

SCR 06

April 27, 1984

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DOCKET NO(S). 50-346

Mr. Richard P. Crouse  
Vice President - Nuclear  
Toledo Edison Company  
Edison Plaza - Stop 712  
300 Madison Avenue  
Toledo, Ohio 43652

SUBJECT: DAVIS BESSE NUCLEAR POWER STATION, UNIT NO. 1

The following documents concerning our review of the subject facility are transmitted for your information.

- Notice of Receipt of Application, dated \_\_\_\_\_.
- Draft/Final Environmental Statment, dated \_\_\_\_\_.
- Notice of Availability of Draft/Final Environmental Statement, dated \_\_\_\_\_.
- Safety Evaluation Report, or Supplement No. \_\_\_\_\_, dated \_\_\_\_\_.
- Notice of Hearing on Application for Construction Permit, dated \_\_\_\_\_.
- Notice of Consideration of Issuance of Facility Operating License, dated \_\_\_\_\_.
- Monthly Notice; Applications and Amendments to Operating Licenses Involving no Significant Hazards Considerations, dated \_\_\_\_\_.
- Application and Safety Analysis Report, Volume \_\_\_\_\_.
- Amendment No. \_\_\_\_\_ to Application/SAR dated \_\_\_\_\_.
- Construction Permit No. CPPR- \_\_\_\_\_, Amendment No. \_\_\_\_\_ dated \_\_\_\_\_.
- Facility Operating License No. \_\_\_\_\_, Amendment No. \_\_\_\_\_, dated \_\_\_\_\_.
- Order Extending Construction Completion Date, dated \_\_\_\_\_.

Other (Specify) ~~Notice of Consideration of Issuance of Amendment to Facility Operating License and Proposed no Significant Hazards Consideration Determination and Opportunity for Hearing concerning amendment application dated February 17, 1984, as revised March 29, 1984, to permit withdrawal of APSRs to accommodate power coastdown for the current fuel cycle (Cycle 4).~~

Office of Nuclear Reactor Regulation  
Albert DeAgazio, Project Manager  
Operating Reactors Branch No. 4  
Division of Licensing

Enclosures:  
As stated

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cc: w/enclosure:  
See next page

See previous white for concurrence. This represents a change in format only.

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SURNAME	RIngram	ADeAgazio;	ef*JFStolz*	*			
DATE	04/11/84	04/11/84	04/11/84	04/11/84			

calculated previously using a conservative bounding analysis based on the end of life for the rhodium detectors. The revised Cycle 4 reload report submitted with this amendment request includes a recalculated setpoint (3.43%) using actual depletion data for the rhodium detectors at the end of the operating cycle. The transient quadrant power tilt limit setpoint has been recalculated similarly to be 8.93% (vs 8.53%).

The revised quadrant power tilt setpoints are determined using more accurate detector depletion data which reduces excess conservatism in the analysis. The reduced conservatism results in smaller safety margins. However, the maximum peaking increase (7.36%) due to quadrant power tilt would not be exceeded. This change, which results from a refinement in a previously used calculational model, is similar to example (vi) identified by the Commission. Therefore, the Commission's staff proposes to determine that no significant hazards consideration is involved with the request to change the incore detector system setpoints for quadrant power tilt.

Local Public Document Room location: University of Toledo Library, Documents Department, 2801 Bancroft Avenue, Toledo, Ohio 43606

Attorney for licensee: Gerald Charnoff, Esq., Shaw, Pittman, Potts, and Trowbridge, 1800 M Street, N.W., Washington, D.C. 20036

NRC Branch Chief: John F. Stolz

John F. Stolz, Chief  
Operating Reactors Branch No. 4  
Division of Licensing

CONCURRENCE  
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04/11/84

ORB#4:DL  
JStolz  
04/11/84

OELD  
04/17/84

Toledo Edison Company

cc w/enclosure(s):

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UNITED STATES NUCLEAR REGULATORY COMMISSION

THE TOLEDO EDISON COMPANY

AND

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

DOCKET NO. 50-346

NOTICE OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO  
FACILITY OPERATING LICENSE AND PROPOSED NO SIGNIFICANT HAZARDS  
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR HEARING

The U.S. Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. NPF-3, issued to The Toledo Edison Company and The Cleveland Electric Illuminating Company (the licensees), for operation of the Davis-Besse Nuclear Power Station, Unit No. 1, located in Ottawa County, Ohio.

In accordance with the licensees' application for amendment dated February 17, 1984, as revised March 29, 1984, the amendment would revise the Appendix A Technical Specifications to allow for withdrawal of the axial power shaping rods (APSRs) to accommodate power coastdown for the current fuel cycle (Cycle 4). The Technical Specification modifications would consist of revised regulating rod groups insertion limits, APSR insertion limits, and axial power

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imbalance limits which would apply beyond 200 effective full power days (EFPDs) of reactor operation if the licensee elects to withdraw the APSRs for power coastdown. Should the licensee elect not to withdraw the APSRs, then the limits presently accepted by the NRC and included in the Technical Specifications will remain in effect.

Additionally, the amendment would revise Table 3.2-2, Quadrant Power Tilt Limits, to incorporate revised steady state and transient tilt limits as determined from the symmetrical incore detector system. The tilt limits as determined by the power range channels and the minimum incore detector system would remain unchanged.

Before issuance of the proposed license amendment, the Commission will have made findings required by the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations.

The Commission has made a proposed determination that the amendment request involves no significant hazards consideration. Under the Commission's regulations in 10 CFR 50.92, this means that operation of the facility in accordance with the proposed amendment would not (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

The Commission has provided guidance concerning the application of the standards in 10 CFR 50.92 by providing examples (48 FR 14870). One example of an action not likely to involve a significant hazards consideration

relates to a reactor core reload amendment (Example iii) involving no fuel assemblies significantly different from those previously found to be acceptable to the NRC for a prior core at the licensed facility. The Commission's example assumes that no significant changes are made to the acceptance criteria for the Technical Specifications, that the analytical methods used to demonstrate conformance with Technical Specifications and regulations are not significantly changed, and the NRC has found previously such methods acceptable. Another example of an action not likely to involve a significant hazards consideration relates to a change (Example vi) which either may result in some increase to the probability or consequences of a previously-analyzed accident or may reduce in some way a safety margin, but where the results of the change are clearly within all acceptable criteria with respect to the system or component specified in the Standard Review Plan.

The Davis-Besse Nuclear Power Station is presently in Cycle 4 operation. The Cycle 4 reload application was approved by Amendment 61 to the Davis-Besse Technical Specifications on September 21, 1983. The summary report supporting Cycle 4 operation established a cycle duration of 240 EFPDs. That summary report did not provide for APSR withdrawal to permit power coastdown to extend cycle life. The summary report revision supporting the proposed amendment provides for the option to the licensees to withdraw APSRs at 200 EFPDs to extend Cycle 4 life to 280 EFPDs. This

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optional operation does not require any fuel assembly removals, additions, or rearrangements from the original approved Cycle 4 operation. The NRC has approved operation by the licensees in this manner for previous reload cycles.

The analytical methods which were used and accepted for the original Cycle 4 reload have also been used to support the proposed amendment. These methods, except for the TACO-2 fuel performance code and the revised cladding models in the Emergency Core Cooling System (ECCS) code package, do not differ significantly from the analytical methods used and accepted for previous cores to demonstrate conformance to acceptance criteria and NRC regulations. The approved TACO-2 code is used to determine the margin for centerline melting and other design calculations for fuel batches 5B and 6. The ECCS analysis utilizes the TACO-2 code and incorporates cladding rupture, strain, and flow blockage models based upon data presented in NUREG-0630. The analysis results in more restrictive operating limits than those determined for previous cycles.

The changes relating to the option permitting APSR withdrawal and subsequent extension of cycle life are similar to example (iii) identified by the Commission since the changes result from a revision to the previously-approved reload report, and identical methods have been used in determining the revisions. Therefore, with respect to the changes which would permit APSR withdrawal, the NRC staff proposes to determine that no significant hazards consideration is involved.

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The measurement-independent steady state quadrant power tilt limit is 4.92% for Cycle 4 corresponding to a maximum peaking increase of 7.36% and is unchanged from all previous cycles. The quadrant power tilt setpoint (3.03%) as measured by the symmetrical incore detector system had been calculated previously using a conservative bounding analysis based on the end of life for the rhodium detectors. The revised Cycle 4 reload report submitted with this amendment request includes a recalculated setpoint (3.43%) using actual depletion data for the rhodium detectors at the end of the operating cycle. The transient quadrant power tilt limit setpoint has been recalculated similarly to be 8.93% (vs 8.53%).

The revised quadrant power tilt setpoints are determined using more accurate detector depletion data which reduces excess conservatism in the analysis. The reduced conservatism results in smaller safety margins. However, the maximum peaking increase (7.36%) due to quadrant power tilt would not be exceeded. This change, which results from a refinement in a previously used calculational model, is similar to example (vi) identified by the Commission. Therefore, the Commission's staff proposes to determine that no significant hazards consideration is involved with the request to change the incore detector system setpoints for quadrant power tilt.

The Commission is seeking public comments on this proposed determination. Any comments received within 30 days after the date of publication of this notice will be considered in making any final determination. The Commission will not normally make a final determination unless it receives a request for a hearing.

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Comments should be addressed to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, ATTN: Docketing and Service Branch.

By June 4, 1984, the licensees may file a request for a hearing with respect to issuance of the amendment to the subject facility operating license and any person whose interest may be affected by this proceeding and who wishes to participate as a party in the proceeding must file a written petition for leave to intervene. Request for a hearing and petitions for leave to intervene shall be filed in accordance with the Commission's "Rules of Practice for Domestic Licensing Proceedings" in 10 CFR Part 2. If a request for a hearing or petition for leave to intervene is filed by the above date, the Commission or an Atomic Safety and Licensing Board, designated by the Commission or by the Chairman of the Atomic Safety and Licensing Board Panel, will rule on the request and/or petition and the Secretary or the designated Atomic Safety and Licensing Board will issue a notice of hearing or an appropriate order.

As required by 10 CFR §2.714, a petition for leave to intervene shall set forth with particularity the interest of the petitioner in the proceeding and how that interest may be affected by the results of the proceeding. The petition should specifically explain the reasons why intervention should be permitted with particular reference to the following factors: (1) the nature of the petitioner's right under the Act to be made a party to the proceeding; (2) the nature and extent of the petitioner's property, financial, or other interest in the proceeding; and (3) the possible effect of any order which may be entered in

the proceeding on the petitioner's interest. The petition should also identify the specific aspect(s) of the subject matter of the proceeding as to which petitioner wishes to intervene. Any person who has filed a petition for leave to intervene or who has been admitted as a party may amend the petition without requesting leave of the Board up to fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, but such an amended petition must satisfy the specificity requirements described above.

Not later than fifteen (15) days prior to the first prehearing conference scheduled in the proceeding, a petitioner shall file a supplement to the petition to intervene which must include a list of the contentions which are sought to be litigated in the matter, and the bases for each contention set forth with reasonable specificity. Contentions shall be limited to matters within the scope of the amendment under consideration. A petitioner who fails to file such a supplement which satisfies these requirements with respect to at least one contention will not be permitted to participate as a party.

Those permitted to intervene become parties to the proceeding, subject to any limitations in the order granting leave to intervene, and have the opportunity to participate fully in the conduct of the hearing, including the opportunity to present evidence and cross-examine witnesses.

If a hearing is requested, the Commission will make a final determination on the issue of no significant hazards consideration. The final determination will serve to decide when the hearing is held.

If the final determination is that the amendment request involves no significant hazards consideration, the Commission may issue the amendment and make it effective, notwithstanding the request for a hearing. Any hearing held would take place after issuance of the amendment.

If the final determination is that the amendment involves a significant hazards consideration, any hearing held would take place before the issuance of any amendment.

Normally, the Commission will not issue the amendment until the expiration of the 30-day notice period. However, should circumstances change during the notice period such that failure to act in a timely way would result, for example, in derating or shutdown of the facility, the Commission may issue the license amendment before the expiration of the 30-day notice period, provided that its final determination is that the amendment involves no significant hazards consideration. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish a notice of issuance and provide for opportunity for a hearing after issuance. The Commission expects that the need to take this action will occur very infrequently.

A request for a hearing or a petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C., by the above date. Where petitions are filed during the last ten (10) days of the notice period, it is requested that the petitioner

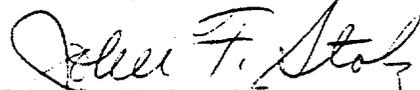
promptly so inform the Commission by a toll-free telephone call to Western Union at (800) 325-6000 (in Missouri (800) 342-6700). The Western Union operator should be given Datagram Identification Number 3737 and the following message addressed to John F. Stolz: petitioner's name and telephone number; date petition was mailed; plant name; and publication date and page number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to the Executive Legal Director, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to Gerald Charnoff, Esq., Shaw, Pittman, Potts, and Trowbridge, 1800 M Street, N.W., Washington, D.C. 20036, attorney for the licensees.

Untimely filings of petitions for leave to intervene, amended petitions, supplemental petitions and/or requests for hearing will not be entertained absent a determination by the Commission, the presiding officer or the Atomic Safety and Licensing Board designated to rule on the petition and/or request, that the petitioner has made a substantial showing of good cause for the granting of a late petition and/or request. That determination will be based upon a balancing of the factors specified in 10 CFR 2.714(a)(1)(i)-(v) and 2.714(d).

For further details with respect to this action, see the application for amendment which is available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the University of Toledo Library, Documents Department, 2801 Bancroft Avenue, Toledo, Ohio 43606.

Dated at Bethesda, Maryland, this 27th day of April 1984.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, appearing to read "John F. Stolz".

John F. Stolz, Chief  
Operating Reactors Branch #4  
Division of Licensing