



Commonwealth Edison
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 Downers Grove, Illinois 60515

May 3, 1991

Dr. Thomas E. Murley, Director
 Office of Nuclear Reactor Regulation
 U.S. Nuclear Regulatory Commission
 Washington, D.C. 20555

Attn: Document Control Desk

Subject: Dresden Nuclear Power Station Units 2 and 3.
 Exposure Extension for 8x8 Fuel Assemblies
NRC Docket Nos. 50-237 and 50-249

References: (1) J. Silady (CECo) letter to T. Murley (NRC), dated February 22, 1990.

(2) B. Siegel (NRC) letter to T. Kovach (CECo), dated July 17, 1990.

Dr. Murley:

In Reference (1), Commonwealth Edison Company (CECo) requested an exposure extension for the Advanced Nuclear Fuels (ANF) 8x8 fuel designs at Dresden Station Units 2 and 3. Although that request was supported by an ANF evaluation (ANF-89-80(P)) which justified a maximum assembly average exposure of 39.0 GWd/MTU for the 8x8 fuel design, CECo elected to conservatively limit the exposure increase to 36.5 GWd/MTU based on fuel cycle projections and industry experience with ANF 8x8 fuel at that time. Reference (2) provided the Staff's approval of the exposure extension.

As a result of unexpected outages and outage extensions for both Dresden units, CECo recently lengthened the current operating cycle for Unit 3 by approximately 5 months (rescheduling the March 1991 refueling outage to September 1991). With this substantial extension to the Unit 3 operating cycle, it is now projected that the maximum assembly average exposure for the 8x8 fuel will be 36.9 GWd/MTU, exceeding the presently approved exposure value of 36.5 GWd/MTU. Therefore, with this submittal CECo is requesting Staff concurrence for an increase in the maximum assembly average exposure for the ANF 8x8 fuel to 39.0 GWd/MTU. Although this request is prompted by the extension to the current Unit 3 operating cycle, it applies to both units (Units 2 and 3).

For the requested extension, no new analyses are required since the previous ANF evaluation (ANF-89-80(P)) justified a maximum assembly average exposure of 39.0 GWd/MTU for the ANF 8x8 fuel. Additionally, recent inspections of 8x8 assemblies have provided additional support for this request by confirming expected fuel performance.

A description and safety evaluation for this extension request is presented in Attachment 'A' to this letter. The previous ANF evaluation (ANF-89-80(P)), and a related ANF letter which provides the associated Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) limits are presented in Attachments 'B' and 'C', respectively.

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APOL Change: NRC PAR Hr Encl w/out Attachment B

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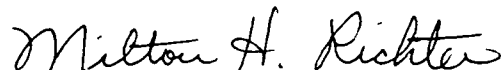
The information in Attachment 'B' is considered to be proprietary information to ANF, and is supported by an affidavit signed by ANF, the owner of the information. Attachment 'F' contains the affidavit that sets forth the basis on which the information may be withheld from public disclosure by the NRC and addresses the considerations listed in paragraph (b) (4) of 10 CFR 2.790 of the NRC's regulations. Accordingly, CECO requests that the information contained in Attachment 'B' be withheld from public disclosure in accordance with 10 CFR 2.790.

Since previously approved methodology has been used, no license amendment is necessary to increase the maximum 8x8 assembly average exposure value; however, Staff concurrence is needed as a result of previous NRC guidance. Therefore, this submittal provides the technical justification for the proposed exposure increase and corresponding changes to the current Core Operating Limits Report (COLR) for each unit. For convenience, the proposed changes are provided in the form of COLRs reissued in their entirety (Attachments 'D' and 'E'). These COLRs will not be implemented until Staff approval has been received.

At this time, it is projected that the ANF 8x8 fuel will exceed the currently approved assembly average exposure value of 36.5 GWd/MTU in early July 1991; therefore, Staff concurrence with the exposure extension (to 39.0 GWd/MTU) is needed by that time.

CECO appreciates the support of your Staff in reviewing this request. Please contact this office should further information be required.

Respectfully,



M. H. Richter
Nuclear Licensing Administrator

Attachments: See listing of Attachments

cc: A. B. Davis - Regional Administrator, Region III
B. L. Siegel - NRR Project Manger
D. E. Hills - Senior Resident Inspector, Dresden