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Vogtle Project

December 22, 1986

Director of Nuclear Reactor Regulation
Attention: Mr. B. J. Youngblood
PWR Project Directorate #4
Division of PWR Licensing A
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

File: X7BC35
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NRC DOCKET NUMBERS 50-424 AND 50-425
CONSTRUCTION PERMIT NUMBERS CPPR-108 AND CPPE-109
VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 AND 2
COMPUTER PROGRAM VALIDATION

Dear Mr. Denton:

In recent telephone conversations, your staff has requested additional information on the verification of the BASEPLATE and FAPPS computer programs listed in subsection 3.9.B.1 of the Vogtle FSAR. The validation information is discussed below and will be included in the next FSAR amendment.

The BASEPLATE code was verified by comparing test problem results with the results of CDC BASEPLATE II code runs for the same problems. The code capabilities investigated include:

- (1) Calculation of maximum bolt pullout, bolt SRSS shear force, and bolt safety factor
- (2) Maximum principal stress of plates
- (3) Weld shear stresses
- (4) Pressure on concrete

In each case the results of the BASEPLATE code were consistent with the CDC benchmark.

The FAPPS code was verified by comparing test problem results with the results of STRUDL code runs for the same problems. The code capabilities compared include stiffness matrix formulation and stress calculation techniques common to both codes. In other applications where FAPPS calculations are not within STRUDL capabilities, hand calculations were performed to ensure proper operation of the code. In each case, the FAPPS results were consistent with the STRUDL results or the hand calculations.

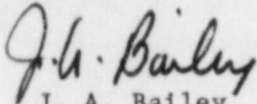
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December 22, 1986
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If your staff requires any additional information, please do not hesitate to contact me.

Sincerely,



J. A. Bailey
Project Licensing Manager

JAB/sm

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