Docket No.: 50-249

Mr. Dennis L. Farrar Director of Nuclear Licensing Commonwealth Edison Company Post Office Box 767 Chicago, Illinois 60690

Dear Mr. Farrar:

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION - DRESDEN 3

CYCLE 10 RELOAD

Re: Dresden Nuclear Power Station, Unit No. 3

Docket-No.-50-249
NRC PDR
Local PDR
BWD-1 r/f
RBernero
Attorney, OELD
EJordan
BGrimes
JPartlow
NThompson
RGilbert
JZwolinski
ACRS (10)
LPhillips
MMcCoy

DISTRIBUTION

By a letter dated February 21, 1986 as supplemented by a letter dated April 18, 1986, you transmitted a request for, information relating to, a Technical Specification amendment for the Dresden 3 Cycle 10 Reload. The staff has reviewed this material and find that we need the information requested in the enclosure in order to complete our review regarding your amendment request. Please respond to this request promptly so that the staff can complete the review in time to meet your present schedule for restart.

The reporting and/or recordkeeping requirements contained in this letter affect fewer than ten respondents. Therefore, OMB clearance is not required under P.L. 96-511.

Sincerely.

John A. Zwolinski, Director BWR Project Directorate #1 Division of BWR Licensing

Enclosure: Request for Additional Information

cc w/enclosure: See next page

 OFC: BW#1:DBL
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 :DAME: CJamerson/dn RGilbert
 :JZWplinski
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 :DATE: / /86
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 : /3/86

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Dresden Nuclear Power Station Units 1, 2 and 3

cc: Mr. Michael I. Miller Isham, Lincoln & Beale Three First National Plaza Suite 5200 Chicago, Illinois 60602

Mr. Doug Scott
Plant Superintendent
Dresden Nuclear Power Station
Rural Route #1
Morris, Illinois 60450

U. S. Nuclear Regulatory Commission Resident Inspectors Office Dresden Station Rural Route #1 Morris, Illinois 60450

Chairman
Board of Supervisors of
Grundy County
Grundy County Courthouse
Morris, Illinois 60450

Regional Administrator Nuclear Regulatory Commission, Region III 799 Roosevelt Road Glen Ellyn, Illinois 60137

Gary N. Wright, Manager Nuclear Facility Safety Illinois Department of Nuclear Safety 1035 Outer Park Drive, 5th Floor Springfield, Illinois 62704

REQUEST FOR ADDITIONAL INFORMATION

RELATED TO THE DRESDEN UNIT 3 CYCLE 10 RELOAD AMENDMENT

COMMONWEALTH EDISON COMPANY

DRESDEN NUCLEAR POWER STATION, UNIT NO. 3

DOCKET NO. 50-249

- 1. A supplement to the proposed license amendment for the Dresden 3 Cycle 10 reload was provided by the licensee by letter dated April 18, 1986. An additional change was proposed to incorporate LHGR limits for EXXON 8x8 and 9x9 fuel as a Limiting Condition for Operation (LCO). In its review, the NRC staff noted that two topical report references were used which may no longer be valid. Specifically, we understand that Exxon's Generic Report XN-NF-81-21, Revision 2 has been withdrawn by the vendor. This affects the validity of the 8x8 LHGR data. In the Figure 3.5-1A provided in the supplemental submittal, the curve for the ENC 8x8 fuel does not conform to the LHGR limit curves presented in both Topical Report XN-NF-81-21, Revision 1 and XN-NF-81-21, Supplement 1. Please clarify the reference to the 8x8 data and provide an explanation of any deviations of the 8x8 curve in Figure 3.5-1A from that given in the applicable Exxon Topical Report.
- 2. Figure 3.5-1A of the April 18, 1986 submittal should be clarified in the following area:

The terminology "nodal exposure" appears to be incorrect when related to the report XN-NF-81-67 (Rev. 1) Figures for ENC 9x9 fuel. Please provide a corrected Figure. In addition, the staff notes that the 8x8 LHGR limit curves presented in XN-NF-81-21, Rev. 1 and Supplement 1 thereto were in terms of peak pellet exposures whereas the exposures in Figure 3.5-1A appear to be in terms of planar exposure. Provide the peaking factors used to convert the peak pellet exposures to planar exposures.

- 3. The second reference in the Supplement does not specify the revision number of the Exxon Generic Report XN-NF-85-67. The licensee should confirm that the latest version is applicable to Dresden 3 Cycle 10. The NRC is basing its review on Revision 1 and considers Revision 0 obsolete.
- 4. The licensee has identified ENC Topical Report XN-NF-524(P)(A) Revision 1, "EXXON Nuclear Company Critical Power Methodology for Boiling Water Reactors", November 1979 as the methodology used to determine the Minimum Critical Power Ratio (MCPR) safety limit for the D3C10 reload. This same

methodology was used in the previous Dresden 3 Cycle 8 and 9 reload analyses. The NRC Safety Evaluation Report (May 1983) on this methodology specified certain restrictions on its use which dealt with the method of accounting for uncertainties in parameters associated with the thermal margin calculation, the use of a Monte Carlo technique and the fitting of a Pearson curve to the resultant distribution. The Dresden Unit 3 Cycle 10 Plant Transient Analysis Topical Report XN-NF-85-62 identifies the main input parameters and uncertainties used in the safety limit analysis for the D3C10 reload application. The licensee should verify that the contingencies identified in the staff SER on XN-NF-524, Revision 1 have been suitably accounted for in the application of the methodology.