

Georgia Power Company
Post Office Box 282
Waynesboro, Georgia 30830
Telephone 404 554-9961
404 724-8114

Southern Company Services, Inc.
Post Office Box 2625
Birmingham, Alabama 35202
Telephone 205 870-6011



Vogtle Project

August 4, 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
Log: GN-1008

NRC DOCKET NUMBERS 50-424 AND 50-425
CONSTRUCTION PERMIT NUMBERS CPPR-108 AND CPPR-109
VOGTLE ELECTRIC GENERATING PLANT - UNITS 1 AND 2
CODE ADDENDA OF RECORD FOR PIPE SUPPORT ALLOWABLE STRESS VALUES

Dear Mr. Denton:

During a review of past technical directives issued to the structural engineers working on the Vogtle Electric Generating Plant (VEGP), it was discovered that the through thickness stress allowable of the AISC Code has been utilized in lieu of the required allowable of the 1974 Edition with Addenda through Summer 1975, ASME Section III Code for Subsection NF applications for which VEGP is committed. Although the AISC allowables are consistent with the Table NF-3292.1-1, this discrepancy of Code values was identified as being in violation of the ASME Section III Bechtel Quality Assurance Manual. Corrective actions have been taken to ensure compliance with the Code of Record as defined in the FSAR.

Our review of these Code paragraphs indicate that the ASME Code had placed the stress limit of 0.3Sy in addition to the allowables of Table NF-3292.1-1 to guard against lamellar tearing of the base materials. This conservative limitation was imposed for the tensile load at the welded connections, so that the stress in the through thickness direction was limited to 30% of the base metal yield strength. This restriction resulted in large weld sizes that did not relieve the problem of tearing of the base material. This additional weld metal can produce significant strains in the parent material resulting in the joining up of base metal inclusions, therefore, the potential for lamellar tearing still existed. Through the use of the 1980 Edition of the ASME Section III Code provision, smaller fillet welds may be used with significantly reduced possibilities of lamellar tearing.

8608080219 860804
PDR ADOCK 05000424
A PDR

Boo!
/10

Director of Nuclear Reactor Regulation
August 4, 1986
Page 2

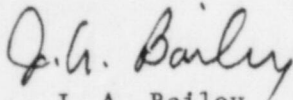
File: X7BC35
Log: GN-1008

In comparing the allowable stress limits of Table NF-3292.1-1 for the 1974 through 1980 Edition of ASME Section III Codes, there were no significant changes with the exception that the overly restrictive 0.3Sy limit. This 0.3Sy limit was removed in the 1980 Edition, thereby allowing the stress limits to meet Table NF-3292.1-1.

Georgia Power Company respectfully requests authorization to exclude the stress limitation of 0.3Sy for subparagraphs NF-3226.5, NF-3321.1(c), NF-3392.1 and Mandatory Appendix XVII, Figure XVII-2211(c) of the 1974 Edition with Addenda Summer 1975. Exclusion of this 0.3Sy restrictive limit will provide consistent stress limits between the AISC and NF jurisdictional boundary.

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

Sincerely,



J. A. Bailey
Project Licensing Manager

JAB/sm

Attachment

xc: R. E. Conway	NRC Regional Administrator
R. A. Thomas	NRC Resident Inspector
J. E. Joiner, Esquire	D. C. Teper
B. W. Churchill, Esquire	W. C. Ramsey
M. A. Miller (2)	L. T. Gucwa
B. Jones, Esquire	Vogtle Project File
G. Bockhold, Jr.	

0633V