



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 42 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 September 13, 1990, and supplemented October 16, 1990, the Cleveland Electric Illuminating Company (the licensee), requested changes to the Perry Nuclear Power Plant (PNPP) Technical Specifications (TSs) by making several administrative corrections related to previous amendments, to apply certain existing surveillance requirements to all appropriate operational conditions, and to make changes to the Administrative Controls section to reflect recent organizational changes. In addition, other minor editorial corrections to the TS and Bases are also proposed.

2.0 EVALUATION

The reference to "Figure 6.2.1-1 Corporate Organization" and "Figure 6.2.2-1 Unit Organization" on page xxv of the TS index are to be deleted. These figures, along with pages 6-3 and 6-4, were deleted from the TS on June 30, 1988 by Amendment No. 13. Therefore, the index references for Figures 6.2.1-1 and 6.2.2-1 are no longer applicable and should have been removed as part of Amendment No. 13. Removal of the index references to Figures 6.2.1-1 and 6.2.2-1 is a purely administrative change.

Technical Specification 3.3.2, Table 3.3.2-1, Action 20, is being modified to provide the required actions to be taken during core alterations and operations with a potential for draining the reactor vessel (Operational Condition #). Per Table 3.3.2-1, the Primary Containment Isolation Trip Functions for Vessel Level 2 and Vessel Level 1 are applicable in Operational Conditions 1, 2, 3 and in Operational Condition #. However, Action 20 provides actions applicable only for Operational Conditions 1, 2 and 3 (be ~~in~~ at least Hot Shutdown within 12 hours and Cold Shutdown within the next 24 hours), while failing to provide actions applicable for Operational Condition #. Action 20 should also provide required actions for Operational Condition #. Therefore, Action 20 is revised to include the proper conservative actions to be taken in Operational Condition # (suspend core alterations and operations with a potential for draining the reactor vessel). This change is conservative and constitutes an additional limitation, restriction or control not presently included in the TS.



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TS Surveillance Requirement 4.3.7.7 is being changed to clarify that the traversing in-core probe (TIP) system is required to be demonstrated operable prior to use when required for monitoring core thermal limits (Average Planer Linear Heat Generation Rate (APLHGR), Linear Heat Generation Rate (LHGR), and Minimum Critical Power Ratio (MCPR)), as well as prior to recalibrating the Local Power Range Monitors (LPRMs). TS 3.3.7.7 requires the TIP system to be operable when used for recalibration of the LPRM detectors and when monitoring thermal limits. However, Surveillance Requirement 4.3.7.7 currently requires the TIP system to be demonstrated operable (by normalizing each of the required detector outputs within 72 hours prior to use) only when required for the LPRM calibration functions. After reviewing the Applicability, the Actions Statements, and the Bases, it is apparent that the intent is to demonstrate TIP system operability prior to monitoring core thermal limits, as well as prior to recalibrating the LPRMs. Therefore, Surveillance Requirement 4.3.7.7 is being revised to clarify when the TIP system shall be demonstrated operable. This change is conservative and constitutes an additional limitation, restriction or control not presently included in the TSs.

TS 3.3.7.7, item b, Applicability, lists the Maximum Fraction of Limiting Power Density (MFLPD) as one of the thermal limits, along with APLHGR, LHGR and MCPR. The MFLPD is a thermal limit that was used in part to define the "T factor" in PNPP's low power operating license (Facility Operating License NPF-45), TS 3.2.2, APRM Setpoints, but was eliminated as part of the Maximum Extended Operating Domain (MEOD) changes when PNPP's full power operating license (Facility Operating License NPF-58) TSs were approved. Deletion of the APRM Setpoints specification (and approval of MEOD) is discussed in Perry Supplemental Safety Evaluation Report (SSER) Number 10, Section 16.2.1, items 2 and 3. Since this limit is no longer utilized (as this method of APRM setpoint monitoring is not applied) it is appropriate to delete MFLPD as one of the thermal limits listed under the Applicability of Specification 3.3.7.7, item b. In addition, related TS definitions 1.15, "Fraction of Limiting Power Density," (FLPD) and 1.16, "Fraction of Rated Thermal Power," (FRTP) and their corresponding references within the TS Index are also to be deleted. These definitions are applicable only to terms used within the previously deleted APRM Setpoints Section 3.2.2 described above (FRTP as used to define the T factor). Since this specification no longer exists, the above definitions are no longer necessary within PNPP's TSs.

The footnote * to Surveillance Requirement 4.3.8.2.c is to be deleted. This note extended the initial surveillance test interval on a one-time basis to the first refueling outage for demonstrating operability of the turbine overspeed protection system. Since PNPP's first refueling outage was completed on July 23, 1989 (first Operational Condition 2 entry following refueling), this extension is no longer applicable. This change, therefore, constitutes a purely administrative change to PNPP TSs.

The asterisks (*) contained within TS 3.4.1.4 are to be deleted from the 50 degree F temperature differential limitations of TSs 3.4.1.4.a and 3.4.1.4.b. The associated footnote rendered the 100 degree F temperature differential limitation of TSs 3.4.1.4 and the 50 degree F temperature differential limitations of TSs 3.4.1.4.a and 3.4.1.4.b not applicable below 25 psig. Removal of this exemption from the 50 degree F temperature differential limitations of TSs 3.4.1.4.a and 3.4.1.4.b is a conservative change that constitutes an additional limitation, restriction, or control not presently included in the TSs. This change will in no way affect the footnote as it applies to the 100 degree F temperature differential limitation of TS 3.4.1.4.

The # footnote contained on page 3/4 6-5 applicable to Surveillance Requirements 4.6.1.2.d and 4.6.1.2.h is to be deleted. This footnote provided a one-time test interval extension to the first refueling outage for containment isolation valves listed in Table 3.6.4-1, which are identified in letter PY-CEI/NRR-0714L dated September 11, 1987, as needing a plant outage to test. Since the referenced Type C test interval extension has expired with the completion of PNPP's first refueling outage, this note is no longer applicable. This change, therefore, constitutes a purely administrative change.

TS 3.6.1.8.b is to be modified by replacing the limit for purge system operation of 3000-hours-per-365-days with a limit of 1000-hours-per-365-days (as provided in footnote ** on page 3/4 6-12) and by deletion of the footnote. According to the footnote, the 3000-hour-per-365-day limit was applicable only from initial fuel load until 3 months following the completion of the first refueling outage. Since PNPP's first refueling outage was completed July 23, 1989 (first Operational Condition 2 entry following refueling), the 3000-hours-per-365-day limit on purge system operation contained in TS 3.6.1.8.b has expired and is therefore no longer applicable. The currently applicable 1000-hour-per-365-day limit contained in the footnote is to be inserted directly into TS 3.6.1.8.b. This change is for clarification only and does not constitute a change in current TS 3.6.1.8.b limits on purge system operation, and therefore this is a purely administrative change. Note that consistent with the NRC's July 18, 1989, response to PNPP's "Containment Purge Evaluation and Technical Specification Change Request" letter PY-CEI/NRR-1025L, dated June 30, 1989, PNPP has resolved to adhere to the 1000-hour-per-365-days containment purge limit contained in TS 3.6.1.8.b, unless PNPP can show that the existing limit is inadequate.

However, based upon second cycle containment purge system operating experience, PNPP has determined that, at this time, no current need exists to increase the current 1000-hours-per-365-day TS limit. Consequently, PNPP will not be submitting a second cycle re-evaluation of the purge system's operation as proposed in letter PY-CEI/NRR-1025L.

The Bases for TS 3/4.7.4 are to be corrected by changing the required sample size of additional snubbers required to be functionally tested for each functional test failure from 10% to 5% in Functional Test Method 1 on page B 3/4 7-3 (first sentence). This change (to 5% sample size) is consistent with the sample size requirements of Surveillance Requirement 4.7.4.e.1 which provides that "...for each snubber of a type that does not meet the functional test acceptance criteria of Specification 4.7.4.f, an additional 5% of that type of snubber shall be functionally tested until no more failures are found or until all snubbers of that type have been functionally tested." Note that Surveillance Requirement 4.7.4.e.1 contained in PNPP's low power operating license (Facility Operating License NPF-45) initially specified a 10% sample size of additional snubbers required to be tested for each functional test failure. This requirement was changed to 5% in the TSs issued with PNPP's full power operating license (Facility Operating License NPF-58). However, Bases 3/4.7.4 was never updated consistent with the change in sample size in Surveillance Requirement 4.7.4.e.1. This change to Bases 3/4.7.4 is a purely administrative change to correct the above error and to achieve consistency throughout PNPP's TSs.

TS 3.8.1.1, Action a, sentence 1 is to be revised by inserting the words "once per" to read as follows:

"With one offsite circuit of the above required A.C. electrical power sources inoperable, demonstrate the OPERABILITY of the remaining A.C. sources by performing Surveillance Requirement 3.8.1.1.1.a within 1 hour and at least once per 8 hours thereafter."

This change is a purely administrative change to achieve consistency and clarification.

Table 4.8.1.1.2-1, note * on page 3/4 8-10 is to be corrected by replacing the reference to Surveillance Requirement 4.3.1.1.a.4 with 4.8.1.1.2.a.4 and by replacing the reference to Surveillance Requirement 4.8.1.1.a.5 with 4.8.1.1.2.a.5. These changes are purely administrative changes to correct existing errors.

The following corrections are proposed for page B 3/4 3-5 of the Bases:

- (1) In Bases Section 3/4.3.7.6, paragraph two, the third "OPERABLE" is changed to "OPERATIONAL" to read as follows: "The SRMs are required OPERABLE in OPERATIONAL CONDITION 2 to provide for rod block capability, and are required OPERABLE in OPERATIONAL CONDITIONS 3 and 4 to provide monitoring capability which provides diversity of protection to mode switch interlocks." This change maintains consistency with the term "OPERATIONAL CONDITION" as defined in TS Definition 1.30 (page 1-6).

- (2) In Bases Section 3/4.3.7.7, paragraph two, sentence two, the word "be" is to be inserted between the final two words of the sentence to read as follows: "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 be OPERABLE."

The above changes to Bases page B 3/4 3-5 are purely administrative changes designed to achieve consistency and correct errors. For clarification, Bases Figure B 3/4 3-1 on page B 3/4 3-8 is to be replaced.

The remainder of the changes to the PNPP TSs requested by this amendment consist of changes to the Administrative Controls section necessitated by the April 1990 reorganization of CEI and its parent company, Centerior Energy Corporation (reference letter PY-CEI/NRR-1189L dated July 17, 1990). The proposed changes for TSs Sections 6.1.2, 6.2.1.c, 6.5.1.6.f, 6.5.1.8, 6.5.2.1, 6.5.2.6.k, 6.6.1.b and 6.7.1.a,c were made under Amendment No. 36, dated December 31, 1990. The additional changes requested herein are as follows:

- (1) "Perry Plant Operations Department (PPOD)" has been retitled "Perry Nuclear Power Plant Department (PNPPD)." This change affects the following TS Sections: 6.1.1, 6.2.1.b, 6.5.1.1, 6.5.1.6.k, 6.5.1.7.a, 6.5.1.7.c, 6.5.3.1.a, 6.5.3.1.b, 6.5.3.1.c, 6.5.3.1.d, 6.5.3.1.f and 6.8.2. This change constitutes a change in title designation only.
- (2) "Nuclear Engineering Department (NED)" and "Perry Plant Technical Department (PPTD)" have been incorporated into a single department entitled "Perry Nuclear Engineering Department (PNED)" under the management of a single Director. Consequently, all references to "Nuclear Engineering Department (NED)" and "Perry Plant Technical Department (PPTD)" are to be changed to "Perry Nuclear Engineering Department (PNED)." This change affects the following TS: 6.2.3.1, 6.2.3.4, 6.5.1.2 and 6.5.3.1.b. Included within the benefits to be gained by consolidation of the above departments are the sharing of nuclear operating experience and expertise and more effective communication. This change has no effect on the technical qualifications necessary to operate PNPP. In addition, well defined lines of authority, responsibility and communication continue to exist for all activities assumed by the Director of the Perry Nuclear Engineering Department that affect the safe operation of the plant. The Director of the Perry Plant Technical Department has assumed the new role of Director of the Perry Nuclear Engineering Department.
- (3) TS 6.5.1.2 is to be changed to reflect the following organizational title changes: "Operations Section" is retitled "Perry Operations Section," "Technical Section" is retitled

"System Engineering Section," and "Maintenance Section" is retitled "Perry Maintenance Section." These changes are organizational title changes only and have no effect on existing lines of authority, responsibility and communications.

- (4) TS 6.5.3.1.a, sentence three is to be revised for clarification as follows: "Instructions shall be approved by appropriate management personnel as designated in writing by PORC, and approved by the appropriate section managers." This change is intended for clarification only.
- (5) Changes are also proposed to establish the plant manager, entitled "General Manager, Perry Nuclear Power Plant Department," as the single authority which Plant Operations Review Committee (PORC) advises on matters which come before it, and as the single authority responsible for approval on items addressed under TS Sections 6.5.3, "Technical Review and Control," and 6.8, "Procedures/Instructions and Programs." In order to achieve this goal of establishing the General Manager, PNPPD, as single authority for the above items, the necessary changes, including removal of references to Directors of other Perry Departments, were made to the following TS: 6.5.1.1, 6.5.1.6.k, 6.5.1.7, 6.5.3.1.a, 6.5.3.1.b, 6.5.3.1.c, 6.5.3.1.d, 6.5.3.1.f and 6.8.2.

The above changes to PNPP TS 6.0, Administrative Controls section are purely administrative changes designed to provide consistency and clarification.

The proposed changes to the TSs constitute additional limitations, restrictions or controls not presently included in the TS, or the changes are purely administrative designed to achieve consistency throughout the TS by providing clarification, by correcting existing errors, or by deleting material no longer applicable to the TSs. The proposed changes have been determined to result in no change to plant systems or have any effect on accident conditions or assumptions, and the changes have not affected any TS Bases. The staff has reviewed the proposed revisions to the TSs and finds them to be acceptable.

3.0 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 (56 fr 29271). 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.

4.0 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) 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 Contributor: J. Lombardo

Date: March 20, 1992