Please circulate:
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February 1, 2002

C O R R E C T I O N  N O T I C E

TO ALL HOLDERS OF

SECY-01-0207 - LEGAL AND FINANCIAL ISSUES RELATED TO EXELON'S PEBBLE BED MODULAR REACTOR (PBMR)

PLEASE REPLACE PAGES 13 AND 23 OF THE ATTACHMENT TO SECY-01-0207 WITH THE ATTACHED REPLACEMENT PAGES. THIS MAKES CHANGES THAT WERE DIRECTED BY THE SRM SO THAT THE PAPER COPY WILL REFLECT THE VERSION RELEASED TO THE PUBLIC.

ATTACHMENT:
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fund option. A sinking fund is a fund that is accumulated by making periodic deposits and is reserved for a specific purpose, such as retirement of debt or decommissioning of a commercial nuclear reactor. The fund is characterized by making uniform periodic payments at compound interest in order to accumulate a given sum at a given future time. Exelon's proposal is a form of a sinking fund. The staff does not believe that Exelon's proposal provides the same level of assurance as other funding options available to non-rate-regulated entities. Thus, the staff believes that Exelon's proposed method is not consistent with current requirements. Further, an exemption to use a sinking fund is likely to be difficult to justify technically since Exelon, as a nonutility, would not have a rate base rate of return (i.e., a guaranteed rate base).

However, as noted in the staff's position in item F., "Minimum Decommissioning Cost Estimates," Exelon would be able to use an adequately justified site-specific estimate for decommissioning its pebble bed modular reactor. Because Exelon's decommissioning cost estimate would be based on a site-specific study, the staff interprets 10 CFR 50.75(e)(1)(i) (the prepayment option) to allow Exelon to take the 2-percent real earnings credit for the whole period, if necessary, depending on the timing of each module's final decontamination schedule and the schedule of cash flows necessary to complete decommissioning if specifically outlined in the site-specific estimate. The present value of even a relatively large decommissioning cost, when discounted back at 2-percent real rate of return, should not be very large and should thus not require an onerous initial deposit.

Staff Position

Exelon proposes to seek a license as a nonutility. A nonutility cannot use the sinking fund option. Exelon's proposed payment scheme would not provide the same assurance of decommissioning funding as the other funding options. However, the staff interprets the regulation to allow Exelon, using the prepayment option, to use a site-specific decommissioning cost estimate and take the 2-percent real earning credit for 100 years, if necessary. Exelon would therefore not be required to make an onerous initial deposit.

F. Minimum Decommissioning Cost Estimates

Issue

Can a PBMR licensee submit decommissioning cost estimates specifically for a PBMR and on a per module basis?

Current Regulations

The minimum amount of decommissioning funds required of BWRs and PWRs is regulated through the minimum decommissioning funds equation in 10 CFR 50.75(c). There is no formula specifically for gas-cooled reactors. However, the regulations allow the use of a site-specific estimate instead of the amount calculated through the generic formula.

Staff Position

The CFO plans to include in the FY 2002 fee rulemaking, revisions to Part 171 that would specifically authorize annual fees to be charged to facilities licensed under Part 52; clarify that the NRC annual fee is charged per license, not per unit; and establish when NRC will begin to charge an annual fee to a holder of a Part 52 combined license. Until a final decision is made on the number of modules that will be allowed under a single license, and the NRC receives sufficient information from Exelon to enable it to determine what kind of regulatory oversight the proposed design will likely require, no staff recommendations on establishing a new license fee category for modular reactors will be offered.

For a Part 52 combined license, the staff plans to assess the annual fee only after construction has been completed, all regulatory requirements have been met, and the Commission has authorized operation of the reactor(s).

J. Financial Protection

Issue

Should Price-Anderson financial protection requirements be applied to each modular reactor unit or to the entire PBMR "facility"?

Current Statutory Provisions and Regulations

The Price-Anderson Act, which is contained in Section 170 of the AEA (42 U.S.C. § 2210), is implemented by the NRC via its 10 CFR Part 140 regulations. The Price-Anderson Act contains three distinct elements or components. First, it establishes a ceiling on the aggregate damage award for nuclear tort claims that can be imposed against an entity involved in the use or handling of radioactive material. Second, it indemnifies any entity exposed to potential liability for activity resulting in a nuclear incident, even if the entity did not directly participate in the activity. Third, it establishes an indemnification scheme through which the federal government requires entities involved in nuclear activities to obtain private insurance to a certain level.

With respect to the third component, the Price-Anderson indemnification scheme, Section 170b. of the act establishes that the amount of primary financial protection required for facilities designed to produce substantial amounts of electricity and having a rated capacity of 100,000 electric kilowatts (100 MWe) or more must be equal to the maximum amount of commercially and reasonably available nuclear liability insurance, which is currently $200 million (42 U.S.C. § 2210b.(1)). Primary financial protection may include private insurance, private contractual indemnities, self-insurance, other proof of financial responsibility, or some combination thereof. In addition, Section 170b. requires licensees of such facilities to participate in an industry retrospective rating plan, or secondary layer of protection, which provides for the assessment of additional deferred premiums in the event that the public liability from a nuclear incident exceeds or appears likely to exceed the level of primary financial protection required of the licensee involved in the nuclear incident. The total amount of financial protection presently available under the act from both the primary and secondary layers is approximately $9.7 billion (the primary layer of $200 million plus a secondary layer of