



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 33 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

INTRODUCTION

By letter dated December 19, 1989, as supplemented by letter dated March 30, 1990, the Cleveland Electric Illuminating Company, et al. (licensees), proposed changes to the Technical Specifications (TS) for the Perry Nuclear Power Plant, Unit No. 1. The proposed changes would modify specifications having cycle-specific parameter limits by replacing the values of those limits with a reference to the Unit 1, Core Operating Limits Report for the values of those limits. The proposed changes also include the addition of the Core Operating Limits Report (COLR) to the Definitions section and to the reporting requirements of the Administrative Controls section of TS. Guidance on the proposed changes was developed by NRC on the basis of the review of a lead-plant proposal submitted on the Oconee plant docket that was endorsed by the Babcock and Wilcox Owners Group. This guidance was provided to all power reactor licensees and applicants by Generic Letter 88-16, dated October 4, 1988.

EVALUATION

The licensees' proposed changes to the TS are in accordance with the guidance provided by Generic Letter 88-16 and are addressed below.

- (1) The Definitions section of the TS was modified to include a definition of the COLR that requires cycle reload-specific parameter limits to be established on a unit-specific basis in accordance with an NRC-approved methodology that maintains the limits of the safety analysis. The definition notes that plant operation within these limits is addressed by individual specifications.
- (2) The following specifications were revised as shown to replace the values of cycle-specific parameter limits with a reference to the COLR that provides these limits:

TS 3.2.1 - Average Planer Linear Heat Generation Rates

1. Transfer the fuel and/or lattice-dependent Maximum Average Planar Linear Heat Generation Rates (MAPLHGR) limit curves to the COLR.
2. Transfer the cycle/analysis methodology-dependent MAPLHGR power and flow factor parametric curves (MAPFAC_p and MAPFAC_f) to the COLR.

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TS 3.2.2 - Minimum Critical Power Ratio

1. Transfer the cycle/analysis methodology-dependent Minimum Critical Power Ratio (MCPR) power and flow factor parametric curves ($MCPR_p$ and $MCPR_f$) to the COLR.

TS 3.2.3 - Linear Heat Generation Rate

1. Transfer the fuel and/or lattice-specific values of the Linear Heat Generation Rate (LHGR) from the above TS to the COLR.
- (3) Specification 6.9.1.9, Core Operating Limits Report, was added to the reporting requirements of the Administrative Controls section of the TS. This specification requires that the COLR be submitted, upon issuance, to the NRC Document Control Desk with copies to the Regional Administrator and Resident Inspector. The report provides the values of cycle-specific parameter limits that are applicable for the current fuel cycle. Furthermore, this specification requires that the values of these limits be established using the NRC-approved methodology in General Electric Standard Application for Reactor Fuel-GESTARII: NEDE-24011-P-A-US (US Supplement latest approved version) and consistent with all applicable limits of the safety analysis. Finally, the specification requires that all changes in cycle-specific parameter limits be documented in the COLR before each reload cycle or remaining part of a reload cycle and submitted upon issuance to NRC, prior to operation with the new parameter limits.

The staff recommended one additional change to Specification 6.9.1.9, to modify the proposed parenthetical reference "latest approved revision" to "The approved revision number at the time reload analyses are performed shall be identified in the COLR." This minor clarification was verbally agreed to by the licensees on September 13, 1990, and has been incorporated.

Additionally, the licensees' submittal modified TS 5.3.1 for description of fuel assemblies to be more generic. The staff has reviewed the licensees' description of fuel assemblies and finds it to be acceptable.

The licensees also included in their submittals, as requested in Generic Letter 88-16, a sample Core Operating Limits Report. The staff reviewed the sample COLR with regard to format and content. Following incorporation of minor changes to the format in response to the staff's suggestions, the staff finds the licensees' sample COLR to be acceptable.

On the basis of the review of the above items, the NRC staff concludes that the licensee provided an acceptable response to those items as addressed in the NRC guidance in Generic letter 88-16 on modifying cycle-specific parameter limits in TS. Because plant operation continues to be limited in accordance with the values of cycle-specific parameter limits that are established using an NRC-approved methodology,

the NRC staff concludes that this change is administrative in nature and there is no impact on plant safety as a consequence. Accordingly, the staff finds the proposed changes acceptable.

FINAL NO SIGNIFICANT HAZARDS CONSIDERATION

The staff has evaluated this proposed amendment and determined that it involves no significant hazards considerations. According to 10 CFR 50.92(c), a proposed amendment to an operating license involves no significant hazards consideration if 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 proposed revision to the TSs is in accordance with the guidance provided in Generic Letter 88-16 for licensees requesting removal of the values of cycle-specific parameter limits from TSs. The establishment of these limits in accordance with an NRC-approved methodology and the incorporation of these limits into the Core Operating Limits Report will ensure that proper steps have been taken to establish the values of these limits. Furthermore, the submittal of the Core Operating Limits Report will allow the staff to continue to trend the values of these limits without the need for prior staff approval of these limits and without introduction of an unreviewed safety question.

The proposed amendment would not alter the requirement that the plant be operated within the limits for cycle-specific parameters nor the required remedial actions that must be taken when these limits are not met. While it is recognized that such requirements are essential to plant safety, the values of the physical cycle-specific limits are determined in accordance with NRC-approved methods and thus, do not affect nuclear safety. Cycle-specific parameters calculated by required computer codes would be incorporated into the Core Operating Limits Report and submitted to the NRC as a matter of information.

Because the values of cycle-specific parameter limits will continue to be determined in accordance with an NRC-approved methodology and remain consistent with the applicable limits of the safety analysis, these changes would not increase the probability or consequences of an accident previously evaluated.

The revised specifications, including the removal of the values of cycle-specific parameter limits and the addition of the Core Operating Limits Report for these limits, would not create the possibility of a new or different kind of accident from those previously evaluated because the

cycle-specific parameters are calculated by computer codes and methods which are approved by NRC for determination of NRC regulatory limits for core design and operating conditions. The removal of the cycle-specific parameters would not involve a significant reduction in the margin of safety since this change does not alter the required methods which must be used to establish the cycle-specific limits. The NRC staff considers these proposed changes to be administrative in nature and that they do not affect the operation of the facility in a manner that involves significant hazards consideration.

STATE CONSULTATION

The State of Ohio (State) has expressed interest in this amendment and Ohio Citizens for Responsible Energy (OCRE) has been admitted as a party to the proceeding before an Atomic Safety and Licensing Board. Neither takes exception to the no significant hazards determinations proposed by the staff in the Federal Register (55 FR 4282) and (55 FR 18690) dated February 7 and May 3, 1990. We have advised the State that we are proceeding with the amendment request because to do otherwise would be prejudicial to the licensees and could potentially cause significant outage delay.

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 made a final no significant hazards consideration finding with respect to this amendment. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). This amendment also involves changes in recordkeeping, reporting or administrative procedures or requirements. Accordingly, with respect to these items, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR §51.22(c)(10). 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.

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.

Principal Contributors: Daniel Fieno, SRXB
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Lawrence Phillips, SRXB

Dated: September 13, 1990

UNITED STATES NUCLEAR REGULATORY COMMISSION
THE CLEVELAND ELECTRICAL ILLUMINATING COMPANY ET AL.
DOCKET NO. 50-440
NOTICE OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING
LICENSE AND FINAL DETERMINATION OF
NO SIGNIFICANT HAZARDS CONSIDERATION

The U.S. Nuclear Regulatory Commission (Commission) has issued Amendment No. 33 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) which revised the Technical Specifications for operation of the Perry Nuclear Power Plant, Unit No. 1, located in Lake County, Ohio. The amendment was effective as of the date of its issuance, to be implemented within 10 days of issuance.

The amendment removed cycle-specific parameters from the Technical Specifications (TSs) Sections 3.2.1 (Average Planer Linear Heat Generation Rate), 3.2.2 (Minimum Critical Power Ratio), and 3.2.3 (Linear Heat Generation Rate), and placed them in the Core Operating Limits Report (COLR). It also modified Section 5.3.1 of the TS for fuel descriptions and added a definition for the COLR to the TS. It also added a reporting requirement to submit the COLR to the NRC staff for information.

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 amendments.

Notice of Consideration of Issuance of Amendment and Proposed No Significant Hazards Consideration Determination in connection with this action was published in the FEDERAL REGISTER on February 7, 1990 (55 FR 4282). A supplement to the request was noticed in the FEDERAL REGISTER on May 3, 1990 (55 FR 18690). A request for a hearing was filed on March 8, 1990 by Susan L. Hiatt on behalf of the Ohio Citizens for Responsible Energy, and on May 31, 1990 by the Utility Radiological Safety Board of Ohio on behalf of the State of Ohio.

Under its regulations, the Commission may issue and make an amendment immediately effective, notwithstanding the pendency before it of a request for a hearing from any person, in advance of the holding and completion of any required hearing, where it has determined that no significant hazards consideration is involved.

The Commission has applied the standards of 10 CFR 50.92 and has made a final determination that the amendment involves no significant hazards consideration. The basis for this determination is contained in the Safety Evaluation related to this action. Accordingly, as described above, the amendment has been issued and made immediately effective and any hearing will be held after issuance.

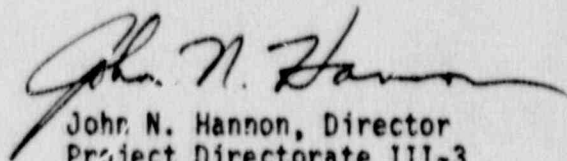
The Commission has determined that this amendment satisfies the criteria for categorical exclusion in accordance with 10 CFR 51.22(c)(9) and (10). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared for this amendment.

For further details with respect to this action see (1) the application for amendment dated December 19, 1989 as supplemented March 30, 1990, (2) Amendment No. 33 to License No. NPF-58, and (3) the Commission's related Safety Evaluation. All of these items are available for public inspection at

the Commission's Public Document Room, Gelman Building, 2120 L Street N.W., Washington, D. C. and at the Perry Public Library, 3753 Main Street, Perry, Ohio. A copy of items (2) and (3) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Reactor Projects III, IV, V and Special Projects.

Dated at Rockville, Maryland this 13th day of September 1990.

FOR THE NUCLEAR REGULATORY COMMISSION



John N. Hannon, Director
Project Directorate III-3
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Office of Nuclear Reactor Regulation