



# 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](mailto: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](mailto: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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