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February 8, 1989

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

Subject: Dresden Nuclear Power Station Unit 2
Cycle 12 Reload 11
NRC Docket No. 50-237

Reference: Letter from B.L. Siegel to H.E. Bliss, "Reload
Submittal to Facilitate Review of the Cycle 12
and Subsequent Reloads Per 10 CFR 50.59 (TAC No.
69235)", dated January 6, 1989.

Dear Dr. Murley:

Dresden Station Unit 2, which has completed its eleventh cycle of operation, is preparing for the Cycle 12 startup. This letter is to advise you of Commonwealth Edison Company's completed reload review per 10 CFR 50.59 and related plans regarding the Dresden Station Unit 2 Cycle 12 core design. It is provided for your information and does not require any Staff action.

The Cycle 12 core will consist of 524 fuel assemblies (FAs) utilized in previous cycles and 200 fresh FAs of the following 9x9 design enriched to 3.13 wt.% U235:

- a) 40 FA's of ANF-4A
(identical to a previously used XN-3 design)
- b) 68 FA's of ANF-4H
(9 rods with axially varying Gd concentrations)
- c) 92 FA's of ANF-4L
(8 rods with axially varying Gd concentrations)

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The Dresden Station Unit 2 Cycle 12 core was designed to perform under current nominal design parameters, Technical Specifications and related bases, and current setpoints such that:

1. Core characteristics will be less limiting than those previously reviewed and accepted; or
- 2) For those postulated events analyzed and reported in Final Safety Analysis Report (FSAR) which could potentially be affected by the fuel reload, reanalysis has demonstrated that the results of the postulated events are within allowable limits. Commonwealth Edison Company has performed a detailed review of the ANF prepared licensing documents, the associated bases, and the references. Based on this review, safety evaluations were performed by Commonwealth Edison On-Site and Off-Site Review pursuant to the requirements of 10 CFR 50.59.

As in the past, the ANF licensing documents relied on previously reviewed and accepted analyses reported in the FSAR and other generic analyses. Commonwealth Edison verified that the reanalyses were performed in accordance with ANF NRC-approved methodology and the results of these analyses were within previously reviewed and accepted limits.

Commonwealth Edison has previously submitted preparatory Technical Specification changes for Dresden Station Unit 2 Cycle 12 operation, and these were approved via the reference. Commonwealth Edison has reviewed the cycle-specific licensing documentation and concluded that additional Technical Specification changes are not required for resumption of Unit 2 operation for Cycle 12. Commonwealth Edison On-Site and Off-Site Review have concluded that no unreviewed safety questions, as defined by 10 CFR 50.59, are involved with this reload. More specifically:

1. There is no increase in the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report;
2. No additional accident or malfunction of a different type than any evaluated previously in the safety analysis report has been created; and
3. There has been no reduction in the margin of safety as defined in the basis for any Technical Specification.

Finally, further verification of the reload core design will be performed per the standard startup physics test normally performed at the start of each reload cycle. In addition to the completed Core Loading Verification, these tests include, but are not limited to, those required by Technical Specifications such as:

1. Shutdown Margin Demonstration;
2. Control Rod Scram Testing;
3. Nuclear Instrumentation Calibration;
4. Reactivity Anomaly Surveillance; and
5. Thermal Limits Evaluation.

The following tests are performed primarily for operational information:

1. TIP Uncertainty Evaluation;
2. Critical Eigenvalue Comparison; and
3. Control Rod Functional and Subcritical Checks.

Therefore, NRC review and approval of the Dresden Unit 2 cycle-specific reload analyses is not required for resumption of operation with the Cycle 12 core.

Please contact this office should further information be desired.

Very truly yours,



J. A. Silady
Nuclear Licensing Administrator

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cc: A.B. Davis - Regional Administrator, RII
B.L. Siegel - Project Manager, NRR
S.G. DuPont - Senior Resident Inspector, Dresden