

September 25, 1984

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 Amendment to Technical
Specification for Facility Operating
License NPF-18 Concerning CRD Charging
Water Header Low Pressure Scram
NRC Docket No. 50-374

- References (a): NPF-18 License condition 2.C.(7) Low Pressure in Pump Discharge of the Control Rod Drive
 - (b): UFSAR Section 4.6.2 page 4.6-9, 27, 32.
 - (c): UFSAR Section 7.2 pages 7.2-8, 9, 10, 18, 19, 66, 68, 69, Table 7.2-1, Table 7.2-2 and Figure 7.2-4.
 - (d): SSER #2 4.6.2, Control Rod System.
 - (e): SSER #7 7.2, Control Rod Drive Low Charging Pressure Scram.
 - (f): J. G. Marshall letter to H. R. Denton dated May 24, 1984.
 - (g): R. Rybak letter to H. R. Denton dated July 31, 1984.
 - (h): R. Rybak letter to H. R. Denton dated August 1, 1984.
 - (i): R. Rybak letter to H. R. Denton dated August 2, 1984.
 - (j): J. Marshall letter to H. R. Denton dated September 4, 1984.

Dear Mr. Denton:

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Pursuant to 10 CFR 50.59, Commonwealth Edison proposes to amend Appendix A, Technical Specification, to Facility Operating License NPF-18. This change is being submitted for your staff's review and approval.

100/ w/chilson

The proposed change is enclosed in Attachment 2. The attached change has received both On-Site and Off-Site review and approval. We have reviewed this amendment request and find that no significant hazards consideration exists. Our review is documented in Attachment 3. Commonwealth Edison is notifying the State of Illinois of our request for this amendment by transmitting a copy of this letter and its attachments to the designated State Official.

In accordance with 10 CFR 170, a fee remittance 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,

895 marshall

J. G. Marshall Nuclear Licensing Administrator

Attachments (1): Background and Discussion

(2): Technical Specification Change to NPF-18

(3): Evaluation of Significant Hazards Consideration

cc: Region III Inspector - LaSalle

A. Bournia - NRR G. Wright - Ill.

SUBSCRIBED and SWORN to before me this standay of Suptember, 1984

Rosalie A Pienta Notary Public

ATTACHMENT 1

LASALLE COUNTY STATION UNIT 2

TECHNICAL SPECIFICATION CHANGE REQUEST

BACKGROUND:

The control rod drive (CRD) system provides high pressure charging water to the under-piston area of the control rod drive mechanisms to scram the reactor when required. If the charging water header pressure is lost, the individual scram accumulators provide a source of energy to perform the scram function. Check valves are located between the accumulators and the charging water header. These check valves maintain the accumulators pressurized following a loss of charging water pressure. If a check valve leaks after charging water pressure is lost, the accumulator pressure could decrease below the pressure required to insert the control rod when reactor pressure is insufficient to provide a source of high pressure water to accomplish the scram function. (Startup and refueling modes).

There is a concern when the reactor vessel is at less than operating pressure that the control rod drive accumulators do not maintain adequate pressure for a period of time compatible with operator action if no control rod drive pump is operating (reference (d)). With the reactor at operating pressure, charging water pressure is not of concern because reactor pressure is sufficient to ensure adequate scram capability.

DISCUSSION:

To ensure that sufficient high pressure water is available for a scram in the startup and refueling modes, a reactor trip (SCRAM) on low CRD discharge water header pressure has been designed and installed in LaSalle County Unit 2 (references (a), (b), (c), & (e)). The proposed Technical Specification change (Attachment A) provides for a Control Rod Drive charging water header low pressure SCRAM with a trip setpoint of greater than or equal to 1157 psig (allowable value 1134 psig) and a time delay of less than or equal to 10 seconds. This scram is active when the reactor mode switch is in the STARTUP or REFUEL positions (Operational conditions 2 and 5). Surveillance requirement 4.1.3.5.b.2, to "measure and record the time that each individual accumulator check valve maintains the associated accumulator pressure above the alarm setpoint with no control rod drive pump operating", is no longer required because the worst case leakage rate of the accumulator check valves still provides sufficient pressure to insert the control rods with the charging water header low pressure scram in effect.

A requirement to verify that this scram function does become active when the reactor mode switch is in the STARTUP or REFUEL positions will be added to the LOGIC SYSTEM FUNCTIONAL TESTS procedures used to demonstrate compliance with Technical Specification 4.3.1.2.

The setpoints described in references (b), (c), (e), and (f) were based on a design trip point of 1100 psig with various instrument and setpoint uncertainties added in to determine the trip setpoint and the allowable values. To arrive at the new setpoints included in Attachment A (trip setpoint of 1157 psig with an allowable value of 1134 psig) the calibrated range of the pressure transmitter and trip units will be reduced from G-2500 psig to 500-1500 psig. This change reduces the uncertainties and allows for lower Technical Specification setpoints. This is the only change which has been made to the original setpoint analysis which has been previously described in the submittal of reference (f).

This request supersedes the original submittal of reference (f). Requests to vacate the original amendment were submitted in references (g), (h), and (i).

Revisions to references (b) and (c) to incorporate the setpoints described herein and to make the changes described in reference (j) will be completed at the next update to the UFSAR.