



**Nebraska Public Power District**  
*Nebraska's Energy Leader*

NLS990109  
December 23, 1999

U.S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D.C. 20555-0001

Gentlemen:

Subject: Reporting of Changes and Errors in ECCS Evaluation Models  
Cooper Nuclear Station  
NRC Docket 50-298, DPR-46

Reference: 1) Letter NLS970040 to US Nuclear Regulatory Commission from P. D. Graham  
(Nebraska Public Power District), dated March 19, 1997, "SAFER/GESTR  
Loss-of-Coolant Accident Analysis Report"

In accordance with 10 CFR 50.46(a)(3)(ii), the Nebraska Public Power District (District) is herein reporting the impact of changes and errors in the methodology used by General Electric (GE) to demonstrate compliance with the Emergency Core Cooling System (ECCS) requirements of 10 CFR 50.46. The District was notified of an error found in GE's GESTR-LOCA and SAFER codes with respect to the Counter Current Flow Limiting (CCFL) Coefficients in SAFER Analyses for GE8, GE9, GE10, and Siemens fuels.

The GE codes utilize actual fuel bundle geometry, and coefficients based on test data using actual bundle geometry to model CCFL. The coefficient used in the current Cooper Nuclear Station (CNS) analysis is based on the original GE8x8 fuel. Subsequent changes to the fuel design were not incorporated into the GE codes. This error resulted in a calculated peak clad temperature (PCT) increase of 5 degrees Fahrenheit for the GE8x8NB (GE9B) fuel currently in use at CNS.

The cumulative change to the CNS SAFER/GESTR methodology is 5 degrees Fahrenheit for the GE9B fuel. The licensing basis PCT was 1570 degrees Fahrenheit (NEDC-32687P, Cooper Nuclear Station SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis, Table 6-1, page 6-2, submitted by Reference 1) for the GE9B fuel. The revised licensing basis PCT for GE9B fuel is  $1570 + 5 = 1575$  degrees Fahrenheit.

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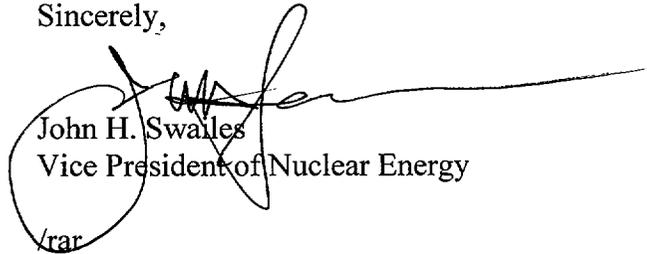
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Should you have any questions concerning this matter, please contact me.

Sincerely,



John H. Swalles  
Vice President of Nuclear Energy

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cc: Regional Administrator  
USNRC - Region IV

Senior Project Manager  
USNRC - NRR Project Directorate IV-1

Senior Resident Inspector  
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NPG Distribution

