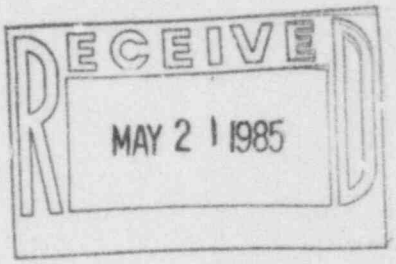
Public Service™

Public Service
Company of Colorado
P.O. Box 840
Denver, CO 80201-0840

OSCAR R. LEE
VICE PRESIDENT

May 15, 1985
Fort St. Vrain
Unit No. 1
P-85168



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: Apparent Contradictory Statements

REFERENCE: 1) NRC letter, Johnson to Lee, dated 4/16/85 (G-85139)

2) PSC letter, Lee to Johnson, dated 4/1/85 (P-85113)

Dear Mr. Johnson:

In reference 1 the NRC outlines what appears to be contradictory statements submitted in three PSC letters. The three statements of concern are addressed below.

Statement of Concern

1. P-85065 dated February 28, 1985, related to Regulatory Guide 1.97 "Instrumentation," indicates that the circulator speed instruments are Category I safety-related;

PSC Response

1. This statement is accurate. Circulator speed instruments were not relied upon in the 10CFR50, Appendix R Fire Protection Evaluation because of close proximity between loops.

85-346

Return Original To RIV

A005

Statement of Concern

2. P-85098 dated April 1, 1985, related to "Upgraded Technical specifications," indicates that core delta-pressure indication is not relied upon;

PSC Response

2. This statement is accurate. The core delta-pressure indicator involved is PDT-1112.

Statement of Concern

3. P-85113 dated April 1, 1985, related to "Fire Protection," states: "In lieu of reliance on circulator speed instrumentation, the shutdown model has been revised to rely on core differential pressure instrumentation to confirm core flow."

PSC Response

3. The term "core differential pressure instrumentation" is inaccurate. The correct term should have been "circulator helium flow". The actual instruments involved are PDT-1157-2 and PDT-1158-2. Attachment A to this letter summarizes the references to PDT-1157-2 and PDT-1158-2 in Reports 1 through 4. To avoid confusion, two pages in Report No. 4 are being revised per this letter, as noted in Attachment A. This letter forwards 20 copies of those two pages. Please arrange to have them inserted into the 20 copies of Report No. 4 previously submitted via reference 2.

The three letters referenced in Reference 1 were reviewed for other inconsistencies and none were found. The inaccuracy contained in P-85113 created an apparent inconsistency between the three letters. PSC has concluded that the term "core differential pressure instrumentation" was used in error. Since more accurate terminology was used in numerous other locations in the Fire Protection Evaluation Reports, the intent of P-85113 was consistent with other correspondence.

PSC has procedures which govern the preparation and review of correspondence to the NRC for accuracy and responsiveness. We will continue to adhere to those procedures and give particular attention to the consistency of all correspondence to the NRC.

If you have any questions on this subject, please contact Mr. M H. Holmes at (303) 571-8409.

Very truly yours,

O.R Lee/by Ken Warembourg

O. R. Lee, Vice President
Electric Production

ORL:pa

Attachment

Enclosures

TABULATION OF REFERENCES TO HELIUM FLOW INSTRUMENTATION IN REPORTS 1 THROUGH 4

Report No. 1	
Figure 2.1-6	o Helium Flow o C-2101 & 3 Flow (PDI-1157-2 & 1158-2)
Table 2.3-1	Circulator 1A & 1C Helium Flow
Table 3.1, pg. 13	PDI-1157 & 8-2
Report No. 2	
Table 2.3-1, pp. 2 & 3	Circulator C-2101 & 3 Helium Flow
Table 2.3-2, pg. 3	PDI-1157 & 8-2
Table 4.1-1, pg. 3	o Circulator 1A & 1C, C-2101 & 3, Flow, Low Range o PDT-1157 & 8-2
Report No. 3	
Section 4.17, pg. 4-6	Circulator Helium Flow
Report No. 4	
Section 2.21, pg. 2-7	o Circulator Helium Flow o Core differential pressure (need to revise to circulator helium flow)
Table 3.10-1, pg. 5	Circulator delta P (need to revise to circulator helium flow)
Section 4.10, pg. 4-6	Helium Flow Instrument Cables
pg. 4-12	Helium Flow Instrument Cables
Table 4-1, 4.10(g)	Helium Flow Instrument Cables

Potential deficiencies relative to location of bearing water surge tank level instrumentation cables in proximity to each other are being resolved through proposed modifications and exemption requests. Section 4.10 describes the proposed modification for re-routing cables associated with one train of bearing water surge tank level instrumentation. Exemption Request 3.10 addresses the resulting separation and protection for this instrumentation function.

Fire detection coverage is to be provided as described in Section 4.5.

2.20 FEEDWATER FLOW MONITORS (4.16)

Potential deficiencies relative to location of feedwater flow monitors and associated cables located in proximity to each other within the Turbine Building are being resolved through proposed modifications and an exemption request. Modifications as described in Section 4.10 will be made to re-route cabling associated with one train of feedwater flow instrumentation. Exemption Request 3.11 addresses the resulting separation and protection for redundant feedwater flow monitoring cables and instrumentation. Exemption Request 3.3 addresses smoke detection for the Turbine Building.

2.21 CIRCULATOR HELIUM FLOW AND INLET TEMPERATURE INSTRUMENTATION (4.17)

In lieu of reliance on circulator speed instrumentation, the shutdown model has been revised to rely on circulator helium flow instrumentation to confirm core flow. Potential deficiencies relative to location of redundant instrumentation and cables for circulator helium flow instrumentation are being resolved through proposed modifications and an exemption request. As described in Section 4.10, modifications will be made to re-route certain cabling associated with one train of circulator helium flow instrumentation. Exemption Request 3.10 addresses the resulting separation and protection of redundant trains of circulator helium flow instrumentation.

TABLE 3.10-1

SUMMARY OF REACTOR BUILDING

FIRE PROTECTION SHUTDOWN REDUNDANCIES

(CONTINUED)

TRAIN A EQUIPMENT	REDUNDANCY	SEPARATION
		drained to the Reactor Building sump for a period of 15 to 20 hours, prior to the need for placing a turbine water removal pump into operation.
3. Circulator Function: - Circulator helium flow PDT 1157-2 (21315, 21320) - Bearing water surge tank level, LT-21135 (16898) - Bearing water pumps P-2101 (3280) and P-2106 (3250) - Level switch LSL-2137, (7194)	Corresponding Train B circulator function components; note any Train B circulator function component is redundant to any Train A circulator function component.	On Elev. 4740', the Train A pumps and components are located at the southwest corner of the Reactor Building. The B-train components are located along the south wall of the Reactor Building approximately 50 feet from the Train A pumps. A concrete wall separates the pumps, so propagation of fire from one set of pumps to the redundant set is not likely. However, power cables from the Train A pumps as well as cabling associated with other circulator function components are routed into the general vicinity, although approximately 45 feet vertically above, the Train B circulator function cables and components. Redundant cables have grating floors between them with no horizontal separation. (See Fig. 4.10 from Report No. 3). Train A cables for circulator function will be re-routed along the west, north and east walls of the Reactor Building to maximize separation from the Train B circulator function cables.

Potential deficiencies relative to location of bearing water surge tank level instrumentation cables in proximity to each other are being resolved through proposed modifications and exemption requests. Section 4.10 describes the proposed modification for re-routing cables associated with one train of bearing water surge tank level instrumentation. Exemption Request 3.10 addresses the resulting separation and protection for this instrumentation function.

Fire detection coverage is to be provided as described in Section 4.5.

2.20 FEEDWATER FLOW MONITORS (4.16)

Potential deficiencies relative to location of feedwater flow monitors and associated cables located in proximity to each other within the Turbine Building are being resolved through proposed modifications and an exemption request. Modifications as described in Section 4.10 will be made to re-route cabling associated with one train of feedwater flow instrumentation. Exemption Request 3.11 addresses the resulting separation and protection for redundant feedwater flow monitoring cables and instrumentation. Exemption Request 3.3 addresses smoke detection for the Turbine Building.

2.21 CIRCULATOR HELIUM FLOW AND INLET TEMPERATURE INSTRUMENTATION (4.17)

In lieu of reliance on circulator speed instrumentation, the shutdown model has been revised to rely on circulator helium flow instrumentation to confirm core flow. Potential deficiencies relative to location of redundant instrumentation and cables for circulator helium flow instrumentation are being resolved through proposed modifications and an exemption request. As described in Section 4.10, modifications will be made to re-route certain cabling associated with one train of circulator helium flow instrumentation. Exemption Request 3.10 addresses the resulting separation and protection of redundant trains of circulator helium flow instrumentation.

TABLE 3.10-1

SUMMARY OF REACTOR BUILDING

FIRE PROTECTION SHUTDOWN REDUNDANCIES

(CONTINUED)

TRAIN A EQUIPMENT	REDUNDANCY	SEPARATION
		drained to the Reactor Building sump for a period of 15 to 20 hours, prior to the need for placing a turbine water removal pump into operation.
3. Circulator Function: - Circulator helium flow PDT 1157-2 (21315, 21320) - Bearing water surge tank level, LT-21135 (16898) - Bearing water pumps P-2101 (3280) and P-2106 (3250) - Level switch LSL-2137, (7194)	Corresponding Train B circulator function components; note any Train B circulator function component is redundant to any Train A circulator function component.	On Elev. 4740', the Train A pumps and components are located at the southwest corner of the Reactor Building. The B-train components are located along the south wall of the Reactor Building approximately 50 feet from the Train A pumps. A concrete wall separates the pumps, so propagation of fire from one set of pumps to the redundant set is not likely. However, power cables from the Train A pumps as well as cabling associated with other circulator function components are routed into the general vicinity, although approximately 45 feet vertically above, the Train B circulator function cables and components. Redundant cables have grating floors between them with no horizontal separation. (See Fig. 4.10 from Report No. 3). Train A cables for circulator function will be re-routed along the west, north and east walls of the Reactor Building to maximize separation from the Train B circulator function cables.