Commonwealth Edison
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Address Reply to: Post Office Box 767
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February 20, 1981

Mr. Darrell G. Eisenhut, Director
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: Dresden Station Unit 3
Cycle 8 Operation with Fuel Supplied
By Exxon Nuclear Company
NRC Docket No. 50-249

Dear Mr. Eisenhut:

Dresden Station Unit 3 is scheduled to begin Cycle 8 operation in May, 1982. Fuel assemblies designed and manufactured by Exxon Nuclear Company will be loaded in the core for this and ensuing operating cycles for Dresden 3. Although Commonwealth Edison has not yet completed its application for this change, by this letter, Commonwealth Edison requests a prompt determination by you of whether this change constitutes a significant hazards consideration.

Commonwealth Edison (CECo.) and Exxon Nuclear Company (ENC) are compiling technical information concerning operation with the ENC-supplied fuel. This information is being prepared consistent with Regulatory Guide 1.70, Chapters 4 and 15, and the most recent NRC guidance regarding applications for amendments of operating licenses for reloads. Part of this information, particularly that describing the methodology being used in design and safety analyses, has already been submitted to the NRC by ENC. These methods are being used in the analysis of Dresden Unit 3 operation with ENC-supplied fuel. The topical reports describing this methodology (including the ENC submittal dates) are listed in Attachment A.

Further generic information applicable to the analysis of Dresden Unit 3 operation with ENC fuel will be submitted by ENC during the first half of 1981. Planned generic submittals include the following items:

- Fuel mechanical design report
- Power distribution uncertainties
- Experimental results supporting the XN-3 critical power correlation
- Verification of ECCS modeling
- Thermal limits methodology
- Plant transient analysis methodology application

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Information specific to the Dresden-3 plant is scheduled to be submitted by CECo in November 1981. The following items will be addressed:

- Plant transient analyses as described in Regulatory Guide 1.70, Chapter 15
- Overpressurization analyses
- Fuel loading error analysis
- Stability analyses
- Standby Liquid Control System effectiveness
- Changes to the Plant Technical Specifications covering operation with ENC-supplied fuel (Attachment B contains a summary listing of the anticipated Technical Specification changes)

In addition a lead plant ECCS analysis for ENC fuel will be submitted as required by 10 CFR 50.46, including break size and location spectra.

We believe that this letter and the topical reports listed in Attachment A contain sufficient information to allow an early NRC decision on whether or not this application involves a significant hazards consideration, and to cause, if necessary, a notice of proposed action to be published in the Federal Register. Title 10 CFR 50.91 provides that the significant hazards determination and any required issuance of such notice be done "as soon as practicable." This is particularly important in this case to avoid the possibility of licensing proceedings delaying cycle 8 startup in the spring of 1982.

Please address any questions you may have concerning this matter to this office.

One (1) signed original and thirty-nine (39) copies of this transmittal are provided for your use.

Very truly yours,

J. S. Abel
Director of
Nuclear Licensing

SUBSCRIBED and SWORN to
before me this 23rd day
of February, 1981

Notary Public

Attachment

cc: RIII Inspector - Dresden
G. F. Owsley (ENC)

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Attachment A

TOPICAL REPORTS APPLICABLE TO OPERATION OF DRESDEN UNIT 3
WITH EXXON NUCLEAR SUPPLIED FUEL

Document	Title	Submittal Date
XN-NF-512(P)	XN-3 Critical Power Correlation	07/20/79
XN-NF-80-19(P), Volume 1	Exxon Nuclear Methodology for Boiling Water Reactors - Neutronics Methods for Design & Analysis	05/30/80
XN-NF-80-19(P), Volume 2	Exxon Nuclear Methodology for Boiling Water Reactors - EXEM: ECCS Evaluation Model Summary Description	05/30/80
XN-NF-80-19(P), Volume 2A	RELAX: A RELAP4 Based Computer Code for Calculating Blowdown Phenomena	05/30/80
XN-NF-80-19(P), Volume 2B	FLEX: A Computer Code for Jet Pump BWR Refill and Reflood Analysis	05/30/80
XN-NF-80-19(P), Volume 3	Exxon Nuclear Methodology for Boiling Water Reactors - Thermal Hydraulics	05/30/80
XN-NF-79-59(P)	Methodology for Calculation of Pressure Drop in BWR Fuel Assemblies	05/30/80
XN-NF-524(P)	Exxon Nuclear Critical Power Methodology For Boiling Water Reactors	05/30/80
XN-NF-79-71(P), Revision 1	Exxon Nuclear Plant Transient Model for Jet-Pump Boiling Water Reactors	05/30/80
XN-NF-79-71(P), Supplement 1	Exxon Nuclear Company's Plant Transient Simulator Code for Evaluation of Abnormal Transients for Jet-Pump Boiling Water Reactors	11/05/80

Attachment B

ANTICIPATED CHANGES TO TECHNICAL SPECIFICATIONS

Section	Page	Brief Description
1.0.C	1	Reference to ENC critical power correlation should be included.
1.1.A	5	MCPR safety limit using the XN-3 critical power correlation may be different.
Bases	10	ENC CPR reference should be added.
1.1.A	11	a) LHGR limit for ENC 8x8 fuel should be addressed b) ENC critical power methodology topical report should be referenced c) Transient analyses performed by ENC substituted for Reference (1).
2.1	13	Transient analyses performed by ENC should be substituted for Reference (1).
Bases	20,21	NEDE-24011-P-A is also Reference (1). Transient analysis document from ENC should be substituted.
3.2	46	LOCA analyses performed by ENC should be referenced instead of NEDO-24146A.
Bases	62,62a	Rod Drop Accident References (1), (2) and (3) may need to be superseded by ENC documents. Reference (6) should be replaced with the ENC transient analyses.
3.5.J	81B-1	LHGR limit for ENC 8x8 fuel should be addressed.
Fig. 3.5-1	81C-1 thru 81C-5	MAPLHGR limit curves for ENC fuel should be added.
3.5.K	81D	MCPR operating limit for ENC 8x8 fuel should be added.
Bases	82	LOCA Analysis References (1) and (2) should be replaced with ENC parellel documents.
Bases	85A	LOCA Analysis Reference (1) should be replaced with a parallel ENC document.
Bases	85B	LHGR Reference (2) should be replaced with ENC documents.