

ANALYSIS OF AND RESPONSES TO RECOMMENDATIONS
GAO-04-32

Background:

To put the Nuclear Regulatory Commission's (NRC's) analysis of, and responses to, the General Accounting Office's (GAO's) recommendations into context, we offer the following background regarding the NRC's decommissioning funding assurance regulatory framework.

All owners of operating nuclear power plants are required to provide reasonable assurance that funds will be available for decommissioning. Approximately 90 percent of these owners are authorized under NRC regulations to accumulate funds for decommissioning over the licensed periods of operation of their plants. In other words, such owners are not required today to have all of the funds needed for decommissioning, but are required to have sufficient funds at the time of permanent termination of operations. Generally, these owners are either traditional electric utilities that are directly rate-regulated by State public utility commissions, and in some cases the Federal Energy Regulatory Commission (FERC), or they are generation companies that are indirectly regulated with respect to the recovery of decommissioning costs. All other owners (the remaining 10 percent) must provide financial assurance through prepaid decommissioning funds and/or through a surety method or guarantee.

With respect to owners authorized to accumulate decommissioning funds over the licensed periods of operation of their plants, the timing of the collection of decommissioning funds through rates or nonbypassable charges is exclusively determined by State and Federal regulatory authorities through periodic rate cases. When setting rates or charges, State ratemaking authorities and the FERC are responsible for addressing details such as procedures for fund collections, taxation effects, regulatory accounting, intergenerational equity, and responsiveness of collection schedules to changing conditions. Under its mandate for assuring public health and safety, the NRC has the authority to ensure that by the time of permanent termination of operations, adequate funds will be available for decommissioning.

The NRC has found that, historically, rate regulatory oversight by State public utility commissions and the FERC has been effective and safety-related expenses have been recovered through rates. The NRC has taken these findings into account in establishing its regulations on decommissioning funding assurance.

GAO's Recommendations:

1. GAO recommended that the NRC develop an effective method for determining whether owners are accumulating funds at sufficient rates to pay for decommissioning. One aspect of an effective method, according to GAO, would entail separately evaluating the level of decommissioning funding assurance being provided by each co-owner of a plant when there are multiple owners.

Response: The NRC already has established a method that is effective in analyzing whether owners are accumulating sufficient funds. In general, the NRC broadly considers current levels of funding and projected earnings on funds. For owners who are not required to be prepaid or to have guarantees, the reasonableness of future

collection schedules, as established or approved by State regulatory authorities and/or the FERC, is also considered.

Because owners who accumulate funds over time are located in, and regulated by, different States and thus are subject to different regulatory authorities responsible for the details concerning how funds are collected, it is to be expected that owners do not necessarily accumulate funds at identical rates. If the NRC determines that any particular owner is not providing reasonable assurance that there will be sufficient funds available for decommissioning at the expected time of permanent shutdown, the NRC, in cooperation with the relevant State regulatory authority and the FERC, or even independently, can modify an owner's plans or schedule for the accumulation of funds or take other action as appropriate. However, the rate of accumulation normally is linked directly to the establishment of rates and charges by State public utility commissions and/or the FERC, and, therefore, the NRC has historically deferred to those bodies with respect to the details regarding the rate of accumulation of funds. Because there has been a long history of effective rate regulatory oversight by State public utility commissions and the FERC and a long history of recovery of safety-related expenses through rates, the NRC's practice is well grounded.

GAO analyzed the 2001 biennial decommissioning funding status reports against generic benchmarks derived from a methodology developed by GAO. This methodology is based on a number of key assumptions. The benchmark amounts that correspond to points in time during the life of a plant can fluctuate up or down depending upon which values one selects for these key assumptions. GAO acknowledged "the inherent uncertainty associated with forecasting outcomes many years into the future" and accordingly did an analysis using "pessimistic and optimistic values" for GAO's key assumptions, in addition to using the "most likely future values of key assumptions" as determined by GAO. The GAO's methodology was not reviewed or accepted by the NRC and was not based on NRC regulations. Based on GAO's benchmarks and assessments of contributions recently made by owners to their decommissioning trust funds, GAO concluded that several owners were "at risk of not accumulating enough funds to pay for decommissioning."

After reviewing the NRC's 2001 analysis, GAO concluded that the NRC did not have an effective method for determining whether owners who were accumulating funds over time were doing so at a sufficient rate. According to GAO, the NRC's analysis of the status of decommissioning funding was ineffective because the "NRC overly relied on the owners' future funding plans, or on rate-setting authority decisions." In addition, the NRC did not separately assess, in the case of a plant with multiple owners, each owner's level of decommissioning funding assurance against the owner's private contractual obligation to other co-owners. In other words, GAO concluded that even if the NRC analyzed the total amount of decommissioning funding assurance provided by all owners of a particular plant and determined that the total amount was adequate, such analysis was not effective unless the NRC further determined whether the individual amount being provided by each co-owner was exactly in proportion to the private arrangement among the owners.

The NRC believes that GAO's method of analyzing the 2001 biennial reports placed undue weight on recent contributions made by owners to their decommissioning trusts.

Minimum decommissioning cost estimates are subject to revision each year. Also, the actual return on investments of funds is subject to constant fluctuation. Therefore, schedules for the collection of decommissioning funds are always subject to adjustment; accordingly, the most recent payments into a decommissioning trust should not be relied upon as a conclusive indication of future payment amounts.

With respect to GAO's generic benchmarks against which to measure the adequacy of decommissioning funds for any plant at various points in time, GAO has acknowledged that using these benchmarks "is not the only way an owner could accrue enough funds to pay future decommissioning costs." GAO justifies using its benchmark method as a "common standard." But, as previously discussed, the roles of individual State public utility commissions and the FERC have always been central to the collection of decommissioning costs by owners authorized to accumulate funds over time. GAO has not explained to what extent the implementation of its benchmark method would directly or indirectly impact or infringe upon the ratemaking authority of State public utility commissions and the FERC. The Atomic Energy Act provides that the authority of the States with respect to the generation and sale of electricity by NRC licensees is not affected by the authority granted to the NRC. Moreover, the U.S. Supreme Court has determined that Congress, in enacting the Atomic Energy Act, intended that the States are to retain their traditional responsibility with respect to nuclear utilities to determine questions relating to cost and that ratemaking questions are to remain in State hands.

GAO expressed the opinion that one reason the NRC's reliance upon owners' schedules for the collection of decommissioning funds is problematic is that owners, as permitted by NRC regulations, can project future earnings at different real rates of return if the owner's regulatory authority authorizes the rate. GAO argued that the NRC did not use a consistent benchmark for evaluating all owners' decommissioning trust funds. GAO is correct that the NRC, under its regulations, allows different earnings projections if approved by an owner's regulatory authority and does not use generic benchmarks to assess all owners' decommissioning funding assurance. However, State public utility commissions and FERC have the authority to set an owner's rates and have the authority to adjust those rates if previous assumptions on future earnings do not materialize. The NRC does not believe that GAO's argument has any bearing on the issue of whether NRC has an effective method for determining whether owners are accumulating decommissioning funds at a sufficient rate. Ultimately, two different collection schedules based on two different assumptions of a future real rate of return on fund balances can both be reasonable when there are mechanisms in place to make ongoing adjustments to collections. Thus, the fact that the NRC allows different owners to use different earnings rates if authorized by their regulatory authorities does not render the NRC's analysis ineffective.

Regarding plants with more than one owner, the NRC's analysis of decommissioning funding assurance considers first and foremost the total amount of funding assurance provided by all owners of the plant, who are all subject to the NRC's jurisdiction. While the NRC recognizes that co-owners may have private contractual arrangements among themselves as to the sharing of costs, the NRC is not a party to such contracts. As long as the total amount of decommissioning funding assurance being provided is sufficient, the NRC does not see a need to further assess each owner's funding assurance against the terms of a private contract. In sum, the NRC is of the opinion that its analysis of

decommissioning funding assurance for plants with co-owners is effective in determining whether there is a concern that may warrant closer scrutiny.

Therefore, notwithstanding the recommendation to develop an effective method for determining whether owners are accumulating funds at sufficient rates to pay for decommissioning, the NRC believes there is no need to change its current method in response to this recommendation.

2. GAO, citing the NRC's plant performance action matrix, recommended that the NRC take a similar approach and establish specific criteria for taking action when NRC determines that an owner is not accumulating funds at a sufficient rate to pay for eventual decommissioning. GAO found that "if NRC had identified an owner with unacceptable levels of financial assurance, it would not have had an explicit basis for acting to remedy potential funding deficiencies because it has not established criteria for responding to unacceptable levels of financial assurances."

Response: If the NRC determines, based on available information, that an owner does not appear to be on track to accumulate sufficient funds for decommissioning, or that an owner's present decommissioning fund balance does not appear to be adequate, the NRC does have a procedural framework for examining the situation further. However, the NRC does not believe that it is necessary to establish specific criteria along the lines suggested by GAO for responding to unacceptable levels of decommissioning funding assurance, considering the complexity and range of circumstances that may arise with any given owner, particularly those who are subject to the jurisdiction of State regulators and the FERC.

Any time the NRC determines that unacceptable levels of decommissioning funding assurance exist, the NRC will apply greater scrutiny to the circumstances. The NRC continues to believe that determining a remedial course of action should be done on a case-by-case basis. Circumstances that owners and the NRC might be confronted with could include, but are not limited to, the following:

- An owner could have a projected funding shortfall (in varying amounts) due to any number of reasons, such as, for example, poor recent performance of investments, a recent rate case reducing future collections, an unscheduled outage that resulted in reduced revenues and additional expenses to buy replacement power, or a new higher decommissioning cost estimate.
- The owner could have 6 years, 15 years, 30 years, or any other number of years remaining on its operating license, during which time the owner could collect additional funds or the trust balance could grow at different rates.
- The status of any license renewal effort may vary, which could significantly impact the amount of time funds could be collected or invested.
- There could be a pending rate case that will adjust future collections, or there could be new legislation pending at the State level.

- There could be other decommissioning funding assurance mechanisms available, partially available, or not available, such as parent company guarantees, surety bonds, or insurance.
- The owner could be planning on immediate dismantlement upon permanent shutdown, a 25-year SAFSTOR period, or a 50-year SAFSTOR period, over which time earnings could accrue or additional contributions to a decommissioning trust could be made.

Because there are many combinations of facts and circumstances that could occur for any reactor facility, the NRC does not believe that it is worthwhile to attempt to catalog and develop responses to every possible combination involving an underfunded owner and believes that such action may lead to an incorrect or inappropriate response before all of the material facts are assessed in the relevant time frame. Accordingly, the NRC does not agree that it should develop specific criteria along the lines suggested by GAO to respond to unacceptable levels of decommissioning funding assurance and plans no action in response to GAO's recommendation.