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DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C.

A. C. THIES
VICE PRESIDENT
PRODUCTION AND OPERATION

March 13, 1970

P. O. Box 2178
28201

Mr. John G. Davis, Director
Region II, Division of Compliance
United States Atomic Energy Commission
230 Peachtree Street, N W
Atlanta, Georgia 30303

Dear Mr. Davis:

This letter is in reply to your letter of February 20, 1970 which identifies certain apparent deficiencies involving items not in conformance with statements in the Final Safety Analysis Report of the AEC Construction Permit Nos. CPPR-33, 34 and 35. Our explanations of these apparent deficiencies are as follows:

- a. The radiographs in question were made of tee welds on penetration plates for the containment structure. The welds are similar to figure N-462.3 (6) in Section III of the ASME Boiler and Pressure Vessel Code. As noted in the above figure, these welds are radiographable with difficulty and generally require special techniques. Paragraph N-1350 of Section III of the ASME Code requires joints of this type to be fully radiographed if a radiographable joint is used. If a nonradiographable joint is used, the joint shall be examined by other means as specified in N-1350. On the advice of radiographic experts, it was initially decided that these joints were not radiographable; therefore, they were subjected to 100% magnetic particle testing. This work was performed in the shops of Southern Boiler and Tank at Memphis, Tennessee. As an added assurance of quality, it was decided that we would attempt to radiograph the joints in the field. It was realized that special techniques would have to be used and that in some areas the density would not meet Code requirements, and non-standard penetrameters would have to be used. Our

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March 13, 1970

field forces ran extensive tests to validate the results including radiographs of known defects. The results of all of these tests are available at the job site. It is our opinion that the full intent of the ASME Code has been met.

- b. Procedure DP-6 was qualified in the same manner as the other procedures used at Oconee. Four guided bend tests were made for this qualification. The two which were not available were evidently lost during the process of typing and filing. We have since completely requalified this procedure and the results are available for review at the job site.
- c. The procedure in question had been qualified for use on pipe up to 7/8" thick. While this procedure is written for use on nuclear applications, it is also used for other welds. At the time of the Compliance Inspection, no welds had been made on B31.7 Class I pipe using this procedure. The procedure has since been qualified for use up to 1-5/8" and will satisfy the range required on the B31.7 Class I pipe. This qualification and the procedure agree on all variables both essential and nonessential.

We hope that this satisfactorily answers the questions raised in your letter of February 20, 1970. We are always willing to discuss any apparent deficiency with members of your staff.

Yours very truly,

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