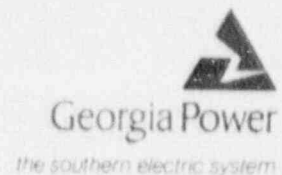


C. K. McCoy  
Vice President, Nuclear  
Vogtle Project



April 19, 1991

ELV-02735  
0933

Docket Nos. 50-424  
50-425

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D. C. 20555

VOGTLE ELECTRIC GENERATING PLANT  
REVISED THERMAL DESIGN PROCEDURE  
SENSITIVITY FACTORS

Georgia Power Company letter ELV-02593 dated March 27, 1991, provided responses to 16 requests for additional information that resulted from the meeting with the NRC staff on February 13, 1991. The response to item 15 referred to the sensitivity factors for the application of the revised thermal design procedure to the Vogtle Electric Generating Plant analyses and committed to supply them to the NRC.

The requested information is contained in the document entitled "DNBR Sensitivities for Vogtle Units 1 & 2 in Support of RTDP Implementation." Enclosed with this letter are:

1. Ten copies of "DNBR Sensitivities for Vogtle Units 1 & 2 in Support of RTDP Implementation" (Proprietary).
2. Ten copies of "DNBR Sensitivities for Vogtle Units 1 & 2 in Support of RTDP Implementation" (Nonproprietary).

Also enclosed is Westinghouse authorization letter CAW-91-146, accompanying affidavit, proprietary information notice, and copyright notice.

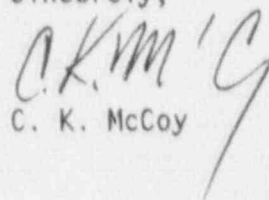
Since the document contains information proprietary to Westinghouse Electric Corporation, it is supported by an affidavit signed by Westinghouse, the owner of the information. The affidavit sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of Section 2.790 of the Commission's regulations.

Accordingly, it is respectfully requested that the information which is proprietary to Westinghouse be withheld from public disclosure in accordance with 10 CFR Section 2.790 of the Commission's regulations.

U. S. Nuclear Regulatory Commission  
ELV-02735  
Page 2

Correspondence with respect to the copyright or proprietary aspects of this item or the supporting Westinghouse affidavit should reference CAW-91-146 and should be addressed to R. P. DiPiazza, Manager of Operating Plant Licensing Support, Westinghouse Electric Corporation, P. O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

Sincerely,

  
C. K. McCoy

CKM/HWM/gmb

Enclosures

xc: Georgia Power Company  
Mr. W. B. Shipman  
Mr. P. D. Rushton  
Mr. S. H. Chesnut  
NORMS

U. S. Nuclear Regulatory Commission  
Mr. S. D. Ebnetter, Regional Administrator  
Mr. D. S. Hood, Licensing Project Manager, NRR  
Mr. B. R. Bonser, Senior Resident Inspector, Vogtle

WESTINGHOUSE CLASS 3

DNBR Sensitivities for Vogtle Units 1 & 2  
in Support of RTDP Implementation

April 1991

Westinghouse Electric Corporation  
Pittsburgh, PA 15230

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## Attachment

Response to NRC Request for DNB Sensitivity Factors Supporting  
the Implementation of RTDP in VEGP Units 1 and 2

As noted in the SER for WCAP-11397-P-A, "Revised Thermal Design Procedure", the DNBR sensitivity factors for a particular plant and the range of applicability should be supplied to support the implementation of RTDP. Sensitivity factors were evaluated for the DNB correlations, THINC-IV model and parameter values for the specific application of RTDP to VEGP. These factors and their range of applicability are supplied for VEGP in Table 1 for VANTAGE-5 fuel and in Table 2 for LOPAR fuel. The VANTAGE-5 sensitivities are based on the WRB-2 correlation and the LOPAR sensitivities are based on the WRB-1 correlation. The DNBR sensitivity factors reported in the tables result in the highest (i.e., most limiting) design limit DNBR.

Table 1

DNBR Sensitivity Factors for the  
RTDP Analysis of 17x17 VANTAGE-5 Fuel in VEGP

<u>Parameter</u>	<u>Nominal *</u> <u>Value</u>	<u>Range</u>	<u>Sensitivity</u>	
			<u>Typical Cell</u>	<u>Thimble Cell</u>
Power	3565 MWt	[		+(a,c)
Inlet Temperature	557.4 °F			
Pressurizer Pressure	2250 psia			
Vessel Minimum Measured Flow	382400 GPMT			
Bypass	0.916			
FΔH	1.65			
FΔHE,1	1.0			
THINC-IV	1.0			
Transient Code	1.0			

- \* The nominal values are based on the conservative parameters used in the DNBR analyses as specified in Section 4.0 of the Safety Evaluation Report supporting the transition from LOPAR fuel to VANTAGE-5 fuel in VEGP.



Table 2

DNBR Sensitivity Factors for the  
RTDP Analysis of 17x17 LOPAR Fuel in VEGP

<u>Parameter</u>	<u>Nominal *</u> <u>Value</u>	<u>Range</u>	<u>Sensitivity</u>	
			<u>Typical Cell</u>	<u>Thimble Cell</u>
Power	3565 MWt	[		+(a,c)
Inlet Temperature	557.4 °F			
Pressurizer Pressure	2250 psia			
Vessel Minimum Measured Flow	382400 GPMT			
Bypass	0.916			
FΔH	1.57			
FΔHE,1	1.0			
THINC-IV	1.0			
Transient Code	1.0			

- \* The nominal values are based on the conservative parameters used in the DNBR analyses as specified in Section 4.0 of the Safety Evaluation Report supporting the transition from LOPAR fuel to VANTAGE-5 fuel in VEGP.