



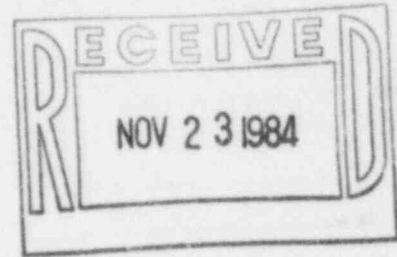
Public Service Company of Colorado

P.O. BOX 840 · DENVER, COLORADO 80201

November 20, 1984
Fort St. Vrain
Unit No. 1
P-84504

Regional Administrator
Region IV
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite #1000
Arlington, Texas 76011

ATTN: Mr. Eric H. Johnson



DOCKET NO. 50-267

SUBJECT: Additional Information
on Proposed Amendment to
LCO 4.1.9

REFERENCE: NRC Memorandum, Wagner
to Ireland, Dated
September 6, 1984
(G-84345)

Dear Mr. Johnson:

This letter addresses the additional information requested by the NRC during a meeting on August 23, 1984 regarding the proposed amendment to LCO 4.1.9.

PSC has evaluated automating orifice valve adjustments as a potential means of reducing the transition time between equal flow and equal outlet temperature orifice patterns. We have considered the suggestions made during the meeting. However, due to the complexity of the adjustment process and the potential complications and accident possibilities associated with operating orifice valves without direct operator control, it has been concluded that the most practical and advantageous modification would be to simply provide the operator with the capability to reposition each valve faster than

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the existing indexer permits. Responsibility for developing a suitable modification to permit faster orifice valve repositioning has been assigned to the Nuclear Engineering Division.

LCO 4.2.1 and LCO 4.2.2 are being revised to ensure that the capability to resume core helium flow within a predetermined period of time based on core afterheat using at least one helium circulator will be maintained. The predetermined period of time shall be limited such that fuel damage will not occur. The revised Technical Specification will include requirements for power, low power and shutdown conditions which will define the minimum levels of circulator operability for each case. The proposed Technical Specification Amendment is expected to be submitted to the NRC by December 31, 1984.

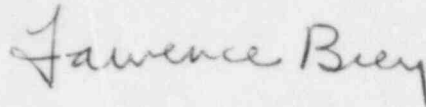
We have also reevaluated the existing LCOs 4.1.3, 4.1.7, and 4.1.9 with consideration to integrating the requirements into a single limitation. Our conclusion is that the LCOs are not amenable to being integrated. The fundamental difficulty is that they deal with diverse and independent parameters. LCO 4.1.3 - Rod Sequence deals with control rod reactivity worth, while LCO 4.1.7 - Inlet Orifice Valves deals with region outlet coolant temperature variances, and LCO 4.1.9 - Core Region Temperature Rise deals with coolant flow. Integration of these LCOs would necessitate a technical specification significantly more complex, more confusing, and more difficult to implement than the current ones. Therefore, we have decided not to attempt to integrate them.

Work is continuing on the following remaining issues:

- * Sources of core flow and core power level indications available to the operator.
- * The impact of a limited number of mispositioned orifice valves on the transition between equal flow valve positions and equal outlet temperature valve positions.
- * Correcting the nonconservatism in the calculation of the pressure drop through the orifice valve discovered in July 1984.
- * Evaluating various sources of motive power to enhance circulator helium flow capabilities.

Additional information on these issues will be submitted by January 15, 1984. If you have any questions in the meantime, please contact Mr. M. H. Holmes at (303) 571-8409.

Very truly yours,

A handwritten signature in cursive script that reads "Lawrence Brey".

H. L. Brey
Executive Staff Assistant
Electric Production

HLB/JL/kt