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Point Beach Nuclear Plant  
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U.S. Nuclear Regulatory Commission  
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Dockets 50-266 and 50-301  
Point Beach Nuclear Plant, Units 1 and 2  
Clarification of Safety Evaluation, License Amendments 207 and 212  
Measurement Uncertainty Recapture Power Uprate (TAC Nos. MB4956 and MB4957)

The Nuclear Regulatory Commission (NRC) issued Amendment 207 to Facility Operating License DPR-24 and Amendment 212 to Facility Operating License DPR-27 for Point Beach Nuclear Plant, Units 1 and 2, respectively, on November 29, 2002. The amendments consisted of changes to the Operating Licenses and Technical Specifications (TS) as requested in our submittal dated April 30, 2002, as supplemented by letters dated June 26, August 29, October 3, October 23, and November 11, 2002. These amendments increased the licensed reactor core power level by 1.4 percent from 1518.5 MWt to 1540 MWt.

Both the NMC submittal and the corresponding NRC safety evaluation (SE) related to these amendments discussed, among others, two conditions relating to scaling of intermediate range nuclear instrumentation and changes to the Core Operating Limits Report (COLR). As discussed during a conference call between Nuclear Management Company, LLC (NMC) representatives and NRC staff on December 17, 2002, NMC recently determined that the intermediate range nuclear instruments would not need to be rescaled. Also, the changes that NMC stated would need to be made to the COLR did not appear to be sufficiently specific.

The November 29, 2002 NRC SE, Section 2.1.2.8, Reactor Protection System Settings, states, "The power range neutron flux high setpoint trips the reactor at 108-percent RTP, and the low setpoint trips the reactor at 25 percent RTP. Similarly, the intermediate range neutron flux trip setpoint activates at a power less than or equal to 40 percent RTP. Because these three setpoints are based upon RTP, the licensee determined that the setpoints would need to be scaled for the uprated power of 1540 MWt. Since the setpoints are based upon rated power, the NRC staff agrees with the licensee's assessment that the setpoints need to be scaled for the power uprate."

The intermediate range trip setpoint is calibrated based on a specified current output from the intermediate range neutron flux detector, which is equivalent to approximately 25 percent of the current RTP of 1518.5 MWt. This trip setpoint is well below the Technical Specification value of less than or equal to 40 percent. During the recent preparation of the installation work plan for implementation of the 1.4 percent measurement uncertainty recapture (MUR) power uprate, plant staff determined that scaling the intermediate range neutron flux trip setpoint for the 1.4 percent increase in RTP would result in a new current setpoint of 24.65 percent, which is still approximately 25 percent of the new RTP of 1540 MWt. This setpoint is even more

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conservative with respect to the Technical Specification setpoint value of less than or equal to 40 percent. Therefore, in order to minimize the required instrument calibrations to implement the MUR uprate on line, plant staff decided that the current trip setpoint for intermediate range neutron flux trip need not be changed. The intent of the NRC SE continues to be met since the intermediate range trip continues to actuate below the 40 percent RTP limit specified in the SE. Because of the minimal difference between the original and uprated power intermediate range setpoints, the margin to the 40 percent limit is only minimally changed. The current Technical Specification setpoint will continue to be met at the new RTP with no rescaling required.

Regarding the second issue, Section 2.1.2.8 of the SE states, "The  $OT\Delta T$  and  $OP\Delta T$  functions both have an input from the  $\Delta T$  at rated power ( $\Delta T_0$ ). Since this value changes for the new power, the licensee determined that it needs to change its procedure for calibrating  $\Delta T_0$ . The licensee also determined that it needs to modify the COLR to incorporate this change. Since the  $\Delta T$  inputs for the setpoints change based upon power, and since the Pont Beach COLR includes input from the  $OT\Delta T$  and  $OP\Delta T$  trips, the NRC staff agrees with the licensee's assessment."

During the recent review of the proposed COLR changes received from the PBNP fuel vendor, Westinghouse Electric Company, plant staff noted that the COLR definition of  $\Delta T_0$  (i.e., "indicated  $\Delta T$  at Rated Power, °F") does not list the specific numerical value and therefore does not need to change. However, as stated in the NRC SE, the procedure for calibrating  $\Delta T_0$  will be changed to reflect the new RTP of 1540 MWt. Additionally, a COLR change is being made to revise the value for core power ("fraction of 1518.5 MWt" to "fraction of 1540 MWt") in Figure 1, Reactor Core Safety Limits Curve. However, no COLR change is required for the definition of  $\Delta T_0$ . The intent of the SE continues to be met in that the procedure for calibrating  $\Delta T_0$  will be changed and the COLR will be changed to reflect the uprated power value.

Finally, the SE contains a few minor typographical errors that could potentially cause confusion. Section 2.6.2.2, Steam Generators, states Point Beach Units 1 and 2 each have four steam generators. Point Beach actually has two steam generators per unit. Also, in Section 2.3, Instrumentation and Controls, on page 25, the SE states WCAP-14787 and WCAP-14788 were reviewed during the Fuel Upgrade Project and approved by a safety evaluation report dated February 8, 2002. The correct date is February 8, 2000. None of these conditions affect the safe operation of the plant under issued Amendments 207 and 212.

This letter serves to document the December 17, 2002 conference call.



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cc: NRC Regional Administrator  
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