

DUKE POWER COMPANY

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34 SEP 28 P 12: 1984
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,

H. B. Tucker
Hal B. Tucker

LTP/mjf

Attachment

cc: NRC Resident Inspector
Catawba Nuclear Station

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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.