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U. S. NUCLEAR REGULATORY COMMISSION
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Gentlemen:

DOCKET 50-266
CYCLE 20 RELOAD
POINT BEACH NUCLEAR PLANT, UNIT 1

Point Beach Nuclear Plant, Unit 1, was shut down for refueling at the end of Cycle 19 operation on April 10, 1991. Cycle 19 burn-up was approximately 10,962 MWD/MTU. Unit 1 began operation for Cycle 20 on June 5, 1992 following an eight-week refueling and maintenance outage.

Reload Region 22 for Unit 1 Cycle 20 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 1 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. 120 for Unit 1 (Technical Specification Change Request 127).

Additional changes approved under License Amendment No. 120 and implemented for Cycle 20 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. 123, which approved the removal of the f(ΔI) function from the overpower delta-T setpoint calculation, was also considered in the safety evaluations performed for Cycle 20.

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The mechanical and thermal-hydraulic designs for the Unit 1 Cycle 20 reload core are similar to those of previously reviewed and accepted reload designs containing OFA fuel. This core is designed to operate under nominal design parameters and the approved Technical Specifications, including those provided with License Amendment Nos. 120 and 123 for Unit 1. For those postulated accidents 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 FΔH 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 1 Cycle 20 concludes that no unreviewed safety questions, as defined in 10 CFR 50.59, are involved in the operation of Unit 1 during Cycle 20. 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 normally conducted at the beginning of each cycle.

Please contact us if you have any questions regarding the Cycle 20 reload design or operation.

Very truly yours,

Bob Link
Vice President
Nuclear Power

Copies to NRC Resident Inspector
NRC Regional Administrator, Region III