CP&L
Carolina Power & Light Company

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

January 29, 1985

FILE: B09-13510C
SERIAL: BSEP/85-0091

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

BRUNSWICK STEAM ELECTRIC PLANT UNIT 2
DOCKET NO. 50-324
LICENSE NO. DPR-62
LICENSEE EVENT REPORT 2-83-95
STATUS OF LER RESOLUTION/FIRE SEAL EVALUATION PROGRAM

REFERENCES:
1. CP&L Letter No. BSEP/83-3621, Dated November 3, 1983 (LER 2-83-95)
2. CP&L Letter No. BSEP/83-3710, Dated November 16, 1983 (LER 2-83-95)
3. CP&L Letter No. BSEP/84-0101, Dated January 13, 1984 C. R. Dietz, CP&L, to J. P. O'Reilly, NRC)
4. CP&L Letter No. BSEP/84-0250, Dated January 31, 1984 (C. R. Dietz, CP&L, to J. P. O'Reilly, NRC)
5. CP&L Letter No. BSEP/84-0600, Dated March 16, 1984

Dear Mr. O'Reilly:

References 1 through 5 represent previous CP&L correspondence relevant to LER 2-83-95. By Reference 5, it was conveyed that an update report of progress on the resolution of LER 2-83-95 would be transmitted to your office by January 31, 1985. This progress report addresses the following issues:

- Accomplishments of the Fire Seal Evaluation Program to date.
- Status of interim compensatory and preventive measures.
- Fire seal evaluation and modification tasks planned.

1.0 ACCOMPLISHMENTS OF THE FIRE SEAL EVALUATION PROGRAM TO DATE

1.1 Implemented core-bore tracking program to more thoroughly monitor the creation of new penetrations in fire barriers and the installation of appropriate penetration seals therein. This program is directed at the maintenance of an accurate data base of ongoing penetration work, using the data assimilated during the in-plant verification effort of 1983-1984 as a basis.

1.2 Developed, issued, and formally approved a Design Basis Document for Fire Barrier Penetration Seals as the initial step in formulating a more rigorous design, procurement, and installation control program to prevent the recurrence of events similar to those contributing to LER 2-83-95.

1.3 Developed a specification for the selection, procurement, and installation of fire barrier penetration seals in conjunction with new fire barrier penetration seal installation detail drawings; these documents are currently being finalized. The specification and installation detail drawings will provide the required guidance for the selection of appropriate seal types, material procurement, and installation.

1.4 Revised the existing penetration seal documentation system consisting of fire barrier penetration location drawings and the fire barrier penetration seal index. As-built data collected during the 1983-1984 in-plant verification effort has been incorporated into these documents, and the penetration index has been enhanced to more closely coordinate with the core-bore tracking program described in Item 1.1 above.

2.0 STATUS OF INTERIM COMPENSATORY AND PREVENTIVE MEASURES

2.1 Currently, areas with fire barrier penetration seals which have not yet been qualified have fire watches posted in accordance with technical specifications until qualification of the penetration seal is established.

2.2 In an ongoing effort described in Reference 5, the reevaluation of BTP 9.5-1 Appendix A fire barriers is continuing with the objective of identifying those barriers presently controlled under technical specifications that represent an overextension of the control program. Where appropriate, these barriers are being deleted from the control program, in most cases reducing the scope of penetration seals subject to concern under LER 2-83-95.

Throughout the reevaluation process, the BTP 9.5-1 Appendix A and 10CFR50 Appendix R fire area boundaries/barriers are being reviewed concurrently to ensure the BSEP Appendix R compliance status is not compromised by removing fire barriers from the control program. The deletion of fire barriers from the control program is supported by appropriate engineering evaluations which have been reviewed by a qualified fire protection engineer.

3.0 FIRE SEAL EVALUATION AND MODIFICATION TASKS PLANNED

3.1 Complete second phase of in-plant penetration seal verification effort; this task consists of reinspection of selected electrical, mechanical, and HVAC penetrations to obtain more detailed data concerning method and materials of construction. The data collection process for electrical penetration seals may utilize statistical sampling techniques to preclude the need for 100 percent inspection of seals.

This data will be incorporated into the penetration seal data base for formulating the electrical penetration seal fire testing program and will provide the basis for development of plant modifications to upgrade inadequate mechanical and HVAC penetration seals.

3.2 In concert with the tasks described in Item 3.1, the seal data compilation effort will be completed, establishing a penetration seal documentation system to be incorporated in the plant drawing system. This system will then be maintained through the tracking program described in Item 1.1.

3.3 Prepare and implement plant modification packages directed at the upgrade and/or replacement of mechanical and HVAC seals determined to be deficient by the tasks described in Item 3.1.

3.4 Develop and complete cable/conduit fire testing program. The objective of this program is to quantitatively establish the adequacy/inadequacy of the existing seals defined through completion of the tasks described in Item 3.1. The results of the testing program will establish the need for and the basis for the level of effort required by CP&L to upgrade/replace electrical seals at BSEP.

4.0 SUMMARY

The ongoing activities and those completed to date have significantly improved the status of the BSEP fire seal issue. Primary concerns emanating from the occurrence of LER 2-83-95 that have now been addressed are:

- CP&L is tracking new core-boring activity in fire barriers and penetration seals such that they are being installed with proper control.

- The fire barrier penetration seal selection, procurement, and installation specification and associated fire barrier penetration seal installation detail drawings are being finalized. These design documents, along with the planned revision to the plant work procedures, will ensure the control of seal selection, procurement, and installation to ensure installation of adequate seals.

- The new seal selection, procurement, and installation requirements are substantially more rigorous than previous design and construction guidance documents. These documents are specific in seal material and installation requirements, obviating the need for judgmental decisions on the part of the individual engineer or designer, other than to select one of the acceptable seal types from a preapproved seal selection matrix.

Installation, control of fire barrier penetrations, and control of penetration seals have been improved significantly. Existing seals which have not yet been qualified continue to be monitored by fire watches consistent with technical specifications. Phase 2 will upgrade mechanical seals and HVAC dampers, and the in-plant verification and fire testing program will establish capability of the electrical seals.

The tasks described above for the BSEP Fire Seal Evaluation Program will be performed on a best-effort basis, commensurate with other regulatory work. This effort will be integrated into our long-range planning and budgeting process.

The BSEP Fire Seal Evaluation Program and associated plant physical and procedural enhancements are being pursued aggressively, and the tasks planned represent an ambitious, but realistic effort. A subsequent progress report will be submitted by January 31, 1986.

Very truly yours,

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

MJP/vt/LETDR1

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