

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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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 USNRC

NPG Distribution

Correspondence No: NLS990109

The following table identifies those actions committed to by the District in this document. Any other actions discussed in the submittal represent intended or planned actions by the District. They are described to the NRC for the NRC's information and are not regulatory commitments. Please notify the NL&S Manager at Cooper Nuclear Station of any questions regarding this document or any associated regulatory commitments.

COMMITMENT	COMMITTED DATE OR OUTAGE
lone	N/A

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