

POWER AUTHORITY OF THE STATE OF NEW YORK

10 COLUMBUS CIRCLE

NEW YORK, N.Y. 10019

(212) 397-6200

TRUSTEES

JOHN S. DYSON  
CHAIRMAN

GEORGE L. INGALLS  
VICE CHAIRMAN

RICHARD M. FLYNN

JAMES L. LAROCCA

ROLLAND E. KIDDER



LEROY W. SINCLAIR  
PRESIDENT & CHIEF  
OPERATING OFFICER

WALTER T. KICINSKI  
FIRST EXECUTIVE  
VICE PRESIDENT &  
CHIEF ADMINISTRATIVE  
OFFICER

JOSEPH R. SCHMIEDER  
EXECUTIVE VICE  
PRESIDENT & CHIEF  
ENGINEER

STEPHEN L. BAUM  
SENIOR VICE PRESIDENT  
& GENERAL COUNSEL

May 18, 1983  
IPN-83-41

Director of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Attention: Mr. Steven A. Varga, Chief  
Operating Reactors Branch No. 1  
Division of Licensing

Subject: Indian Point 3 Nuclear Power Plant  
Docket No. 50-286  
Seismic Qualification of the Auxiliary  
Feedwater System (AFS)

Dear Sir:

The Authority is providing the following information in response to a request from NRC staff.

The Authority provided to the NRC, by letter dated February 7, 1983 (IPN-83-11) a discussion concerning the auxiliary feedwater system's capability to perform its intended safety function.

In addition to the above, the Authority has revised "Alarm Response Procedures Panel SCF Condensate and Boiler Feed ARP-6" to include the following:

1. Verify that valve LCV-1158 closes automatically when the condensate storage tank water level reaches 20 ft. (380,000 gallons).
2. Close Valve LCV-1158 by manually failing the air to the valve's diaphragm, if the valve does not close automatically when the water inventory reaches 380,000 gallons.

To ensure that the operator has sufficient time to take this manual action, the Authority performed an evaluation of the failure of the non-seismic portion of the piping downstream of valve LCV-1158. Extremely conservative calculations were performed for a full spectrum of breaks of the aforementioned 12 inch line. The calculation, among other things, took no credit for makeup and condensate transfer from the hotwells.

A048

8305240529 830518  
PDR ADOCK 05000286  
PDR

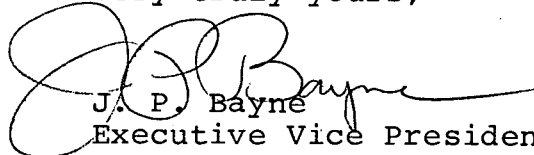
Using these conservative assumptions it was calculated that if operator action is taken to manually close valve LCV-1158, after a postulated highly unlikely guillotine break of the associated piping, 15 minutes after the condensate storage tank low level isolation setpoint is reached, sufficient water inventory will remain in the tank to cool the plant to permit RHR initiation.

The assumption of operator action in 15 minutes after the low level isolation setpoint is conservative, because, in reality, if a guillotine break were to occur, the operators would have other indications in the control room such as condensate storage tank level indication, condenser low vacuum alarm, condensate storage tank low level alarm, or even visual indications such as water in the turbine building, that would indicate a break well before the tank water level falls to 380,000 gallons. The nominal capacity of the tank is 600,000 gallons.

With respect to the 15 minutes, the Authority has determined that this period of time is more than sufficient to allow an operator to take manual action, assuming valve LCV-1158 fails to automatically close following a break in its associated piping.

Should you or your staff have any questions regarding this matter, please contact Mr. P. Kokolakis of my staff.

Very truly yours,

  
J. P. Bayne  
Executive Vice President  
Nuclear Generation

cc: Resident Inspector's Office  
Indian Point Unit 3  
U. S. Nuclear Regulatory Commission  
P. O. Box 66  
Buchanan, New York 10511