

August 15, 2002 NG-02-0622

Office of Nuclear Reactor Regulation U. S. Nuclear Regulatory Commission Attn: Document Control Desk Mail Station 0-P1-17 Washington, DC 20555-0001

Subject:

Duane Arnold Energy Center

Docket No: 50-331

Op. License No: DPR-49

10 CFR 50.46 Annual Report of Changes in Peak Cladding Temperature for

the Duane Arnold Energy Center

References:

1. Letter from K. Putnam (NMC) to NRC, NG-01-0969, "10 CFR 50.46 Annual Report of Changes in Peak Cladding Temperature for the DAEC," dated October 12, 2001.

- 2. NRC Amendment 243, "Extended Power Uprate (TAC No. MB0543)," dated November 6, 2001.
- 3. Letter from K. Putnam (NMC) to NRC, NG-01-0754, "10 CFR 50.46 Special Report of Errors in Peak Cladding Temperature for the DAEC," dated June 7, 2001

File:

A-105, A-225, J-60a

Dear Sir/Madam:

In accordance with 10 CFR 50.46(a)(3)(ii), Nuclear Management Company, LLC hereby submits our annual report regarding the changes in the calculated peak cladding temperatures (PCTs) of the GE 10, GE 12, and GE 14 fuel types currently used at the Duane Arnold Energy Center (DAEC). This report covers the period from the last annual report (Reference 1) to June of this year.

Subsequent to the last annual report, the re-analysis of PCT for all three currently-utilized fuel types, performed in support of the DAEC Extended Power Uprate (EPU) license amendment request, was approved by the Staff (Reference 2). Consequently, as discussed in Reference 3, only those identified errors remain applicable to the current fuel types. The remaining applicable errors result in an accumulated change in PCT of +55 °F (both nominal and absolute value) for all fuel types in use at the DAEC.

August 15, 2002 NG-02-0622 Page 2 of 2

In 2002, our fuel vendor notified us of a new error in the EPU analysis. The error is in the Core Spray injection elevation and its correction results in an increase of 5 °F in the calculated PCT for all three fuels types in use at the DAEC. When added to the previous accumulation of errors, the new error results in a total change in PCT of +60 °F (both nominal and absolute value). However, significant margin in PCT (over 600 °F) to the regulatory limit of 2200 °F exists. Thus, there is no safety significance to the reported errors and no re-analysis is required at this time.

Should you have any questions regarding this letter, please contact this office.

Sincerely,

Kenneth S. Putnam Manager, Licensing

cc:

H. Tran M. Peifer

Docu

J. Dyer (Region III)

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NRC Resident Office - DAEC