



Progress Energy

10 CFR 50.90

Serial: RNP-RA/04-0090

JUL 22 2004

United States Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2
DOCKET NO. 50-261/LICENSE NO. DPR-23

SUPPLEMENT TO AMENDMENT REQUEST REGARDING FULL
IMPLEMENTATION OF THE ALTERNATIVE SOURCE TERM (TAC NO. MB5105)

Ladies and Gentlemen:

By letter dated May 10, 2002, Carolina Power and Light Company, now doing business as Progress Energy Carolinas (PEC), Inc., submitted a license amendment request regarding full implementation of the Alternative Source Term (AST) for the H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2.

A supplement to the May 10, 2002, license amendment request was submitted by letter dated March 5, 2004. That supplement provided responses to Nuclear Regulatory Commission (NRC) Requests for Additional Information. In the response related to the analysis of a Steam Generator Tube Rupture (SGTR) event, the following statement was made: "The scenario assumes that the ruptured Steam Generator (SG) is isolated from the environment by operator action within 30 minutes. It does not assume that primary to secondary leakage or break flow is terminated at 30 minutes. Although break flow may continue beyond 30 minutes, this additional flow into the secondary side of the affected SG will not be released to the environment, as the affected SG secondary side is isolated from the environment within 30 minutes. Based on simulator experience, the continuing break flow does not result in the opening of the main steam safety valves on the affected SG, nor does it result in any SG overfill conditions."

This letter provides additional details regarding the SGTR event. A scenario was run on the HBRSEP, Unit No. 2, simulator in June 2004. The scenario initiated with a 695 gallons per minute (72.8 pounds per second) primary to secondary leak (rupture) in SG B, an open SG B power operated relief valve (PORV), and a loss of offsite power. This is consistent with the bounding scenario for AST dose analyses. When the open PORV was manually closed, SG B was isolated from the environment after approximately 20 minutes, as compared to 30 minutes as described in the Updated Final Safety Analysis Report Section 15.6.3. The appropriate response and mitigation procedures were followed during the simulator scenario.

Progress Energy Carolinas, Inc.
Robinson Nuclear Plant
3581 West Entrance Road
Hartsville, SC 29550

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Attachment II provides the SGTR event data curves from the simulator run for the primary side pressure and the ruptured SG B secondary side level and pressure. The wide range SG B level remained below 100%, and as seen on the curves, the SG B pressure remained below the SG B PORV setting of 1035 psig. The event terminated when RCS pressure matched SG B pressure and no further primary to secondary mass transfer occurred.

This additional information does not result in required changes to the previously submitted No Significant Hazards Consideration or Environmental Impact Consideration.

Attachment I provides an Affirmation pursuant to 10 CFR 50.30(b).

If you have any questions concerning this matter, please contact Mr. C. T. Baucom at (843) 857-1253.

Sincerely,

A handwritten signature in black ink, appearing to read "J. F. Lucas". The signature is fluid and cursive, with the first letters of each name being capitalized and prominent.

J. F. Lucas

Manager - Support Services - Nuclear

RAC/rac

Attachments:

- I. Affirmation
 - II. Simulator Data Curves from Steam Generator Tube Rupture Event
- c: Mr. T. P. O'Kelley, Director, Bureau of Radiological Health (SC)
Mr. H. J. Porter, Director, Division of Radioactive Waste Management (SC)
Dr. W. D. Travers, NRC, Region II
Mr. C. P. Patel, NRC, NRR
NRC Resident Inspectors, HBRSEP
Attorney General (SC)

AFFIRMATION

The information contained in letter RNP-RA/04-0090 is true and correct to the best of my information, knowledge, and belief; and the sources of my information are officers, employees, contractors, and agents of Progress Energy Carolinas, Inc., also known as Carolina Power and Light Company. I declare under penalty of perjury that the foregoing is true and correct.

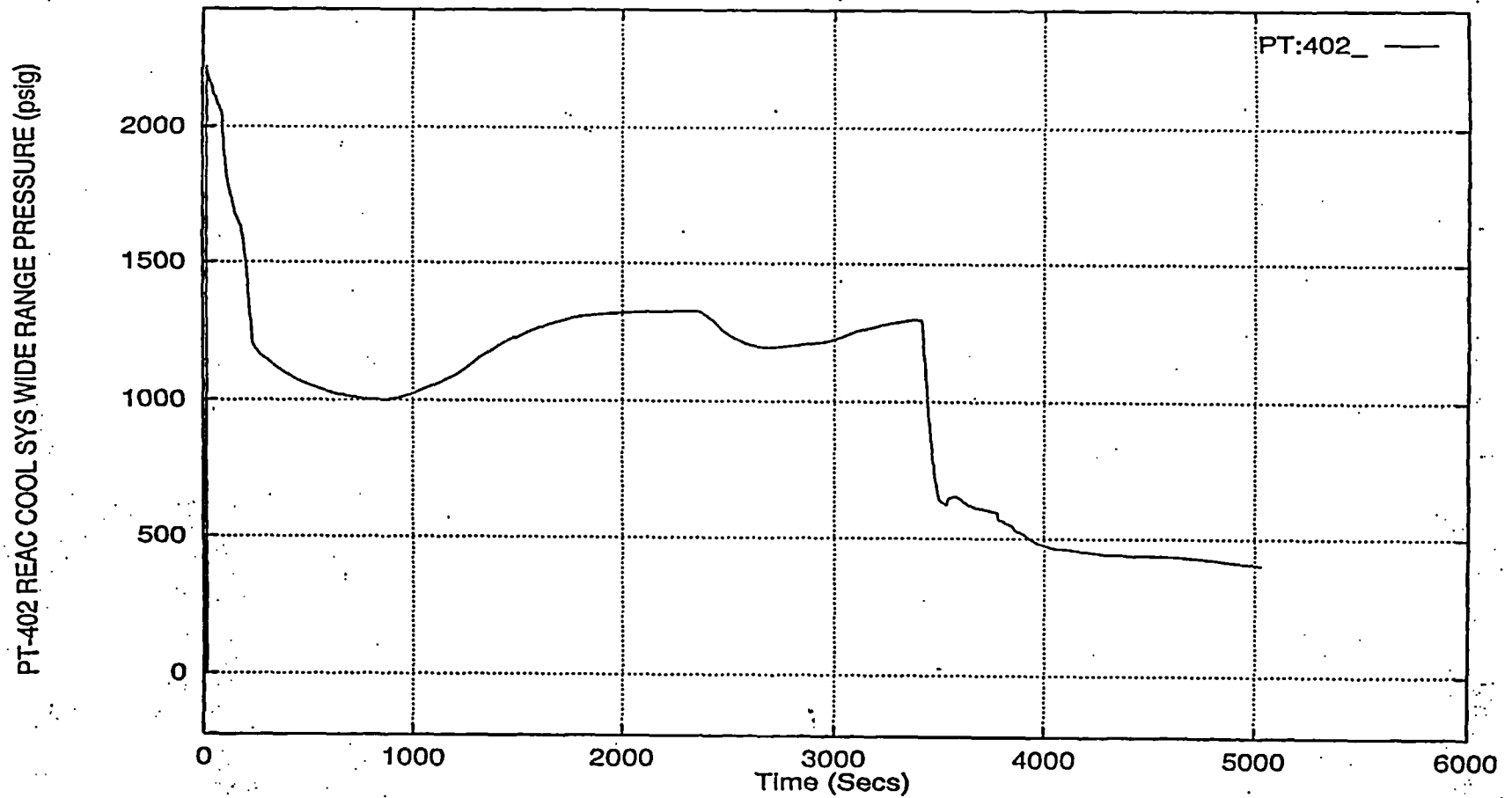
Executed On: 7/22/04

C L Burton
C. L. Burton
Director-Site Operations

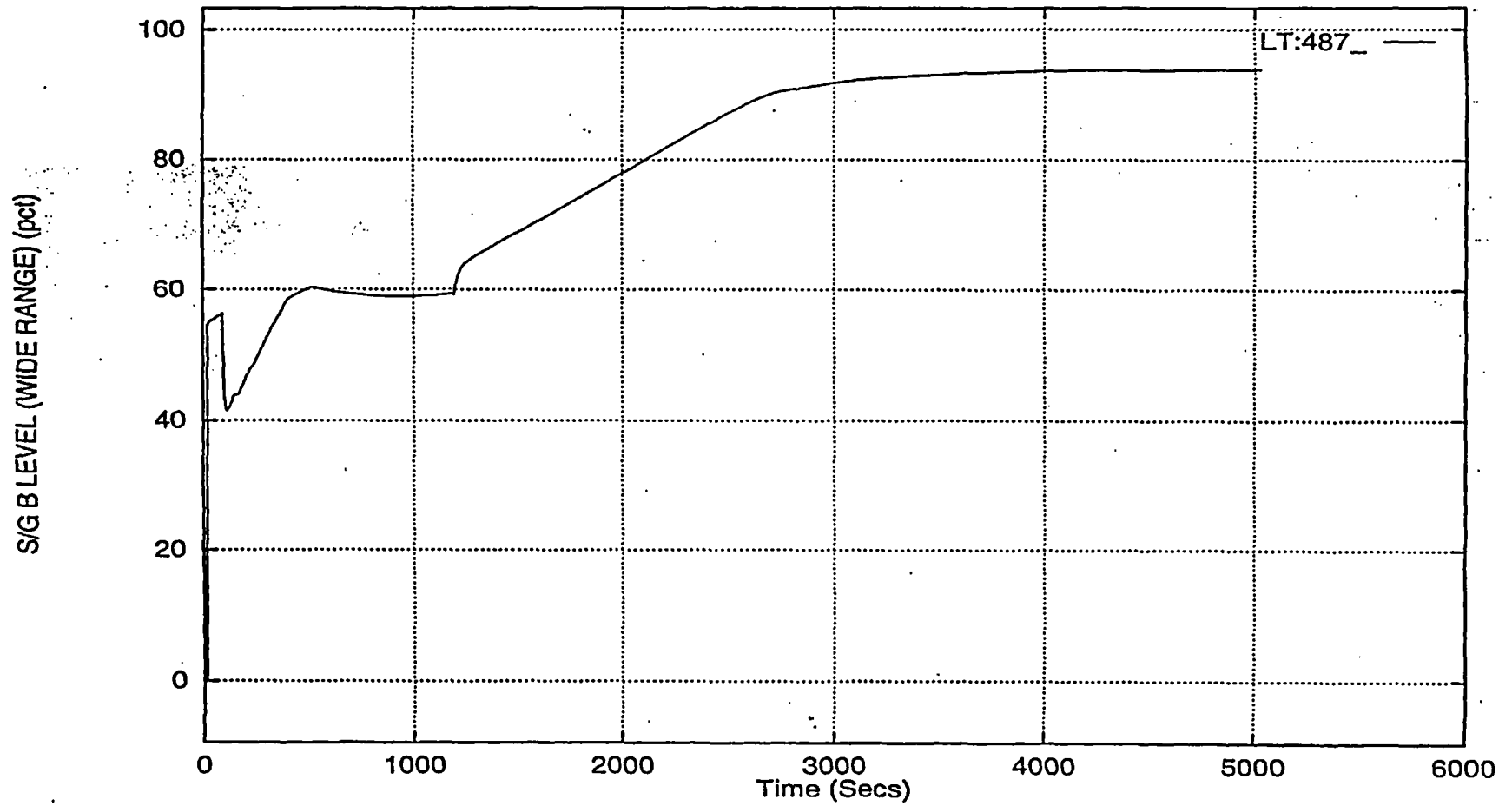
H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

**Simulator Data Curves from
Steam Generator Tube Rupture Event**

Simulator Data Curves from SGTR Event



Simulator Data Curves from SGTR Event



Simulator Data Curves from SGTR Event

