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2420 W. 26th Avenue, Suite 100D, Denver, Colorado 80211

June 29, 1989
Fort St. Vrain
Unit No. 1
P-89229

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

ATTN: Mr. Frederick J. Hebdon, Director
Project Directorate - IV

Docket No. 50-267

SUBJECT: **DECOMMISSIONING FINANCIAL PLAN**

REFERENCES:
(1) NRC Memorandum, Heitner to Hebdon, dated May 31, 1989 (G-89206)
(2) PSC Letter, Williams to Document Control Desk, dated December 5, 1988 (P-88422)
(3) PSC Letter, Crawford to Hebdon, dated June 9, 1989 (P-89216)

Dear Mr. Hebdon:

On May 17, 1989, representatives of Public Service Company of Colorado (PSC) met with the NRC Staff to discuss the decommissioning funding plan for the Fort St. Vrain High Temperature Gas-Cooled Reactor (HTGR). The results of this meeting are summarized in Reference 1. This letter summarizes PSC's understanding of the discussions at that meeting.

Prior to meeting of May 17th, PSC had notified the NRC of PSC's intent to terminate operations at FSV not later than June 30, 1990 (Ref. 2). At the NRC's request, a license amendment has been submitted to amend the Facility Operating License to include a license condition on early shutdown, such that PSC will not be authorized to operate the reactor above 2 percent of full power for electric power production after June 30, 1990 (Ref. 3).

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PSC intends to submit the Preliminary Decommissioning Plan (to include the Decommissioning Financial Plan) to the NRC by June 30, 1989. In preparing the Financial Plan, a number of questions were identified regarding interpretation and application of the NRC's Decommissioning Final Rule to the premature decommissioning of Fort St. Vrain. The May 17, 1989, meeting between PSC and NRC representatives was intended to address these questions and to discuss the Financial Funding Plan associated with the decommissioning of FSV.

To clarify information contained in Reference 1, it should be noted that defueling of Fort St. Vrain is anticipated to last approximately 2½ years at a cost of $116M.

PSC DECOMMISSIONING PLANS

During the meeting, the status of FSV and the schedule for terminating operations were discussed. As noted previously, PSC has committed to terminate operations not later than June 30, 1990. Fort St. Vrain represents a case of premature decommissioning of a nuclear power plant, in that the operating license will not expire until the year 2008. PSC currently plans to utilize the SAFSTOR option for decommissioning, whereby final decontamination and dismantlement would be deferred until approximately 2043, with estimated license termination scheduled for approximately 2046. The selection of SAFSTOR and the schedule set forth below reflect PSC's application of NRC requirements contained in the Decommissioning Final Rule.

The following schedule reflects anticipated decommissioning activities; detailed plans will be provided in the Preliminary Decommissioning Plan:

1990	Final plant shutdown; operations terminated
1990 - 1994	Defueling and preparations for SAFSTOR
1994 - 2043	Plant SAFSTOR period
2043 - 2046	FSV Decontamination and Dismantlement
2046	Termination of FSV 10 CFR 50 license with NRC

The three major phases associated with Fort St. Vrain decommissioning include the SAFSTOR preparation period, the SAFSTOR period and the Decontamination and Dismantlement period prior to license termination. The SAFSTOR preparation period will involve limited component dismantlement and decontamination of systems external to the PCRV, as well as related plant activities to support a non-operating mode during the 55-year storage period.

During the SAFSTOR period, expected plant activities include performance of plant security, surveillances and maintenance necessary to maintain the plant in a safe condition.

During the Decontamination and Dismantlement period, activities necessary to permit release of the site for unrestricted use and to allow termination of the 10 CFR 50 license will be performed.

DECOMMISSIONING COST ESTIMATE AND FUNDING TO DATE

In preparation for decommissioning, PSC has elected to prepare a site-specific cost estimate for decommissioning in accordance with 10 CFR 50.75(b). The estimated cost for decommissioning FSV is $80.9M (in 1989 dollars).

To date, PSC has accumulated approximately $12M from its customers for decommissioning. An additional $6M will be recovered from customers by 1992 under the terms of the 1986 settlement agreement with the Colorado Public Utilities Commission. These funds are being and will be retained in an external trust fund in accordance with 10 CFR 50.75(e)(1)(ii). No further recovery of decommissioning funds from customers will be realized as per the settlement agreement.

PSC has prepared a Financial Plan which accumulates the remaining funds over the entire 55-year SAFSTOR period, and which considers the use of these funds as required during each of the three major phases noted previously. These funds will be obtained from PSC general revenues with annual payments of $1.76M from 1989 through 2043. Sustaining these payments is not expected to create an undue financial burden on the corporation, as these payments constitute a small fraction of PSC's total annual operating revenues. PSC believes this approach adequately protects the public interest while at the same time maintains the financial integrity of the company.

A new external fund will be created to accumulate these annual payments, in accordance with the provisions of 10 CFR 50.75(e)(1)(ii). These funds will support the yearly decommissioning needs, as well as provide accumulation of additional funds to support final decontamination and dismantlement activities. PSC will periodically review the funding level necessary to support decommissioning activities, and commits to adjust the funding level as necessary to accommodate any change in expected costs, consistent with NRC guidance.

APPLICATION OF NRC DECOMMISSIONING FINAL RULE

Three principal areas of question concerning application of the NRC Decommissioning Final Rule were identified during the course of the PSC-NRC meeting.

Decommissioning Cost Estimate

10 CFR 50.75(b) states in part that:

> *"... financial assurance for decommissioning will be provided in an amount which may be more but not less than the amount stated in the table in paragraph (c)(1) of this section ....*
> *... The amount stated in the applicant's or licensee's certification may be based on a cost estimate for decommissioning the facility."*

The Table of Minimum Amounts (10 CFR 50.75(c)(1)), however, does not identify a formula to determine the minimum certified amount for a HTGR similar to FSV. In lieu of using minimum certified amounts determined specifically for light water reactors (LWRs), PSC has prepared a site specific cost estimate, as permitted in the above cited rule. PSC notes that this site specific cost estimate is less than the minimum certified amounts required for LWRs. PSC's understanding from discussions with NRC staff is that PSC's approach to establish a cost figure is acceptable and no exemption request is required.

Decommissioning Funding Schedule

10 CFR 50.75(e)(ii), "External sinking fund", states in part:

> *"... a fund established and maintained by setting funds aside periodically in an account segregated from licensee assets and outside the licensee's administrative control in which the total amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected."*

Contrary to the above requirement, the premature shutdown of FSV in 1990 (prior to the license expiration in 2008) will not allow PSC sufficient time to accumulate the full amount of funds necessary to complete all anticipated actions prior to the initiation of decommissioning activities. Therefore, accumulation of the remaining funds for decommissioning, over and above those already set aside in external decommissioning funds, will necessarily occur following termination of operations.

PSC's Financial Plan proposes to accumulate the remaining funds during the entire SAFSTOR period. This approach is considered justified, since it is PSC's opinion that the accumulation of funds following cessation of operations in those circumstances involves the same principle as that applied to reactors which had shutdown prior to issuance of the Decommissioning Final Rule (e.g., Humboldt Bay, La Crosse), as PSC also will not have had the opportunity to accumulate funds in accordance with the scenario contemplated in the final rule.

Additionally, in the Statement of Considerations accompanying the final rule, the Commission states that, for reactors shutdown prior to the effective date of the rule, "(d)etails concerning financial assurance, primarily the time period for accumulating funds not set aside during operation, would be decided on a case-by-case basis" (53 FR 24027, dated June 27, 1988).

As a result of discussions at the May 17th meeting, PSC intends to submit an exemption request for PSC's proposed decommissioning funding schedule in accordance with 10 CFR 50.12, by July 30, 1989.

Use of Tax Deductions/Tax Credits

During the meeting of May 17th, NRC requested PSC to elaborate on the role of tax deductions to partially fund ongoing decommissioning expenditures during the SAFSTOR and decontamination/ dismantlement periods, and, in particular, how PSC would plan to account for changes in federal and/or state tax rates. The NRC Staff noted that tax rates could vary and change the plan results. The Staff noted its initial view that the plan should not depend on tax deductions for expenditures because of this problem and the fact that reliance on tax deductions may be a form of internal funding which the Commission disallowed in the decommissioning rule. PSC believes this summary reflects the nature and scope of discussions on this point during the meeting. To the extent the description provided in Reference 2 concerning this portion of the meeting differs, PSC believes this summary is accurate.

PSC considers use of tax deductions to be justified. To elaborate on discussions at the meeting, in the event of a change in either state or federal income tax rates, PSC would adjust annual contributions to the trust fund to reflect any change in tax rates. Although this adjustment would be implemented by adjusting future contributions to the trust, the adjustment would have the effect of revising both past and future contributions. For example, if income tax rates were to decline, with a corresponding reduction in the tax benefit of business expense deductions, PSC would adjust future contributions to eliminate any previous underfunding as a result of the higher tax rate(s) previously used to determine the level of annual contributions.

In this connection it should also be noted that because PSC will be using SAFSTOR, decommissioning expenditures for surveillance, monitoring, etc. (and corresponding income tax deductions) will occur throughout the SAFSTOR period. To fail to recognize the tax benefits of those expenditures in determining the level of PSC's annual withdrawals from the decommissioning trust would require larger withdrawals than needed, and correspondingly, increased contributions during the following years, thus extending conservatism beyond reason and causing overfunding of the decommissioning trust. It is PSC's position that there is no justification for such conservatism. Failure to recognize tax deductions could place an undue burden on

PSC stockholders and could result in significant complications in the handling of a fund surplus at the time of license termination, given that the bulk of funding will be stockholder rather than ratepayer funds. Moreover, the NRC's Decommissioning Final Rule has approved the use of a sinking fund to accumulate over a period of years the amount required for decommissioning. PSC's funding proposal is entirely consistent with the sinking fund methodology that the NRC has endorsed.

The funds derived from the tax deduction are an integral part of the funding plan and should not be considered a form of internal funding. The tax deductions to be taken for decommissioning costs will be the direct result of the actual cash expenditures made in a particular year. Therefore, the after-tax amount of the annual expenditure for decommissioning will be withdrawn from the fund in the year those decommissioning dollars are spent.

For these reasons, PSC believes that it is appropriate to project after-tax costs for decommissioning by taking account of the tax effect of ongoing decommissioning expenditures at 1989-1990 tax rates and adjusting for any changes in rates or other aspects of tax treatment as those changes occur.

Based on discussions with the NRC Staff and the fact that the regulations are not explicit with respect to either permitting or excluding the use of tax deductions for funding, PSC does not anticipate submitting an exemption request related to tax deductions. Certainly, PSC recognizes NRC's concern in this area and, following submittal of PSC's Preliminary Decommissioning Plan, PSC would be prepared to discuss utilization of tax deductions in more detail.

If you have any questions, please contact Mr. M.H. Holmes at (303) 480-6960.

Very truly yours,

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