

February 1, 1990

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Mr. Jack J. Hayes, Jr.

SUBJECT: Virgil C. Summer Nuclear Station

Docket No. 50/395

Operating License No. NPF-12

Proposal of Alternative to ASME Boiler and Pressure Vessel Code Section III

Requirements

Gentlemen:

The purpose of this letter is to request approval in accordance with 10 CFR 50.55a (a) (3), for the use of SB-166, UNS NO6690 (Alloy 690) material in fabricating steam generator plugs. The design values that will be used for code calculations will be based on those given in Code Case N-474, approved May 6, 1989 for SB-163 material, and Code Main Committee Item 88-360, approved December 9, 1988 for all forms of Alloy 690.

Babcock and Wilcox has requested ASME approval for the application of Alloy 69°C, Specification SB-166, SB-167, SB-168, and SB-564 material, for ASME Section III repairs. The ASME Boiler and Pressure Vessel Code Committee has reviewed this request and assigned this request as an addenda to the N-474 Code Case. The Code Case number for this request is N-474-1.

Your approval of this proposal is requested by March 2, 1990 to allow the use of Alloy 690 steam generator tube plugs during the upcoming refueling outage for V. C. Summer Nuclear Plant. The need for this material is based on the recent problems that have been associated with Alloy 600 when used as mechanical steam generator plugs. Inconel Alloy 690 has been shown in various industry tests and literature to have superior corrosion resistance to that of Alloy 600. Alloy 690 is currently recognized as a code-approved material for steam generator tubing and sleeving based on its improved corrosion resistant properties. South Carolina Electric & Gas Company contends that the level of quality and safety is enhanced by utilization of Alloy 690 for plug related activities in the steam generators. Therefore, the use of Alloy 690 is the preferred choice of material for steam generator plugging applications to avert potential plug cracking concerns.

A001

Document control Desk February 1, 1990 Page 2 of 2

Should there be any questions, please call us at your convenience.

Very truly yours.

O. S. Bradham

ARR/OSB: 1cd

D. A. Nauman/O. W. Dixon, Jr./T. C. Nichols, Jr. E. C. Roberts R. V. Tanner S. D. Ebneter

J. J. Hayes, Jr.

General Managers

C. A. Price R. B. Clary K. E. Nodland J. C. Snelson

R. L. Prevatte J. B. Knotts, Jr.

NSRC NPCF

RTS (NRR 90001) File (810.01)