NUCLEAR REGULATION

NRC Needs More Effective Analysis to Ensure Accumulation of Funds to Decommission Nuclear Power Plants

Why GAO Did This Study
Following the shutdown of a nuclear power plant a significant radioactive waste hazard remains until the waste is removed and the plant site decommissioned. In 1999, GAO reported that the combined value of the owners’ decommissioning funds was insufficient to ensure enough funds would be available for decommissioning. GAO was asked to update its 1999 report and to evaluate the Nuclear Regulatory Commission’s (NRC) analysis of the owners’ funds and its process for acting on reports that show insufficient funds.

What GAO Found
Although the collective status of the owners’ decommissioning fund accounts has improved considerably since GAO’s last report, some individual owners are not on track to accumulate sufficient funds for decommissioning. Based on our analysis and most likely economic assumptions, the combined value of the nuclear power plant owners’ decommissioning fund accounts in 2000—about $26.9 billion—was about 47 percent greater than needed at that point to ensure that sufficient funds will be available to cover the approximately $33 billion in estimated decommissioning costs when the plants are permanently shutdown. This value contrasts with GAO’s prior finding that 1997 account balances were collectively 3 percent below what was needed. However, overall industry results can be misleading. Because funds are generally not transferable from funds that have more than sufficient reserves to those with insufficient reserves, each individual owner must ensure that enough funds are available for decommissioning its particular plants. We found that 33 owners with ownership interests in a total of 42 plants had accumulated fewer funds than needed through 2000 to be on track to pay for eventual decommissioning. In addition, 20 owners with ownership interests in a total of 31 plants recently contributed less to their trust funds than we estimate they needed to put them on track to meet their decommissioning obligations.

NRC’s analysis of the owners’ 2001 biennial reports was not effective in identifying owners that might not be accumulating sufficient funds to cover their eventual decommissioning costs. In reviewing the 2001 reports, NRC reported that all owners appeared to be on track to have sufficient funds for decommissioning. In reaching this conclusion, NRC relied on the owners’ future plans for fully funding their decommissioning obligations. However, based on the owners’ recent actual contributions, and using a different method, GAO found that several owners could be at risk of not meeting their financial obligations for decommissioning when these plants stop operating. In addition, for plants with more than one owner, NRC did not separately assess the status of each co-owner’s trust funds against each co-owner’s contractual obligation to fund decommissioning. Instead, NRC assessed whether the combined value of the trust funds for the plant as a whole was reasonable. Such an assessment for determining whether owners are accumulating sufficient funds can produce misleading results because owners with more than sufficient funds can appear to balance out owners with less than sufficient funds even, though funds are generally not transferable among owners. Moreover, NRC has not established criteria for taking action if it determines that an owner is not accumulating sufficient funds.

What GAO Recommends
NRC should (1) develop an effective method for determining whether owners are accumulating decommissioning funds at sufficient rates and (2) establish criteria for taking action when it is determined that an owner is not accumulating sufficient funds. NRC disagreed with these recommendations suggesting that its method is effective and that it is better to deal with unacceptable levels of financial assurance on a case-by-case basis. GAO continues to believe that limitations in NRC’s method reduce its effectiveness and without criteria, NRC might not be able to ensure owners are accumulating decommissioning funds at sufficient rates.