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May 8, 1986

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: LaSalle County Station Unit 2
Proposed Exigent Technical Specification
Amendment Change to the Traversing In-Core Probe
Technical Specification 3.3.7.7
NRC Docket Nos. 50-374

Dear Mr. Denton:

Pursuant to 10 CFR 50.90, Commonwealth Edison (CECo) proposes an exigent amendment to Appendix A, the Technical Specifications, for Operating License NPF-18. The proposed change revises Technical Specification 3.3.7.7 for Traversing In-core Probe System.

This exigent situation arises from the inoperability of the Traversing In-Core Probe system which was discovered on April 28, 1986. Subsequent trouble shooting by the maintenance department revealed that the inoperability was caused by a failure of the indexer motor. This motor is physically located within the drywell and would require a unit shutdown to replace. No planned shutdowns are scheduled for Unit 2 prior to the end of cycle refueling outage.

LPRM calibrations need to be done to meet Technical Specification 4.3.1.1 as indicated in Table 4.3.1.1-1, note (f). The 1000 effective full power hours identified in Technical Specification 4.3.1.1 will expire on approximately May 22, 1986. With the Technical Specification allowance of 25% this would require the unit to be shutdown on approximately May 31, 1986.

As a best estimate with known data, it would take an outage of 2 to 4 days to shutdown, enter the drywell and repair the indexer. No other method exists to repair the indexer.

To accomplish this LPRM calibration a full set of TIP scans would need be made with one TIP machine inoperable. TIP traces would be made and then the plant computer would be used to generate substitute data for the LPRM's for which TIPs cannot be run. This data would then be used to calibrate those LPRM's for which TIP data cannot be obtained.

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The methods discussed in this submittal and the use of substitute data are accepted practices in fuel management of General Electric fuel. Entry of substitute data will be controlled by use of formally approved station procedures which will reflect accepted GE fuel management techniques.

The proposed amendment is essentially the same as that approved for Washington Public Power Supply Unit 2.

A discussion of the proposed amendment can be found in Attachment A that finds that a no significant hazards consideration exists. Our review is documented in Attachment B. Attachment C contains the tech spec pages which must be changed. The attached change has received both On-site and Off-site review and approval.

Commonwealth Edison has notified the State of Illinois of our request for this amendment and our appraisal on the question of no significant hazards by telephone call and transmittal of a copy of this letter and its attachments to the designated State Official.

In accordance with 10 CFR 170, a fee remittance in the amount of $150.00 is enclosed.

Please direct any questions you may have concerning this matter to this office.

Three (3) signed originals and thirty-seven (37) copies of this transmittal and its attachments are provided for your use.

Very truly yours,

C. M. Allen

C. M. Allen
Nuclear Licensing Administrator

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Attachments (1): Technical Specification Change to NPF-18
(2): Evaluation of Significant Hazards Consideration

cc: Region III Inspector - LSCS
A Bournia - NRR
M. C. Parker - IL

SUBSCRIBED and SWORN to
before me this 8th day
of May, 1986

Rosalie A. Pierta
Notary Public

1670K

ATTACHMENT A

DISCUSSION

BACKGROUND

On 28 April 1986, with LaSalle County Station Unit 2 operating at 98% power, the "C" Traversing Incore Probe (TIP) indexer was found to be inoperable. Subsequent troubleshooting determined that the indexer motor in the Drywell (Primary Containment) would not move. The problem cannot be resolved without replacement of the indexer mechanism inside the Drywell, which requires a Unit Shutdown. There are no planned shutdowns for LaSalle 2 before the end of the current cycle. A forced shutdown to repair the indexer is expected to result in the loss of approximately 2 to 4 full power days of generation.

Tech Spec 4.3.1.1 (Table 4.3.1.1-1 note (f)) requires that the LPRM's be calibrated each 1000 effective full power hours (EFPH). This exposure will be reached on approximately May 22, 1986. The calibration of these LPRM's is not achievable unless the TIP machines are operable or the alternate methods proposed by this change are acceptable.

DESCRIPTION

This specification is being modified to provide flexibility to utilize symmetric TIP channels in lieu of inaccessible channels under certain core conditions.

Specification 3.3.7.7 is revised to allow substitution of symmetric string TIP data for inaccessible TIP string locations if the reactor is operating in an octant symmetric (type "A") sequence. This is because during A sequences, most TIP strings will have symmetric counterparts which have comparable readings due to the symmetry of the core loading. Additionally, the total TIP asymmetry will be verified with all accessible symmetric pairs from available operating TIP machines to be less than 6.0% (standard deviation).

Some equipment problems may cause a TIP channel which lies on the axis of symmetry to be inaccessible. These channels do not have symmetric counterparts. In these cases, the substitute data must be generated by computer modeling of the core conditions, with the calculated data normalized to the available real data. This will be accomplished using a formal approved station procedure.

ATTACHMENT B

Significant Hazards Consideration

Commonwealth Edison has evaluated the proposed Technical Specification Amendment and determined that it does not represent a significant hazards consideration. Based on the criteria for defining a significant hazards consideration established in 10CFR50.92, operation of LaSalle County Station Unit 2 in accordance with the proposed amendment will not:

1) Involve a significant increase in the probability or consequences of an accident previously evaluated because:

   This change does not involve any safety System. The primary containment isolation function (TIP withdrawal) is not affected. The TIP system is not safety related. This change does not change the fundamental process involved in calibrating neutron instrumentation (LPRM's) but allows the usage of symmetric detectors amd analytical values to substitute data into inaccessible channels. The core monitoring methodology is presently 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 A-sequence rod patterns. Therefore this change cannot increase the probability or consequences of an accident.

2) Create the possibility of a new or different kind of accident from any accident previously evaluated because:

   The inoperability of the TIP system or portions thereof has no affect on any accident initiator. Therefore no new or different kind of accident is postulated.

3) Involve a significant reduction in the margin of safety because:

   The previously measured uncertainties are within the assumptions of the licensing basis. Usage of symmetric substitute data requires measurement of the TIP asymmetry from all accessible symmetric pair and verification that the measurable asymmetry is less than 6.0%. Therefore the margin of safety is maintained within previously reviewed limits.

Based on the preceding discussion, it is concluded that the proposed system change clearly falls within all acceptable criteria with respect to the system or component, the consequences of previously evaluated accidents will not be increased and the margin of safety will not be decreased. Therefore, based on the guidance provided in the Federal Register and the criteria established in 10CFR50.92(e), the proposed change does not constitute a significant hazards consideration.

ATTACHMENT C

CHANGED TECHNICAL SPECIFICATION PAGES

INSERT INTO TECH SPEC 3.3.7.7

Otherwise; with four traversing in-core probe machines, an inaccessible LPRM string may be calibrated using a traversing in-core probe scan from a symmetric string provided that an 'A' type control rod pattern is in use and that the total core TIP asymmetry is less than 6% (standard deviation).

BASIS 3/4.3.7.7

The specification allows use of substituted TIP data from symmetric channels if the control rod pattern is symmetric since the TIP data is adjusted by the plant computer to remove machine dependent and power level dependent bias. If an inoperable TIP channel does not have a symmetric counterpart, the source of data for the substitution may be a computer calculated data set which is normalized to available real data.