

UNITED STATES NUCLEAR REGULATORY COMMISSIONCOMMONWEALTH EDISON COMPANYDOCKET NO. 50-249ENVIRONMENTAL ASSESSMENT AND FINDING OFNO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to the Commonwealth Edison Company (CECo, the licensee) for the Dresden Nuclear Power Station, Unit 3, located in Grundy County, Illinois.

ENVIRONMENTAL ASSESSMENT

Identification of Proposed Action: In general, the proposed license amendment would delete part of a certain license condition and revise the Technical Specifications (TS) to support refueling and startup for Cycle 11 operation.

The proposed change in the Dresden Unit 3 License (DPR-25) is deletion of the condition requiring a Safety Evaluation for coastdown operation with off-normal feedwater temperature from Section 3.E of the license.

The Technical Specification changes specific to the Cycle 11 reload fuel and analyses include: revision of the Minimum Critical Power Ratio (MCPR) operating limit for Cycle 11, reduction of the Single Loop Operation (SLO) MCPR adder to 0.01 (from 0.03), a reduction in the Maximum Average Planar Linear Heat Generation Rate (MAPLHGR) reduction factor for SLO to 0.91 (from 0.70), deletion of the paragraph that requires a MCPR penalty based on scram time performance, incorporation of transient Linear Heat Generation Rate (TLHGR) limits, and revision of reduced flow MCPR limits.

The Technical Specification change resulting from analyses performed to allow equipment out-of-service includes revision of the relief valve Technical Specifications to require action only after two relief valves are found to be inoperable, provided MAPLHGR reduction factors are implemented.

The Technical Specification changes provided for clarification or as administrative changes include; removal of all references to GE fuel (except in spent fuel storage Technical Specifications), changing references to EXXON Nuclear Company (ENC) to Advanced Nuclear Fuels Corporation (ANF) (except in titles of earlier documents and definitions of nuclear limits), and defining Transient LHGR (TLHGR), Steady State LHGR (SLHGR), Fuel Design Limiting Ratio for Centerline melt (FDLRC) and Fuel Design Limiting Ratio for Exxon Fuel (FDLRX).

These revisions to the license of Dresden Unit 3 would be made in response to the licensee's application for amendment dated March 9, 1988.

The Need for the Proposed Action: Pursuant to 10 CFR 50.90, CECO has proposed an amendment of Facility Operating License DPR-25 which would revise certain license conditions and TS in order to provide for Cycle 11 operation of Dresden Unit 3. This license amendment will establish the necessary critical operating limits, defined operating domains, and surveillance requirements to assure safe operation of Dresden Unit 3 with the new Cycle 11 reactor core fuel configuration.

Environmental Impacts of the Proposed Action:

By letter dated March 9, 1988, the licensee provided transient and accident safety analyses using approved methods to bound all normal and abnormal conditions of Cycle 11 operation for Dresden Unit 3.

The licensee's reload submittal analysis was performed by Advanced Nuclear Fuels (ANF) using licensing methodology to technically justify Cycle 11 operation. This methodology has been previously reviewed and considered acceptable by the NRC staff. Also, included as part of this reload submittal were transient and accident analyses coastdown with FW heater(s) out-of-service, (FHOOS) relief valve out-of-service (RVOOS), Single Loop Operation (SLO) and Extended Load Line Limit Analysis (ELLLA). All core wide transients and Emergency Core Cooling System (ECCS) analyses were performed with the most restrictive RVOOS.

The Commission has reviewed these analyses, and in the Safety Evaluation Report proposed for this amendment, concludes that operation of the facility would not endanger public health and safety. The Commission finds that potential radiological releases during normal operations, transients, and for accidents would not be increased. With regard to non-radiological impacts, the proposed amendment involves systems located entirely within the restricted area as defined in 10 CFR Part 20. They do not affect non-radiological plant effluents and have no other environmental impact. Therefore, the Commission also concludes that there are no significant non-radiological environmental impacts associated with the proposed amendments.

Accordingly, the Commission findings in the "Final Environmental Statement related to Operation of Dresden Nuclear Power Station Units 2 and 3 dated November 1973, regarding radiological environmental impacts from the plant during normal operation or after accident conditions, are not adversely altered by this action. Furthermore, occupational radiological exposure as a result of reload activities and subsequent plant operations allowed by this action will not be adversely different when compared to

previous operating and reload cycles. CECO is committed to operate Dresden Unit 3 in accordance with standards and regulations to maintain occupational exposures levels "as low as reasonably achievable."

Alternative to the Proposed Actions: The principal alternative would be to deny the requested amendment. This alternative, in effect, would be the same as a "no action" alternative. Since the Commission has concluded that no adverse environmental effects are associated with this proposed action, any alternatives with equal or greater environmental impact need not be evaluated.

Alternative Use of Resources: This action does not involve the use of resources not previously considered in connection with the Nuclear Regulatory Commission's Final Environmental Statement, dated November 1973, related to this facility.

Agencies and Persons Consulted: The NRC staff reviewed the licensee's request of March 9, 1988 and did not consult other agencies or persons.

Finding of No Significant Impact: The Commission has determined not to prepare an environmental impact statement for the proposed license amendment.

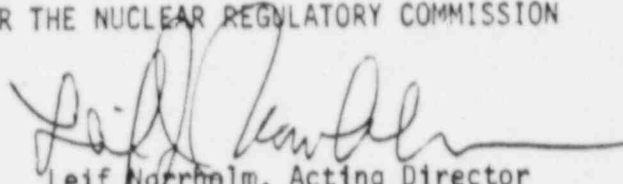
Based upon this environmental assessment, the Commission concludes that the proposed action will not have a significant adverse effect on the quality of the human environment.

For further details with respect to this action, see the request for amendment dated March 9, 1988 and the Final Environmental Statement for Dresden Unit 3 dated November 1973 which are available for public inspection

at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C. 20555 and at the Morris Public Library, 604 Liberty Street, Morris, Illinois 60450.

Dated at Rockville, Maryland this 5th of May 1988.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, appearing to read "Leif Norrholm", written in dark ink over the typed name.

Leif Norrholm, Acting Director  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

May 10, 1988

DOCKET NO. 50-249

MEMORANDUM FOR: Rules and Procedures Branch  
Division of Rules and Records  
Office of Administration

FROM: Office of Nuclear Reactor Regulation

SUBJECT: **COMMONWEALTH EDISON COMPANY - DRESDEN NUCLEAR POWER STATION UNIT 3  
ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT**

One signed original of the *Federal Register* Notice identified below is enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies ( 6 ) of the Notice are enclosed for your use.

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- Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s); Time for Submission of Views on Antitrust Matters.
- Notice of Consideration of Issuance of Amendment to Facility Operating License.
- Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
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- Notice of Limited Work Authorization.
- Notice of Availability of Safety Evaluation Report.
- Notice of Issuance of Construction Permit(s).
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Office of Nuclear Reactor Regulation  
Project Directorate III-2  
Division of Reactor Projects - III,  
IV, V and Special Projects

Enclosure:  
As stated

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