the actual plant interlock is cleared consistent with the safety analysis. The SCRAM Bypass Setpoint ensures that the Turbine Stop Valve (TSV) and Turbine Control Valve (TCV) Fast Closure scrams are active at high power. Rapid pressurization of the reactor due to valve closure and loss of the steam flow path causes void collapse and could result in violation of fuel safety limits if a direct SCRAM function does not occur. The limiting event is normally a Load Rejection Without Bypass (LRNBP). The OPL-3 is a document which provides inputs for use in plant transient safety analysis. The EPU Resolved OPL-3 prepared as part of the EPU Transient Analysis establishes P_{Bypass}. The analysis then determines that this power level is low enough that fuel limits will not be challenged if a LRNBP occurs without the direct SCRAM. This allows TSV and TCV valve testing without an attendant SCRAM. Current MNGP Technical Specifications define P_{Bypass} as 45% of Rated Thermal Power (RTP) in Table 3.3.1.1-1 Functions 8 and 9 and in LCO 3.3.1.1 Action E. The actual setpoint is implemented based on Turbine 1st Stage Pressure which is not a direct measurement of reactor thermal power because it does not include steam flow to the Turbine Bypass system. This actual setpoint is not included in the Technical Specifications, but is treated as a Technical Specifications Setpoint for the purposes of setpoint control and treatment of uncertainties. As a result the actual setpoint determination must account for this difference. The analytical limit for the setpoint is currently selected as the Turbine 1st Stage Pressure corresponding to P_{Bypass} less the Turbine Bypass system capacity or 30% RTP as shown in the table above. During implementation of EPU, P_{Bypass} is being scaled down (45% RTP to 40% RTP) to maintain a constant absolute thermal power level. For EPU the analytical limit for the Turbine 1st Stage Pressure SCRAM Bypass setpoint is being conservatively maintained at the same absolute thermal power level (30% RTP at 1775 MWt is equivalent to 26.6% RTP at 2004 MWt). Bypass system capacity in total steam flow is unchanged, but is reduced as a percentage of total rated steam flow at EPU (From 14% RTP to 11.6% RTP). MNGP EPU transient analysis was performed for an analytical limit value of 40% and a

		bypass capacity of 11.6%. This corresponds to a turbine flow of 28.4% of rated power if bypass valves are fully open. Scaling the 30% power AL (based on uprate from 1775 MWt to 2004 MWt) to 26.6% assures that the SCRAM protection is not bypassed until power is reduced below the values in the Resolved OPL-3 that were used in transient analysis. CA-96-054 R5 has been generated to establish a conservative interim setpoint for the startup with a replacement High Pressure Turbine. The calculation uses a conservative AL for Turbine 1st Stage Pressure corresponding to 25% power and allows a readability error of 5 psig for the graph of predicted 1st Stage Pressure versus thermal power. During startup testing the actual relationship between Turbine 1st Stage Pressure and reactor power will be confirmed and the calculation will be revised accordingly.

<table>
<tr>
<td>3</td>
<td>Reactor Vessel Water Level - Low</td>
<td>
<table>
<tr><th>Parameter</th><th>CLTP</th><th>Reference</th><th>EPU</th><th>Reference</th></tr>
<tr><td>AL</td><td>0 inches AIZ</td><td>CA-95-073 R3</td><td>-2.5 inches AIZ
7.0 inches AIZ</td><td>CA-95-073 R4, EPU Transient Analysis</td></tr>
<tr><td>AV</td><td>7.0 inches AIZ</td><td>CA-95-073 R3</td><td></td><td>CA-95-073 R4</td></tr>
<tr><td>NTSP</td><td>9.0 inches AIZ</td><td>CA-95-073 R3</td><td></td><td>CA-95-073 R4</td></tr>
</table>
CPPU Effect: Increased steam flow at EPU causes increased differential pressure across steam dryer. If reactor water level drops below the level of the steam dryer skirt, resulting steam bypassing the dryer flows past the variable leg reactor water level instrument tap and creates a Bernoulli effect pressure reduction indicated as a non-conservative increase in reactor water level.
CPPU Basis: The limiting event for this setpoint is a complete loss of feedwater. The safety requirement for the reactor scram on water level is to maintain water level above the top of the core. A plant specific analysis of the maximum induced error was obtained and revealed that the indication error would increase from 5.4 inches indicated to 7.03 inches at EPU rated steam flow. At current conditions the instrument uncertainties with a 5.4 inch error had very low margin of 0.1 inches. The increased error at EPU conditions required a change. MNGP has revised the analytical limit used in transient analysis for the EPU project and determined that a 2.5 inch decrease in the analytical limit maintained water level inside the core shroud 77 inches above the top of the core during the loss of feedwater event. This restored the extra margin between the NTSP and the AL to about 1 inch.
</td>
</tr>
<tr>
<td>4</td>
<td>Simulated Thermal Power – High SCRAM and Rod Block

Two Loop Operation (TLO)</td>
<td>
<table>
<tr><th>Parameter</th><th>EPU</th><th>Reference</th></tr>
<tr><td>AL</td><td>NA</td><td></td></tr>
<tr><td>AV</td><td>0.55W+61.5% RTP clamped at 116% RTP</td><td>See below</td></tr>
<tr><td>NTSP</td><td>0.55W+59.5% RTP clamped at 114% RTP</td><td>GE Report (Attachment 3, CA-08-050)</td></tr>
</table>
<u>TLO Scram</u>
The slope of the new allowable value line is determined by rescaling the slope of the
</td>
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</table>

		OLTP line by the OLTP/LPU ratio of thermal powers. Rescaling does not alter the relationship of the allowable value line and the rod lines and provides the same operational margin as in the original design. Rescaling maintains the same values in terms of absolute power. • A point on the new allowable value line is established using the minimum core flow value at LPU and the LPU APRM Scram AV Clamp thermal power value. This point is selected to conveniently bound LPU operation. • The intercept of the allowable value line is calculated using the new slope and point. CLTP APRM Allowable Value Line Slope OLTP = 1670 MWt LPU = 2004 MWt LPU APRM Slope = (OLTP/LPU) x (CLTP Allowable Value Line Slope) = 0.55 Minimum Core Flow at LPU = 99% LPU APRM FB STP Scram Clamp AV = 116% Intercept = (LPU APRM FB STP Scram Clamp AV) – (LPU APRM Slope) x (Minimum Core Flow at LPU) = 116% - (0.55 x 99%) = 61.5% LPU APRM FB STP Scram AV TLO = 0.55 W + 61.5% ♦ For conservatism, calculated intercepts are rounded down.

<table>
<tr>
<td>5</td>
<td>Simulated Thermal Power – High Rod Block

Two Loop Operation (TLO)</td>
<td>
<table>
<tr><th>Parameter</th><th>EPU</th><th>Reference</th></tr>
<tr><td>AL</td><td>N/A</td><td></td></tr>
<tr><td>AV</td><td>0.55W+55.5% RTP clamped at 110%</td><td>See below.</td></tr>
<tr><td>NTSP</td><td>0.55W+53.5% RTP clamped at 108%</td><td>GE Report (Attachment 3, CA-08-050)</td></tr>
</table>

<u>TLO Rod Block</u>

• The new allowable value line is calculated the same as the TLO Scram, except that the LPU Rod Block Clamp AV value is used.

LPU APRM FB STP Rod Block Clamp AV = 110%

Intercept = (LPU APRM FB STP Rod Block Clamp AV) – (LPU APRM Slope) x (Minimum Core Flow at LPU)
= 110% - (0.55 x 99%)
= 55.5%

LPU APRM FB STP Rod Block AV TLO = 0.55 W + 55.5%
</td>
</tr>
<tr>
<td>6</td>
<td>Simulated Thermal Power – High SCRAM

Single Loop Operation (SLO)</td>
<td>
<table>
<tr><th>Parameter</th><th>EPU</th><th>Reference</th></tr>
<tr><td>AL</td><td>N/A</td><td></td></tr>
<tr><td>AV</td><td>0.55(W-DeltaW)+61.5% RTP</td><td>See below</td></tr>
<tr><td>NTSP</td><td>0.55W+55.6% RTP</td><td>GE Report (Attachment 3, CA-08-050)</td></tr>
</table>

DeltaW=5.4%
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<td></td>
<td><u>SLO Scram</u>

• The extra drive flow, designated deltaW, required in SLO to get the same core flow as TLO, is defined as 5.4%, which is equal to the difference between the TLO and SLO intercepts divided by the slope.
• The LPU TLO Scram intercept is adjusted downward by subtracting the calculated thermal power represented by the increased difference in drive flow between TLO and SLO.

Intercept = (LPU APRM FB STP Scram AV TLO Intercept) – (SLO Drive Flow adjustment)
= 61.5% – (0.55 x 5.4%)
= 58.5%

LPU APRM FB STP Scram AV SLO = 0.55 W + 58.5%
This is equivalent to the TLO value expressed in terms of deltaW.
0.55 W + 58.5% = 0.55(W - deltaW) + 61.5%

♦ Note that although SLO setpoints are defined over the entire operating range, SLO is unchanged in terms of absolute power/flow.</td>
</tr>
<tr>
<td>7</td>
<td>Simulated Thermal Power – Rod Block

Single Loop Operation (SLO)</td>
<td>
<table>
<tr><th>Parameter</th><th>EPU</th><th>Reference</th></tr>
<tr><td>AL</td><td>N/A</td><td></td></tr>
<tr><td>AV</td><td>0.55(W-DeltaW) + 55.5% RTP</td><td>See below</td></tr>
<tr><td>NTSP</td><td>0.55W + 49.6% RTP</td><td>GE Report (Attachment 3, CA-08-050)</td></tr>
</table>
</td>
</tr>
</table>

<table>
<tr><td></td><td></td><td>DeltaW=5.4%

<u>For SLO Rod Block</u>

• The new allowable value is calculated the same as the SLO Scram, except the TLO Rod Block allowable value line intercept is used

Intercept= (LPU APRM FB STP Rod Block AV TLO Intercept)-(SLO Drive Flow Adjustment)
= 55.5% - (0.55 x 5.4%)
= 52.5%.

LPU APRM FB STP Rod Block SLO = 0.55 W + 52.5 %
This is equivalent t the TLO value expressed in terms of deltaW.
0.55 W + 52.5% = 0.55(W – deltaW) + 55.5%

♦ Note that although SLO setpoints are defined over the entire operating range, SLO is unchanged in terms of absolute power/flow.</td></tr>
<tr><td>8</td><td>APRM Neutron Flux High SCRAM</td><td><table><tr><th>Parameter</th><th>CLTP</th><th>EPU</th><th>Reference</th></tr><tr><td>AL</td><td>125%</td><td>125%</td><td>EPU Transient Analysis</td></tr><tr><td>AV</td><td>122%</td><td>122%</td><td>CA-08-050</td></tr><tr><td>NTSP</td><td>119.5%</td><td>119.5%</td><td>CA-08-050</td></tr></table>
CPPU Basis: This scram is being retained at the same percentage of rated power as currently implemented for PRNMS. No changes to technical specification are required.</td></tr>
<tr><td>9</td><td>Rod Worth Minimizer/RCIS Rod Pattern Controller Low Power Setpoint – Setpoint Value</td><td>The Rod Worth Minimizer is required to be operable when reactor power is less than 10% of rated thermal power. The RWM provides a safety function for the Rod Withdrawal Error event by preventing movement of high worth rods at low power. The Low Power Setpoint for the MNGP is set at 20% reactor power sensed from four Rosemount 1151 flow transmitters</td></tr>
</table>

<table>
<tr><td></td><td></td><td>(FT6-51-A, B, C, and D) and the digital feedwater control system. The total instrument uncertainties of the LPSP are considered small compared to the 10% margin between 10% and 20% RTP. The Digital Feedwater Control System span will increased to accommodate higher feedwater flows at rated EPU conditions. The 10% RTP Technical Specifications Operability is not changed due to EPU. The 20% LPSP setting is not revised by EPU.</td></tr>
<tr><td>10</td><td>APRM Setdown SCRAM</td><td>No change in setpoints as a percentage of rated thermal power due to EPU

<table><tr><th>Parameter</th><th>CLTP</th><th>EPU</th><th>Reference</th></tr><tr><td>AL</td><td>N/A</td><td>N/A</td><td></td></tr><tr><td>AV</td><td>20%</td><td>20%</td><td>CA-08-050</td></tr><tr><td>NTSP</td><td>18%</td><td>18%</td><td>CA-08-050</td></tr></table></td></tr>
<tr><td>11</td><td>APRM Setdown Rod Block</td><td>No change in setpoints as a percentage of rated thermal power due to EPU

<table><tr><th>Parameter</th><th>CLTP</th><th>EPU</th><th>Reference</th></tr><tr><td>AL</td><td>N/A</td><td>N/A</td><td></td></tr><tr><td>AV</td><td>15%</td><td>15%</td><td>CA-08-050</td></tr><tr><td>NTSP</td><td>13%</td><td>13%</td><td>CA-08-050</td></tr></table></td></tr>
<tr><td>12</td><td>APRM Downscale Rod Block</td><td><table><tr><th>Parameter</th><th>CLTP</th><th>EPU</th><th>Reference</th></tr><tr><td>AL</td><td>N/A</td><td>N/A</td><td></td></tr><tr><td>AV</td><td>2%</td><td>2%</td><td>CA-08-050</td></tr><tr><td>NTSP</td><td>3.5%</td><td>4%</td><td>CA-08-050</td></tr></table>
No change in setpoints as a percentage of rated thermal power due to EPU. EPU nominal setpoint is conservatively rounded to 4%.</td></tr>
<tr><td>13</td><td>Rod Block Monitor Setpoints</td><td>These setpoints are set in accordance with results of reload transient analysis verified each cycle as documented in the COLR. There is no change in the values or control of these setpoints due to EPU.

The values for RBM power-biased setpoints are maintained the same in terms of percent power. The trip setpoints (corresponding to the various power dependent setpoint levels) are evaluated as part of the cycle specific reload analysis. Therefore the CLTR generic disposition</td></tr>
</table>

		of this setpoint is applicable to this setpoint. RBM rod block setpoint will be established by the reload analysis for the first operating cycle at EPU.

NRC EICB RAI No. 2

The surveillance frequency in TS Section 3.3.1.1, Surveillance Requirement SR 3.3.1.1.6, is proposed to be revised from 2000 effective full power hours to 1770 full power hours, However, no detailed analysis to justify the change was provided. Please provide the calculation to demonstrate the basis for the proposed change.

NSPM RESPONSE

This RAI will be answered in a separate letter.

NRC EICB RAI No. 3

Please affirm that all setpoints or allowable value changes in Technical Specifications, within scope of the agreement letter of February 23, 2009, will have the footnotes applied. The **Background** below provides the context to the request for this item.

========== Background to RAI-EICB-item 3 ==========

In the license amendment request (LAR) for extended power uprate which was submitted on November 5, 2008, Nuclear Management Company, LLC (the licensee) requested allowable value changes for various Monticello Technical Specification functions. In the LAR the licensee claimed that these functions did not meet the identified criteria for Limiting Safety System Settings (LSSS) that protect a Safety Limit that was under development by the BWR Owners Group in support of Technical Specification Task Force (TSTF)-493, Revision 3, and, therefore, did not propose to add TSTF-493 footnotes for these functions.

Since 2008, discussions between industry and the staff have resulted in agreement on the scope of TS functions which should be annotated with footnotes in TSTF-493 as well as agreement on strategies for adopting TSTF-493. These agreements for the development and adoption of TSTF-493, Revision 4, are reflected in the TSTF letter to the NRC, "Industry Plan to Resolve TSTF-493, Clarify Application of Setpoint Methodology for LSSS Functions," dated February 23, 2009 (ML090540849). The TSTF agreement letter states that TSTF-493 footnotes should be added to all instrument functions in the LCOs for Reactor Trip System (also called Reactor Protection System), the Engineered Safety Feature Actuation System (also called Emergency Core Cooling System) and some instrument functions in other LCOs identified by the BWROG in TSTF-493, Revision 3.

Although the content of TSTF-493, Revision 4, LCOs was finalized by the February 23, 2009 agreement letter, the TSTF-493 Bases are still being worked on. In the interim time period, until the TSTF-493 Bases are finalized and TSTF-493 is issued, it is the NRR staff's expectation that setpoint and allowable value changes that are currently under review should follow the guidance of the TSTF agreement letter. Therefore, Monticello TS functions revised by this amendment request should be annotated with TSTF-493 footnotes.

It should be noted that the licensee has adopted TSTF-493 footnotes for other TS functions for which they agreed were LSSS that protect a Safety Limit.

It is recommended that the licensee submit a revision to their LAR that references the TSTF agreement letter and propose TSTF-493 footnotes for these TS functions. This will ensure that the licensee complies with the requirements of 10 CFR 50.36. The staff will accept footnotes for this function that are identical to footnotes (c) and (d) that are currently included in the Monticello TS for other TS functions.

NSPM RESPONSE

This RAI will be answered in a separate letter.

REFERENCES

1. NSPM letter to NRC, "License Amendment Request: Extended Power Uprate", (L-MT-08-052) dated November 5, 2008. (Accession No. ML083230111)

2. Email P. Tam (NRC) to G. Salamon and K. Pointer (NSPM) dated March 11, 2009, "Monticello - Draft RAI from EICB re. Proposed EPU Amendment", (TAC No. MD9990) (Accession No. ML090710091)

3. Email K. Feintuch (NRC) to K. Pointer (NSPM) dated April 6, 2009, "MD9990-Monticello EPU Additional RAI Item", (TAC No. MD999) (Accession No. ML091030034)

ENCLOSURE 3

GEH AFFIDAVIT FOR

ATTACHMENT 3 TO CALCULATION CA-08-050, REV.0

AVERAGE POWER RANGE MONITOR SELECTED PRNM LICENSING SETPOINTS EPU OPERATION (NUMAC)

GE-Hitachi Nuclear Energy Americas LLC

AFFIDAVIT

I, James F. Harrison, state as follows:

(1) I am Vice President, Fuels Licensing, Regulatory Affairs, GE-Hitachi Nuclear Energy Americas LLC ("GEH"), and have been delegated the function of reviewing the information described in paragraph (2) which is sought to be withheld, and have been authorized to apply for its withholding.

(2) The information sought to be withheld is contained in GEH report, *0000-0081-6958 MNGP-PRNMS-APRM Calc-2008-P, Revision 1*, dated May, 2009. The proprietary information is identified by a dotted underline inside double square brackets, [[This sentence is an example.{3}]]. In each case, the superscript notation {3} refers to Paragraph (3) of this affidavit, which provides the basis for the proprietary determination.

(3) In making this application for withholding of proprietary information of which it is the owner or licensee, GEH relies upon the exemption from disclosure set forth in the Freedom of Information Act ("FOIA"), 5 USC Sec. 552(b)(4), and the Trade Secrets Act, 18 USC Sec. 1905, and NRC regulations 10 CFR 9.17(a)(4), and 2.390(a)(4) for "trade secrets" (Exemption 4). The material for which exemption from disclosure is here sought also qualify under the narrower definition of "trade secret", within the meanings assigned to those terms for purposes of FOIA Exemption 4 in, respectively, Critical Mass Energy Project v. Nuclear Regulatory Commission, 975F2d871 (DC Cir. 1992), and Public Citizen Health Research Group v. FDA, 704F2d1280 (DC Cir. 1983).

(4) Some examples of categories of information which fit into the definition of proprietary information are:

a. Information that discloses a process, method, or apparatus, including supporting data and analyses, where prevention of its use by GEH's competitors without license from GEH constitutes a competitive economic advantage over other companies;

b. Information which, if used by a competitor, would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing of a similar product;

c. Information which reveals aspects of past, present, or future GEH customer-funded development plans and programs, resulting in potential products to GEH;

d. Information which discloses patentable subject matter for which it may be desirable to obtain patent protection.

The information sought to be withheld is considered to be proprietary for the reasons set forth in paragraphs (4)a. and (4)b. above.

(5) To address 10 CFR 2.390(b)(4), the information sought to be withheld is being submitted to NRC in confidence. The information is of a sort customarily held in confidence by GEH, and is in fact so held. The information sought to be withheld has, to the best of my knowledge and belief, consistently been held in confidence by GEH, no public disclosure has been made, and it is not available in public sources. All disclosures to third parties, including any required transmittals to NRC, have been made, or must be made, pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence. Its initial designation as proprietary information, and the subsequent steps taken to prevent its unauthorized disclosure, are as set forth in paragraphs (6) and (7) following.

(6) Initial approval of proprietary treatment of a document is made by the manager of the originating component, the person most likely to be acquainted with the value and sensitivity of the information in relation to industry knowledge, or subject to the terms under which it was licensed to GEH. Access to such documents within GEH is limited on a "need to know" basis.

(7) The procedure for approval of external release of such a document typically requires review by the staff manager, project manager, principal scientist, or other equivalent authority for technical content, competitive effect, and determination of the accuracy of the proprietary designation. Disclosures outside GEH are limited to regulatory bodies, customers, and potential customers, and their agents, suppliers, and licensees, and others with a legitimate need for the information, and then only in accordance with appropriate regulatory provisions or proprietary agreements.

(8) The information identified in paragraph (2) above is classified as proprietary because it contains results of an evaluation of instrumentation developed by GEH for the Monticello Nuclear Generating Plant Power Range Neutron Monitor license application. Development of the analyses, techniques, and information and their application to the design, modification, and processes for the Monticello Nuclear Generating Plant Power Range Neutron Monitor license application was achieved at a significant cost to GEH.

The development of the evaluation process along with the interpretation and application of the analytical results is derived from the extensive experience database that constitutes a major GEH asset.

(9) Public disclosure of the information sought to be withheld is likely to cause substantial harm to GEH's competitive position and foreclose or reduce the availability of profit-making opportunities. The information is part of GEH's comprehensive BWR safety and technology base, and its commercial value extends beyond the original development cost. The value of the technology base goes beyond the extensive physical database and analytical methodology and includes development of the expertise to determine and apply

the appropriate evaluation process. In addition, the technology base includes the value derived from providing analyses done with NRC-approved methods.

The research, development, engineering, analytical and NRC review costs comprise a substantial investment of time and money by GEH.

The precise value of the expertise to devise an evaluation process and apply the correct analytical methodology is difficult to quantify, but it clearly is substantial.

GEH's competitive advantage will be lost if its competitors are able to use the results of the GEH experience to normalize or verify their own process or if they are able to claim an equivalent understanding by demonstrating that they can arrive at the same or similar conclusions.

The value of this information to GEH would be lost if the information were disclosed to the public. Making such information available to competitors without their having been required to undertake a similar expenditure of resources would unfairly provide competitors with a windfall, and deprive GEH of the opportunity to exercise its competitive advantage to seek an adequate return on its large investment in developing and obtaining these very valuable analytical tools.

I declare under penalty of perjury that the foregoing affidavit and the matters stated therein are true and correct to the best of my knowledge, information, and belief.

Executed on this 11th day of May 2009.

James F. Harrison
Vice President, Fuels Licensing
GE-Hitachi Nuclear Energy Americas LLC

ENCLOSURE 1

ATTACHMENT 1

CALCULATIONS

CA-95-073, REV. 4 - REACTOR LOW WATER LEVEL SCRAM SETPOINT

CA-95-075, REV. 1 - MAIN STEAM LINE HIGH FLOW SETPOINT

CA-96-054, REV. 5 - TURBINE STOP VALVE CLOSE/GENERATOR LOAD REJECT SCRAM BYPASS

CA-08-050, REV. 0 – INSTRUMENT SETPOINT CALCULATION – AVERAGE POWER RANGE MONITOR (APRM) NON-FLOW BIASED PRNM SETPOINTS FOR CLTP and EPU

- ATTACHMENT 3 - AVERAGE POWER RANGE MONITOR SELECTED PRNM LICENSING SETPOINTS EPU OPERATION (NUMAC)