

LER ATTACHMENT - RO #1-81-46

Facility: Unit 1

Event Date: April 14, 1981

During Unit 1 power operation, water hammer of the A Residual Heat Removal (RHR) System steam condensing piping to the A RHR heat exchanger occurred when the system was started to recirculate the suppression pool for chemistry sampling. Subsequent plant surveillance revealed that hydraulic snubber 1-E11-47SS326, which restrains the subject steam condensing piping at a point downstream of the piping inlet pressure control valve, 1-E11-F051A, was inoperable due to a broken snubber shaft.

A failure analysis of the broken snubber shaft indicates the shaft breakage occurred due to shear failure. The subject piping is normally full of RHR System water up to the line isolation valve, 1-E11-F052A, which is upstream of the F051A. Leakage past both closed valves allowed a steam pocket to form in the subject line. When the RHR System A loop was started for recirculation and sampling of the suppression pool, the steam pocket was displaced by the loop water volume and water hammer of the line occurred, thereby causing the snubber shaft to break.

Following the event, the snubber, Bergen and Patterson Part No. 3 KIP HSSA-3, was repaired, satisfactorily tested, and returned to service. Once per four hours, venting of the RHR System steam condensing loop piping on both units was initiated to ensure the piping full of water.

In accordance with plant modifications, the F052A and B line isolation valves on both units were replaced to help eliminate the leakage problem. In addition, manual isolation valves will be installed in accordance with plant modifications on the respective 1" bypass lines around the F051A, B, and F052A, B valves of the A and B RHR System steam condensing loops on both units to help eliminate a source of inleakage to the loops. On both units, A and B RHR System steam condensing loops are currently being vented once per eight hours in plant operational modes requiring their operability.



Carolina Power & Light Company 7

Brunswick Steam Electric Plant
P. O. Box 10429
Southport, NC 28461-0429
August 3, 1984

FILE: B09-13510C
SERIAL: BSEP/84-1149

Mr. James P. O'Reilly, Administrator
U. S. Nuclear Regulatory Commission
Suite 2900
101 Marietta Street N.W.
Atlanta, GA 30323

BRUNSWICK STEAM ELECTRIC PLANT, UNIT 1
DOCKET NO. 50-325
LICENSE NO. DPR-71
SUPPLEMENT TO LICENSEE EVENT REPORT 1-81-46

Dear Mr. O'Reilly:

In accordance with Section 6.9.1.8i of the Technical Specifications for Brunswick Steam Electric Plant, Unit 1, the enclosed supplemental Licensee Event Report is submitted. The original report fulfilled the requirement for a written report within fourteen (14) days of a reportable occurrence and both are in accordance with the format set forth in NUREG-0161, July 1977.

Very truly yours,

C. R. Dietz, General Manager
Brunswick Steam Electric Plant

RMP/mcg/LETG2

Enclosure

cc: Mr. R. C. DeYoung
NRC Document Control Desk

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