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January 20, 1992

Document Control Desk
U. S. NUCLEAR REGULATORY COMMISSION
Mail Station P1-137
Washington, DC 20555

Gentlemen:

DOCKET 50-351
CYCLE 18 RELOAD
POINT BEACH NUCLEAR PLANT, UNIT 2

Point Beach Nuclear Plant, Unit 2, was shut down for refueling at the end of Cycle 17 operation on September 27, 1991. Cycle 17 burn-up was approximately 10,778 MWD/MTU. Unit 2 began operation for Cycle 18 on November 14, 1991 following a seven-week refueling and maintenance outage.

Reload Region 20 for Unit 2 Cycle 18 operation contains 28 Westinghouse 14 x 14 upgraded Optimized Fuel Assemblies (OFA). Upgraded OFAs include removable top nozzles, debris filter bottom nozzles, and extended burnup geometry. This is the third reload region of upgraded OFA fuel inserted into the Unit 2 core. The use of upgraded OFA fuel in both Point Beach Nuclear Plant units was reviewed and approved, as reported in the NRC Nuclear Safety Evaluation Report issued on May 8, 1989, in support of License Amendment No. 123 (Technical Specification Change Request 127) for Unit 2.

Additional changes approved under License Amendment No. 123 and implemented for Cycle 18 are increased allowable core power peaking factors, thimble plug removal, the use of hafnium peripheral power suppression assemblies, integral fuel burnable absorber assemblies, and axial blankets. License Amendment No. 126, which approved the removal of the $f(\Delta I)$ function from the overpower delta-T setpoint calculation, was also considered in the safety evaluations performed for Cycle 18.

The mechanical and thermal-hydraulic designs for the Unit 2 Cycle 18 reload core are similar to those of previously reviewed and accepted reload designs containing OFA fuel. This core is designed

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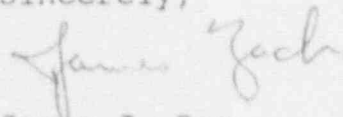
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to operate under nominal design parameters and the approved Technical Specifications, including those provided with License Amendment Nos. 123 and 126 for Unit 2. For those accident sequences presented in the FSAR which could be affected by the reload core, re-evaluation has demonstrated that the results of the postulated events are within allowable limits. The reload core meets the current F_{QXP} limit of 2.5 and the current FAH limit of 1.70.

In accordance with past practice, the Westinghouse reload safety evaluation report relies on previously reviewed and accepted analyses as reported in the FSAR, in the upgraded OFA safety reports, and in earlier reload cycle safety evaluation reports. The reload safety report for Unit 2 Cycle 18 concludes that no unreviewed safety questions, as defined in 10 CFR 50.59, are involved in the operation of Unit 2 during Cycle 18. This 10 CFR 50.59 evaluation has been reviewed and approved by the Manager's Supervisory Staff. Verification of the core design has been performed by means of the standard start-up physics tests conducted at the beginning of this cycle.

Please contact us if you have any questions regarding the Cycle 18 reload design or operation.

Sincerely,



James J. Zach
Vice President
Nuclear Power

Copy to: NRC Resident Inspector
NRC Regional Administrator, Region III

Subscribed and sworn to before me
this 21st day of January, 1992.



Notary Public, State of Wisconsin

My Commission expires 5-22-94.