

Mr. D. L. Farrar  
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Commonwealth Edison Company  
Executive Towers West III  
1400 Opus Place, Suite 500  
Downers Grove, IL 60515

March 22, 1996

SUBJECT: BASES PAGE CHANGE (TAC NOS. M92452 AND M92453)

Dear Mr. Farrar:

By letter dated May 5, 1995, Commonwealth Edison Company (ComEd) notified the NRC that it had changed the LaSalle County Station, Units 1 and 2, Technical Specifications (TS) Bases Section 3/4.2.3 under the provisions of 10 CFR 50.59. Also, ComEd requested a change to the TS Index to reflect the change to the bases. The bases change eliminates the detailed discussion of Equipment Out-of-Service (E00S) options and instead references the Core Operating Limits Report (COLR). The COLR provides detailed direction for applying minimum critical power ratio penalties to E00S conditions and contains references for the current E00S analyses.

The staff has reviewed your changes to the TS Bases pages and agrees that they are appropriate. Enclosed is a copy of reviewed Bases pages B 3/4 2-2, B 3/4 2-3 and B 3/4 2-6 for both the Unit 1 and 2 TSs. However, the TS Index pages you requested to change are part of the TS and require an amendment to be revised. Based on a discussion with the NRC, ComEd included these changes in a request for TS amendment dated December 21, 1995. NRC review of these changes will be provided under separate letter.

Sincerely,

Original signed by:

M. David Lynch, Project Manager  
Project Directorate III-2  
Division of Reactor Projects - III/IV  
Office of Nuclear Reactor Regulation

Docket Nos. 50-373, 50-374

Enclosure: Bases pages

cc w/encl: see next page

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Unit Nos. 1 and 2

cc:

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## POWER DISTRIBUTION SYSTEMS

### BASES

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#### 3/4.2.2 DELETED

#### 3/4.2.3 MINIMUM CRITICAL POWER RATIO

The required operating limit MCPRs at steady state operating conditions as specified in Specification 3.2.3 are derived from the established fuel cladding integrity Safety Limit MCPR, and an analysis of abnormal operational transients. For any abnormal operating transient analysis evaluation with the initial condition of the reactor being at the steady-state operating limit, it is required that the resulting MCPR does not decrease below the Safety Limit MCPR at any time during the transient assuming instrument trip setting given in Specification 2.2.

To assure that the fuel cladding integrity Safety Limit is not exceeded during any anticipated abnormal operational transient, the most limiting transients have been analyzed to determine which result in the largest reduction in CRITICAL POWER RATIO (CPR). The type of transients evaluated were loss of flow, increase in pressure and power, positive reactivity insertion, and coolant temperature decrease. The limiting transient yields the largest delta MCPR. When added to the Safety Limit MCPR, the required minimum operating limit MCPR of Specification 3.2.3 is obtained and presented in the CORE OPERATING LIMITS REPORT.

Analyses have been performed to determine the effects on CRITICAL POWER RATIO (CPR) during a transient assuming that certain equipment is out of service.

References to current equipment out-of-service analyses, as well as descriptions of those equipment out-of-service options which require an adjustment to the operating limit MCPR, are provided in the CORE OPERATING LIMITS REPORT.

BASES

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MINIMUM CRITICAL POWER RATIO (Continued)

The evaluation of a given transient begins with the system initial parameters shown in FSAR Table 15.0-1 that are input to a GE-core dynamic behavior transient computer program. The codes used to evaluate events are described in

BASES3/4.2.4 LINEAR HEAT GENERATION RATE

The specification assures that the LINEAR HEAT GENERATION RATE (LHGR) in any rod is less than the design linear heat generation even if fuel pellet densification is postulated. The power spike penalty specified is based on the analysis presented in Section 3.2.1 of the GE topical report NEDM-10735 Supplement 6, and assumes a linearly increasing variation in axial gaps between core bottom and top and assures with a 95% confidence that no more than one fuel rod exceeds the design LINEAR HEAT GENERATION RATE due to power spiking.

References:

1. General Electric Company Analytical Model for Loss-of-Coolant Analysis in Accordance with 10 CFR 50, Appendix K, NEDO-20566A, September 1986.
2. "Qualification of the One-Dimensional Core Transient Model for Boiling Water Reactors," General Electric Company Licensing Topical Report NEDO 24154 Vols. I and II and NEDE-24154 Vol. III as supplemented by letter dated September 5, 1980, from R. H. Buchholz (GE) to P. S. Check (NRC).
3. "LaSalle County Station Units 1 and 2 SAFER/GESTR-LOCA Loss-of-Coolant Accident Analysis," General Electric Company Report NEDC-32258P, October 1993.
4. "General Electric Standard Application for Reactor Fuel," NEDE-24011-P-A (latest approved revision).
5. "ARTS Improvement Program Analysis for LaSalle County Units 1 and 2," General Electric Company Report NEDC-31531P, December 1993.

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## POWER DISTRIBUTION SYSTEMS

### BASES

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