



UNITED STATES  
ATOMIC ENERGY COMMISSION  
DIRECTORATE OF REGULATORY OPERATIONS  
REGION II - SUITE 818  
230 PEACHTREE STREET, NORTHWEST  
ATLANTA, GEORGIA 30303

TELEPHONE: (404) 526-4503

APR 19 1973

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

RO INQUIRY REPORT NO. 50-261/73-2Q  
CAROLINA POWER AND LIGHT COMPANY (H. B. ROBINSON NO. 2), LICENSE  
NO. DPR-23, DOCKET NO. 50-261, UNPLANNED LIQUID RELEASE OF RADIO-  
ACTIVE MATERIAL FROM THE SITE

The attached Inquiry Report is forwarded for information.

Operator error in valving coupled with inadequate procedures were the apparent causes for the inadvertent offsite release of a small amount of particulate and tritium activity. Our inspector was at the site shortly after the release and was able to obtain the details associated with the release; these details are provided in the Inquiry Report.

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

W. C. Seidle, Chief  
Facilities Operations Branch

RO:II:WCS

Enclosure:  
RO Inquiry Rpt. No.  
50-261/73-2Q

cc w/encl:  
RO:HQ (5)  
→ DR Central Files  
Regulatory Standards (3)  
Directorate of Licensing (13)

cc encl. only:  
\*PDR  
\*Local PDR  
\*NSIC  
\*DTIE, OR  
\*State

\*To be dispatched at a later date.

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

RO Inquiry Report No.: 50-261/73-2Q

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

License No.: DPR-23

Facility: H. B. Robinson No. 2

Descriptive Title: Unplanned Liquid Release of Radioactive Material  
from the Site

Prepared By:

W. W. Peery  
W. W. Peery, Radiation Specialist, Radiological and  
Environmental Protection Branch

4/19/73  
Date

A. Date and Manner AEC Was Informed:

On April 12, 1973, a Region II inspector at the Robinson 2 site notified the Region that an unplanned liquid release of radioactive material from the site had occurred. Additional information was obtained from the site by telephone on April 12, 1973.

The licensee reported that a telegram was sent to the Region on the evening of April 11, 1973 (copy attached).

B. Description of Particular Event or Circumstance:

Due to operator failure to provide proper valving during surveillance testing of the safety injection system, about 500 gallons of liquid from the refueling water storage tank flowed to the spent fuel pit purification system and from there to a storm drain system ditch which allowed the liquid to flow off site to Black Creek below the Lake Robinson impoundment. The release was reported to be 23.5 millicuries of gross beta-gamma activity at a concentration of  $1.25 \times 10^{-2}$  microcuries per milliliter and 19.5 millicuries of tritium at a concentration of  $1.02 \times 10^{-2}$  microcuries per milliliter. Technical Specification liquid release limits were not violated. The quantities of radioactive material reported released were based on the analysis of a sample taken immediately after the release. The site health physicist stated that this release averaged

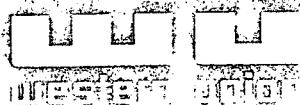
with releases of liquid radioactive materials from the site as of April 10, 1973, was within the limits of Appendix B to 10 CFR 20. The information necessary to show compliance with Part 20 is to be included in the licensee's ten-day written report on the incident.

C. Action by Licensee:

1. A liquid sample was analyzed to determine the quantity of radioactive material released.
2. Determination was made of the volume of liquid released.
3. Methods to prevent recurrence include:
  - a. A blind flange has been installed in the spent fuel pit coolant line to prevent the flow path which led to the offsite release.
  - b. A tagging procedure is being developed requiring that the shift foreman be notified before any change is made to the blind flange installed in the spent fuel pit coolant line.
  - c. Consideration is being given to issuing a completely new procedure to be followed step by step to preclude a similar incident.

The final corrective actions are to be included in the licensee's forthcoming ten-day report. A licensee representative stated that no proprietary information is included in the above report.

Attachment:  
Telegram dtd 4/18/73



Telegram

1141A EST APR 18 73 LDX001

PD IDMT HARTSVILLE SOCAR 04-11 NFT

NORMAN C. MOSELEY  
PMS JOHN G DAVIS, DIRECTOR OF REGION TWO

AEC DIVN OF COMPLIANCE DRL

230 PEACHTREE ST NE ATLA

IN ACCORDANCE 6.1.C. OF THE TECHNICAL  
SPECIFICATIONS THE FOLLOWING ABNORMAL OCCURENCE IS  
REPORTED. WHILE PERFORMING A SAFETY INJECTION PERIODIC  
TEST ON APRIL 10 1973, AN INADVERTANT LIQUID RELEASE  
OCCURED RESULTING IN THE RELEASE OF A SMALL AMOUNT OF  
PARTICULATE AND TRITIUM ACTIVITY TO THE PLANT STORM  
DRAIN SYSTEM. THIS WAS REPORTED TO MR HERB WHITENER IN  
PERSON ON APRIL 11, 1973.

B J FURR, MANAGER, H B ROBINSON PLANT BOX 790  
HARTSVILLE S.C. 29550