



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JAN 6 1992

MEMORANDUM FOR: E. G. Adensam, Project Director (14H-12)
Project Directorate II-1
Division of Reactor Projects - I/II

FROM: Robert C. Jones, Chief
Reactor Systems Branch
Division of Systems Technology

SUBJECT: REQUEST FOR NRR REVIEW OF POTENTIAL BORON INTRODUCTION
INTO BRUNSWICK STEAM ELECTRIC PLANT'S PRIMARY SYSTEMS
(TIA 91-30) (TAC NOS. M81949 AND M81950)

The Reactor Systems Branch (SRXB) was requested to review a memorandum from Ellis W. Merschoff, Region II to Gus C. Lainas, Assistant Director for RII Reactors, dated October 23, 1991, regarding potential boron introduction into the primary fluid systems of the Brunswick Steam Electric Plant (BSEP). The licensee had observed measurable concentrations of boron in the reactor vessels (less than 1 ppm) and in other parts of the primary fluid system of both units. The source of the boron was identified to be a boron-based corrosion inhibitor in the turbine building closed cooling water (TBCCW) system head tank which was periodically letdown to radwaste systems and subsequently introduced boron into the condensate demineralizers and the reactor vessel. This primary source has been stopped by diverting the letdown. The remaining concern was the accumulation of boron in the condensate demineralizer resins which might be suddenly released into the reactor vessel. The additional corrective actions taken by the licensee include the scheduled replacement of the condensate demineralizer resins and the implementation of compensatory actions to shutdown the unit if conditions develop that might lead to more than 1 ppm boron in the reactor vessel.

The Reactor Systems Branch has reviewed the licensee's 10 CFR 50.59 safety review package and concludes that there are no unreviewed safety questions and that the corrective and compensatory actions are adequate to prevent entry into an unanalyzed plant condition.

Robert C. Jones, Chief
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cc: A. Thadani
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