



Nebraska Public Power District

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NLS2016007
January 21, 2016

50.46(a)(3)(ii)

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

Subject: Annual Report of Changes and Errors in Emergency Core Cooling System
Evaluation Models for 2015
Cooper Nuclear Station, Docket No. 50-298, DPR-46

Reference: Letter from Jim Shaw, Nebraska Public Power District, to U.S. Nuclear
Regulatory Commission, dated January 21, 2015, "Annual Report of
Changes and Errors in Emergency Core Cooling System Evaluation
Models for 2014"

Dear Sir or Madam:

The purpose of this letter is to submit the 2015 annual report of changes or errors in the
Emergency Core Cooling System (ECCS) evaluation models pursuant to 10 CFR 50.46(a)(3)(ii)
for Cooper Nuclear Station (CNS).

In the reference letter, Nebraska Public Power District reported it would pursue additional action
due to the limited margin to the 2200°F Peak Cladding Temperature (PCT) limit for both fuel
types currently in the core. CNS contracted with the fuel vendor to evaluate Maximum Average
Planar Linear Heat Generation Rate (MAPLHGR) limit setdowns to reduce the licensing basis
peak clad temperature (LB PCT). The results of this reanalysis are provided below.

The revised LB PCT will be 2150°F for both GE14 and GNF2 fuel types. This change in the LB
PCT is a result of a 1.1% PLHGR/MAPLHGR setdown for GE14 and a 2.0% PLHGR/
MAPLHGR setdown for GNF2. Use of the revised LB PCT was approved on September 1,
2015, by Engineering Calculation NEDC 99-046, "Review of GE Calculation - Cooper Nuclear
Station SAFER/GESTR-LOCA Analysis," Revision 9. This document accepted the use of
General Electric Hitachi/Global Nuclear Fuel Report 002N7432-R1, "Updated LHGR/
MAPLHGR Limits for Cooper GE14 and GNF2 Fuel." The revised LB PCT was applied on
September 1, 2015.

The previously reported LB PCT limits in the reference letter were 2195°F for GE14 fuel and
2180°F for GNF2 fuel. The subsequent changes of -45°F (GE14) and -30°F (GNF2) are not
classified as significant per 10CFR 50.46(a)(3)(i).

COOPER NUCLEAR STATION

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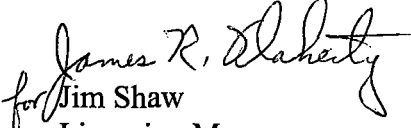
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NRR

The reanalysis incorporated all errors/changes applicable to the ECCS evaluation models for GE14 and GNF2 fuel types that were previously reported in the 2014 annual report. Since September 1, 2015, there have been no other changes or errors affecting the LB PCT. CNS continues to comply with the PCT limit of 2200°F specified in 10 CFR 50.46(b)(1) for both GE14 and GNF2 fuel types.

This letter makes no regulatory commitments.

If you have any questions regarding this report, please contact Jeremy Custer, Reactor and Fuels Engineering Supervisor, at (402) 825-5653.

Sincerely,


for Jim Shaw
Licensing Manager

/lb

Attachment: LB PCT Limits in Emergency Core Cooling System Evaluation Models for 2015
Nebraska Public Power District - Cooper Nuclear Station

cc: Regional Administrator w/attachment
USNRC - Region IV

Cooper Project Manager w/attachment
USNRC - NRR Plant Licensing Branch IV-2

Senior Resident Inspector w/attachment
USNRC- CNS

NPG Distribution w/attachment

CNS Records w/attachment

LB PCT Limits in Emergency Core Cooling System Evaluation Models for 2015
Nebraska Public Power District - Cooper Nuclear Station

Fuel Type	Licensing Basis PCT (°F)	Local Oxidation (%)	Core-Wide Metal-Water Reaction (%)
GE14	2150	<6.00	<0.10
GNF2	2150	<6.00	<0.10