



Duke Energy Corporation

Oconee Nuclear Station
7800 Rochester Highway
Seneca, SC 29672

(864) 885-3107 OFFICE
(864) 885-3564 FAX

W. R. McCollum, Jr.
Vice President

December 15, 1999

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555

Subject: Oconee Nuclear Station
Docket Nos. 50-269, 50-270, 50-287
Supplemental Response to Generic Letter 96-06:
Assurance of Equipment Operability and Containment
Integrity During Design-Basis Conditions

Generic Letter (GL) 96-06, "Assurance of Equipment Operability and Containment Integrity During Design Basis Conditions," dated September 30, 1996, requested licensees to determine if containment air cooler cooling water systems are susceptible to either waterhammer or two-phase flow conditions during postulated accident conditions, and to determine if piping systems that penetrate containment are susceptible to thermal expansion of fluid that could lead to overpressurization of piping. Duke Energy Corporation (Duke) responded to GL 96-06 in submittals to the NRC dated October 29, 1996, January 28, 1997, April 15, 1997, June 30, 1997, August 1, 1997, May 28, 1998, September 22, 1998, December 17, 1998, and March, 23, 1999.

In an effort to address the waterhammer portion of the GL, Duke, along with other licensees, joined, in July of 1998, a collaborative effort with EPRI and NEI to publish a Technical Basis Report (TBR) for waterhammers postulated by GL 96-06. Members of the Office of Nuclear Reactor Regulation (NRR) also participated. The culmination of the effort was the release of an interim report entitled "Resolution of Generic Letter 96-06 Waterhammer Issues." The interim report was released September 23, 1999 to both NRR and the Advisory Committee on Reactor Safeguards (ACRS) for review. The TBR was then presented, in a public meeting on November 17, 1999, to the thermal-hydraulic sub-committee of the ACRS. It is anticipated that the ACRS and NRR will provide comments to EPRI/NEI by the end of 1999, and the TBR can then be revised.

A072

PPR ADDCK 05000269

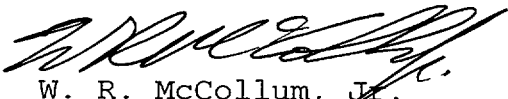
NRC Document Control Desk
December 15, 1999
Page 2

Duke has completed the review of piping and piping support loads based on force time histories with all Reactor Building Auxiliary Coolers (RBAC) valved in and all RBAC fans operating for the three Oconee Units per our commitments outlined in our letter of September 22, 1999. Using conservative analysis techniques, the review confirmed that the LPSW system, while exceeding certain code allowables, remains operable for waterhammers postulated by the GL.

In our letter dated March 23, 1999, Duke stated that subsequent LPSW modifications will follow publication of the TBR, which at that time was anticipated to occur by July 15, 1999. Since the TBR has not yet been finalized, Duke cannot submit a long-term resolution plan at this time. Duke will continue to participate in the EPRI/NEI effort, and press for completion of the TBR in a timely fashion. Duke believes that the TBR will provide alternative analysis techniques that will more accurately portray waterhammer pressure waves and piping system structural responses. Duke proposes to submit an update on the issue five months after the completion of the TBR and provide a schedule for the long-term resolution plan to allow for application of the alternative techniques to the LPSW piping system. Duke believes this delay is prudent given the complexities of the analysis and is commensurate with the safety benefits gained.

Please address any questions to Larry Nicholson at 864-885-3292.

Very truly yours,



W. R. McCollum, Jr.
Site Vice President

NRC Document Control Desk
December 15, 1999
Page 3

cc: Mr. L. A. Reyes, Regional Administrator
U. S. Nuclear Regulatory Commission, Region II

Mr. D. E. LaBarge, Project Manager
Office of Nuclear Reactor Regulation

Mr. M. C. Shannon
Senior Resident Inspector
Oconee Nuclear Site