

Exelon Nuclear 200 Exelon Way Kennett Square, PA 19348 www exeloncorp com

Nuclear

10 CFR 50.46 (a)(3)(i) and (ii)

December 18, 2002

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

Limerick Generating Station, Units 1 and 2

Facility Operating License Nos. NPF-39 and NPF-85

NRC Docket Nos. 50-352 and 50-353

Subject:

10 CFR 50.46 Reporting Requirements

Reference:

Letter from S. A. Richards (NRC) to J. F. Klapproth (GE Nuclear Energy),

"Review of NEDE-23785, Vol. III, Supplement 1, Revision 1, "GESTR-LOCA and

SAFER models for Evaluation of Loss-of-Coolant Accident Volume III,

Supplement 1, Additional Information for Upper Bound PCT Calculation" (TAC

No MB2774)", February 1, 2002.

Dear Sir/Madam:

In accordance with 10 CFR 50.46 (a)(3)(i) and (ii), the following is a revision to the licensing basis Loss-of-Coolant Accident (LOCA) peak clad temperatures (PCTs) for Limerick Generating Station (LGS), Units 1 and 2. Table 1 (attached) provides the revised licensing basis PCT values and the prior PCT error accumulation changes for LGS, Unit 1. Table 2 (attached) provides the revised licensing basis PCT values and the prior PCT accumulations for LGS, Unit 2.

Exelon Generation Company, LLC (Exelon) received a 10 CFR 50.46 notification letter from Global Nuclear Fuel (GNF) ("SAFER Core Spray Injection Elevation Error"), which informed us of a PCT impact due to an error in a code input affecting the elevation of the core spray spargers. The error affects the buildup and draining of the water in the upper plenum region above the core. The correction of the error results in an estimated increase in the licensing basis PCT of 15°F for the GE14 fuel type. The error did not impact the pre-GE14 fuel types.

A second 10 CFR 50.46 notification letter was also received from GNF ("Impact of SAFER Bulk Water Level Error on the Peak Clad Temperature (PCT)"), which informed us of a PCT impact due to an error affecting the initial water level in the bulk water region of the vessel. The error occurred due to failure to properly account for the effect of the steam dryer pressure drop on the initial inventory of water in the vessel. The correction of the error results in an estimated decrease in the licensing basis PCT of 5°F for all fuel types.

In the referenced letter, the NRC approved the elimination of the 1600°F limit on the upper bound peak clad temperature. Exelon has confirmed that the Safety Evaluation Report attached to the reference letter is applicable to Limerick Generating Station, Units 1 and 2. 10 CFR 50.46 Reporting Requirements December 18, 2002 Page 2

Therefore, future 10 CFR 50.46 reports will no longer include a discussion of the upper bound peak clad temperature.

The attached tables provide, by fuel type, the baseline PCTs, the prior PCT error accumulations, and the resultant estimated licensing basis PCTs for the limiting and non-limiting fuel types. The estimated licensing basis peak clad temperature for the most limiting fuel type at LGS, Unit 1 (GE14) increases to 1680°F. The licensing basis PCT for the most limiting fuel type at LGS, Unit 2 (GE14) also increases to 1680°F. The licensing basis PCT for both units has more than 500°F margin to the 2200°F limit specified in 10 CFR 50.46. Therefore, no additional action is required.

If you have any questions, please do not hesitate to contact us.

Very truly yours,

Michael P. Gallagher

Director, Licensing and Regulatory Affairs Mid Atlantic Regional Operating Group

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Attachments

cc:

H. J. Miller, Administrator, Region I, USNRC

A. L. Burritt, USNRC Senior Resident Inspector, LGS

S. Wall, Project Manager, USNRC

TABLE 1

CURRENT BASELINE PCT (°F) VALUES AND ERROR ACCUMULATION
LIMERICK GENERATING STATION, UNIT 1

	P8x8R	GE8	GE9	GE 11/13	GE14
BASELINE PCT	1625	1515	1515	1605	1670
Prior PCT Error Accumulation	10	20	50	40	0
50.46 Notification Core Spray Sparger Elevation Error	0	0	0	0	15
50.46 Notification Bulk Water Level Error	-5	-5	-5	-5	-5
TOTAL	5	15	45	35	10
NEW ESTIMATED LICENSING BASIS PCT VALUES	1630	1530	1560	1640	1680

TABLE 2

CURRENT BASELINE PCT (°F) VALUES AND ERROR ACCUMULATION
LIMERICK GENERATING STATION, UNIT 2

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	P8x8R	GE8	GE9	GE 11/13	GE14
BASELINE PCT	1625	1515	1515	1605	1670
Prior PCT Error Accumulation	10	20	50	40	0
50.46 Notification Core Spray Sparger Elevation Error	. 0	0	0	0	15
50.46 Notification Bulk Water Level Error	-5	-5	-5	-5	-5
TOTAL	5	15	45	35	10
NEW ESTIMATED LICENSING BASIS PCT VALUES	1630	1530	1560	1640	1680