(414) 221-2345

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FEDERAL EXPRESS

U. S. NUCLEAR REGULATORY COMMMISSION Document Control Desk Washington, D. C. 20555

Gentlemen:

DOCKET 50-266
REACTOR VESSEL SAFETY INJECTION NOZZLE
WELD INDICATION EVALUATION REPORT
POINT BEACH NUCLEAR PLANT, UNIT 1

The attached report, "Evaluation and Analysis of Point Beach Nuclear Plant, Unit 1, Reactor Vessel Safety Injection Nozzle-to-Shell Weld Indication" transmits our procedure for evaluating the acceptability of a flaw indication found during the Point Beach Nuclear Plant, Unit 1, ten-year reactor vessel in-service inspection conducted during the spring 1987 refueling outage. This analysis includes an evaluation of the low-temperature overpressure protection (LTOP) concern expressed by Mr. Barry Elliot during a meeting with the NRC staff on May 30, 1987. The analysis shows that the observed flaw indication is stable under all postulated loading conditions, including an LTOP faulted event.

We believe we have conducted one of the most technologically advanced ten-year reactor vessel in-service examinations in the industry to date, which included use of the 50/70 near-surface transducer assembly and automated reflector imaging. One of the phases of the examination focused on the near-surface zone of the reactor vessel wall. The examination showed that the Unit 1 reactor vessel has few indications and is especially "clean" in the inner quarter of the vessel wall. On this basis and on the basis of the results from the fracture mechanics analyses performed on the safety injection nozzle indication, we conclude that the requirements of ASME Section XI have been satisfied and that the Unit 1 reactor vessel is safe for

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NRC Document Control Desk June 2, 1987 Page 2

continued operation. In accordance with IWB-2420 of the ASME Code, Section XI, this safety injection nozzle weld will be reexamined three times at approximately equal intervals over the next ten-year in-service inspection cycle.

If you have any questions about the report, please contact us.

Very truly yours,

Thomas J. Cassidy

Executive Vice President

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Attachment

Copies to NRC Regional Administrator, Region III NRC Resident Inspector