

September 22, 1989

Docket No. 50-440

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

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Dear Mr. Kaplan:

SUBJECT: AMENDMENT NO. 25 TO FACILITY OPERATING LICENSE NO. NPF-58
(TAC NO. 74498)

The Commission has issued the enclosed Amendment No. 25 to Facility Operating License No. NPF-58 for the Perry Nuclear Power Plant, Unit No. 1. This amendment revises the Technical Specifications (TS) in response to your application dated August 23, 1989.

This amendment permits the use of functioning channels of the Traversing In-Core Probe (TIP) System to provide necessary data when up to ten of the TIP measurement locations are inaccessible or inoperable. The operable TIP measurement data will be substituted from symmetric core locations for use in Local Power Range Monitoring calibrations and thermal power monitoring. We have reviewed the exigent circumstances associated with your request and have concluded that these changes to the TS are necessary to allow Perry Unit 1 to continue operation. We have also concluded that you have provided a sufficient basis for determining that the exigent circumstances could not have been avoided, as required by 10 CFR 50.91(a)(6).

Your application requested an unlimited substitution for inoperable TIP measurement locations of operable TIP data from symmetric core locations. This portion of your amendment request is denied as discussed in the enclosed Safety Evaluation. As stated above, the staff has approved your revised request for a maximum of ten inoperable TIP locations.

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Mr. Alvin Kaplan

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A copy of the Notice of Denial is also enclosed. The Notice has been forwarded to the Office of the Federal Register for publication. The notice of issuance of the amendment will be included in the Commission's next biweekly Federal Register notice.

Sincerely,

/s/

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

Enclosures:

1. Amendment No. 25 to
License No. NPF-58
2. Safety Evaluation
3. Notice of Denial

cc w/enclosures:
See next page

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Surname: PKreutzer
Date: 9/19/89

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

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.

DOCKET NO. 50-440

PERRY NUCLEAR POWER PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 25
License No. NPF-58

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by The Cleveland Electric Illuminating Company, Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and Toledo Edison Company (the licensees) dated August 23, 1989 complies 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, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-58 is hereby amended to read as follows:

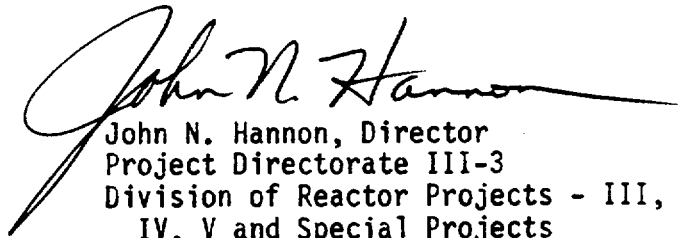
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(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 25 are hereby incorporated into this license. The Cleveland Electric Illuminating Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

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

FOR THE NUCLEAR REGULATORY COMMISSION



John N. Hannon, Director
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 22, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 25

FACILITY OPERATING LICENSE NO. NPF-58

DOCKET NO. 50-440

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. Overleaf pages are provided to maintain document completeness.

Remove

3/4 3-82
B 3/4 3-5

Insert

3/4 3-82
B 3/4 3-5

INSTRUMENTATION

SOURCE RANGE MONITORS

LIMITING CONDITION FOR OPERATION

3.3.7.6 At least the following source range monitor channels shall be OPERABLE:

- a. In OPERATIONAL CONDITION 2*, three.
- b. In OPERATIONAL CONDITION 3 and 4, two.

APPLICABILITY: OPERATIONAL CONDITIONS 2*, 3 and 4.

ACTION:

- a. In OPERATIONAL CONDITION 2* with one of the above required source range monitor channels inoperable, restore at least 3 source range monitor channels to OPERABLE status within 4 hours or be in at least HOT SHUTDOWN within the next 12 hours.
- b. In OPERATIONAL CONDITION 3 or 4 with one or more of the above required source range monitor channels inoperable, verify all insertable control rods to be fully inserted in the core and lock the reactor mode switch in the Shutdown position within one hour.

SURVEILLANCE REQUIREMENTS

4.3.7.6 Each of the above required source range monitor channels shall be demonstrated OPERABLE by:

- a. Performance of a:
 1. CHANNEL CHECK at least once per:
 - a) 12 hours in CONDITION 2*, and
 - b) 24 hours in CONDITION 3 or 4.
 2. CHANNEL CALIBRATION** at least once per 18 months.
- b. Performance of a CHANNEL FUNCTIONAL TEST:
 1. Within 24 hours prior to moving the reactor mode switch from the Shutdown position, if not performed within the previous 7 days, and
 2. At least once per 31 days.
- c. Verifying, prior to withdrawal of control rods, that the SRM count rate is at least 0.7 cps*** with the detector fully inserted.

*With IRM's on range 2 or below.

**Neutron detectors may be excluded from CHANNEL CALIBRATION.

***Provided the signal-to-noise ratio is ≥ 2 .

INSTRUMENTATION

BASES

MONITORING INSTRUMENTATION (Continued)

3/4.3.7.4 REMOTE SHUTDOWN INSTRUMENTATION AND CONTROLS

The OPERABILITY of the remote shutdown monitoring instrumentation and controls ensures that sufficient capability is available to permit shutdown and maintenance of HOT SHUTDOWN of the unit from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criteria 19 of 10 CFR 50.

3/4.3.7.5 ACCIDENT MONITORING INSTRUMENTATION

The OPERABILITY of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess important variables following an accident. This capability is consistent with the recommendations of Regulatory Guide 1.97, "Instrumentation for Light Water Cooled Nuclear Power Plants to Assess Plant Conditions During and Following an Accident," December 1975 and NUREG-0737, "Clarification of TMI Action Plan Requirements," November 1980. The CHANNEL CHECK for the Primary Containment Isolation Valve Position consists of the verification that indication of valve position (open or closed) can be determined by the valve position lights in the control room. The CHANNEL CALIBRATION for the Primary Containment Isolation Valve Position consists of the Position Indicator Test (PIT), which is conducted in accordance with Specification 4.0.5.

3/4.3.7.6 SOURCE RANGE MONITORS

The source range monitors provide the operator with information of the status of the neutron level in the core at very low power levels during startup and shutdown. At these power levels, reactivity additions shall not be made without this flux level information available to the operator. When the intermediate range monitors are on scale, adequate information is available without the SRMs and they can be retracted.

The SRMs are required OPERABLE in OPERATIONAL CONDITION 2 to provide for rod block capability, and are required OPERABLE in OPERABLE CONDITIONS 3 and 4 to provide monitoring capability which provides diversity of protection to the mode switch interlocks.

3/4.3.7.7 TRAVERSING IN-CORE PROBE SYSTEM

The OPERABILITY of the traversing in-core probe system with the specified minimum complement of equipment ensures that the measurements obtained from use of this equipment accurately represent the spatial gamma flux distribution of the reactor core. With less than the specified complement of equipment, the spatial gamma flux distribution of the reactor core can still be accurately represented by using replacement data from symmetrical strings (LPRM locations), provided the conditions specified in the LCO are met.

The TIP system OPERABILITY is demonstrated by normalizing all probes (i.e., detectors) prior to performing an LPRM calibration function. Monitoring core thermal limits may involve utilizing individual detectors to monitor selected areas of the reactor core, thus all detectors may not be required to OPERABLE. The OPERABILITY of individual detectors to be used for monitoring is demonstrated by comparing the detector(s) output with data obtained during the previous LPRM calibrations.

INSTRUMENTATION

BASES

MONITORING INSTRUMENTATION (Continued)

3/4.3.7.8 LOOSE-PART DETECTION SYSTEM

The OPERABILITY of the loose-part detection system ensures that sufficient capability is available to detect loose metallic parts in the primary system and avoid or mitigate damage to primary system components. The allowable out-of-service times and surveillance requirements are consistent with the recommendations of Regulatory Guide 1.133, "Loose Part Detection Program for the Primary System of Light-Water-Cooled Reactors," May 1981.

3/4.3.7.9 RADIOACTIVE LIQUID EFFLUENT MONITORING INSTRUMENTATION

The radioactive liquid effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in liquid effluents during actual or potential releases of liquid effluents. The alarm/trip setpoints for these instruments shall be calculated in accordance with the procedures in the ODCM to ensure that the alarm/trip will occur prior to exceeding the limits of 10 CFR Part 20. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50.

3/4.3.7.10 RADIOACTIVE GASEOUS EFFLUENT MONITORING INSTRUMENTATION

The radioactive gaseous effluent instrumentation is provided to monitor and control, as applicable, the releases of radioactive materials in gaseous effluents during actual or potential releases of gaseous effluents. The alarm setpoints for these instruments shall be calculated in accordance with the procedures in the ODCM to ensure that the alarm will occur prior to exceeding the limits of 10 CFR Part 20. This instrumentation also includes provisions for monitoring the concentrations of potentially explosive gas mixtures in the GASEOUS RADWASTE TREATMENT SYSTEM. The OPERABILITY and use of this instrumentation is consistent with the requirements of General Design Criteria 60, 63, and 64 of Appendix A to 10 CFR Part 50.

3/4.3.8 TURBINE OVERSPEED PROTECTION SYSTEM

This specification is provided to ensure that the turbine overspeed protection system instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety related components, equipment or structures.

3/4.3.9 PLANT SYSTEMS ACTUATION INSTRUMENTATION

The plant systems actuation instrumentation is provided to initiate action of the containment spray system in the event of a LOCA with high containment



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 25 TO FACILITY OPERATING LICENSE NO. NPF-58
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.
PERRY NUCLEAR POWER PLANT, UNIT NO. 1

DOCKET NO. 50-440

1.0 INTRODUCTION

By letter dated August 23, 1989 from A. Kaplan, Cleveland Electric Illuminating Company (CEI), to the NRC (Ref. 1), CEI proposed Technical Specification (TS) changes for the Perry Nuclear Power Plant (Perry) relating to the Traversing In-Core Probe (TIP) system. The changes would be to Technical Specification TS 3.3.7.7 and related Bases. The primary change would be an addition (paragraph b.) to the TS Limiting Condition for Operation (LCO) which would permit, with one or more TIP measurement locations (channels) inoperable, data to be substituted for these channels from operable channels (neutronically) symmetric to the inoperable channels. (There are minor changes combining the current LCO paragraphs a. and b. and adding the footnote of Applicability paragraph b. to paragraph a.) The LCO addition would also require (1) the reactor to be operated in a type A control rod pattern, providing an octant symmetric core symmetry and a resulting cross-core (diagonally) symmetric measurement channel pattern, and (2) the total core TIP uncertainty for the cycle to have been measured to be less than 8.7 percent (standard deviation) as used in the General Electric safety analysis.

The proposed change has been requested because there are currently several channels in one of the five TIP units in which a TIP measurement cannot be made. The reactor must be shut down to gain access to the drywell for repair work on the TIP unit. The current TS 3.3.7.7 requires that all channels be operable for the TIP system to be operable for required periodic power distribution measurements. Thus the reactor would have to be shut down soon for the repair. The proposed TS change is intended to avoid such a shutdown now, and in the future, when suitable backup information is available.

Following the submittal and the initial NRC staff review, there were several telephone conversations between CEI and the staff about the need for restrictions in the number of substitutions permitted. As a result of these discussions and with the licensee's agreement, the staff denies the original application as submitted and has modified the proposed LCO paragraph b. restricting the number of channels for which data could be substituted to a maximum of ten.

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2.0 EVALUATION

The TIP system is used for calibration of the local and average power range monitors (LPRM and APRM) and to supply detailed axial power distribution information for the analysis of core operating conditions and the approach to limits. During normal operation with a symmetric control rod pattern, the core power distribution is correspondingly symmetric, and symmetric TIP measurement channels provide similar information to within statistical differences which are accounted for in safety analyses and measured in the course of cycle startup tests. It is normal, approved practice to translate by symmetric transfers the information from measured locations to unmeasured locations when calculating, via the measurements and the process computer, the core power distribution. Under these normal operating circumstances it would be acceptable to similarly supply data from operating symmetric channels to replace inoperable channel information. No significant loss of accuracy would likely be involved.

However, inoperable channels do decrease the information supplied by the measurement system, and if abnormal power distributions developed, excessive substitution might make them more difficult to recognize. Perry has 41 TIP channels, and unrestricted symmetric substitution would permit, in theory, as much as 44 percent of the TIP information to be missing. This might not be unreasonable in a normal neutronic configuration, but is undesirable for abnormal situations.

Limiting inoperability for Perry to 10 channels means that 75 percent of the channels are available. The NRC staff advocates maintenance of as close to 100 percent operability of the instrumentation system as possible. This is necessary to be able to identify and evaluate possible power distribution or reactivity anomalies which might occur. The 75 percent operability requirement was chosen to allow a reasonable amount of failures in the system, but to encourage licensees to strive for as near to 100 percent as possible. TS changes to reduce the number further might result in a lack of incentive to keep the system operating as close to 100 percent as possible. This could result in an unacceptably degraded ability to detect anomalous conditions in the core.

This position has not been explicitly stated in previous Boiling Water Reactor (BWR) reviews of TIP operability restrictions, but it has been in many staff reviews for Pressurized Water Reactors (PWR's). The BWR and PWR incore systems are not exactly analogous, but they are sufficiently similar in application that it is reasonable to adopt a similar limit for power distribution measurement operability. The evaluations in previous BWR reviews (for Washington Nuclear 2 and LaSalle 1 and 2) have been compatible with this position.

A restriction to 10 channels would permit Perry to lose one of the 5 tip units and 2 or 3 other channels before reaching the limit. Based on past experience, this should be sufficient to keep shutdowns from TIP inoperability to an extremely low level. Perry intends to repair the present TIP problem at the first opportunity arising from a shutdown for other causes. This should always be the intent with failures in this system.

With regard to the other restrictions of the new paragraph b., (1) Perry will be operated with a type A control rod pattern and thus have the required symmetry, and (2) the Perry TIP symmetry pair variations have been measured during the current cycle startup tests and the results fall well within the required limits. The "total core TIP uncertainty" referred to in the TS includes both the measured pair variations (consisting of both detector geometry and neutronic noise components) and standard components for LPRM correction uncertainty (3.4%) and analytical model uncertainty (4.6%) as discussed in Reference 2. The total uncertainty for "TIP readings" used in the GE safety limit analysis is 8.7 percent (see Table 4-1 of Reference 3), so that the required measured TIP uncertainty is 6.6 percent. For this cycle for Perry this has been measured to be 1.7 percent. This low value is to be expected since Perry is using gamma detectors (rather than fission detectors) and detector geometry uncertainty components are expected to be very small. Finally, it is noted that the proposed modification to the paragraph structure of the LCO and the addition of the footnote to Applicability paragraph a. and the additions to Bases 3/4.3.7.7 are all compatible with the primary changes and are acceptable.

As discussed above, unlimited substitution for inoperable TIP channels would be unacceptable. Therefore, the proposed TS changes have been modified to be in accord with acceptable restrictions in channel substitution, and operations will be within the other limits in the specification on control rod symmetry and TIP uncertainty. Based on the above, the staff finds the proposed changes, as modified, to be acceptable.

3.0 EXIGENT CIRCUMSTANCES

CEI first discovered a problem on Friday, August 11, 1989, while taking TIP traces with the B TIP Unit. A trace for TIP channel B2 could not be taken due to mechanical interference within the indexing mechanism for the B unit. The indexing mechanism for each TIP unit selects the channel (or LPRM location) to be accessed by the TIP detector probe. This mechanical interference in the indexing mechanism prevented the B TIP detector probe from physically passing from the indexing machine into the guide tube resulting in that channel on the B TIP unit being inaccessible. Subsequently, three other LPRM locations (channels) on the B unit could not be accessed due to this interference. However, two of these channels (locations) can be accessed by other TIP units which allows flux measurements to be made at these locations. Therefore, currently two channels cannot be accessed by a TIP Unit.

The TIP indexing mechanisms are located within the drywell and are therefore inaccessible during power operation. Even at reduced power levels, purgings of the drywell cannot be performed (only permitted in Modes 4 and 5) and therefore direct access to the TIP machines by drywell entry is severely limited due to temperature and health physics concerns. Attempts are continuing to be made, by various means, to remotely advance the sprocket wheel to correctly position the indexing mechanism and therefore allow passage of the TIP detector. The exact problem within the B machine's indexing mechanism cannot be determined until a drywell entry can be made, since troubleshooting attempts from outside the drywell to date have proven unsuccessful.

As originally issued, the TS state that the TIP system shall be operable with five detectors and support equipment to enable mapping the core, and all 5 detectors are required to be capable of calibration at a common location. At the present time, four channels (including the common channel) cannot be accessed by the B TIP machine. Therefore, without approval of this revision to Technical Specification 3.3.7.7 the TIP system will be considered inoperable when it is next necessary to recalibrate the LPRM detectors. The next calibration of the LPRM's is required to be performed within 1000 MWd/t of the last calibration date. This next calibration is estimated to be due on September 18, 1989 (assuming full power operation). The late date taking into account the 25 percent permissible extension of the surveillance interval is September 29, 1989.

Without approval of this Technical Specification change, Perry will be forced to shut down when the next surveillance for calibrating the LPRM's comes due in late September. CEI could not have foreseen this problem with the TIP system as TIP calibrations can only be performed at an appreciable flux level (after entry into Mode 1) and no problems with the indexing mechanism were identified during prior testing of the system. Prior to and during plant startup following the recent refuel outage, the TIP probes were driven through each of the indexing mechanisms under both cold and hot conditions. Three successful full core TIP traverses were performed during the current operating cycle prior to this failure. CEI therefore could not have reasonably submitted their request in a more timely manner.

An exigent TS change has been requested since a full 30-day Federal Register notice period may not be possible before shutdown of the plant is required. To provide a full 30-day notice, the amendment would not be able to be issued prior to close of business on September 29, 1989. This might not allow sufficient time to complete the surveillance before plant shutdown is required. CEI has committed to fix the inoperable TIP machine prior to plant startup, should an unscheduled plant shutdown occur prior to the overdue date of the LPRM calibration surveillance.

The staff has reviewed the circumstances described above with respect to the proposed TS change and agrees that the amendment is necessary for continued operation and that failure to act on the request in a timely manner would require CEI to unnecessarily shut down the unit. The staff has concluded that these circumstances could not have reasonably been avoided and, therefore, valid exigent circumstances exist, as defined by 10 CFR 50.91(a)(6).

4.0 FINAL NO SIGNIFICANT HAZARDS CONSIDERATION DETERMINATION

The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92. A proposed amendment to an operating license for a facility involves no significant hazards considerations if operation of the facility in accordance with a 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 an analysis of their proposed amendment request in relation to the above standards and have concluded that it involves no significant hazards considerations. The Commission also has made a final determination that the amendment request involves no significant hazards considerations, based on the above standards and the following considerations:

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 (LPRM's), but requires that only the equipment associated with the TIP channels necessary for recalibrating LPRM's 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 LPRM's to those of the TIP's or the basic method used to determine substitute values to be used by the process computer for LPRM's 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 LPRM's using symmetric string base distributions provide LPRM data within the normal uncertainty expected for calibrations 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). Additionally, the maximum number of inoperable channels has been limited to ten.

Based upon the above considerations, the staff concludes that the amendment meets the three criteria of 10 CFR 10.92. Therefore, the staff has made a final determination that the proposed amendment does not involve significant hazards considerations.

5.0 STATE CONSULTATION

The staff made a good-faith effort to consult with the state of Ohio by telephone on September 14, 1989. The state offered no comments on this amendment.

6.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 or a change to a surveillance requirement. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

7.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

8.0 REFERENCES

1. Letter and attachments from A. Kaplan, CEI, to the NRC, dated August 23, 1989, "Exigent Technical Specification Change Request - Traversing In-Core Probe System."
2. NEDO-20340, "Process Computer Performance Evaluation Accuracy," June 1974.
3. GESTAR II, NEDE-24011-P-A-9, "General Electric Standard Application for Reactor Fuel," November 1988.

Principal Contributors: T. Colburn
H. Richings

Dated: September 22, 1989

U.S. NUCLEAR REGULATORY COMMISSION
CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.

DOCKET NO. 50-440

NOTICE OF DENIAL OF AMENDMENT TO FACILITY OPERATING LICENSE
AND OPPORTUNITY FOR A HEARING

The U. S. Nuclear Regulatory Commission (the Commission) has denied in part a request by the licensees for amendment to Facility Operating License No. NPF-58, issued to 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 (the facility) located in Lake County, Ohio.

The amendment, as proposed by the licensees, would consist of the following changes to the Technical Specifications (Appendix A to Facility Operating License No. NPF-58):

- (1) Technical Specification (TS) 3.3.7.7 describes Limiting Conditions for Operation (LCO) of the Traversing In-Core Probe (TIP) System. The licensees proposed to modify TS 3.3.7.7 to allow one or more TIP measurement locations to be inoperable with data replaced by that location's symmetric counterpart if that location is operable and provided the reactor core is operating in a type A control rod pattern and the total core uncertainty for the present cycle has been determined to be less than 8.7 percent (standard deviation).

(2) There are also minor changes combining current paragraphs a. and b. and adding the footnote of applicability paragraph b. to paragraph a.

(3) The corresponding bases page has also been changed.

The licensees' application for the amendment was dated August 23, 1989. Notice of consideration of issuance of the amendment was published in the FEDERAL REGISTER on August 30, 1989 (54 FR 35955).

The portion of the application which proposed unlimited substitution of data for inoperable TIP locations was denied. The staff determined that although no significant loss of accuracy would likely be involved by the licensees' proposed TS change, inoperable channels would decrease the information supplied by the measurement system and if abnormal power distributions developed, excessive substitution might make them difficult to recognize. Unrestricted substitution would allow as much as 44 percent of the TIP information to be missing. This would be undesirable for abnormal situations. Therefore, the staff has limited substitution to a maximum of 10 of the 41 TIP channels.

The licensees were notified of the Commission's denial of this request by letter dated September 22, 1989. All other changes requested by the licensees' application have been approved by Amendment No. 25. Notice of issuance of Amendment No. 25 will be published in the Commission's regular biweekly FEDERAL REGISTER notice.

By October 30, 1989, the licensees may demand a hearing with respect to the denial described above and any person whose interest may be affected by this proceeding may file a written petition for leave to intervene.

A request for a hearing or 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, Gelman Building, 2120 L Street N.W., Washington, D.C., by the above date.

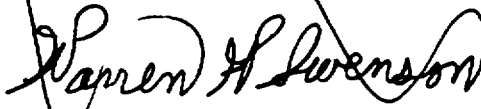
A copy of the petition should also be sent to the General Counsel, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to Jay Silberg, Esq., Shaw, Pittman, Potts & Trowbridge, 2300 N Street, N. W., Washington, D.C. 20037, attorney for the licensees.

For further details with respect to this action, see (1) the application for amendment dated August 23, 1989, and (2) the Commission's Safety Evaluation issued with Amendment No. 25 to NPF-58 dated September 22, 1989 which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Perry Public Library, 3753 Main Street, Perry, Ohio 44081. A copy of item

(2) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C., 20555, Attention: Division of Reactor Projects - III, IV, V & Special Projects.

Dated at Rockville, Maryland, this 22nd day of September, 1989.

FOR THE NUCLEAR REGULATORY COMMISSION

A handwritten signature in cursive script, reading "Warren H. Swenson". The signature is written in dark ink and is positioned directly below the typed name.

Warren H. Swenson, Project Manager
Project Directorate III-3
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation