

## SNUPPS

Standardized Nuclear Unit  
Power Plant System

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Nicholas A. Petrick  
Executive Director

April 17, 1984

SLNRC 84-0070 FILE: 0543  
SUBJ: Boron Precipitation in the Boron  
Injection Tank and Associated  
Piping

H. R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Docket Nos.: STN 50-482 and STN 50-483

Dear Mr. Denton:

During a meeting with Reactor Systems Branch, (RSB) on April 13, 1984, a question was raised concerning precipitation of boron in the boron injection tank (BIT) and associated piping.

In 1981 and subsequently in 1983 Westinghouse Electric Corporation performed a generic analysis showing that the required concentration in the BIT could be reduced to 0 ppm with no impact on plant safety. Subsequent to this, SNUPPS submitted the necessary FSAR changes to allow use of the reduced concentration and coincidentally removed the heat tracing, or disconnected it, that was originally designed for this portion of the system. The heat tracing was no longer required since the reduction in Boron concentration removed the concern about the saturation temperature of the boron solution. During the April 13 meeting RSB questioned whether boron precipitation could occur in these lines during "immediate borate" when 7000 ppm boron is pumped directly from the Boric Acid Storage Tanks to the primary system. The final resolution reached during the April 13 meeting was that SNUPPS would confirm that a system flush either be added to the immediate borate procedure, or be confirmed to already exist therein.

SNUPPS has confirmed that there are no provisions to flush the lines used during immediate borate, however the boration would not normally be done through the BIT, rather the normal charging path would be used and this path is constantly in use, and therefore flushed, with normal letdown/charging flow. In order to completely alleviate RSB concerns SNUPPS has committed to add a note similar to the following in the procedures related to immediate boration.

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PDR ADOCK 05000482  
A PDR

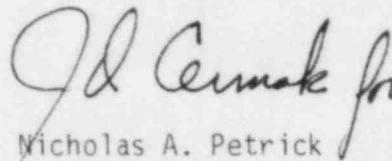
Boo!  
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If for any reason the BIT is used as the discharge flowpath during the immediate borate procedure, the BIT will be flushed with water from the RWST or the VCT prior to isolation of the BIT.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. A. Petrick for".

Nicholas A. Petrick

JHR/mjd/1a27

cc: J. Neisler/B. Little, USNRC/CAL  
W. Schum/A. Smith, USNRC/WC  
J. Konklin, USNRC Region III  
G. L. Koester, KGE  
D. T. McPhee, KCPL  
D. F. Schnell, UE