

From: James Turdici
To: Peter Rabideau
Date: 9/20/01 7:55AM
Subject: Pebble Bed

Pete:

Per our discussion attached are both the OGC version (fees_1.wpd) and our latest draft (2001 11 SECY on white....) for the annual fee response based on Exelon's white paper. I have forwarded my entire file to you. The project lead is Diane Jackson and the OGC POC is Marty O'Neill. Diane mentioned that is important to get a draft asap as they are trying to put out a draft Commission paper for review. Also, she advised that the goal is to get it to the Commission in late Oct or early November.

Jim

CC: Diane Dandois; Glenda Jackson

B/30

Annual Fees

Issue

How should annual fees be assessed for a set of modular reactors that constitute a PBMR facility? When should annual fees commence for a PBMR facility that has been issued a single combined operating license?

Current Regulations

The NRC's annual fee regulations are in 10 CFR Part 171. Part 171 covers annual fees associated with Part 50 licenses, but does not specifically cover annual fees associated with combined licenses issued under Part 52. A modification to Part 171 would be necessary prior to the issuance of a Part 52 combined operating license for a PBMR facility.

Under current regulations, each person licensed to operate a power reactor shall pay an annual fee "for each unit for each license." 10 CFR 171.15(a). However, under 10 CFR 171.11(b), the Commission, either on its own or by application from "an interested person," can grant an exemption from annual fees if it determines that doing so would not violate any law and would be in the public interest. In addition, the Commission has established specific criteria in its regulations that it will consider in reviewing annual fee exemption requests for reactors, including (1) age of the reactor; (2) the size of the reactor; (3) the number of customers in rate base; (4) the net increase in KWh cost for each customer directly related to the annual fee assessed under part 171; and (5) any other relevant matter which the licensee believes justifies the reduction of the annual fee. 10 CFR 171.11(c)(1)-(5).

Preapplicant's Position

The current provisions of 10 CFR 171.15(a) that each person licensed to operate a power reactor shall pay an annual fee "for each unit for each license," means that the NRC could impose a separate fee for each module (reactor). Therefore, the annual fee for a 10-module PBMR facility would be greatly disproportionate to the annual fee for an equivalent sized BWR or PWR. This could place a modular reactor design at a competitive disadvantage with other designs and act as a deterrent to the development of modular reactors. The NRC has commented that "the Commission has determined that the bulk of its licensee-related activities have and will continue to be directly related to the regulation of large power reactors." 51 Fed. Reg. 24084. Exelon presumes that this statement explains the apparent decision to require fees for each reactor instead of the entire facility or site. In 1986, when the rule was originally considered, almost all commercial nuclear power facilities were large reactors, and a multiple modular facility had not yet been developed or approved.

Exelon believes it is not reasonable to treat multiple PBMR modules at a site in the same manner as multiple PWRs or BWRs at a site. For several reasons, Exelon contends that the regulatory effort for a 10-module facility will be comparable to or less than the effort required for a large BWR or PWR. Exelon presumes that the modules at a site will have a single licensing basis. Additionally, Exelon maintains that the design is simpler and safer than the design of the PWR or BWR, thereby simplifying NRC's oversight responsibilities. Furthermore, because the NRC assesses annual fees in part to recover costs that cannot be assigned to any particular facility, Exelon claims that this would penalize Exelon for selecting a modular design rather than

a large LWR design and would discourage the development of a newer and safer technology.

Exelon proposes that rulemaking for 10 CFR 171.15 be initiated and completed prior to the first PBMR application to specify that only one annual fee will be required for each "set" of PBMR modules. According to Exelon, in this rulemaking, the NRC should define the term "modular facility" and limit the total size for a modular reactor facility to a maximum of 1500 MWe.

Discussion

The establishment of annual fees for a PBMR licensed under Part 52 will require a revision to 10 CFR Part 171. This should occur before the Commission authorizes operation of a PBMR.

In addition to budgeted dollars and estimated part 170 fees, two other major considerations would determine the amount of the annual fee for the PBMR. These considerations are (1) the number of modules that are included within a single license and (2) the agency's regulatory oversight necessary for the PBMR.

With respect to the first consideration, the annual fee for each operating power reactor is currently determined by dividing the total annual fee amount for the power reactor class by the number of operating power reactor *licenses*. It is currently anticipated that up to ten Pebble Bed modules could be allowed under a single license. Therefore, a license authorizing operation of a PBMR would be subject to an annual fee comparable to the annual fee being charged for a Part 50 operating license, regardless of the number of modules at the site. However, should the PBMR licensee construct and operate only one module, approximately 300-450 MWe, the licensee could, as discussed above, seek a full or partial exemption from annual fees under 10 CFR 171.11. The licensee, however, would have to meet the deadline requirements specified in Section 171.11(b) (e.g., exemption requests must be filed 90 days from the effective date of the final rule establishing the annual fees for which the exemption is sought).

With respect to the second consideration, agency oversight, annual fees for a given class of licenses are based on NRC's budgeted costs allocated to the class for generic activities and other costs not recovered under 10 CFR Part 170. At this time, it is not entirely clear whether the agency's generic and other efforts to regulate a PBMR will be significantly different from its regulation of other types of operating power reactors. NRR has provided some indication that it is unlikely that the generic regulatory oversight of PBMRs will be significantly different from that of existing reactors. Depending on how the regulatory efforts differ and the magnitude of the resources (FTE, contract costs and associated indirect costs), a separate class of licensees could be established.

While a PBMR reactor potentially having up to 10 modules might have the largest megawatt output capacity compared to all existing reactors, historically, the upper limits of that capacity have not been a consideration in determining the annual fee amount. This is because the agency does not consider the economic advantages or disadvantages of possessing a license when assessing annual fees.

Under section 6101(c)(1) of OBRA, the NRC may impose annual fees on "licensees." Historically, the agency has taken the position that annual fees should be assessed upon issuance of an operating license or a certificate holder (such as the USEC). Consistent with this approach, it is OGC's understanding that with respect to a holder of a combined construction

permit and operating license under 10 CFR Part 52, the CFR contemplates assessing the annual fee only after construction is complete, all regulatory requirements have been met, and the Commission has authorized operation of the facility.

Recommendation

There appears to be no statutory language that would require each modular unit at a site to pay the same fee charged to a single boiling water reactor or pressurized water reactor at a site. Costs must be assessed against all licensees in a "fair and equitable" manner and, "to the maximum extent practicable", must reflect a "reasonable relationship" between the fees charged and the services rendered. Therefore, if the NRC's regulatory costs for PBMR's are approximately the same as existing power reactors and the license can include multiple modules, the PBMR annual fees would be of the same magnitude as existing power reactors. However, if the NRC's regulatory costs are significantly lower or higher than those for other types of operating reactors, the Commission could consider a partial exemption or establishment of a separate license class. Until a final decision is made on the number of modules that will be allowed under a single license and NRR receives more data from Exelon and is in a better position to make the appropriate preliminary determinations about what kind of staff services the proposed design will likely require, no recommendations are offered.

Annual Fees

Issue

How should annual fees be assessed for a set of modular reactors that constitute a PBMR facility? When should annual fees commence for a PBMR facility that has been issued a single combined operating license?

Current Statutory Provisions and Regulations

The Omnibus Budget Reconciliation Act of 1990 as amended (OBRA) gives the NRC rulemaking authority to assess annual charges. The statute establishes two standards for assessing charges: Fees charged must be "fair and equitable" in allocating the "aggregate amount of charges" among licensees, and, "to the maximum extent practicable," fees charged must have "a reasonable relationship to the cost of providing regulatory services and may be based on the allocation of the Commission's resources among licensees or classes of licensees." Under section 6101(c)(2) of OBRA, the aggregate amount of annual charges collected from all licensees must, in fiscal year 2001, equal 98 percent of the budget authority of the Commission in the fiscal year when the charge is collected, less any amount appropriated to the Commission from the Nuclear Waste Fund and less the amount of fees collected for specific services rendered by the NRC under the Independent Offices Appropriations Act.

The NRC exercises its fee-assessment authority via 10 CFR part 171. Part 171 covers annual fees associated with Part 50 licenses, but does not specifically cover annual fees associated with combined licenses issued under part 52. A modification to part 171 would be necessary prior to the issuance of a Part 52 combined operating license for a PBMR facility. The current regulations state that each person licensed to operate a power reactor shall pay an annual fee "for each unit for each license."

Under current regulations, each person licensed to operate a power reactor shall pay an annual fee "for each unit for each license." 10 CFR 171.15(a). However, under 10 CFR 171.11(b), the Commission, either on its own or by application from "an interested person," can grant an exemption from annual fees if it determines that doing so would not violate any law and would be in the public interest. The Commission has established specific criteria in its regulations that it will consider in reviewing exemption requests, including (1) age of the reactor; (2) the size of the reactor, (3) the number of customers in rate base; (4) the net increase in KWh cost for each customer directly related to the annual fee assessed under part 171; and (5) any other relevant matter which the licensee believes justifies the reduction of the annual fee. 10 CFR 171.11(c)(1)-(5). Therefore, the Commission is authorized to grant such exemptions and, where it finds justification to do so, can authorize full or partial exemptions from annual fees on a case-by-case basis.

Preapplicant's Position

The current 10 CFR 171.15(a) states that each person licensed to operate a power reactor shall pay an annual fee "for each unit for each license," which means that the NRC could impose a separate fee for each module (reactor). Therefore, the annual fee for a 10-module PBMR facility would be greatly disproportionate to the annual fee for an equivalent sized BWR or PWR. This could place a modular reactor design at a competitive disadvantage with other designs and act

as a deterrent to the development of modular reactors. The NRC has commented that "the Commission has determined that the bulk of its licensee-related activities have and will continue to be directly related to the regulation of large power reactors." 51 *Fed. Reg.* 24084. Exelon presumes that this statement explains the apparent decision to require fees for each reactor instead of the entire facility or site. In 1986, when the rule was originally considered, almost all commercial nuclear power facilities were large reactors, and a multiple modular facility had not yet been developed or approved.

Exelon believes it is not reasonable to treat multiple PBMR modules at a site in the same manner as multiple PWRs or BWRs at a site. For several reasons, Exelon contends that the regulatory effort for a 10-module facility will be comparable to or less than the effort required for a large BWR or PWR. For example, Exelon posits that the modules at a site will presumably have a single licensing basis. Additionally, Exelon maintains that the design is simpler and safer than the design of the PWR or BWR, thereby simplifying NRC's oversight responsibilities. Furthermore, because the NRC assesses annual fees in part to recover costs that cannot be assigned to any particular facility, Exelon claims that this would penalize Exelon for selecting a modular design rather than a large LWR design and would discourage the development of a newer and safer technology.

Exelon proposes that rulemaking for 10 CFR 171.15 be initiated and completed prior to the first PBMR application to specify that only one annual fee will be required for each "set" of PBMR modules. According to Exelon, in this rulemaking, the NRC should define the term "modular facility" and limit the total size for a modular reactor facility to a maximum of 1500 MWe.

Discussion

It is clear from the language of OBRA that the NRC has great flexibility in determining policies and practices in recovering the statutorily-directed amount. The Commission is within its statutory bounds as long as the rule results in a fair and equitable allocation of costs to all licensees, and as long as there is a reasonable relationship between the services rendered by staff and the costs charged for those services. As long as these standards are met, under the current legislation, the Commission could conceivably initiate a rulemaking to create a new category of fees to reflect a potentially lower fee base for modular design reactors.

In addition to budgeted dollars and estimated part 170 fees, two other major considerations would determine the amount of the annual fee for the PBMR. These considerations are (1) the number of modules that are included within a single license and (2) the agency oversight necessary for the PBMR.

With respect to the first consideration, the annual fee for each operating power reactor is currently determined by dividing the total annual fee amount for the power reactor class by the number of operating power reactor *licenses*. It is currently anticipated that up to ten Pebble Bed modules could be allowed under a single license. Therefore, a license authorizing operation of a PBMR would be subject to an annual fee comparable to the annual fee being charged for a Part 50 operating license, regardless of the number of modules at the site. However, should the PBMR licensee construct and operate only one module, approximately 300-450 MWe, the licensee could, as discussed above, seek a full or partial exemption from annual fees under 10 CFR 171.11(b). The licensee, however, would have to meet the deadline requirements specified in Section 171.11(b) (e.g., exemption requests must be filed 90 days from the effective

date of the final rule establishing the annual fees for which the exemption is sought).

With respect to the second consideration, agency oversight, annual fees for a given class of licenses is based on NRC's budgeted costs for generic activities and other costs not recovered under 10 CFR Part 170. At this time, it is not entirely clear whether the agency's generic and other efforts to regulate a PBMR will be significantly different from its regulation of other types of operating power reactors. NRR has provided some indication that it is unlikely that the generic regulatory oversight of PBMRs will be significantly different from that of existing reactors. Again, depending on how the regulatory efforts differ and the magnitude of the resources (FTE, contract costs and associated indirect costs), it appears that the Commission has the statutory authority create a separate class of licenses or new fee category.

The establishment of annual fees for a PBMR licensed under part 52 will require a revision to 10 CFR Part 171 before the Commission authorizes operation of a PBMR. While a PBMR reactor potentially having up to 10 modules might have the largest megawatt output capacity when compared to all existing reactors, historically, the upper limits of that capacity have not been a consideration in determining the annual fee amount. This is because the agency does not consider the economic advantages or disadvantages of possessing a license when assessing annual fees.

NEED SOMETHING HERE ON COMMENCEMENT OF ANNUAL FEE FOR COL - GERRY FEHST INCLUDED THE FOLLOWING TEXT, BUT WE NEED JIM TURDICI TO EXPAND ON IT, GIVEN THE POLICY CONSIDERATIONS INVOLVED:

Under section 6101(c)(1) of OBRA, the NRC may impose annual fees on "licensees." The Commission's practice has been only to assess annual fees on power reactors that possess an operating license and certificate holders (such as the USEC). Thus, although a construction permit is a "license", the NRC has not imposed annual fees on those holding a power reactor construction permit [BUT WHY?]

Consistent with this approach, it is OGC's understanding that with respect to a holder of a combined construction permit and operating license under 10 CFR Part 52, the CFR contemplates assessing the annual fee only after construction is complete, all regulatory requirements have been met, and the Commission has authorized operation of the facility.

Conclusion/Recommendation

For fee purposes, there appears to be no statutory language that would require each modular unit at a site to pay the same fee charged to a single boiling water reactor or pressurized water reactor at another site. Costs must be assessed against all licensees in a "fair and equitable" manner and, "to the maximum extent practicable, "must reflect a "reasonable relationship" between the fees charged and the services rendered. The NRC may therefore decide to exercise its rulemaking authority to develop a workable generic subclass category for fees for PBMRs. Alternatively, the NRC may provide fee relief through exemptions under 10 CFR 171.11(c), though fee relief by rule might be more efficient. However, until a final decision is made on the number of modules that will be allowed under a single license (assuming a single license is permitted), and NRR receives more data from Exelon and is in a better position to make the appropriate preliminary determinations about what kind of staff services the proposed design will likely require, no further recommendations are offered.