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December 4, 2015

Ms. Annette Vietti-Cook
Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
ATTN: Rulemakings and Adjudications Staff

Subject: Industry Comments on Proposed Rule for a Variable Annual Fee Structure for Small Modular Reactors (Docket ID NRC-2008-0664)

Project Number: 689

Dear Ms. Vietti-Cook:

On behalf of the nuclear industry, the Nuclear Energy Institute (NEI)¹ expresses support for the NRC staff's proposed rule for a variable annual fee for light-water small modular reactors (SMRs) (80FR68268). This rule is important to provide clarity in support of near-term business decisions regarding submittal of license applications for SMRs—the first of which is anticipated in late 2017 or early 2018.

The NRC assesses annual fees on licensees pursuant to 10 CFR Part 171 to recover generic and other regulatory costs not otherwise recovered under 10 CFR Part 170 as a means to meet the requirements of the Omnibus Budget Reconciliation Act of 1990, as amended (OBRA-90). The current Part 171 fee structure allocates these fees equally among the operating power reactor licensees. This approach would not be fair and equitable to SMRs that incorporate enhanced design and safety features, which are expected to result in lower generic regulatory and oversight costs. In addition, because SMRs are significantly smaller than large light-water reactors and may include multiple modules at a single facility, SMRs would face a disproportionately high annual fee if assessed on a per-reactor basis at the uniform rate for large reactors.

The proposed rule revises 10 CFR Part 171 to "address inequities of the current 10 CFR Part 171 fee structure relative to future SMRs and multi-module nuclear plants." Assessing an annual fee for SMRs based on the total thermal power output of the facility is a reasonable approach now for providing a fair and

¹ NEI is the organization responsible for establishing unified industry policy on matters affecting the nuclear energy industry, including the regulatory aspects of generic operational and technical issues. NEI's members include all entities licensed to operate commercial nuclear power plants in the United States, nuclear plant designers, major architect/engineering firms, fuel cycle facilities, nuclear materials licensees, and other organizations and entities involved in the nuclear energy industry.

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equitable fee structure for SMRs given the absence of data on the regulatory resources associated with NRC oversight of this new class of reactors and how they may differ from the resources applied to oversee existing units. As identified in SECY-15-0044, *Proposed Variable Annual Fee Structure for Small Modular Reactors*, and the draft regulatory analysis for the proposed rule, we agree that the NRC should commit itself to re-evaluate the adequacy of this fee structure as better information on the cost of oversight of the SMR class of power reactors becomes available.

We support the NRC staff's plans to finalize the rule with an effective date of February 2016. The attachment to this letter provides detailed comments that would enhance the clarity of the final rule language.

If you have any questions, please contact me or Marc Nichol (mrn@nei.org; 202-739-8131).

Sincerely,

A handwritten signature in black ink, appearing to read "RJ Bell".

Russell J. Bell

Attachment

c: Ms. Maureen E. Wylie, CFO, NRC
Ms. Jennifer L. Uhle, NRO, NRC
Mr. Michael E. Mayfield, NRO/DARR, NRC
NRC Document Control Desk

**Industry Comments on Proposed Rule for a Variable Annual Fee Structure for Small Modular Reactors
[DOCKET ID NRC-2008-0664]**

Comment #	Location	Comment/Basis	Recommendation
1	§170.3 Definitions	It is unclear why new definitions are being added to 10 CFR Part 170, as the requirements for these fees do not depend upon these definitions. Adding definitions that are not used within this part of the regulations causes confusion. In particular, "bundled unit" is a unique term constructed solely for the calculation of the annual fee in 10 CFR Part 171, and is unrelated to the licensing structure of a facility (e.g., whether a small modular reactor facility is licensed as a single facility with multiple modules, or each module receives its own license).	Delete the definitions for "Bundled Unit", "small modular reactor (SMR)", and "small modular reactor site (SMR site)" from 10 CFR Part 170. If a definition is required to maintain consistency with 10 CFR Part 171, then only "small modular reactor (SMR)" should be included.
2	§171.5 Definitions, and §171.15(e)(1) Annual Fees	The rule language is not entirely clear on the relationship between SMR licenses, SMR modules, SMR plants, the SMR site (which may include several SMR modules, plants, and licenses), and the bundled units (which serve as the basis for the calculation of the annual fee). For example, §171.15(e)(1) Annual Fees states licensees "shall pay the annual fee for each license held." This could be misinterpreted to mean that the determination of a bundled unit is limited to the SMR modules covered by a single license, regardless of the number of licenses that comprise a single SMR plant or the number of SMR plants on a single SMR site. The NRC has previously expressed, in SECY 11-0079, a preference to license each module separately. If the NRC issues a license for each module, the proposed rule language may not achieve the intent of this	<p>Modify §171.5 Definitions as follows:</p> <p>"Bundled unit means a measure of the cumulative licensed thermal power rating for one or more SMRs located on a single site. One bundled unit is less than or equal to 4,500 MWt. <u>An additional bundled unit is not established until the preceding bundled unit reaches the cumulative 4,500 MWt rating. The thermal rating of a module can be split between two bundled units for the purposes of assessing annual fees under §171.15(e).</u>"</p> <p>Modify §171.15(e)(1) Annual Fees as follows:</p> <p>"(e)(1) Each person holding an operating license for a small modular reactor issued under part 50 of this chapter or that holds a combined license</p>

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		rulemaking, as it could be misinterpreted to assess an annual fee on each module separately. Furthermore, each SMR site could comprise multiple SMR plants (each plant containing multiple modules). The current rule language in §171.15(e)(1) and the definition of "bundled unit" do not make it clear that a bundled unit can comprise modules from more than one SMR plant, and that an additional bundled unit is not established before the preceding bundled unit reaches the cumulative 4,500 MWt rating.	issued under part 52 of this chapter after the Commission has made the finding under 10 CFR 52.103(g) shall pay the annual fee for each <u>all</u> licenses held <u>for an SMR site</u> during the fiscal year in which the fee is due."
3	§171.15(e)(3) Annual Fees	SMRs meet the definition of power reactors; however, the rule language does not explicitly state that the annual fees assessed for SMRs are in lieu of the annual fees assessed for power reactors under §171.15(b). Although the proposed rule language states that the SMR annual fee is assessed for the same activities listed for power reactors, not clearly stating that these fees are in lieu of the power reactor fees could lead to a misinterpretation that SMRs are assessed both sets of annual fees.	Revise §171.15(e)(3) Annual Fees as follows: "(3) <u>The annual fee for an SMR collected under paragraph (e) of this section is in lieu of any fee otherwise required under paragraph (b) of this section.</u> The annual fee <u>under paragraph (e) of this section covers</u> is assessed for the same activities listed for the power reactor base annual fee and spent fuel storage/reactor decommissioning reactor fee."
4	§171.5 Definitions	The definition of "Variable rate" can be simplified and clarified. Currently it is difficult to determine how the variable rate applies to additional bundled units, and appears inconsistent with the definition of "bundled unit".	Replace the definition of "Variable rate" with: "Variable rate means a per-MWt fee factor applied to all bundled units on a site. For the first bundled unit with a licensed thermal power rating greater than 250 and less than or equal to 2,000 MWt, the factor is based on the difference between the maximum fee and the minimum fee, divided by 1,750 MWt (the variable fee licensed

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			thermal rating range). For additional bundled units with a licensed thermal power rating greater than 0 and less than or equal to 2,000 MWt, the factor is based on the maximum fee divided by 2,000 MWt."
5	§171.15 SMR Fee Table	Describing additional bundled units with a range from >4,500 MWt to ≤9,000 MWt is confusing and unnecessary. This description is confusing as it is inconsistent with the definition of "bundled unit", which states that a "bundled unit is less than or equal to 4,500 MWt." It appears that the range of thermal capacity is describing the SMR site total, and not an additional bundled unit. Including SMR site MWt totals in the table unnecessarily complicates the bundle approach. It could also lead one to interpret the table as meaning that the first 4,500 MWt of additional bundled units (e.g., the second bundled unit) is not assessed an annual fee. This description could also be interpreted to unnecessarily limit the SMR site total thermal rating to 9,000 MWt. We are not aware of any other fee-based requirement that would limit a site's total thermal output. We also note that there is at least one nuclear facility in the U.S. with almost 12,000 MWt total thermal rating. The rule should be clarified to make clear that: (1) if any bundled unit would exceed 4,500 MWt, an additional bundle would exist for the portion of the thermal rating above 4,500 MWt; and (2) the same bundled fee schedule should apply to any	<p>Replace the thermal rating scale for the "Additional Bundled Units" as follows:</p> <p>Replace ">4,500 ≤6,500 MWt" with ">0 ≤2,000 MWt"</p> <p>Replace ">6,500 ≤9,000 MWt" with ">2,000 ≤4,500MWt"</p>

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		successive bundle.	
6	Draft Regulatory Analysis	In the draft Regulatory Analysis, an equation is given on page 16 for the calculation of the "Maximum Fee", which is not clear and could be interpreted to be inconsistent with the detailed process for calculating the maximum fee, which is described in more detail in Attachment A.	Revise the numerator of the equation to calculate the "Maximum Fee" as follows: "Total Part 171 Annual Fee (<u>less all minimum and variable SMR fees</u>)"
7	General	<p>The proposed rule provides an equitable assessment of annual fees for SMR, based on current information. We expect, however, that the actual cost of oversight for the SMR class of reactors will be even lower than the assumptions that form the basis for the proposed rule. In light of this, we envision that data on the actual or estimated costs of oversight for SMRs will become available in the future and could serve as a basis for adjusting the SMR variable fee structure commensurate with oversight costs. For example, data showing that SMRs have costs of oversight even lower than those currently assumed could justify changing the lower threshold for assessing the maximum fee from 2,000 MWt to the mean power rating of all reactors (~3,411 MWt), or could even justify a maximum fee that is less than the fee assessed for the existing large light water reactors.</p> <p>As data on the cost of oversight for SMRs becomes available, it will be important for the NRC to reassess the validity of the assumptions used to form the underlying variable fee structure in the proposed rule.</p>	<p>The NRC should, in the statements of consideration accompanying the final rule, commit to reviewing data on the costs of oversight for SMRs as it becomes available, and adjust the SMR variable fee structure to ensure the annual fees equitably align with the cost of oversight of this class of reactors.</p> <p>The NRC should, in the "Final Regulatory Basis for Proposed Changes to 10 CFR Part 171," clearly and explicitly identify the assumptions important to forming the basis for the final variable fee rule for SMRs.</p>

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		Therefore, the assumptions underlying the final rule need to be well documented, so that their accuracy can be evaluated to determine whether the fee structure is appropriate, or needs to be adjusted to account for regulatory costs that are either higher or lower than originally assumed for the SMR class of reactors.	