

August 25, 1989

Docket No. 50-440

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Mr. Alvin Kaplan, Vice President  
 Nuclear Group  
 The Cleveland Electric Illuminating  
 Company  
 10 Center Road  
 Perry, Ohio 44081

Dear Mr. Kaplan:

SUBJECT: EXIGENT TS CHANGE REQUEST, TRAVERSING IN-CORE PROBE, PERRY  
 NUCLEAR PLANT, UNIT NO. 1 (TAC NO. 74498)

Enclosed is a "Notice of Consideration of Issuance of Amendment  
 to Facility Operating License and Proposed No Significant Hazards  
 Consideration Determination and Opportunity for Hearing." This  
 amendment was requested by your letter dated August 23, 1989. This  
 Notice was forwarded to the Office of the Federal Register for  
 publication.

Sincerely,

/s/

Timothy G. Colburn, Sr. Project Manager  
 Project Directorate III-3  
 Division of Reactor Projects - III,  
 IV, V and Special Projects  
 Office of Nuclear Reactor Regulation

Enclosure:  
 As stated

cc: See next page

*OP 2*

Office: LA/PDIII-3  
 Surname: *PKreutzer*  
 Date: *8/25/89*

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 JHannon  
*8/25/89*

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Mr. Alvin Kaplan  
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Perry Nuclear Power Plant  
Unit 1

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The Honorable Robert V. Orosz  
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UNITED STATES NUCLEAR REGULATORY COMMISSION  
CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.

DOCKET NO. 50-440

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-58, issued to the Cleveland Electric Illuminating Company, Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company and Toledo Edison Company (the licensees), for operation of the Perry Nuclear Power Plant, Unit No. 1 located in Lake County, Ohio.

The amendment would permit the use of functioning channels of the Traversing In-Core Probe (TIP) system to provide data when one or more of the TIP measurement locations are inaccessible or inoperable. Operable TIP measurement data would be substituted from symmetric core locations for use in Local Power Range Monitoring (LPRM) calibrations and thermal power monitoring.

The exigent circumstances related to this request are that the first indication of a problem with the TIP system occurred on August 11, 1989. Mechanical interference within the 'B' TIP unit indexing mechanism prevented taking traces on a channel. Subsequently, three other channels

on that TIP unit also became inaccessible. Two of these four channels can be accessed by other TIP units, however, two remain inaccessible. The TIP mechanisms are located in the drywell and are inaccessible at power due to the high radiation levels. The next calibration of the LPRM detectors is due on September 18, 1989. Utilizing the 25 percent permissible extension of surveillance intervals would make the late date for this surveillance September 29, 1989. If the 'B' TIP indexing mechanism cannot be restored prior to this surveillance being due, it must be declared inoperable. Without the proposed change, the plant would be required to shut down when the above surveillance becomes overdue in late September. This problem could not have been foreseen by the licensee because TIP calibrations can only be performed after entry into power operation and no problems were identified with the TIP indexing mechanism during prior system testing. Three previous successful TIP core traverses were performed during the operating cycle prior to this failure. The licensees' amendment request was promptly submitted on August 23, 1989 and did not result in creation of the exigent circumstances.

The due date of this amendment request to avoid shutdown of the unit does not allow for a full 30-day notice in the Federal Register. The earliest publication date in the Federal Register of the notice for this proposed amendment is no earlier than August 30, 1989. Therefore, based on the above, the staff has determined that exigent circumstances exist with respect to this license amendment request.

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 considerations. 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 licensees have provided the following analysis of the above three factors:

1. The core monitoring methodology is based on symmetry of rod patterns and fuel loading. This is not changed, but extended to use a higher order of symmetry (octant symmetry) which exists with "type A" sequence rod patterns.

This change does not change the fundamental process involved in calibrating neutron instrumentation (LPRMs), but requires that only the equipment associated with the TIP channels necessary for recalibrating LPRMs and for core monitoring functions be operable. The use of symmetric detectors to provide substitute data for inaccessible TIP channels does not compromise the ability of the process computer to accurately represent the spatial gamma flux distribution of the reactor core.

This proposed change does not alter the basic method used to calculate power and exposure distributions and fuel thermal limits. The existing method for calculating core power and exposure distributions and fuel thermal limits

includes provisions for monitoring the gamma flux distribution with mirror or rotational symmetry. This proposed change includes provisions for using octant symmetry, which is both mirror and rotationally symmetrical.

This proposed change does not alter the basic method used to determine the appropriate constants with which to relate the readings of LPRMs to those of the TIPs or the basic method used to determine substitute values to be used by the process computer for LPRMs which have failed. The proposed change specifies the use of TIP data which is equivalent to that which would normally be used.

The calibration of LPRMs using symmetric string base distributions provide LPRM data within the normal uncertainty expected for calibration with all five machines operable. Consequently, this condition will not adversely affect core thermal limit calculations.

This proposed change does not alter the function, performance or operation of any safety system or safety related equipment. The restriction to "A" control rod sequences and the limitation on total TIP uncertainty ensures the readings from symmetric channels are equivalent.

Therefore, this proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. The substitution of data into inaccessible TIP channels has no effect on any accident initiator, therefore this proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.
3. This proposed change does not involve a significant reduction in a margin of safety because the implementation is restricted by the LCO to type A symmetric control rod patterns, and then only when the total TIP uncertainty has been demonstrated previously in the cycle to be within the value assumed in the General Electric reload licensing topical report - GESTAR II (8.7 percent).

The staff agrees with the licensees' analysis; accordingly, the Commission proposes to determine that this change does not involve significant hazards considerations.

The Commission is seeking public comments on this proposed determination. Any comments received within 15 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.

Written comments may be submitted by mail to the Regulatory Publications Branch, Division of Freedom of Information and Publications Services, Office of Administration, U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, and should cite the publication date and page number of the FEDERAL REGISTER notice.

Written comments may also be delivered to Room P-216, Phillips Building, 7920 Norfolk Avenue, Bethesda, Maryland from 7:30 a.m. to 4:15 p.m. Copies of written comments received may be examined at the NRC Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D.C. The filing of requests for hearing and petitions for leave to intervene is discussed below.

By September 29, 1989 , the licensee 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 request for hearing and a petition for leave to intervene. Requests for a hearing and petitions for leave to intervene shall be filed in accordance with the Commission's "Rule 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 pre-hearing 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 that 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 the amendment is issued before the expiration of 30-days, the Commission will make a final determination on the issue of no significant hazards considerations. If a hearing is requested, 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 considerations, 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 request involves significant hazards considerations, 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 15-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 15-day notice period, provided that its final determination is that the amendment involves no significant hazards considerations. The final determination will consider all public and State comments received. Should the Commission take this action, it will publish a notice of 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, the Gelman Building, 2120 L 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 1 (800) 325-6000 (in Missouri 1 (800) 342-6700). The Western Union operator should be given Datagram Identification Number 3737 and the

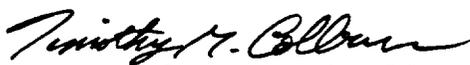
following message addressed to John N. Hannon: petitioner's name and telephone number; date petition was mailed; plant name; and publication date and page number of this FEDERAL REGISTER notice. A copy of the petition should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to Jay Silberg, Esq., Shaw, Pittman, Potts and Trowbridge, 2300 N Street, N.W., Washington, D.C. 20037.

Nontimely 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 presiding Atomic Safety and Licensing Board that the petition and/or request should be granted 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 dated August 23, 1989, which is available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, D. C. 20555, and at the Local Public Document Room, Perry Public Library, 3753 Main Street, Perry, Ohio.

Dated at Rockville, Maryland, this 25th day of August, 1989.

FOR THE NUCLEAR REGULATORY COMMISSION

  
Timothy G. Colburn, Acting Director  
Project Directorate III-3  
Division of Reactor Projects - III,  
IV, V and Special Projects  
Office of Nuclear Reactor Regulation