SMUD
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AN ELECTRIC SYSTEM SERVING THE HEART OF CALIFORNIA

October 17, 1990
GM 90-777

James M. Taylor
Executive Director For Operations
United States Nuclear Regulatory Commission
Washington, DC 20555

Dear Director Taylor:

Thank you for allowing me to present the District's opinion on the treatment of timing of Decommissioning Funding for Prematurely Shutdown Nuclear Plants.

As we discussed in our meeting on October 17, 1990, I have attached a copy of a memorandum from the District's Counsel analyzing the appropriate NRC staff treatment for this timing.

I appreciate this opportunity to reiterate our position on this issue which is of extreme importance to the customer/owners of the District.

Sincerely,

S. David Freeman
General Manager

Attachment

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MEMORANDUM

TO: S. David Freeman, General Manager
Sacramento Municipal Utility District

FROM: Thomas A. Baxter TAB
David R. Lewis

SUBJECT: Decommissioning Funding Accumulation Periods for Prematurely Closed Nuclear Power Plants

DATE: October 16, 1990

I. Introduction

This memorandum examines how the Nuclear Regulatory Commission (NRC) should treat the timing of decommissioning funding for prematurely shut down nuclear plants. Because the NRC's regulations do not address this issue squarely, and in light of the premature shutdowns of the Shoreham, Fort St. Vrain, and Rancho Seco facilities, we understand that the NRC Staff is seeking Commission guidance on three options: (1) immediate funding; (2) funding over five years; and (3) funding through the end of the license term.

As discussed below, we strongly recommend that the Staff not seek such a decision from the Commission, and that the Commission not limit the NRC Staff's discretion to choose among the three proposed options, or other possible options for that matter. Instead, the Staff should be left with the authority and flexibility to consider the timing of decommissioning funding for prematurely shut down plants on a case-by-case basis, and to fashion a decommissioning funding schedule that considers the particular circumstances of the licensee.

We believe that this type of flexibility meets the NRC's intent underlying its decommissioning rule. The decommissioning rule was intended to be a flexible regulation -- one that provided reasonable assurance that funds would be available for decommissioning when needed without imposing undue financial burdens on the licensees. These precepts militate against limiting options and toward individual consideration of the particular circumstances presented by a prematurely shut down plant. Only by this means can the NRC arrive at a course that provides the requisite reasonable assurance of funding without imposing undue burdens. In one individual case, the NRC might determine that accelerated funding is appropriate, but in another, where there is sufficient assurance of ultimate funding, a longer term of accumulation might be in order. Rancho Seco

provides a good illustration of the latter, being a state agency that cannot become bankrupt and that has the legal authority to establish its own rates to cover costs.

If, on the other hand, the Commission is inclined to preselect a particular option and limit the discretion of the Staff, we believe that it may only do so in a rulemaking proceeding. The Commission would be establishing substantive obligations, which under the Administrative Procedure Act (APA), must be preceded by notice and opportunity for comment.

The basis for these recommendations and conclusions is presented below. First, a brief overview of the decommissioning rule and its purposes is discussed. Then, the pertinent policy considerations are examined, and Rancho Seco's situation described to place the issue in context. Finally, the procedural requirements of the APA are briefly addressed.

II. Overview of the Decommissioning Rule

Under 10 C.F.R. § 50.75(c) and (e), the licensees of nuclear plants are required to establish decommissioning funding mechanisms, such as an external sinking fund. A licensee who is an electric utility may use a generic "certification" amount prescribed in the NRC rule as the initial funding target. Five years before the "projected" end of operations, such licensees

are required to submit a preliminary decommissioning plan which "shall also include plans for adjusting levels of funds assured for decommissioning to demonstrate that a reasonable level of assurance will be provided that funds will be available when needed to cover the costs of decommissioning." 10 C.F.R. § 50.75(f). The proposed decommissioning plan itself (due within two years following permanent cessation of operations, and in no case later than one year prior to expiration of the operating license) must include a "plan for assuring the availability of adequate funds for completion of decommissioning." 10 C.F.R. § 50.82(b)(4).

The NRC has explained that

> Consideration of these steps, first establishing a general level of adequate financial responsibility for decommissioning early in life, followed by periodic adjustments, and then evaluations of specific provisions close to the time of decommissioning, will provide reasonable assurance that the Commission's objective is met, namely that, at the time of permanent end of operations sufficient funds are available to decommission the facility in a manner which protects the public health and safety.

53 Fed. Reg. 24,018, 24,030-31 (1988).

The Federal Register statement reflects the NRC's "objective" that sufficient funds be available at the time of

permanent end of operations. The Federal Register statement and rule also make it clear that the rule contemplates such funding over a normal period of operation, commencing with a "general level . . . early in life" followed by adjustment five years before the "projected" end of operations. Similarly, in Public Service Co. of New Hampshire (Seabrook Station, Units 1 and 2), CLI-88-10, 28 N.R.C. 573, 584-85 (1988), the Commission explained:

> The decommissioning rule was issued to ensure that at the conclusion of the lengthy period in which reactors would be in commercial operation there would be funds available for safe and timely decommissioning.
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> * * *
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> [T]he rule contemplated a step-by-step decommissioning funding assurance process over a long period of time with an initial certification of funding, periodic updates, a preliminary decommissioning plan at or about 5 years before projected end of operations, and a decommissioning plan submitted as part of the application for licensing termination.

The description in the rule itself of the allowable funding methods indicates such methods should be initially structured to accumulate sufficient decommissioning funding by the time

termination of operations is expected.[1/] The plan that a licensee must submit five years before the projected end of operation, however, need demonstrate only that there is a "reasonable level of assurance" that funds will be available "when needed to cover the costs of decommissioning." See 10 C.F.R. § 50.75(f). There is no provision in the rule stating that a licensee shall have all the funds it needs for decommissioning at the time it ceases operation.

If a licensee chooses to use the SAFSTOR method of decommissioning, 10 C.F.R. § 50.82(c)(1) does require that the licensee's decommissioning plan include a provision that "funds needed to complete decommissioning be placed into an account segregated from the licensee assets and outside the licensee's administrative control during the storage or surveillance period. . . ." As explained more fully below, however, this provision was not written to apply to prematurely shut down plants, but rather to those which operate for a normal reactor life. The rationale behind section 50.82(c)(1) is that there is a need for assurance of funds over the extended timeframe when a

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1/ For example, an external sinking fund is defined as 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. 10 C.F.R. § 50.75(e)(1)(ii).

facility is no longer a revenue producing asset. 53 Fed. Reg. at 24,034; NUREG-1221 at D-31. In addition, this provision serves to protect against the possibility of licensee bankruptcy during a lengthy storage period. NUREG-1221 at B-13, D-31.

Even this provision is not a self-effectuating requirement for full funding by a specific date. The storage period may post-date termination of operations by years, and indeed there is nothing in the NRC's regulations that requires the licensee to enter the storage period during the term of its license. Further, the amount that must be set aside to "complete" decommissioning arguably could be less than the total estimated amount by excluding storage costs.

The absence of an absolute requirement to fully fund decommissioning costs by specific dates, such as the time a plant ceases operation, is not surprising. The provisions in 10 C.F.R. §§ 50.75 and 50.82 are primarily intended to require appropriate planning, both financial and technical, which the NRC Staff then reviews. Thus, a licensee's firm legal obligations become defined by its commitments in approved plans required by the

regulations, and not by operation of these regulations alone, which are goal oriented.[2/]

The objective to fund the decommissioning liability by the end of operations is a reasonable planning criterion for normally operating reactors generally. Because existing operating reactors have from about twenty to forty years left before their licenses expire, the licensees may accumulate funds gradually. However, because it is not possible to foresee the precise situation of licensees twenty to forty years hence, or the method or timing of decommissioning such licensees may select, the long-term planning criterion aims for sufficient funding by the projected end of operations. This criterion as applied to reactors operating normally over their expected lives reasonably balances financial assurance against burden.

In addition, the NRC structured its rule to provide flexibility. As was noted during the rulemaking,

> The rule provides a framework for the regulation of decommissioning which is adequate for decommissioning after normal operations or after an accident. This flexibility allows for case-by-case

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2/ A licensee should not be in violation of any regulation if decommissioning costs turn out to be greater than the amount accumulated pursuant to an approved plan.

> considerations which are especially important in dealing with an accident situation.

NUREG-1221 at C-14.

Finally, the decommissioning rule reflects the Commission's endeavor to minimize the administrative effort of licensees and to avoid imposing undue financial burdens. See 53 Fed. Reg. at 24,030, 24,033 ("the Commission believes it is important not to impose inordinate financial burdens on licensees.") This sensitivity was manifested in the NRC's decision not to develop financial assurance mechanisms in anticipation of prematurely shutdown plants. The Commission specifically rejected comments calling for the prepayment of funds as a guard against premature shutdown.

> An important consideration in selecting an acceptable method for providing funds for decommissioning is that the method be reasonably cost effective. Prepayment of funds has been recognized by several studies as being significantly more expensive than other methods. In view of the unlikely nature of the event being considered [i.e., premature shutdown], prepayment generally has a cost too high for the benefit that would be realized.

53 Fed. Reg. at 24,034. See also NUREG-1221 at D-24. In the same vein, the NRC did not include in the final rule the "make

whole" rate of collection originally considered in the proposed rule for external sinking funds. NUREG-1221 at D-35 to D-36.

III. Application of the Decommissioning Rule to Prematurely Shutdown Plants

As noted by the NRC Staff in review of Fort St. Vrain's premature closure,

> In considering the final decommissioning rule, the Commission assumed that power reactor licensees would be able to accumulate funds over the full operating life of the plant as determined by the remaining term of the operating license. It does not appear, however, that the Commission meant to force those licensees who cease operation prematurely to raise the entire amount of required decommissioning funds at the time of shutdown.

Letter from P. Erickson to A. Crawford, Docket No. 50-267, "Fort St. Vrain, Decommissioning Financial Plan and Preliminary Decommissioning Plan -- Request for Additional Information" (Oct. 4, 1989). The Staff proceeded to state its determination that the NRC should allow that licensee "some leeway in the time permitted to collect decommissioning funds." In that case, the Staff suggested funding through the license term (until 2008).

Indeed, it should be noted that the decommissioning rule is written in a manner that makes literal compliance impossible for a prematurely shutdown plant. A prematurely shutdown plant will

not have submitted an updated financial plan five years before the end of operations and may not have the decommissioning cost estimate that would be part of the submittal.

Further, even if the utility had a site-specific decommissioning cost estimate, it would be extremely improvident for the NRC to insist on immediate deposit of the full amount. Rather than increasing financial assurance, NRC insistence on immediate deposit of a sum on the order of one to several hundred million dollars could create financial instability. At the very least, it would cause the utility to draw upon resources that might be better spent for defueling, plant layup, prompt waste disposal, and other activities conducted immediately following cessation of operations to place the facility into a secure non-operational condition.

In sum, while full funding by the end of operations was a reasonable long-term planning criterion for normally operating reactors, it is probably not an appropriate requirement for prematurely shut down plants, as the Staff already has recognized in its Fort St. Vrain review. The balancing of benefits and burdens that the NRC undertook when considering what licensees should do in general -- licensees who were expected to operate their plants for at least another twenty years -- does not apply to a prematurely shut down plant. The burden of immediate or

even short-term funding may be inordinate, not only threatening the stability of the licensee but severely impacting the ratepayer and the competitiveness of the local economy. At this juncture, careful consideration is necessary to determine what is reasonable in light of the specific circumstances.

Clearly, then, it is appropriate to allow a licensee of a prematurely shutdown facility some reasonable period to accumulate funds. What is a reasonable period will depend on the specific circumstances -- how much needs to be accumulated, when the funds will be needed, and the degree of financial security of the licensee. The particular circumstances may very well justify an accumulation period in excess of five years.

The Rancho Seco situation is an apt illustration. SMUD, which shut down Rancho Seco after a June 6, 1989 referendum, has committed to an initial deposit of $55 million for its external decommissioning sinking fund. See letter from D. Keuter to NRC, Docket No. 50-312, "Decommissioning Financial Plan and Interim Exemption Request from Certain Requirements of 10 C.F.R. 50.75(e)(1)(ii)" (July 24, 1990). SMUD is still evaluating decommissioning options and investigating costs, and has not yet filed a site-specific decommissioning cost estimate. While the District submitted to the NRC on July 12, 1990, a status report on decommissioning planning for Rancho Seco ("Plan for Ultimate

Disposition of the Facility"), it has not yet filed a proposed decommissioning plan under 10 C.F.R. § 50.82. While it is likely that SMUD will propose a storage period of several decades and a funding plan consistent with the timing of major expenditures for decommissioning activities, the NRC should wait for such information, in the form of plans, before deciding on a major element of the financial scheme. The funding accumulation period should not be decided in the abstract, but along with the decommissioning plan, the site specific cost estimate, and the revised financial plan.

A generic policy would not allow the Staff to take into consideration SMUD's ability to generate funds over a long period of time, which is well assured by several factors. First, SMUD maintains multiple generation facilities, power purchase contracts, as well as extensive transmission and distribution facilities. Consequently, its revenue producing capability and financial stability are not wholly dependent on Rancho Seco. Further, SMUD has the statutory authority under California's Municipal Utilities District Act to establish the rates for the power it sells, and therefore the legal authority to recover its costs from the ratepayers irrespective of whether a particular asset is used and useful. In addition, further assurance of adequate decommissioning funding is provided in SMUD's case

because of California's Nuclear Facility Decommissioning Act, which imposes a separate and independent State requirement to fund decommissioning expenses. Finally, SMUD as a municipal utility district is precluded from bankruptcy in the usual sense. Instead, the Bankruptcy Code allows for a "municipal reorganization" where the municipal's liabilities and obligations must eventually be paid.

These same considerations would justify in SMUD's case the accumulation of funds into the storage period and beyond the license term. The planning criterion to segregate during the storage period funds to complete decommissioning was based on the concern that the licensee might not be able to generate further funds if its nuclear plant was no longer a revenue producing asset and on the concern that the licensee might become bankrupt during the period. Neither concern would pertain to SMUD, because again SMUD has its own authority to establish rates to cover costs, including the costs of decommissioning a retired plant, and because SMUD cannot avoid its obligations by bankruptcy.

IV. Limitations Imposed by the Administrative Procedure Act

For the reasons discussed above, we believe that the Staff should not seek confirming guidance from the Commission, and the

Commission should not restrict the discretion of the Staff by preselecting one of the three funding period options, but should instead allow case-by-case consideration of what is appropriate. Only by considering the special circumstances in each case can the NRC determine what is necessary to provide reasonable assurance of funding without imposing undue burdens.

If, however, the Commission is inclined to dictate a generic funding schedule for prematurely shut down plants, it may only do so by rulemaking. The preselection of one of the suggested options would establish a substantive obligation to be imposed on a class of licensee. As discussed above, there is no absolute requirement under the current regulations that a licensee have all funds accumulated by cessation of operations, five years thereafter, or by the end of the license term. Accordingly, the options cannot be viewed as interpretative. Instead, any preselection would be the establishment of a "binding norm" for a situation not addressed by the current rule.

The courts have held that a statement that establishes a substantive standard -- a binding norm -- is a substantive rule. Pacific Gas and Electric Co. v. FPC, 506 F.2d 33, 38 (D.C. Cir. 1974). Similarly, a statement that limits the discretion of an official is a substantive rule. Limerick Ecology Action, Inc. v. NRC, 869 F.2d 719, 734 (3d Cir. 1989). Under the APA, absent

good cause, a substantive rule may only be promulgated after public notice and opportunity for comment. 5 U.S.C. § 553.

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