



ENTERGY

MEMORANDUM

50-313
50-368
50-382
50-458

TO: BILL RECKLEY
FROM: JAGER SMITH
DATE: July 18, 2002
RE: Issues regarding Decommissioning Funding

Following is a draft listing of facts and questions that I would like to discuss in our upcoming teleconference.

Facts

Based on a ruling by the Arkansas Public Service Commission (APSC), Entergy was ordered to cease funding of the ANO decommissioning trusts effective January 1, 2001. See APSC Order No. 32 in Docket No. 87-166-TF. No contributions (other than earnings) have been made to the ANO decommissioning trusts after 1/1/01. The APSC's decision was based on assumed license extensions and an assumed extension of the operating lives of ANO 1 and ANO 2.

NUREG-1577, Rev. 1, *Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance*, states that the "external sinking fund" method of providing decommissioning funding assurance "requires a licensee, or a designated representative of a licensee, to make payments, **at least annually**, into an external trust fund held by a third party, usually a bank licensed by a State, acting as trustee." *Id.* at section III.2.c(1), page 10 (emphasis supplied).

Based in part on the APSC's action with respect to ANO, the Louisiana Public Service Commission (LPSC) Staff has proposed cessation of decommissioning collections for River Bend. LPSC Docket No. U-25687. The LPSC Staff's proposal is also based on an assumed license renewal and assumed life extension of River Bend.

The 10 CFR 50.75(f) biennial filing is part of the process of licensee's providing "reasonable assurance that funds will be available for the decommissioning process." 10 CFR 50.75(a). Entergy has filed with the NRC all the information required by the regulations, but in view of recent actions by rate regulators to cease decommissioning funding, Entergy is unclear as to whether the current funding mechanism provides the required "reasonable assurance."

Entergy uses the "external sinking fund" method of providing for future decommissioning funding for ANO 1, ANO 2, Grand Gulf, River Bend, and Waterford 3, pursuant to 10 CFR 50.75(e)(1)(ii).

Aool

Entergy understands from previous conversations with the Staff that the methodology used to test whether a licensee's funding method provides reasonable assurance (assuming no further contributions will be made to the trust) is as follows: The reviewer will start with the amount of funds available in the decommissioning trust(s), and escalate that amount by a 2 percent annual real rate of return to the end of the licensed life of the plant. The escalated amount will then be compared to the NRC minimum amount calculated pursuant to 10 CFR 50.75(b) and (c). If the escalated amount is at least as large as the NRC minimum, reasonable assurance is shown.

In Entergy's most recent 10 CFR 50.75(f) filing for ANO 2, ANO 2 had approximately \$158.5 million available in its decommissioning trust funds as of the end of year 2000. See Attachment 1 to 2001 ANO biennial filing.

ANO 2's current license expiration date is 7/17/2018, or approximately 17 years past the end of calendar year 2000.

Escalating the ANO 2 trust fund amount by 2 percent annual real rate of return, compounded annually (i.e., $\$158.5M \times 1.02^{17}$) results in an escalated fund value of approximately \$222 million.

10 CFR 50.75(e)(1)(ii) appears to indicate that a figure different than 2 percent real rate of return can be used to escalate the decommissioning fund if the licensee's rate setting authority has authorized the use of another rate. Assumed earning rates used in ANO 2's decommissioning model submitted to the APSC are found in Attachment 1-C to the 2001 ANO biennial filing, at pages 6 and 7, and the inflation rate (CPI-U) of the decommissioning obligation used in the model is found on page 8 of that same attachment. Earnings rates vary from 7.25 percent to 4.21 percent, and the CPI-U used was around 2.5 percent per year. This would result in a real rate of return between approximately 4.75 percent and 1.71 percent, depending on the particular fund (tax qualified versus non-tax qualified) and the year.

The NRC minimum funding amount for ANO 2 calculated pursuant to 10 CFR 50.75(b) and (c) is approximately \$522.3 million using the standard burial factor, and approximately \$301.1 million using the waste vendor disposal factor per NUREG 1307 Rev. 9. See Attachment 1-A to 2001 ANO biennial filing.

NUREG-1577, Rev. 1, states that "[a]s part of the reporting requirements in section 50.75(f), a licensee's calculations of both the basic certification formula amount and the annual escalation amount are subject to NRC verification." *Id.* at section III.2.a, page 7.

NUREG-1577 also indicates that the NRC will defer to rate regulators to set decommissioning funding, *as long as there is "reasonable assurance" that decommissioning funds will be available.* "The NRC expects that, for licensees that continue to have direct or indirect rate regulatory oversight, it will continue to be able to defer to rate regulators to determine the appropriate amortization schedule for decommissioning funds, provided that there is reasonable assurance that, at the time of permanent cessation of operations, decommissioning funds plus estimated earnings will be available in the amount estimated to be necessary to complete

decommissioning.” *Id.* at section III.2.c(2), page 9. “Reasonable assurance” consists of a series of steps set out in 10 CFR 50.75. See 10 CFR 50.75(a).

Regulatory Guide 1.159, section 2.2.5, provides that in the case of a shortage in decommissioning funds in an external sinking fund, a “reasonable time may be used to make up any deficit, consistent with good-faith efforts to obtain appropriate rate relief.”

Chairman Meserve has advised Entergy in a letter dated May 11, 2001, that the accumulation of decommissioning funds in an external sinking fund should be based on the remaining term of the license. See also Regulatory Guide 1.159, section 2.2.5.

Seventy percent of River Bend is regulated jointly by the Public Utility Commission of Texas (PUCT) and the LPSC. Thirty percent is treated as a non-rate regulated asset. The 70 percent regulated share uses an external sinking fund for decommissioning, while the 30 percent non-regulated share has had its decommissioning liability prefunded as part of Entergy’s acquisition of the 30 percent share from the Rural Utility Service (RUS) through the bankruptcy of Cajun Electric Power Cooperative, the former owner of the 30 percent share. Under the terms of the acquisition of the 30 percent share, the decommissioning funds for each respective share cannot be used for decommissioning the other fraction of the plant, and any excess in the 30 percent prefunded trust at the end of decommissioning must be returned to the RUS. Order of U.S. Bankruptcy Court, M.D. La., Civil Action 94-2763-B2, dated August 26, 1996, approving Settlement Term Sheet.

As of the end of 2000, River Bend’s 70 percent regulated share had approximately \$90.3 million in its decommissioning trust. See Attachment 3 to River Bend biennial filing.

River Bend’s current license expiration date is August 29, 2025.

The NRC minimum funding amount for the 70 percent regulated share is approximately \$438.8 million computed using the standard waste burial figure, or \$277.5 using the waste vendor disposal factor. See Attachment 3-A to the River Bend biennial filing.

Escalating \$90.3 million at a 2% real rate of return to the approximate 25 years to the end of the River Bend license results in a figure of approximately \$148 million.

If the LPSC orders cessation of funding of River Bend’s decommissioning trust, River Bend may not have enough funds available to meet the NRC minimum funding amount computed as noted above. This does not address the assumed continued funding by the PUCT, although it is presumed that the PUCT would not be responsible for covering any shortfall in the funding provided by the LPSC.

If the LPSC orders cessation of funding of River Bend’s decommissioning trust, Entergy expects a similar proposal will be forthcoming relating to Waterford 3, the other nuclear plant regulated by the LPSC. Given that Waterford 3 is approximately the same age as River Bend with similar current decommissioning trust funding, Entergy expects similar results for Waterford 3 as for River Bend.

Questions

What methodology should the licensee use to determine whether it presently is providing “reasonable assurance” in the case where the rate regulator has ordered cessation of decommissioning fund contributions?

What sanctions apply in the case where a persistent failure to provide reasonable assurance exists?

10 CFR 50.75(e)(2) indicates that the NRC may take action “independently or in cooperation with the FERC and the licensee’s State PUC” to ensure adequate accumulation of decommissioning funds. What independent action would the NRC consider? What conditions must exist before the NRC would take action in cooperation with a rate regulator to address inadequate decommissioning funding?

Does the NRC consider the APSC’s action in ceasing decommissioning funding for ANO 2 in advance of the issuance of a license renewal for that plant consistent with the “reasonable assurance” requirements?

If the LPSC orders a cessation of decommissioning collections for River Bend in advance of a license renewal for that plant, would the NRC consider that action consistent with “reasonable assurance” requirements?

Does the NRC consider complete cessation of decommissioning funding, with an implicit or explicit promise from the rate regulator to revisit the issue in the future, to be consistent with “reasonable assurance” requirements? If the answer to this question is “maybe,” at what point does the funding no longer provide reasonable assurance.

Consider the case where a rate regulator states or implies that the rate regulator will remain responsible for the decommissioning collections, where current decommissioning funding does not meet minimum requirements because the rate regulator either orders under-funding or zero funding of the decommissioning trust. In this case, the rate regulator has assumed a plant operating life in excess of the licensed life for calculations. If the NRC finds in this case that “reasonable assurance” exists that adequate funds will be available for decommissioning the plant, is the licensee relieved of the NRC requirements concerning plant operating life assumptions and other assumptions contained in NRC regulations, guidance documents, and Chairman Meserve’s May 11, 2001 letter to Entergy? Stated more generally, if the rate regulator states that it will remain responsible for decommissioning funding, is the licensee relieved of the requirements for otherwise proving reasonable assurance through the calculations in 10 CFR 50.75(b), (c), and (f)?

If exact compliance with the NRC minimum is not required at any given point in time, at what point does a failure to meet the minimum result in a failure to provide “reasonable assurance”?