



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 192 AND 75 TO FACILITY OPERATING
LICENSE NOS. DPR-66 AND NPF-73
DUQUESNE LIGHT COMPANY
OHIO EDISON COMPANY
PENNSYLVANIA POWER COMPANY
THE CLEVELAND ELECTRIC ILLUMINATING COMPANY
THE TOLEDO EDISON COMPANY
BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2
DOCKET NOS. 50-334 AND 50-412

1.0 INTRODUCTION

By letter dated October 11, 1994, as supplemented June 23, 1995, and August 24, 1995, the Duquesne Light Company (the licensee) submitted a request for changes to the Beaver Valley Power Station, Unit Nos. 1 and 2, (BVPS-1 and BVPS-2), Technical Specifications (TSs). The requested changes would revise BVPS-1 and BVPS-2 TSs 1.18, "Quadrant Power Tilt Ratio," 3/4.2.4, "Quadrant Power Tilt Ratio," the Table Notation of TS Table 3.3-1, "Reactor Trip System Instrumentation," and associated Bases to incorporate the guidance provided in the NRC's Improved Standard Technical Specification (NUREG-1431, Revision 1) applicable to these TSs. The proposed amendments would clarify the requirements of the subject TSs with regard to the use of excore power range neutron flux detectors to monitor quadrant power tilt ratio when an excore power range neutron flux instrument is inoperable. The proposed change would also make several minor editorial changes in the subject TSs. The June 23, 1995, letter provided a revision to the proposed no significant hazards evaluation contained in the October 11, 1994, submittal. The August 24, 1995, letter provided typed final TS pages, with minor editorial changes, for issuance of these amendments. The August 24, 1995, letter did not change the initial proposed no significant hazards consideration determination or expand the scope of the August 2, 1995, Federal Register notice.

2.0 EVALUATION

TS 1.18, "Quadrant Power Tilt Ratio," currently allows the use of three operable excore detector channels to determine the quadrant power tilt ratio (QPTR) when one excore channel is inoperable. However, since reactor power

Limitations are not addressed in this definition, this is inconsistent with current TS 4.2.4.c which requires using the incore movable detectors to determine the QPTR when one power range channel is inoperable and reactor power is greater than 75% of rated thermal power (RTP).

In order to eliminate this inconsistency, the sentence allowing the remaining three operable detectors to compute the QPTR when one excore detector is inoperable has been removed from TS 1.18 since this requirement does not properly belong in the definition. In addition, TS 4.2.4.c (proposed TS 4.2.4.b) has been modified such that with one power range high neutron flux channel input to QPTR inoperable and thermal power less than 75% of RTP, the remaining three power range high neutron flux channels can be used for calculating the QPTR.

The QPTR is routinely determined using the power range channel input which is part of the power range nuclear instrumentation. The power range channel provides a protection function with operability requirements specified in TS 3.3.1. Although it is a part of the nuclear instrumentation channel, the power range channel input to QPTR functions independently of the power range channel in monitoring radial power distribution. Therefore, it may still be capable of monitoring for the QPTR even if the power range channel output is inoperable. The replacement of "power range channel" with "power range high neutron flux channel input to QPTR" in TS 4.2.4.b accurately reflects the QPTR definition and eliminates the confusion of having an inoperable power range channel when the excore detector has been verified operable and can be used to determine the QPTR when power is less than 75% of RTP. Above 75% of RTP, the movable incore detectors would still be required to determine QPTR when less than four power range high neutron flux channels input to the QPTR are operable.

As a result of the above changes to TS 4.2.4, TS Table 3.3-1 Action 2 has been changed to provide various options when one power range neutron flux channel is inoperable. These changes ensure that surveillance testing is performed in a manner consistent with the requirements of TSs 3.2.4 and 4.2.4 when a power range channel is inoperable. These changes are consistent with the Beaver Valley Power Station Updated Final Safety Analysis Reports design descriptions and analyses assumptions and will ensure that the cores operate within the fuel design criteria and that the power distributions remain within the bounds of the safety analyses. The proposed changes to TS 4.2.4 and TS Table 3.3-1 are, therefore, acceptable.

The remaining changes to the QPTR TS and applicable Bases are editorial in nature and are consistent with the NRC staff's current position as reflected in the NRC Improved Standard Technical Specifications (NUREG-1431, Revision 1) and are, therefore, acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Pennsylvania State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. The NRC staff has determined that the amendments involve 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 the amendments involve no significant hazards consideration, and there has been no public comment on such finding (60 FR 39436). Accordingly, the amendments meet 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 the amendments.

5.0 CONCLUSION

The Commission 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 the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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Date: September 15, 1995