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34 SEP 28 P 1

September 22, 1984

Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323

Re: R11:WPA
     50-413/83-51-02

Dear Mr. O'Reilly:

Please find attached a description of the Quickpipe computer program used
in the structural analysis for small bore piping systems. This description
will be included, as shown, in Revision 12 to the FSAR.

This should satisfactorily resolve Inspector concerns in regard to Inspector
Follow-Up Item 413/83-51-02, Piping Analysis Modeling.

Very truly yours,

Hal B. Tucker

LTP/mjf

Attachment

cc: NRC Resident Inspector
    Catawba Nuclear Station

    Mr. Robert Guild, Esq.
    Attorney-at-Law
    P. O. Box 12097
    Charleston, South Carolina 29412

    Palmetto Alliance
    2135½ Devine Street
    Columbia, South Carolina 29205

Mr. Jesse L. Riley
Carolina Environmental Study Group
854 Henley Place
Charlotte, North Carolina 28207

Harold R. Denton
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Table 3 9.1-6 (Page 28)
Computer Programs Used in Analysis

Application: Quickpipe

A. Author: Impell Corporation (formally EDS Nuclear, Inc.)
                      Southeast Region Office
                      333 Technology Park/Atlanta
                      Norcross, Georgia 30092

      Source: Impell Corporation

      Version: 3A dated June 25, 1984

      Facility: Impell Corporation

B. Description: Quickpipe is a computer program for the structural analysis and code compliance evaluation of small bore piping systems. It is used for qualification of ASME Section III, Class 2 and 3 piping as well as some seismic qualification of ANSI B31.1 piping. Quickpipe can perform the analysis by means of either a stress-controlled or frequency-controlled basis for gravity, thermal and/or seismic loading cases. The program also features suitable algorithms to optimize excessive support locations spotted in the analysis if desired. Quickpipe is an extension of Impell Corporation's Superpipe program developed primarily as an alternative to the hand calculation methods required by the Alternate Analysis procedures described in Section 3.7.3.8.3.

      Extent and Limitation of its application: Quickpipe is limited to analysis of 4" and under nominal piping systems.

C. Verification: The program has been bench-marked against the Impell program Superpipe.