



Proposed Rule – Variable Annual Fee Structure for Small Modular Reactors (SMRs)

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Laws Governing Fees

- Independent Office Act of 1952
 - Recovers fees for a service or thing of value
 - Examples include licensing reviews and inspections
 - 10 CFR part 170 fees (Hourly Fees)
 - Fees are based on the NRC's hourly rate times NRC expended hours
- Omnibus Budget Reconciliation Act of 1990, as amended (OBRA-90)
 - Collects 90% of NRC budget Authority
 - Collects 10 CFR Part 170 and 10 CFR part 171 (annual fees)
 - Examples of services include rulemaking or research activities
 - Fairness and Equity of Fees

Operating Reactor Annual Fee Structure

- Currently, the operating reactor licensees pay the same flat annual fee under 10 CFR Part 171.
 - In a 1995 Final Rule (See 60 FR 32230) , the Commission determined that a uniform fee was the optimal approach because it:
 - Simplified the fee assessment process.
 - Provided a predictable, reliable, and equitable allocation of cost recovery fees.

Current Fleet Statistics

The current fleet consists of 100 reactors which are mix of pressurized and boiling water reactors.

- Fleet Size 100 reactors *
- Largest Grand Gulf Station Unit 1 (4,408 MWt)
- Smallest Fort Calhoun (1,500 MWt)
- Average Size 3,097 MWt
- There are 9 reactors less than 2,000 MWt, totaling 15,921 MWt (5.2 percent of the fleet total) with an average age of about 43 years
- 5 of the reactors less than 2,000 MWt are among the ten oldest reactors in the US
- *includes Watts Bar

Small Modular Reactors

In the future, NRC anticipates the emergence of a new generation of reactor designs, SMRs.

SMRs are expected to have:

- Modular designs, factory component fabrication,
- licensed thermal power limits with capacities of 1,000 megawatts thermal (MWt) or less per module
- safety and security design features that may result in lower regulatory oversight burden

Problem

- Under the current annual fee structure:
 - SMRs with considerably smaller licensed thermal power ratings would be required to pay the same flat annual fee as the existing fleet.
 - Multimodule nuclear plants would be assessed the same 10 CFR Part 171 flat annual fee on a per-licensed-module basis as the existing fleet.
 - SMR licensees are eligible to apply for fee exemptions but there is no guarantee of approval creating regulatory uncertainty.
 - Applying SMRs to the current annual fee structure appears to be contrary to OBRA-90 as it relates to the fairness and equity of fees given their unique design features.



Advance Notice of Proposed Rulemaking (ANPR)

In 2009, NRC issued an ANPR seeking public input on an annual fee structure for SMRs:

-NRC received 16 comments which included 2 position papers from Nuclear Energy Institute and American Nuclear Society.

-Some commenters suggested the following:

- a risk matrix methodology
- fees based on licensed thermal power rating
- reinstatement of size factor under 10 CFR 171.11
- establishment of power reactor subclasses

Preferred Approach

NRC staff analyzed the comments and four alternative annual fee structures for SMRs emerged as a result of the analysis:

- Alt. 1 - Continue the existing annual fee structure, but define a modular site of up to 12 reactors or 4,000 MWt licensed power rating as a single unit for annual fee purposes.
- Alt. 2 - Create fee classes for groups of reactor licensees and distribute the annual fee costs attributed to each fee class equally among the licensees in that class.
- Alt. 3 - Calculate the annual fee for each licensed power reactor as a function of potential risk to public health and safety using a risk matrix.
- Alt. 4 - Calculate the annual fee for each licensed power reactor as a function of its licensed thermal power rating.

In FY 2011, the NRC staff recommended to the Commission that Alt. 4 was the preferred approach for SMRs.

SMR Proposed Rule

-In FY 2015, the NRC staff further refined the four alternatives and Alternative 4 (refined) remains the preferred approach for SMRs.

-On November 4, 2015, the NRC published the Commission approved approach, the Proposed Rule – Variable Annual Fee Structure for SMR for public comment.



SMR Proposed Rule Cont'd

For this rulemaking, the following refined four alternative annual fee structures were examined:

- Alt. 1 - No action.
- Alt. 2 - Continue the existing annual fee structure for all reactors but allow for “bundling” of SMR reactor modules up to a total of 4,500 MWt as a single SMR “bundled unit.”
- Alt. 3 - Continue the existing annual fee structure for the current fleet of operating power reactors but establish a third fee class for SMRs with fees commensurate with the budgetary resources allocated to SMRs.
- Alt. 4 - Continue the existing annual fee structure for the current fleet of operating power reactors but calculate the annual fee for each SMR site as a multi-part fee which includes minimum fee, variable fee and maximum fee.

Note: Former Alt. 3 – risk matrix was eliminated because it was considered costly and complex to compute fees based on risk to public health & safety.

The NRC determined that Alt. 4 remains the preferred approach for SMRs.

SMR Rule Cont'd

Therefore, the NRC proposes to implement a variable annual fee structure for SMRs with the following changes to 10 CFR Part 170 and 10 CFR Part 171:

- ***Section 170.3 Definitions.***
 - Add New definitions for “bundled unit,” “small modular reactor (SMR),” and “small modular reactor site (SMR site).”
- ***Section 171.5 Definitions.***
 - Add definitions for “bundled unit,” “maximum fee,” “minimum fee,” “small modular reactor (SMR),” “small modular reactor site (SMR site),” “variable fee,” and “variable rate.”
- ***Section 171.15 Annual Fees: Reactor licenses and independent spent fuel storage licenses.***
 - Add new paragraphs for SMR licenses to reflect SMR fees and date of collection by the NRC, September 30, similar to the operating reactor license’s requirement.

Comment Submission

The deadline for submitting comments for this rulemaking and the draft regulatory analysis is December 4, 2015.

- **ADDRESSES:** You may submit comments by any of the following methods (unless this document describes a different method for submitting comments on a specific subject):
- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID NRC-2008-0664. Address questions about NRC dockets to Carol Gallagher; telephone: 301-415-3463; e-mail: Carol.Gallagher@nrc.gov. For technical questions contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.
- **E-mail comments to:** Rulemaking.Comments@nrc.gov. If you do not receive an automatic e-mail reply confirming receipt, then contact us at 301-415-1677.
- **Fax comments to:** Secretary, U.S. Nuclear Regulatory Commission at 301-415-1101.

Comment Submission

- **Mail comments to:** Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, ATTN: Rulemakings and Adjudications Staff.
- **Hand deliver comments to:** 11555 Rockville Pike, Rockville, Maryland 20852, between 7:30 a.m. and 4:15 p.m. (Eastern Time) Federal workdays; telephone: 301-415-1677.
- For additional direction on obtaining information and submitting comments, see “Obtaining Information and Submitting Comments” in the SUPPLEMENTARY INFORMATION section of this document.
- **FOR FURTHER INFORMATION CONTACT:** Arlette Howard, Office of the Chief Financial Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone:
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