UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

August 30, 1988

Docket No. 50-267

Mr. R. O. Williams, Jr.
Vice President, Nuclear Operations
Public Service Company of Colorado
P. O. Box 840
Denver, Colorado 80201-0840

Dear Mr. Williams:

SUBJECT: FORT ST. VRAIN SCHEDULE COMMITMENT ITEMS PCRV TENDON SURVEILLANCE - REVISION 7 AND REQUEST FOR ADDITIONAL INFORMATION (TAC NO. 54639)

Reference:
1. PSC letter dated January 8, 1988 (P-88002); Transmittal of fifth six month PCRV tendon interim surveillance report.
2. PSC letter dated July 20, 1987 (P-87234); Transmittal of fourth six month PCRV tendon interim surveillance report.

The staff has reviewed your submittals, References 1 and 2, concerning changes you have requested to commitments for the Fort St. Vrain Nuclear Generating Station (FSV). These changes involve an alternative PCRV Tendon Surveillance Program. The key features of this alternative program are that the surveillance intervals are extended from 6 to 12 months. The cycle for new tendons selected for liftoff testing is extended from 18 to 24 months.

In considering this extension, the staff notes that over 80% of the tendons have been examined, so the data sample is fairly complete. Repeated testing of the control group tendons by liftoff shows no obvious degradation over three years. No new non effective tendon wires have been observed in the control group tendons since June 1985. The five worst case tendons are currently stable, and still acceptable by the end-of-life criteria in the FSAR. Based on the above considerations, the staff finds your revised PCRV tendon surveillance program is acceptable. A summary of your revised commitments is enclosed.

However, in order to continue adequately monitoring the PCRV tendon status, and evaluate potential future concerns, the staff is requesting certain additional information. The purpose of this request is to clarify the current and future ability of the PCRV to perform its design function. The staff believes that this is a opportune time to perform such an evaluation, since considerably more surveillance data is now available than was several years ago. A properly conducted evaluation could be the basis for further reductions in the surveillance intervals.

The staff's request for additional information is Enclosure 2. The staff requests that you provide a schedule for conducting your evaluation within 45 days of the date of this letter. If you wish to discuss any aspects of this request, including methodology, please contact me at (301) 492-1333. I will arrange for a meeting with the staff on this issue.

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The reporting and/or recordkeeping requirements contained in this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

Kenneth L. Heitner

Kenneth L. Heitner, Project Manager
Project Directorate - IV
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

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Enclosure 1
Revision 6

PUBLIC SERVICE COMPANY OF COLORADO COMMITMENTS RELATED TO THE OPERATION OF THE FORT ST. VRAIN NUCLEAR GENERATING STATION

Item	Commitment Description/Requirement (Reference)	Schedule
1.	Provide status reports on the Nuclear Performance Enhancement Program on an annual basis. (P-88031)	Approximately annually
2.	Implement the Technical Specifications (TS) Upgrade Program (P-85098):	
	a. Provide a revised final draft proposal of the Upgraded TS for NRC comment, (P-87063)	Complete
	b. Submit a license amendment to incorporate the Upgraded TS. (P-85243)	90 days after NRC comments on Item 2a
	c. Implement the Upgraded TS. (P-85243)	Approximately 4th refueling outage (License amendment will define)
3.	Improve control rod and reserve shutdown reliability. Incorporate the interim Technical Specifications in the Upgrade Program.	(See Item 2)
4.	Develop a plan to implement approved modifications to control moisture ingress and submit annual reports on progress. (P-85022 and P-85082)	Annually
5.	Evaluate control of moisture in CRDM purge system. (P-85021)	4th refueling outage
6.	PCRV Tendon Surveillance Requirements:	
	a. Incorporate the revised Tendon Surveillance Program into the Technical Surveillance (P-85199),	(See Item 4)
	b. Provide the results of the revised program to the NRC.	Approximately every six months

7. Provide an improved CRDM surveillance program which includes consideration of CRDM operational testing. (P-88012)	Five months after the start of 4th refueling outage
8. Fire Protection Modifications:	
a. Perform emergency lighting modifications (P-88030)	Complete by 3/1/88
b. Perform modifications involving ACM backfeed, permanent turbine water removal pump, and valve operability (P-87013).	Startup following 4th refueling outage

Enclosure 2

REQUEST FOR ADDITIONAL INFORMATION

PCRV TENDON DEGRADATION

1. Evaluate current structural integrity and design safety margin of PCRV based on current tendon surveillance data. This evaluation should be based on actual data from the approximately 80% percent of the tendons examined to date. This includes data from tendon liftoff tests, visual examinations, and load cells. The data should be reduced to a common basis, such as remaining preload force. Reasonable and conservative assumptions should be used to calculate the preload forces for tendons where there is no data. The evaluation should compare the current condition of the PCRV in terms of the structural integrity and design margins with those originally assumed and accepted as the plant's licensing basis in the FSAR.

2. Evaluate the projected-end-of-life structural integrity and design safety margins of the PCRV based on current tendon surveillance data. The evaluation would be based on the same data as used in item 1 above. Reasonable and conservative assumptions about future degradation of the remaining preload force should be used to calculate end-of-life conditions. The basis for predicting the end-of-life condition of tendons already severely degraded should be given special attention. The evaluation should compare the projected end-of-life condition (in terms of structural integrity and design margins of the PCRV with the FSAR commitments.

The reporting and/or recordkeeping requirements contained in this letter affect fewer than ten respondents; therefore, OMB clearance is not required under P.L. 96-511.

Sincerely,

/s/

Kenneth L. Heitner, Project Manager
Project Directorate - IV
Division of Reactor Projects - III,
IV, V and Special Projects
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc w/enclosure:
See next page

DISTRIBUTION

Docket File	NRC PDR	Local PDR	PD4 Reading
DR4A/J. Collins	J. Calvo	P. Noonan	Project Manager
OGC	E. Jordan	J. Partlow	ACRS (10)
PD4 Plant File	R. Lipinski	D. Jeng	G. Bagchi

PD4/LA	PD4/PM	PD4/D	ESGB	ESGB	ESGB
PNoonan	KHeitner:kb	JCalvo	R. Lipinski	D. Jeng	G. Bagchi
06/16/88	06/16/88	06/01/88	06/30/88	06/30/88	06/30/88

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