



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

October 29, 1981

Docket No. 50-249

DO NOT REMOVE

Posted
Amdt. 56
to DPR-25

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

Dear Mr. DeGeorge:

SUBJECT: SPENT FUEL POOL MODIFICATION - DRESDEN STATION, UNIT 3

Pursuant to the Atomic Safety and Licensing Board's (ASLB) "Partial Initial Decision Modifying Operating License to Permit Installation of Five High-Density Spent Fuel Storage Racks at Dresden Unit 3", dated September 24, 1981, the Commission has issued Amendment No. 56 to Facility Operating License No. DPR-25.

The amendment is in partial response to your application dated May 11, 1978, which requested approval for the installation of 33 high-density spent fuel storage racks at Dresden Station Units 2 and 3. However, because of the NRC staff's concerns with respect to seismic matters, by letter dated August 10, 1981, you requested approval for installation and use of five racks for Dresden Unit 3 only. Supplemental and supporting information for your May 11, 1978 application was transmitted by your letters dated January 12 and 24, 1979, May 30, 1979, June 12, 1979, August 17, 1979, October 19 and 29, 1979, December 2, 1980, January 29, 1981, and June 8, 1981.

The amendment authorizes a Technical Specification change which requires the effective subcritical multiplication factor (K_{eff}) in the spent fuel pool be maintained below 0.95, and incorporates a new License Condition 3.M which (1) approves the installation and use of five high-density storage racks in the spent fuel storage pool for Dresden Station Unit 3, (2) requires fuel stored in the spent fuel pool to have a U-235 loading less than or equal to 14.8 grams per axial centimeter, and (3) requires no loads heavier than the weight of a single fuel assembly and handling tool to be carried over fuel stored in the spent fuel pool. The license amendment also incorporates the requirement that the FSAR be updated to reflect the four commitments relied upon by the Board in reaching their decision.

Mr. L. DelGeorge

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On June 5, 1980, we issued our Safety Evaluation and Environmental Impact Appraisal supporting this action. The staff's evaluation of the licensee's August 10, 1981 proposal to install five spent fuel storage racks at Dresden Unit 3 was presented as testimony at the September 11, 1981 ASLB Hearing in Bethesda, Maryland.

A copy of the combined Notice of Issuance and Negative Declaration is also enclosed. You have already been provided a copy of the ASLB's Partial Initial Decision.

Sincerely,



Thomas A. Ippolito, Chief
Operating Reactors Branch #2
Division of Licensing

Enclosures:

1. Amendment No. 5~~6~~ to
License No. DPR-25
2. Notice of Issuance and
Negative Declaration

cc w/enclosures:
See next page

Mr. L. DelGeorge

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cc w/enclosures:

Mr. Philip Steptoe
Isham, Lincoln & Beale
Counselors at Law
One First National Plaza, 42nd Floor
Chicago, Illinois 60603

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

Morris Public Library
604 Liberty Street
Morris, Illinois 60451

Illinois Department of Nuclear Safety
1035 Outer Park Drive
5th Floor
Springfield, Illinois 62704

Mr. William Waters
Chairman, Board of Supervisors
of Grundy County
Grundy County Courthouse
Morris, Illinois 60450

U.S. Environmental Protection Agency
Region V Office
Regional Radiation Representative
230 South Dearborn Street
Chicago, Illinois 60604

Mary Jo Murray, Esq.
Assistant Attorney General
Environmental Control Division
188 W. Randolph Street
Suite 2315
Chicago, Illinois 60601

U. S. Nuclear Regulatory Commission
Resident Inspector's Office
Dresden Station
RR #1
Morris, Illinois 60450

John F. Wolf, Esq.
3409 Shepherd Street
Chevy Chase, Maryland 20015

Dr. Linda W. Little
500 Hermitage Drive
Raleigh, North Carolina 27612

The Honorable Tom Corcoran
U.S. House of Representatives
Washington, D.C. 20515



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

COMMONWEALTH EDISON COMPANY

DOCKET NO. 50-249

DRESDEN STATION UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 56
License No. DPR-25

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by the Commonwealth Edison Company (the licensee) dated May 11, 1978, and the licensee's request dated August 10, 1981, as supplemented and supported by the information transmitted by letters dated January 12 and 24, 1979, May 30, 1979, June 12, 1979, August 17, 1979, October 19 and 29, 1979, December 2, 1980, January 29, 1981, and June 8, 1981, comply with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, pursuant to the Atomic Safety and Licensing Board's "Partial Initial Decision Modifying Operating License to Permit Installation of Five High-Density Spent Fuel Storage Racks at Dresden Unit 3", dated September 24, 1981, Facility Operating License No. DPR-25 is hereby amended as follows:

A new Paragraph 3.M is added to read:

M. Spent Fuel Storage Racks

1. The licensee is authorized to install and use five high-density fuel storage racks in the spent fuel storage pool at Dresden Station Unit 3.
2. Fuel stored in the spent fuel pool shall have a U-235 loading less than or equal to 14.8 grams per axial centimeter.
3. No loads heavier than the weight of a single spent fuel assembly and handling tool shall be carried over fuel stored in the spent fuel pool.
4. The licensee shall update the Dresden Station Unit 3 FSAR within 8 months from the effective date of this amendment to reflect the following commitments:
 - a. A corrosion surveillance program for the racks to insure that any loss of neutron absorber material and/or swelling of the storage tubes is detected.
 - b. In situ neutron attenuation tests to verify that tubes and racks contain a sufficient number of Boral plates such that K-effective will not be greater than 0.95 when the spent fuel is in place.
 - c. If one boral plate is detected missing, the associated tube will be blocked to prohibit insertion of a fuel assembly. If more than one missing boral plate is detected per pool, the licensee will remove the storage rack or racks containing any additional missing boral plates from the pool. Such storage racks will not be replaced in the pool until a specific criticality analysis covering the proposed corrective action has been submitted to and approved by the NRC.
 - d. Before any storage rack is placed in the Dresden pools, the licensee will check each storage location with a plug gauge to confirm that the minimum dimension between the lead-in clips at the top of each storage location is at least 5.758 inches. If necessary, the licensee will grind down the storage clips to ensure this dimension is achieved.

Changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 3.B is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 56, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Thomas M. Novak, Assistant Director
for Operating Reactors
Division of Licensing

Attachment:
Changes to the Technical
Specifications

Date of Issuance: October 29, 1981

ATTACHMENT TO LICENSE AMENDMENT NO. 56

FACILITY OPERATING LICENSE NO. DPR-25

DOCKET No. 50-249

Revise the Appendix "A" Technical Specifications by replacing the existing Page 157 with the attached Page 157.

5.0 DESIGN FEATURES

5.1 Site

Dresden Unit 3 is located at the Dresden Nuclear Power Station which consists of a tract of land of approximately 953 acres located in the northeast quarter of the Morris 15-minute quadrangle (as designated by the United States Geological Survey), Goose Lake Township, Grady County, Illinois. The tract is situated in portions of Sections 25, 26, 27, 34, 35, and 36 of Township 34 North, Range 8 East of the Third Principal Meridian.

5.2 Reactor

- A. The core shall consist of not more than 724 fuel assemblies.
- B. The reactor core shall contain 177 cruciform-shaped control rods. The control material shall be boron carbide powder (B_4C) compacted to approximately 70% of theoretical density.

5.3 Reactor Vessel

The reactor vessel shall be as described in Table 4.1.1 of the SAR. The applicable design codes shall be as described in Table 4.1.1 of the SAR.

5.4 Containment

- A. The principal design parameters and applicable design codes for the primary containment shall be as given in Table 5.2.1 of the SAR.
- B. The secondary containment shall be as described in Section 5.3.2 of the SAR and the applicable codes shall be as described in Section 12.1.1.3 of the SAR.
- C. Penetrations to the primary containment and piping passing through such penetrations shall be designed in accordance with standards set forth in Section 5.2.2 of the SAR.

5.5 Fuel Storage

- A. The new fuel storage facility shall be such that the K_{eff} dry is less than 0.90 and flooded is less than 0.95.
- B. The K_{eff} of the spent fuel storage pool shall be less than or equal to 0.95.

5.6 Seismic Design

The reactor building and all contained engineered safeguards are designed for the maximum credible earthquake ground motion with an acceleration of 20 per cent of gravity. Dynamic analysis was used to determine the earthquake acceleration, applicable to the various elevations in the reactor building.

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NO. 50-249COMMONWEALTH EDISON COMPANYNOTICE OF ISSUANCE OF AMENDMENT TO
FACILITY OPERATING LICENSE
AND NEGATIVE DECLARATION

Pursuant to the Atomic Safety and Licensing Board's (ASLB) "Partial Initial Decision Modifying Operating License to Permit Installation of Five High-Density Spent Fuel Storage Racks at Dresden Unit 3", dated September 24, 1981, the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 56 to Facility Operating License No. DPR-25, issued to Commonwealth Edison Company (the licensee), which revised the license and its appended Technical Specifications for operation of the Dresden Nuclear Power Station, Unit No. 3, located in Grundy County, Illinois.

The amendment authorizes a Technical Specification change which requires the effective subcritical multiplication factor (K_{eff}) in the spent fuel pool be maintained below 0.95 and incorporates a new License Condition 3.M which (1) approves the installation and use of five high-density storage racks in the spent fuel storage pool for Dresden Station Unit 3, (2) requires fuel stored in the spent fuel pool to have a U-235 loading less than or equal to 14.8 grams per axial centimeter, and (3) requires no loads heavier than the weight of a single fuel assembly and handling tool to be carried over fuel stored in the spent fuel pool. The license amendment also incorporates the requirement that the FSAR be updated to reflect the four commitments relied upon by the ASLB in reaching its decision.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations

in 10 CFR Chapter I, which are set forth in the license amendment. This action is a part of the action covered by the Notice of Proposed Issuance of Amendment to Facility Operating License which was published in the FEDERAL REGISTER on August 11, 1978 (43 F. R. 35763). In a Notice of Hearing dated March 29, 1979, the ASLB granted the State of Illinois' petition to intervene.

The Commission has issued an Environmental Impact Appraisal for this action and has concluded that the action will not significantly affect the quality of the human environment.

For further details with respect to this action, see (1) the application for amendment dated May 11, 1978 and a related request for Dresden Station Unit 3 only dated August 10, 1981; also see licensee letters dated January 12 and 24, 1979, May 30, 1979, June 12, 1979, August 17, 1979, October 19 and 29, 1979, December 2, 1980, January 29, 1981, and June 8, 1981, (2) the Commission's related Safety Evaluation and Environmental Impact Appraisal, dated June 5, 1980, (3) Amendment No. 56 to License No. DPR-25, including the Commission's letter of transmittal, and (4) the ASLB's Partial Initial Decision, dated September 24, 1981. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the Morris Public Library, 604 Liberty Street, Morris, Illinois 60451. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C., Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 29th day of October, 1981.

FOR THE NUCLEAR REGULATORY COMMISSION


Thomas A. Ippolito, Chief
Operating Reactors Branch #2
Division of Licensing