

UNITED STATES  
ATOMIC ENERGY COMMISSION

~~XXXXXXXXXXXXXXXXXXXX~~

REGION II - SUITE 818  
230 PEACHTREE STREET, NORTHWEST  
ATLANTA, GEORGIA 30303

TELEPHONE: (404) 526-4503

DIRECTORATE OF REGULATORY OPERATIONS

October 27, 1972

J. G. Keppler, Chief, Reactor Testing and Operations Branch (2)  
Directorate of Regulatory Operations, Headquarters

RO INQUIRY REPORT NO. 50-261/72-13Q  
CAROLINA POWER AND LIGHT COMPANY (H. B. ROBINSON NO. 2), LICENSE NO.  
DPR-23, DOCKET NO. 50-261, DILUTION OF BORON INJECTION TANK

The attached Inquiry Report is forwarded for information.

The factual information regarding the boron injection tank dilution incident was provided by B. J. Furr, Plant Superintendent, and J. McGirt, Operating Supervisor.

Regarding proprietary information, Mr. McGirt advised Region II, by telephone on October 24, that such information was not contained in this Inquiry Report.

A copy of the licensee's telegram informing Region II of the dilution incident is attached to the Inquiry Report.

W. C. Seidle, Chief  
Reactor Operations Branch

RO:II:WCS

Enclosure:  
RO Inquiry Rpt. No.  
50-261/72-13Q (Cubitt)

cc w/encl:  
RO:HQ (5)  
DR Central Files   
Regulatory Standards (3)  
Directorate of Licensing (13)  
PDR (encl. only)  
Local PDR (encl. only)  
NSIC (encl. only)  
DTIE (encl. only)

*Per*

U. S. ATOMIC ENERGY COMMISSION  
REGION II  
DIRECTORATE OF REGULATORY OPERATIONS

RO Inquiry Report No.: 50-261/72-13Q

Carolina Power and Light Company  
336 Fayetteville Street  
Raleigh, North Carolina 27602

License No.: DPR-23

Facility: H. B. Robinson No. 2

Descriptive Title: Dilution of Boron Injection Tank

Prepared By: R. L. Cubitt  
R. L. Cubitt, Reactor Inspector  
Reactor Operations Branch

10/27/72  
Date

A. Date and Manner AEC Was Informed:

A licensee representative contacted Region II by telephone on October 20, 1972, to report the dilution of the boron injection tank during reactor operation. Additional information was obtained from the site by telephone on October 24, 1972.

A copy of the licensee's telegram informing Region II of the dilution incident is attached to this report.

B. Description of Particular Event or Circumstance:

During routine sampling of the boron injection tank (BIT) and boric acid tanks (BAT) "A" and "B" at 9:00 a.m. on October 19, 1972, the boron concentrations of the solutions in the BIT and BAT "B" were determined to be 19,500 ppm. Previous measurements made on October 16, 1972, showed all three tanks to have boron concentrations greater than 21,000 ppm.

The licensee evaluated the circumstances surrounding this dilution and concluded that dilution of the BIT occurred on October 16, 1972, while the cold leg safety injection flow paths were being verified. This verification consisted of establishing a flowpath from the refueling water storage tank (RWST) to the safety injection system pumps and thence to a line which bypasses the BIT and its inlet and outlet safety injection valves, to the cold leg injection lines. The flowpath continued through the cold leg injection lines to the 3/4-inch high head safety injection test line returning to the RWST. (See figure 6.2.1, Safety Injection System, Final Safety Analysis Report.)

The licensee concluded that the most probable cause of dilution was because the safety injection valves located on the inlet and outlet line of the BIT were leaking, thus allowing refueling water to enter the BIT. BAT "B" was subsequently diluted during normal recirculation with the BIT.

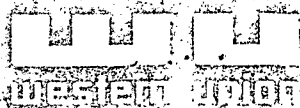
C. Action by Licensee:

The licensee recirculated the contents of BAT "A" with the BIT to restore the contents of the BIT to the proper concentration. This was accomplished at approximately 7:30 p.m. on October 19, 1972. Boric acid batching operations were initiated to bring the boron content of BAT "B" to greater than 20,000 ppm. The licensee intends to formally report this event to Licensing.

A licensee representative said that to the best of his knowledge the information presented above contained no proprietary information.

Attachment:

TWX dtd 10/20/72



Telegram

947A EDT OCT 20 72 AA040 AAA030(0836)(1-0041820294)PD

10/20/72 0834

ICS IPMCMA B CLB

ZCZC 010 B VN PDF 6 EXTRA TDCM HARTSVILLE SOCAR 20 907A EDT

PMS JOHN DAVIS, FONE

DIRECTOR OF REGION 2 AEC DIVN OF COMPLIANCE 230 PEACHTREE ST  
ATLA

THURSDAY 10/19/72 THE HORON INJECTION TANK AND B BORIC ACID  
TANK WERE FOUND TO HAVE A LOW CONCENTRATION OF BORIC ACID.  
STEPS WERE INITIATED TO RETURN THE TANKS TO THEIR NORMAL  
CONCENTRATION AND BOTH TANKS ARE NOW WITHIN SPECIFICATIONS. THIS  
IS REPORTED IN ACCORDANCE WITH SECTION 6.6.1.A OF THE TECHNICAL  
PECIFICATIONS

BENNY J FURR PLANT MANAGER H B ROBINSON  
LANT CAROLINA  
POWER AND LIGHT

CF-1201 (R5-69)



Telegram

10/19/726.6.1.A

AA030/2