February 8, 1996

FOR: The Commissioners

FROM: James M. Taylor /s/
Executive Director for Operations

SUBJECT: ADVANCE NOTICE OF PROPOSED RULEMAKING - NUCLEAR POWER REACTOR DECOMMISSIONING FINANCIAL ASSURANCE IMPLEMENTATION REQUIREMENTS

PURPOSE:

To seek Commission approval to publish in the Federal Register an advance notice of proposed rulemaking on Nuclear Power Reactor Decommissioning Financial Assurance Implementation Requirements.

BACKGROUND:

The staff is aware of the uncertainty concerning whether the restructuring and deregulation of the electric power industry may have a negative impact on the availability of funds for decommissioning. Therefore, the staff prepared a rulemaking plan to amend NRC's requirements pertaining to assuring availability of decommissioning funds, as part of the staff's broader effort to update NRC's financial assurance requirements for the decommissioning of nuclear power reactors. In order for the staff to have a better information base with which to work in preparing the proposed rule, the staff decided to seek Commission approval to first publish the attached advance notice of proposed rulemaking (Attachment 1).

DISCUSSION:

The staff submitted a rulemaking plan (Attachment 2) on Nuclear Power Reactor Decommissioning Financial Assurance Implementation Requirements as Attachment 3 to SECY-95-223, September 1, 1995. Subsequently, the staff decided that the action should first be published as an advance notice of proposed rulemaking (ANPR). This decision was based on the fact that the potential deregulation of the power generating industry has raised questions concerning the availability of funds for decommissioning. Potential reorganizations of utilities may require a modification of the NRC financial assurance requirements to recognize the changing organization of utilities.

Electric utilities, as defined in 10 CFR 50.2, are allowed to set aside funds annually over the estimated life of a reactor by collecting funds through ratepayers. With the advent of electric industry restructuring and deregulation, a nuclear power licensee could lose its direct access to a rate base or source of funds to cover the unfunded balance of decommissioning costs. To address this situation, the staff is considering revising the definition of "electric utility" and requiring periodic reports detailing the progress of decommissioning fund collections. The staff is also considering allowing licensees the opportunity to take credit for earnings on their trust funds during an extended safe storage period.

On December 14, 1995, the Commission was briefed on electric utility industry restructuring and deregulation. At the briefing, representatives of State and Federal agencies, industry, and the financial community presented their views on this issue. The opinion of the representatives was that the Commission should be careful to not pursue regulatory action too quickly because of the general uncertainty about restructuring and deregulation and because a premature regulatory action may have a potentially harmful impact on the industry.

In order to obtain relevant information on this topic, the staff is now seeking permission to publish in the Federal Register the attached advance notice of proposed rulemaking (Attachment 1).

COORDINATION:

The Office of the General Counsel has no legal objection to this paper.

RECOMMENDATION:

That the Commission:

1. Approve the Advance Notice of Proposed Rulemaking (ANPR) for publication (Attachment 1).

2. Note:

   a. The ANPR would be published in the Federal Register for a 75-day public comment period;

   b. A public announcement will be issued (Attachment 3);

   c. The appropriate congressional committees will be informed (Attachment 4); and

   d. Copies of the ANPR as published in the Federal Register will be distributed to all Commission power reactor licensees. The notice will be sent to other interested parties upon request.

James M. Taylor
Executive Director for Operations

CONTACT: Brian J. Richter, RES
(301) 415-6221

Attachments:

1. Federal Register Notice + disk
2. Rulemaking Plan (Att 3-SECY-95-223 dtd 9/1/95)
3. Draft Public Announcement

ATTACHMENT 1

[7590-01]

NUCLEAR REGULATORY COMMISSION
10 CFR 50.2, 50.75, and 50.82
RIN 3150-AF41

Financial Assurance Requirements
for Decommissioning Nuclear Power Reactors

AGENCY: Nuclear Regulatory Commission.

ACTION: Advance notice of proposed rulemaking.

SUMMARY: The Nuclear Regulatory Commission is considering amending its regulations relating to financial assurance requirements for the decommissioning of nuclear power plants. Potential deregulation of the power generating industry has created uncertainty with respect to whether current NRC regulations concerning decommissioning funds and the financial mechanisms will require a modification to account for utility reorganizations not contemplated when current financial assurance requirements were promulgated. Additionally, the NRC is considering requiring power reactor licensees to periodically report on the status of their decommissioning funds. Allowing credit for earnings on decommissioning trust funds during extended storage will also be considered. This advance notice of proposed rulemaking is issued to invite public comment on issues pertaining to the form and content of the NRC's nuclear power reactor decommissioning financial assurance requirements as they relate to electric utility deregulation.

DATE: Submit comments by [insert a date to allow 75 days public comment] _____, 1996. Comments received after this date will be considered if it is practical to do so, but the Commission is able to assure consideration only for comments received on or before this date.

ADDRESSES: Mail comments to: The Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch.

Deliver comments to: 11555 Rockville Pike, Rockville, Maryland, between 7:45 a.m. and 4:15 p.m. Federal workdays.

Comments may be submitted electronically, in either ASCII text or WordPerfect format (version 5.1 or later), by calling the NRC Electronic Bulletin Board (BBS) on FedWorld. The bulletin board may be accessed using a personal computer, a modem, and one of the commonly available communications software packages, or directly via Internet. Background documents on the advance notice of proposed rulemaking are also available, as practical, for downloading and viewing on the bulletin board.

If using a personal computer and modem, the NRC rulemaking subsystem on FedWorld can be accessed directly by dialing the toll free number (800) 303-9672. Communication software parameters should be set as follows: parity to none, data bits to 8, and stop bits to 1 (N,8,1). Using ANSI or VT-100 terminal emulation, the NRC rulemaking subsystem can then be accessed by selecting the "Rules Menu" option from the "NRC Main Menu." Users will find the "FedWorld Online User's Guides" particularly helpful. Many NRC subsystems and data bases also have a "Help/Information Center" option that is tailored to the particular subsystem.

The NRC subsystem on FedWorld can also be accessed by a direct dial phone number for the main FedWorld BBS, (703) 321-3339, or by using Telnet via Internet: fedworld.gov. If using (703) 321-3339 to contact FedWorld, the NRC subsystem will be accessed from the main FedWorld menu by selecting the "Regulatory, Government Administration and State Systems," then selecting "Regulatory Information Mall." At that point, a menu will be displayed that has an option "U.S. Nuclear Regulatory Commission" that will take you to the NRC Online main menu. The NRC Online area also can be accessed directly by typing "/go nrc" at a FedWorld command line. If you access NRC from

FedWorld's main menu, you may return to FedWorld by selecting the "Return to FedWorld" option from the NRC Online Main Menu. However, if you access NRC at FedWorld by using NRC's toll-free number, you will have full access to all NRC systems, but you will not have access to the main FedWorld system.

If you contact FedWorld using Telnet, you will see the NRC area and menus, including the Rules Menu. Although you will be able to download documents and leave messages, you will not be able to write comments or upload files (comments). If you contact FedWorld using FTP, all files can be accessed and downloaded but uploads are not allowed; all you will see is a list of files without descriptions (normal Gopher look). An index file listing all files within a subdirectory, with descriptions, is available. There is a 15-minute time limit for FTP access.

Although FedWorld also can be accessed through the World Wide Web, like FTP that mode only provides access for downloading files and does not display the NRC Rules Menu.

For more information on NRC bulletin boards call Mr. Arthur Davis, Systems Integration and Development Branch, NRC, Washington, DC 20555, telephone (301) 415-5780; e-mail AXD3@nrc.gov.

Examine copies of comments received at: The NRC Public Document Room, 2120 L Street NW (Lower Level), Washington, DC.

FOR FURTHER INFORMATION CONTACT: Brian J. Richter, Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 425-6221, e-mail bjr@nrc.gov.

SUPPLEMENTARY INFORMATION:

Background

Requirements pertaining to financial assurance for the decommissioning of nuclear power reactors are contained in 10 CFR 50.75. Under § 50.75(e)(3), the NRC allows power reactor licensees, who are defined as "electric utilities"[(1)] under § 50.2, to set aside funds annually over the estimated life of the reactor for decommissioning. The NRC provided more flexibility to its electric utility licensees than other licensees because electric utilities have existed in a highly structured environment regulated by State public utility commissions (PUCs) or the Federal Energy Regulatory Commission (FERC). Under § 50.75(e)(2), the NRC requires licensees other than electric utilities to set aside an external sinking fund coupled with a surety method or insurance for any unfunded balance. However, with the advent of deregulation, the distinction between electric utility licensees and other licensees will likely be reduced or eliminated. Thus, the NRC needs to clarify the definition of "electric utility" and to require additional assurance of those licensees whose power reactor costs are no longer regulated.

Typically, power reactor licensees place decommissioning funds in external trust or escrow accounts that are reserved for decommissioning activities.[(2)] Under the definition of external sinking fund, power reactor licensees must accumulate all the funds estimated to be needed for decommissioning by the time their facilities are permanently shut down. Although § 50.75(e) also allows power reactor licensees to use surety bonds, letters of credit, and prepayment to provide funding assurance, virtually all power reactor licensees use the external sinking fund method of assurance.

The intent of § 50.75 is to provide reasonable assurance that funds for decommissioning will be available when necessary. The inability of the licensee to provide funding for decommissioning may adversely affect protection of public health and safety. Also, a lack of decommissioning funds is a financial risk to taxpayers (i.e., if the licensee cannot pay for decommissioning, taxpayers would ultimately pay the bill).

In a related issue, when the Commission issued the decommissioning rule, the Commission believed that, for a regulated electric utility, an external reserve account collected over the estimated remaining reactor life would provide the necessary reasonable assurance. However, as a conservatism built into the rule, the NRC decided not to allow licensees to take credit for earnings on their trust funds while their reactors were in extended safe storage. Rather, the NRC assumed that during safe storage the rate of return on external decommissioning trust funds would equal the decommissioning cost escalation rate. Thus, the after-tax, after-inflation earnings rate effectively would be zero.

When the NRC promulgated the 1988 decommissioning rule, it did not require licensees to report periodically on the status of their decommissioning funds. NRC viewed licensee compliance with the funding assurance requirements as a matter to be determined through the inspection process when necessary. Also, the NRC recognized in the 1988 decommissioning rule the PUCs' and FERC's authority to set annual contribution rates to decommissioning funds and to establish investment and other management criteria for the funds. The PUCs and FERC also actively monitor these decommissioning funds as part of their rate regulatory responsibility. Moreover, the Financial Accounting Standards Board (FASB), a national organization that sets accounting standards, recently initiated a review of reporting of decommissioning obligations on electric utility financial statements. Although FASB has not established a final standard, it appears that it will increase the level of detail on power reactor licensees' financial statements. If adopted, this standard would likely give the NRC and others additional information on the status of decommissioning funds. However, the advent of deregulation, and consequently less oversight by FERC or by PUCs, makes it imperative that the NRC have a source of information to monitor the status of decommissioning funds.

Specific Proposal

The Commission is considering amending 10 CFR 50.2, 50.75, and 50.82 to require that electric utility reactor licensees provide assurance that the full estimated cost of decommissioning will be available through an acceptable guarantee mechanism if the licensees are no longer subject to rate regulation by PUCs or FERC, and do not have a guaranteed source of income. The amendment would also allow licensees to assume a positive real rate of return on decommissioning funds during the safe storage period. Lastly, a periodic reporting requirement would be established.

Specific Considerations

Advice and recommendations on a proposed rule reflecting the foregoing and any other points considered pertinent are invited from all interested persons. Comments and supporting reasons are particularly requested on the following questions arranged by topic:

A. Timing and Extent of Electric Utility Industry Deregulation

A.1. What is the likely timetable for industry restructuring and deregulation?

A.2. Will the electric utility industry go through several phases as it responds to deregulation and other competitive pressures? If so, what will be the likely major changes in business structure that may occur in each phase? Will rates remain regulated at the retail distribution level, with deregulation occurring for generation and transmission? Will retail wheeling become widespread and lead to deregulation of all sectors of the electric utility industry? Or will rates remain regulated at the retail distribution level, with deregulation occurring within the generation and transmission sectors? What will likely be the final structure of the electric utility industry, assuming either partial or full deregulation?

A.3. Some states appear to oppose deregulation. Will they be able to maintain their opposition if neighboring states deregulate? What will be the industry structure if some states deregulate more than others? Can a "hybrid" system exist effectively?

B. Stranded Costs

B.1. How will restructuring affect large baseload plants that currently receive rate relief to cover construction costs or have a portion yet to be phased into the rate base? Specifically, what is the probability that and degree to which these costs will be recoverable should a nuclear power plant be deemed to be non-competitive because of high construction costs? What will be the source of operating, maintenance, and capital improvement funds should such a nuclear generator decide to continue operations? What will be the source of funds to prematurely and safely shut down an uneconomic plant? Are transmission access or other surcharges to cover stranded costs likely?

C. Nuclear Financial Qualifications and Decommissioning Funding Assurance

C.1. If nuclear plants are shut down prematurely, how will licensees who can no longer pass costs through to ratepayers provide for a shortfall of decommissioning funds?

C.2. At what point does an operator of a nuclear power plant cease to be a "utility" as defined in 10 CFR 50.2 of the NRC's regulations?

C.3. If an electric utility reorganizes itself, including divesting parts of itself, so that the remaining entity operating a reactor is no longer regulated by a rate-setting State or Federal body, or will cease to be regulated by a rate-setting State or Federal body if the reactor ceases operation, would it be appropriate to require financial assurance for the decommissioning costs in full prior to NRC approval of such reorganizations? Such assurance could take the form of self-guarantee, parent company guarantee, certification by the rate-regulating entity, or other financial surety mechanism to cover the unfunded decommissioning costs. Should the NRC require additional assurance for adequate funds for safe operation and decommissioning in anticipation of deregulation? Should the NRC require, as a condition of approval of certain reorganizations involving the transfer of control of a nuclear power plant, that newly created organizations or holding companies sign a binding agreement that holds them jointly liable for decommissioning costs associated with that nuclear power plant? What would be the impact of such actions?

C.4. Should the NRC require a licensee to provide a reasonable assurance of the availability of funds for decommissioning by imposing a minimum level of net worth, cash flow, or other financial measure (similar to 10 CFR Part 30, Appendices A and B)? If below the minimum levels, the licensee would no longer be allowed to accumulate decommissioning costs over remaining facility life, but would need a guarantee that funds would be available for decommissioning through various financial measures. What financial measures would be effective and reasonable?

C.5. Would PUCs and FERC be willing to certify that licensees under their jurisdictions, both electric utility and Part 50 licensees other than electric utilities, would be allowed to collect sufficient revenues through rates to complete decommissioning funding?

C.6. What would be the impact if the NRC required licensees to accelerate collection of decommissioning funds such that decommissioning funding for all plants would be complete within 10 years (or some other time period)?

C.7. Assume that licensees have accumulated funds that are determined to be adequate based on current estimates of decommissioning costs. If these estimates turn out to be low far in the future (for example, if final dismantlement occurs after a 50 year safe storage period), how will underfunding be remedied? What measures should the NRC consider for obtaining assurance of funds for such situations? Should the NRC require larger contingency factors in estimates to cover such situations?

C.8. Would it be feasible for the nuclear industry to develop a captive insurance pool to pay for decommissioning funding shortfalls that result from premature decommissioning? Could such a pool be structured similarly to Nuclear Mutual Limited (NML) and Nuclear Electric Insurance Limited (NEIL), who currently insure on-site property damage and replacement power of member utilities?

C.9. If PUC or FERC oversight is either substantially limited or eliminated, are there any other options for financial assurance of decommissioning that the NRC should consider?

The preliminary views expressed in this notice may change in light of comments received. In any case, there will be another opportunity for additional public comment in connection with any proposed rule that may be developed by the Commission.

PART 50 - DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

The authority citation for Part 50 continues to read as follows:

AUTHORITY: Secs. 102, 103, 104, 105, 161, 182, 183, 186, 189, 68 Stat. 936, 937, 938, 948, 953, 954, 955, 956, as amended, sec. 234, 83 Stat. 1244, as amended (42 U.S.C. 2132, 2133, 2134, 2135, 2201, 2232, 2233, 2236, 2239, 2282); secs. 201, as amended, 202, 206, 88 Stat. 1242, as amended, 1244, 1246 (42 U.S.C. 5841, 5842, 5846).

Section 50.7 also issued under Pub. L. 95-601, sec. 10, 92

Stat. 2951 as amended by Pub. L. 102-486, sec. 2902, 106 Stat 3123,

(42 U.S.C. 5851). Section 50.10 also issued under secs. 101, 185, 68 Stat. 936, 955, as amended (42 U.S.C. 2131, 2235); sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.13, 50.54(dd), and 50.103 also issued under sec. 108, 68 Stat. 939, as amended (42 U.S.C. 2138). Sections 50.23, 50.35, 50.55, and 50.56 also issued under sec. 185, 68 Stat. 955 (42 U.S.C. 2235). Sections 50.33a, 50.55a and Appendix Q also issued under sec. 102, Pub. L. 91-190, 83 Stat. 853 (42 U.S.C. 4332). Sections 50.34 and 50.54 also issued under sec. 204, 88 Stat. 1245 (42 U.S. C. 5844). Sections 50.58, 50.91, and 50.92 also issued under Pub. L. 97-415, 96 Stat. 2073 (42 U.S.C. 2239). Section 50.78 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152). Sections 50.80 - 50.81 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Appendix F also issued under sec. 187, 68 Stat. 955 (42 U.S.C 2237).

Dated at Rockville, Maryland, this ___ day of _____, 1996.

For the Nuclear Regulatory Commission.

_____
John C. Hoyle,
Secretary of the Commission.

ATTACHMENT 2

RULEMAKING PLAN FOR AMENDING NUCLEAR POWER REACTOR DECOMMISSIONING FINANCIAL ASSURANCE IMPLEMENTATION REQUIREMENTS

REGULATORY PROBLEM AND ISSUES TO BE RESOLVED

The staff has determined that there is a need to update NRC's financial assurance requirements for the decommissioning of nuclear power plants. The impact of deregulation of the power generating industry has created potential uncertainty with respect to the availability of decommissioning funds and requires a modification of the financial mechanism required to provide the decommissioning funds when needed. Along with the modification, a monitoring of such a mechanism would be required.

Current rule requirements.

Requirements pertaining to financial assurance for the decommissioning of nuclear power reactors are contained in § 50.75. Under § 50.75(e)(3), the NRC allows power reactor licensees, who are defined as "electric utilities" under 10 CFR 50.2, to set aside funds annually over the estimated life of the reactor. It was the capability to collect funds through the ratepayer that allowed these licensees to use an external sinking fund. Under § 50.75(e)(2), the NRC requires non-electric utilities to set aside an external sinking fund coupled with a surety method or insurance. However, with the advent of deregulation, the NRC needs to clarify the definition of "electric utility"[(3)]. These funds are to be placed in external decommissioning trust or escrow accounts so as to be reserved only for decommissioning activities.[(4)] Under the definition of external sinking fund, power reactor licensees must accumulate all the funds estimated to be needed for decommissioning by the time their facilities are permanently shut down. Although § 50.75(e) also allows power reactor licensees to use surety bonds, letters of credit, and prepayment to provide funding assurance, virtually all power reactor licensees use the external sinking fund method of assurance.

Regarding the financial assurance implementation requirement, the intent of the current decommissioning rule is that the assurance mechanism ensures that funds for decommissioning can be obtained when necessary with reasonable assurance. The inability of the licensee to provide such assurance can be considered in some circumstances, if cleanup is over long periods, to result in a health and safety issue and certainly is a financial risk to taxpayers (i.e., if the licensee cannot pay for decommissioning, the taxpayers would ultimately pay the bill.) Such a finding provided the basis for the current decommissioning rule requirements. At the time the decommissioning rule was finalized, the Commission believed that for a regulated power reactor utility, an external reserve account collected over the estimated remaining reactor life would provide the necessary required reasonable assurance. As a conservatism built into the rule, the NRC decided not to allow licensees to take credit for earnings on their trust funds while their reactors were in extended safe storage. Rather, the NRC implicitly assumed that, during safe storage the rate of return on external decommissioning trust funds would equal the decommissioning cost escalation rate. Thus, the after-tax, after inflation earnings rate would effectively be zero.

When the NRC promulgated the 1988 decommissioning rule, it did not require licensees to report periodically on the status of their decommissioning funds. Rather, NRC viewed licensee compliance with the funding assurance requirements as a matter to be determined through the inspection process when necessary. Also, the NRC respects the State Public Utility Commissions' (PUCs) and the Federal Energy Regulatory Commission's (FERC) authority to set annual contribution rates to decommissioning funds and to establish investment and other management criteria for the funds. The PUCs and FERC also actively monitor decommissioning funds of licensees under their jurisdiction as part of their rate regulatory responsibility. Moreover, the Financial Accounting Standards Board (FASB), a national organization that sets accounting standards, recently initiated a review of reporting of decommissioning obligations on electric utility financial statements. Although FASB has not established a final standard, it appears that it will increase the level of detail on their financial statements. If adopted, this standard would likely give the NRC and others additional information on the status of decommissioning funds. For these reasons, the staff has not devoted significant resources to date on determining decommissioning fund status.

Regulatory problem to be resolved.

For the following reasons, the staff is considering amending the rule.

Issue A: Should we limit or supplement the method for assuring the availability of decommissioning funds for situations where electric utilities' access to collection of funds from ratepayers becomes restricted due to the impact of deregulation?

FERC and several State PUCs (e.g., California and Michigan) have recently initiated policy changes that would, over the next several years, deregulate utilities providing electric services. Although exact prediction of the structure of the future electric utility industry is difficult, there may be cases where companies providing electricity generation, including generation from nuclear power reactors, will be separated from companies providing both bulk transmission services for wholesale and distribution to the end-use customer. As these policy changes were developing, several owners of NRC-licensed power reactors established holding companies that control NRC licensees.

In view of impending utility deregulation, the distinction between owners and operators of nuclear power plants may

become less clear. All plant co-owners are licensees but they may only be licensed to possess the plant and its radioactive material. Normally, only one licensee, usually the majority owner, is licensed to operate the plant. However, some utilities have established generating subsidiaries to operate the plant. If the utility parent remains on the license, or otherwise commits through operating agreements or other mechanisms, to pay safety-related costs, including decommissioning, there should be no serious concern that decommissioning funds will be unavailable. However, as deregulation proceeds, both plant operators and co-owners may reduce or eliminate their links with affiliated electric utilities.

As indicated in SECY-94-280 (November 18, 1994), the staff's position is that there appears to be no immediate safety concern with these reorganizations, particularly since the staff has sought and received commitments that licensees will notify the NRC when significant assets are transferred from a licensee to its non-licensed parent company. However in the longer-term, trends in deregulation and reorganization may cause power reactor licensees to have smaller asset bases and reduced recourse to decommissioning cost recovery through rates approved by PUCs or FERC. This would be contrary to the assumptions underlying the Commission's decision to allow regulated electric utilities more liberal methods (i.e., uninsured external sinking fund) of providing decommissioning funding assurance than other NRC licensees.

Issue B: Should the NRC allow licensees to take credit for earnings on their trust funds during an extended safe storage period?

Some licensees have argued that they are able to earn a positive real rate of return on their decommissioning funds during safe storage. These licensees argue that by requiring all decommissioning funds to have been collected by shutdown, the NRC may require some licensees to collect more funds from ratepayers than is absolutely necessary given the potential for accrual of interest. If, as a result, substantially more funds than needed are collected from ratepayers while the plant was operating, this would result in an unwarranted expense to licensees, their ratepayers, or stockholders. Also, inequities could be created between generations of ratepayers.

Issue C: Should the NRC determine compliance with decommissioning funding assurance regulations by power reactor licensees through a periodic reporting requirement or through the inspection process?

The NRC has not deemed it necessary nor has monitored licensee compliance with the decommissioning rule's funding assurance requirements. The evolving situation with utility financial viability has resulted in a need for the NRC to monitor more closely the availability of decommissioning funds as required.

Recently the Cajun Electric Power Cooperative, a licensee of the River Bend nuclear power plant, filed for Chapter 11 Bankruptcy. Cajun is past due on the payment on some of its liabilities. Documents submitted by Cajun and Gulf States Utilities indicate that Cajun has made and continues to make required payments for the ultimate decommissioning of the River Bend unit. Two other power reactor licensees went through Chapter 11 bankruptcy reorganization without degradation of decommissioning funding assurance(5).

Also, for the past several years Congress and various media organizations have requested the NRC to provide information on the status of decommissioning funds. The NRC has thus far been unable to honor these requests.

PRELIMINARY REGULATORY ANALYSIS

Options.

Based on the information presented above, the options for rule amendment considerations concerning implementation of financial assurance mechanisms and monitoring of the financial assurance plan can be enumerated in the following three categories. The first relates to the financial assurance implementation mechanism. The second relates to the collection of decommissioning funds by licensees during the safe storage period. The last addresses licensee monitoring or reporting to confirm compliance with financial assurance requirements. Each of the three issues discussed above has both a no-action option and one that, if adopted, would change existing NRC policy.

A. Additional assurance needed due to deregulation?

(1) No action option (i.e., retain the current financial assurance implementation mechanism);

(2) Revise the regulations to require that electric utility reactor licensees provide assurance that the full estimated cost of decommissioning will be available through a formal guarantee mechanism if they are no longer able to set rates or are not subject to rate regulation by the PUCs or FERC (e.g., restrict the definition of "electric utility" in §50.2 to exclude reference to indirect ability to recover cost of electricity generation or distribution);

B. Allow credit for earnings during safe storage period?

(1) No action option (i.e., continue to require all funds needed for decommissioning to be available at time of shutdown);

(2) Allow licensees to collect decommissioning funds during the safe storage period and/or allow licensees to assume a positive real rate of return on decommissioning funds during safe storage;

C. Collection monitoring through reporting?

(1) No action option (i.e., continue to require no periodic reporting of decommissioning funding requirements, but allow for their inspection); and

(2) Implement a periodic reporting requirement.

Decision criteria.

Option (A-1): Continue allowing power reactor licensees to fund decommissioning over the estimated remaining life of the facility without requiring a formal guarantee mechanism for the balance of decommissioning costs that remains unfunded. This option, the no action option, would maintain the distinction between electric utility licensees as currently defined and other NRC-licensed facilities and would continue to recognize the unique status of regulated electric utilities in terms of their ability to provide long-term assurance of decommissioning funding through the rate-making process.

Option (A-2): Revise the Commission's decommissioning regulations to require that, in situations where an electric utility's access to collect funds from ratepayers is limited due to deregulation, power reactor licensees provide assurance of the full estimated cost of decommissioning through a formal guarantee mechanism. This could take the form of either: (a) a guarantee of any unfunded decommissioning liability with prepayment, a surety bond, letter of credit, or other

method allowed in § 50.75(e)(1)(iii); (b) a parent company or self guarantee through passing a financial test similar in scope to the one contained in 10 CFR Part 30, Appendices A and C, to assure that a licensee has an adequate resource base to fund decommissioning; or (c) a certification to the NRC from the rate-making authority that all unfunded decommissioning obligations under NRC regulations will be collected in rates.

Licensees must be able to obtain funds for decommissioning when necessary. The inability of a licensee to provide decommissioning funding assurance may result in a potential heath and safety issue and clearly a financial risk to taxpayers. For a regulated power reactor utility, an external reserve account would provide the necessary required reasonable assurance. This reasonable assurance may cease to exist if electric utilities are deregulated, particularly if a power reactor is shut down prematurely [(6)]. Therefore, the staff regards Option (A-2) as the recommended option because it provides additional assurance that decommissioning funds will be available along with a tiered system of choices to licensees in selecting financial assurance mechanisms that are appropriate to their circumstances.

Comparison of Options (A-1) and (A-2): The regulatory analysis for Option (A-1) was considered in the 1988 decommissioning rule. Because this option proposes to continue the current methods of funding assurance, no additional costs or benefits should occur. Option (A-2) would impact only those licensees that were no longer able to set rates subject to a PUC or FERC. There are presently no power reactor licensees in this category. For those non-rate setting licensees that would attempt to qualify for a parent company or self-guarantee, the staff estimates 8 to 40 hours would be needed to complete the financial test documents. The burden on the NRC to review these documents would be approximately 2 hours per licensee. If one-third of the present licensees were in this category, the total burden on the NRC is estimated to be less than 100 staff hours.

Those licensees unable to qualify for the financial test would be required under Option (A-2) to obtain a surety bond, letter of credit, or other acceptable guarantee mechanism for the projected unfunded decommissioning expense balance. If this balance is assumed to be $100 million for the typical licensee, at a cost of 1% to 2% of the amount guaranteed, the cost per affected licensee would be $1 million to $2 million per year. This cost would decline as licensees' decommissioning trust funds increased over time. Total cost to all licensees would thus be $40 million to $120 million per year to start, but would subsequently decline as decommissioning trust funds increased. However, these costs would only be incurred in cases where licensees can no longer collect decommissioning costs through rate payments.

Option (B-1): Continue to require all funds needed for decommissioning to be available at time of shutdown.

Option (B-2): Allow licensees to collect decommissioning funds during the safe storage period and/or allow licensees to assume a positive real rate of return on decommissioning funds during safe storage.

With respect to when decommissioning funds should be available, reasonable assurance is best provided by having funds collected during plant operation (Option (B-1)). However, the assumption of a zero real rate of return is too conservative. Given that historically, real (i.e. inflation-adjusted, after-tax) rates of return using U.S. Treasury issues have been around 2%, the staff proposes to allow licensees to use this rate in their calculations (Option (B-2)). If rates turn out to be lower than this, § 50.82 already provides that licensees are to adjust decommissioning funds during safe storage to reflect changes in cost estimates. Thus, there is little risk that there will be major shortfalls in decommissioning funds.

Comparison of Options (B-1) and (B-2): Since Option (B-1) is the present situation, and the staff is proposing relief from current requirements, Option (B-2), there is no adverse impact on licensee or NRC resources.

Option (C-1): Continue to require no periodic reporting, but rely on the inspection process to determine power reactor licensee compliance with NRC decommissioning funding requirements.

Option (C-2): Implement a periodic reporting requirement.

With respect to reporting requirements, the staff recommends Option (C-2), to implement a periodic reporting requirement. The staff needs appropriate assurance that licensees are collecting their required decommissioning funds. This can be done by licensees submitting a simple statement to the NRC of information they have available regarding funds in their external account. This choice is considerably less costly to both the licensee and the NRC than relying on inspections and involves little effort. It is intended that in the proposed rule comments be solicited from the public on which method of providing such information to the NRC would be preferred.

Comparisons of Options (C-1) and (C-2): Because of close PUC and FERC monitoring, the staff believes that the great majority of licensees prepare and submit annual reports on decommissioning fund status to their rate regulators. Asking licensees to submit a copy of this report to the NRC would require only minimal effort by each licensee. On the other hand, obtaining this information through the inspection process would likely be more burdensome for the NRC and for those licensees inspected each year. The staff concluded that the benefit of obtaining this information through a reporting requirement, in terms of both determining licensee compliance with NRC decommissioning funding regulations and responding to Congressional and other requests, outweigh the minimal impact of the requirement and, as explained below, would be less burdensome to licensees and the NRC than relying on the NRC inspection process. Thus, the staff is proposing options for the Commission's consideration.

If the NRC imposed a periodic reporting requirement (e.g., every 3 years) on the status of decommissioning funding assurance, the staff estimates that licensees would submit approximately 100 reports every 3 years, or an average of 33 reports each year. In some cases, a report will cover more than one power reactor owned by the same licensee. In other cases, co-owners will submit separate reports for their proportionate shares of the same reactor. The impact on licensee resources should be minimal. As indicated above, most power reactor licensees already prepare annual reports for their PUCs or FERC containing the information that would be required in a periodic report. Also, virtually all licensees receive periodic reports from their decommissioning trustees giving the status of decommissioning funds. Thus, no licensee should need to expend additional preparation time in complying with an NRC reporting requirement. The impact on licensees would be in copying and transmitting information they already have, which staff estimates to be approximately 2 staff-hours per licensee or 66 staff-hours annually. If the NRC were to use FASB information, if it becomes available, no additional impact on licensees would occur since the staff could obtain this information from publicly available sources. Licensees that the NRC chose to inspect in any year would spend at least 5 staff-hours and, possibly, considerably more time preparing for the inspection, assisting the NRC during the inspection, and responding to the inspection results.

It should take approximately 1 NRC-staff hour on average to review and analyze each report. An annual summary report based on the submissions current up to that year should require approximately 8 NRC-staff hours to prepare and disseminate. No contractor effort should be needed. Thus, total NRC staff effort should be about 41 staff-hours annually (i.e., 33 reports x 1 NRC-staff hour + 8 NRC-staff hours) for a decommissioning funding status report. Using FASB information would entail similar staff effort.

The primary option to annual reports would be for the NRC to monitor compliance through selective annual inspections

of licensees. A reasonable annual inspection rate would be about 20%, or approximately 22 units, each year. Although the time to review each report would be the same (i.e., 1 staff-hour for each report), the staff would require additional coordination and communication time with the licensee for each inspection. If inspections were conducted from NRC headquarters by written correspondence or telephone, staff estimates an additional 1.5 staff-hours per inspection would be required for this coordination and communication time. If inspections were conducted at licensees' facilities, required coordination and communication time would likely increase on average to at least 8 staff-hours per inspection. An annual summary report based on the annual inspections conducted would also require about 8 staff-hours to prepare and disseminate. Thus, annual NRC staff requirements for an inspection approach would be from 63 staff-hours for headquarters-based inspections to 206 staff-hours for field-based inspections. Therefore, the staff believes that a periodic report would likely have a much smaller impact on NRC staff resources than selective inspections.

With respect to the backfit rule, the conditions under which nuclear power reactors have been regulated have changed greatly since the rule was written. Because of the NRC responding to these changing circumstances, this action is a case of adequate protection, not requiring a backfit analysis. Specifically with respect to Option (A-2), the lack of adequate financial assurance is a potential health and safety concern and a financial risk to taxpayers. The choice of a tiered option approach for the licensee, however, would help mitigate impacts that the use of an Option (A-2) requirement would impose. With respect to the backfit rule regarding Option (C-2), the reporting requirement is a reasonable and cost-effective mechanism to confirm compliance. Use of Option (C-2) would be a much more efficient expenditure of effort on the part of the licensee and the NRC than selective inspections. However, to mitigate any impacts this action would impose, it is intended that comments be solicited from the public on the option to choose for the reporting requirement.

OGC'S LEGAL SUFFICIENCY ANALYSIS DEMONSTRATING THAT NO KNOWN BASIS EXISTS FOR LEGAL OBJECTION

OGC finds that the options for the rulemakings delineated in this plan are within the authority of the Commission, granted to the agency to protect the public health and safety through licensing of commercial production and utilization facilities under the Atomic Energy Act of 1954, as amended.

Of primary concern in developing the proposed rule is the question of the backfit justification for the proposed rule. Since the primary impetus for the rulemaking appears to be the newly developed corporate organizations, the proposal seems to be a prime candidate for justification as changes necessary to maintain "adequate safety." For the options addressing new corporate organizations, the staff should plan to explicitly address the question of "adequate protection of public health and safety" in discussing the applicability of backfit rule. The backfit issue must also be addressed for the issue of periodic reporting. It is premature at this juncture to reach a conclusion on whether a reporting requirement can be justified under the backfit rule.

The staff will need to consider and get appropriate OMB approvals related to paperwork reduction activities as the financial reporting options are pursued.

As the staff pursues the options related to various corporate organizations, it will be necessary to develop strong justifications for why certain reactor owners and operators are being designated as requiring additional actions for financial assurance. These justifications will provide significant input for the backfit discussions to the extent the justifications are used to explain the basis for concluding that "adequate public health and safety" considerations satisfy backfit questions associated with this rulemaking.

While the above issues must be addressed as the options in this plan are pursued, there is nothing evident at this time to indicate that these legal issues will prevent successful pursuit of the course of action recommended in this rulemaking plan.

AGREEMENT STATE CONSIDERATIONS

Although Agreement States do not license power reactors, they are involved to some degree in the low level waste disposal process and associated costs.

SUPPORTING DOCUMENTS

A Regulatory Guide or Branch Technical Position will need to be published for this action.

RESOURCES REQUIRED

Resources are included in the current Five Year Plan to complete and implement the rulemaking. The offices involved are RES, NRR, and OGC.

IS IT RECOMMENDED THAT THE EDO ISSUE THE RULE IN ACCORDANCE WITH MANAGEMENT DIRECTIVE 9.17?

No. Due to the imposition of additional requirements of reporting and providing additional assurance of decommissioning fund availability, this is regarded as more than a minor amendment and should require a notation vote on the part of the Commission.

LEAD OFFICE STAFF AND STAFF WITHIN EACH OFFICE WHO WILL BE INVOLVED

RES/DRA	Thomas Martin	Brian Richter/Raj Auluck
NRR	Seymour Weiss	Anthony Markley/Robert Wood
OGC	Stewart Treby	Bradley Jones

USE OF STEERING GROUP

No. These rule amendments are not considered to be significantly complex to warrant a steering group.

ENHANCED PUBLIC PARTICIPATION

No. The impacts of up-front decommissioning funding have already been accounted for in earlier decommissioning rulemaking. These proposed amendments are simply providing the licensees with greater flexibility of implementation.

SCHEDULE

Expressed in terms of time from approval of the Rulemaking Plan.

Proposed rule to EDO, includes Regulatory Guide 1 year Public comment period ends	18 months
Final rule to EDO	2 years

ATTACHMENT 3

DRAFT PUBLIC ANNOUNCEMENT

NOTICE OF INTENT TO AMEND REGULATIONS RELATING
TO FINANCIAL ASSURANCE REQUIREMENTS FOR THE
DECOMMISSIONING OF NUCLEAR POWER PLANTS

The Nuclear Regulatory Commission has issued an Advance Notice of Proposed Rulemaking (ANPR) on the Nuclear Power Reactor Decommissioning Financial Assurance Implementation Requirements.

The impact of deregulation of the power generating industry has created uncertainty with respect to the availability of decommissioning funds and may require a modification of the financial mechanisms required by the NRC to provide decommissioning funds when needed. Additionally, the NRC is considering requiring power reactor licensees to report periodically on the status of their decommissioning funds and allowing credit for earnings on decommissioning trust funds during extended storage. The advance notice of proposed rulemaking was issued to invite public comment on issues pertaining to the form and content of the NRC's nuclear power reactor decommissioning financial assurance requirements as they relate to electric utility deregulation.

ATTACHMENT 4

The Honorable Dan Schaefer, Chairman
Subcommittee on Energy and Power
Committee on Commerce
United States House of Representatives
Washington, DC 20515

Dear Mr. Chairman:

Enclosed for the information of the Subcommittee is a copy of the advance notice of proposed rulemaking on Nuclear Power Reactor Decommissioning Financial Assurance Implementation Requirements that the NRC intends to publish shortly in the Federal Register.

This advance notice is being issued to invite public comment on issues pertaining to the form and content of the NRC's nuclear power electric decommissioning financial assurance requirements as they relate to electric utility deregulation in 10 CFR 50.2, 50.75, and 50.82.

Sincerely,

Dennis K. Rathbun, Director
Office of Congressional Affairs

Enclosure: Federal Register Notice

cc: Representative Frank Pallone

The Honorable Lauch Faircloth, Chairman
Subcommittee on Clean Air, Wetlands, Private
Property and Nuclear Safety
Committee on Environment and Public Works
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

Enclosed for the information of the Subcommittee is a copy of the advance notice of proposed rulemaking on Nuclear Power Reactor Decommissioning Financial Assurance Implementation Requirements that the NRC intends to publish shortly in the Federal Register.

This advance notice is being issued to invite public comment on issues pertaining to the form and content of the NRC's nuclear power electric decommissioning financial assurance requirements as they relate to electric utility deregulation in 10 CFR 50.2, 50.75, and 50.82.

Sincerely,

Dennis K. Rathbun, Director
Office of Congressional Affairs

Enclosure: Federal Register Notice

cc: Senator Bob Graham

---

1. "Electric utility means any entity that generates or distributes electricity and which recovers the cost of this electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority. Investor-owned utilities, including generation or distribution subsidiaries, public utility districts, municipalities, rural electric cooperatives, and State and Federal agencies, including associations of any of the foregoing, are included within the meaning of 'electric utility.'"

2. Note: Many licensees that have established decommissioning trust funds for their power reactors are making deposits into their trust accounts both for decommissioning costs as defined under § 50.2 and for other decommissioning-associated costs such as interim spent fuel management and storage and "green field" costs. The NRC allows licensees to deposit funds in the same trust account as long as the trust has sub-accounts that clearly delineate the purposes of the sub-account. A trust or sub-account established to provide assurance of NRC-defined decommissioning costs should be stipulated to cover NRC-defined decommissioning costs before any other purpose.

3. Electric utility means any entity that generates or distributes electricity and which recovers the cost of this electricity, either directly or indirectly, through rates established by the entity itself or by a separate regulatory authority. Investor-owned utilities, including generation or distribution subsidiaries, public utility districts, municipalities, rural electric cooperatives, and State and Federal agencies, including associations of any of the foregoing, are included within the meaning of "electric utility."

4. Note: Many licensees that have established decommissioning trust funds for their power reactors are making deposits into their trust accounts both for decommissioning costs as defined under § 50.2 and for other decommissioning-associated costs such as interim spent fuel management and storage and "green field" costs. The NRC allows licensees to deposit funds in the same trust account as long as the trust has sub-accounts which clearly delineate the purposes of the sub-account. A trust or sub-account established to provide assurance of NRC-defined decommissioning costs should be prioritized to cover NRC-defined decommissioning costs before any other purpose.

5. To date, the Bankruptcy Court has considered decommissioning and other safety-related expenses for nuclear power plant licensees to be high priority expenses and has allowed them to be paid ahead of most other creditor claims. While these experiences provide some comfort that bankruptcies are not presenting immediate problems for decommissioning fund adequacy, there is no assurance that Bankruptcy Courts will treat unregulated power generators in the same manner as regulated utilities.

6. For power reactor licensees who are "electric utilities" as defined in § 50.2, including generating or operating subsidiaries, decommissioning funding assurance for prematurely shut down plants was addressed in a 1992 rulemaking (57 FR 30383; July 9, 1992). This rule amended § 50.82 to provide that the NRC will evaluate, on a case-by-case basis, the decommissioning funding plans of licensees who have not accumulated sufficient funds because their plants were shut down prematurely. Essentially the NRC evaluates the particular safety and financial situation of each licensee to determine if the ability of a licensee to collect funds after shutdown provides reasonable assurance that funds will be available when needed. The staff has evaluated several funding plans on a case-by-case basis and has found that, for electric utilities that are regulated or set their own rates, this approach has worked well. However, without rate regulation or rate-setting ability, assurance of decommissioning costs, particularly for prematurely shut down plants, may not be adequately provided under current NRC policy.