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New York State Energy Research and Development Authority

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May 27, 2026

U.S. Nuclear Regulatory Commission
Office of the Secretary
ATTN: Rulemakings and Adjudications Staff
Washington, DC 20555

Subject: "Regulatory Framework for Fusion Machines" [NRC-2023-0071]

To all concerned:

The State of New York appreciates the opportunity to comment on the U.S. Nuclear Regulatory Commission's (NRC) proposed rule "Regulatory Framework for Fusion Machines" (NRC-2023-0071) published in the Federal Register on February 26, 2026. The proposed rule would amend multiple sections of Title 10 of the *Code of Federal Regulations* to incorporate fusion machines into the existing byproduct material regulatory framework under 10 CFR Part 30, consistent with the statutory changes enacted in the ADVANCE Act of 2024.[1] The NRC has concurrently issued for comment draft guidance document NUREG-1556, Volume 22.[2]

New York's Interest in the Proposed Rule

New York is an Agreement State under Section 274 of the Atomic Energy Act of 1954, as amended,[3] and as such the New York State Department of Health (DOH) and New York City Department of Health and Mental Hygiene (NYCDOHMH) possess regulatory authority over the licensing and inspection of byproduct material within its borders. New York already regulates particle accelerators and associated byproduct materials under its Agreement State program and has decades of experience in radiation protection, emergency preparedness, and waste

[1]ADVANCE Act of 2024, Pub. L. No. 118-67, § 205, 138 Stat. (2024) (amending Atomic Energy Act of 1954, §§ 11e.(3)(B), 11ff.). Available at: https://www.congress.gov/bill/118th-congress/senate-bill/870.

[2]Draft NUREG-1556, Vol. 22, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Fusion Machine Licenses" (2026). Available at: https://www.regulations.gov/docket/NRC-2023-0071.

[3]Atomic Energy Act of 1954, as amended, 42 U.S.C. §§ 2011 et seq., § 274 (authorizing Agreement State programs). See NRC Agreement State Program information at https://www.nrc.gov/agreement-states.

management. As a potential host state for future commercial fusion machine deployment, New York has a direct and substantial interest in ensuring that the federal regulatory framework for fusion machines adequately protects public health and safety, preserves the environment, and provides sufficient clarity and resources for Agreement State implementation.

Several companies involved in this important and progressive fusion industry have already approached New York State to understand the regulatory landscape. While a formal application has not been submitted to the DOH or NYCDOHMH as of the date of this notice, NYSDOH anticipates receiving applications to support the growing technological- and energy-development initiatives in the State.

In preparing these comments, we have engaged in discussions with individuals in the private sector pertaining to fusion-machine startups, tritium handling systems, and fusion training centers to better understand current technological advancements, potential issues and concerns with current regulatory structures, and potential obstacles that we may encounter as a cost-recovery Agreement State.

New York recognizes the potential benefits of fusion energy as a firm, low-carbon power source and supports the NRC's efforts to provide regulatory certainty for an emerging industry. The State has identified several areas of concern where the proposed rule requires strengthening, clarification, or supplementation. The following represent the combined comments of NYSERDA, NYSDOH, NYCDOHMH, and NYSDOS and incorporate by reference the previous New York comments submitted to the NRC in a letter dated July 15, 2024, in response to the NRC's pre-decisional draft proposed rule under RCPD-24-004.[4]

General Observations

Support for a Risk-Informed, Performance-Based Approach

New York supports the NRC's decision to regulate fusion machines under the byproduct material framework rather than the utilization facility framework used for fission reactors. As the NRC correctly observes, fusion machines differ fundamentally from fission reactors in that criticality is not possible, fusion reactions require active control to sustain, and the radiological hazards are more aligned with those managed under existing materials licenses.[5]

However, a lighter regulatory framework must not come at the expense of robust public safety protections. The performance-based nature of the proposed rule appropriately allows

[4]NYSERDA Letter to NRC, signed by Alyse Peterson, P.E., Senior Advisor and State Liaison Officer – Designee (July 15, 2024), responding to RCPD-24-004. Available at: https://www.regulations.gov/docket/NRC-2023-0071.

[5]91 Fed. Reg. at 9479–9480 (discussing characteristics of near-term fusion machines and their distinction from fission reactors). Available at: https://www.federalregister.gov/documents/2026/02/26/2026-03865/regulatory-framework-for-fusion-machines.

innovation, but it also places significant responsibility on individual licensing authorities to evaluate novel applications on a case-by-case basis. This approach requires that Agreement States have adequate technical expertise, staffing, and financial resources—areas where the proposed rule falls short.

Concern Regarding the Use of Part 30 as the Regulatory Vehicle

We reiterate and stand by the New York comment letter dated July 15, 2024, as it pertains to the definition of fusion and the overall approach to fusion regulatory framework. A copy of this original letter is attached for ease of reference. New York has substantive concerns pertaining to the modification of Part 30 to accommodate fusion machines and byproduct materials. NRC has historically dedicated separate parts of 10 CFR to risk-significant activities and modalities where additional concerns and considerations may apply in the interest of ensuring clear and consistent regulations. Examples include Part 32 (Manufacturing and Distribution), Part 33 (Broad Scope Licenses), Part 34 (Industrial Radiography), Part 35 (Medical Applications), Part 36 (Irradiators), and Part 39 (Well Logging). The original intent of these regulations was to supplement the requirements in Part 30 and elaborate on modality-specific requirements which may afford additional considerations to ensure clear and consistent lines of applicability.

Given the risk-significant nature of the fusion machine modality and the potential interpretation issues that could arise with the existing framework by including these regulations with the standard requirements for domestic licensing of byproduct materials under Part 30, we have concerns with this approach. Incorporating fusion machines into Part 30 could result in the inadvertent incorporation of unnecessary requirements, which may cause potential interpretation issues and limit the adoption of future regulations depending on technological advancements. As fusion machine prototype designs mature, there is a high potential for revisions and modifications to Part 30 and supporting regulations. While we agree that a regulatory pathway should be afforded to accommodate the current development of fusion machines, the utilization of Part 30 may lead to significant issues in interpreting or applying these regulations for new or innovative fusion machine designs and potential applicability or interpretation to include other licenses and uses of byproduct materials unrelated to fusion machines. This approach may unduly impose regulatory burden on the intended progressive regulatory framework for fusion-machine technological advancement and undermine efforts to streamline licensing reviews and promote industrial growth.

While New York supports a clear and adaptable regulatory framework to accommodate the industrial and technological advancements of fusion-power production, the placement of regulations for fusion machines and fusion-supporting systems into a new Part of 10 CFR promotes clearer lines of applicability, interpretation of requirements, and supporting regulations under different parts of 10 CFR. Such an approach would accelerate advanced technology adoption, expedite licensing, and reduce regulatory burden.

Concern Regarding Deference to Case-by-Case Determinations

The proposed rule relies extensively on case-by-case determinations by the NRC or Agreement States for critical safety matters, including physical security requirements for activation products not listed in Appendix A to 10 CFR Part 37,[6] waste classification for novel radionuclides,[7] and the potential need for additional regulatory action for future fusion designs.[8] While New York acknowledges that some case-by-case flexibility is inherent and appropriate in a performance-based regime, the degree of reliance on ad hoc decision-making creates the potential for inconsistent regulation across the National Materials Program and imposes significant analytical burdens on Agreement States that may lack specialized fusion expertise.

Concerns with the Proposed Rule

Agreement State Capacity, Resources, and Regulatory Compatibility

The proposed rule acknowledges that many fusion facilities will be licensed not by the NRC directly, but by Agreement States. As of February 2026, thirty-eight Agreement States have assumed authority over section 11e.(3) byproduct material.[9] Agreement State radiation control programs are likely to serve as the primary licensing authority for many future commercial fusion facilities.[10] Several early commercial projects are already being developed in Agreement States.[11]

New York is concerned that the proposed rule insufficiently addresses the substantial burden this framework will place on Agreement States. The regulatory analysis estimates total

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[6]91 Fed. Reg. at 9485 (stating that tritium is not considered risk-significant for Part 37 purposes). Available at: https://www.federalregister.gov/documents/2026/02/26/2026-03865/regulatory-framework-for-fusion-machines.

[7]91 Fed. Reg. at 9485 (discussing waste classification tables developed based on expected waste streams in the early 1980s). Available at: https://www.federalregister.gov/documents/2026/02/26/2026-03865/regulatory-framework-for-fusion-machines.

[8]NRC Staff Requirements — SECY-23-0001 (Apr. 13, 2023). Available at: https://www.nrc.gov/docs/ML2303/ML23038A234.html.

[9]91 Fed. Reg. at 9481 (noting that thirty-eight of thirty-nine Agreement States have assumed authority over section 11e.(3) byproduct material). Available at: https://www.federalregister.gov/documents/2026/02/26/2026-03865/regulatory-framework-for-fusion-machines.

[10]Foley Hoag LLP, "Fusion Update: NRC Publishes Proposed Regulatory Framework For Fusion Machines" (Mar. 17, 2026). Available at: https://foleyhoag.com/news-and-insights/blogs/energy-and-climate-counsel/2026/march/fusion-update-nrc-publishes-proposed-regulatory-framework-for-fusion-machines/.

[11]See Orrick, Herrington & Sutcliffe LLP, "NRC Proposed Fusion Rule Further Clarifies Path for Commercial Deployment" (Mar. 2026). Available at: https://www.orrick.com/en/Insights/2026/03/NRC-Proposed-Fusion-Rule-Further-Clarifies-Path-for-Commercial-Deployment.

implementation costs of approximately $858,000 at a 7-percent discount rate.[12] However, this figure appears to encompass only the cost of revising state regulations for compatibility. It does not adequately account for the costs Agreement States will incur in developing the technical expertise necessary to evaluate first-of-a-kind fusion machine license applications, hiring and training qualified staff, conducting inspections of fusion facilities involving novel radiological hazards, and developing state-level emergency preparedness and environmental review capabilities specific to fusion.

Similarly to other cost-recovery Agreement States, NYSDOH evaluates NRC fee determinations under 10 CFR 171.16 as a benchmark to propose its own licensing fee amounts.[13] Under this proposed rulemaking, it is unclear if a modified license fee will be set by the NRC for fusion research and development or power-production purposes. With proposed changes to adopt a regulatory framework to promote fusion machines, the monetization of resource demands and time allocations to accommodate a new fusion license are unknown but expected to significantly surpass the most expensive license fees prescribed under 10 CFR 171.16. Given the difficulties in establishing programmatic costs to accommodate byproduct material licenses for fusion machines, Agreement States are placed in a challenging situation by needing to provide sufficient financial overhead to accommodate a new fusion-machine license and appropriately establish appropriate license fees without sufficient knowledge or expertise in the time and resources needed.

New York requests that the NRC establish a license fee dedicated to fusion-related activities in order to serve as a benchmark for Agreement State rulemaking. Further, we request additional funding from the NRC to Agreement States to adequately promote industrial development of fusion systems and address potential gaps in financial overhead for cost-recovery Agreement States. Without such funding and licensing fee benchmarks by the NRC, some Agreement States may be placed in a financially vulnerable position upon receipt of a license application for an R&D or power-production fusion-machine byproduct materials license. With 40 Agreement States regulating approximately 90% of all radioactive materials licenses within the United States, Agreement States will have a very high likelihood of receiving the first fusion power production radioactive materials license application. The implementation of a funding mechanism by the NRC to support Agreement State efforts to regulate fusion machines will support the overarching goal of promoting industrial development while reducing regulatory burden. As it currently stands, many Agreement State programs may not be able to financially support these initiatives without federal assistance.

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[12] 91 Fed. Reg. at 9477 (stating total estimated implementation cost of $858,000 at a 7-percent discount rate). Available at: https://www.federalregister.gov/documents/2026/02/26/2026-03865/regulatory-framework-for-fusion-machines.

[13] 10 CFR § 171.16 (annual fees for materials licensees). Available at: https://www.ecfr.gov/current/title-10/section-171.16.

The NRC recognizes fusion research and commercialization as emerging fields characterized by technologies that are not yet well defined. The Commission should be prepared to provide additional support to Agreement States to address technical and knowledge gaps needed to effectively regulate these operations. New York suggests that such support should include but not be limited to:

> **Agreement State Staff Training:** NRC should be prepared to equip Agreement State license reviewers and inspectors with knowledge and expertise necessary to evaluate fusion machine systems. NRC should consider amending their sponsored training programs to include fusion machine technology content. Additional specialized training in heat exchange systems, fire suppression systems, and non-radioactive hazards unique to fusion machine systems, as well as guidance on how to integrate evaluations into licensing and inspection processes, will be essential to ensure timely, effective regulatory reviews.
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> **Development of Technical Expertise and Resources:** Agreement States may initially lack qualified subject matter experts with advanced physics, engineering, and professional backgrounds necessary to effectively review system safety plans and evaluate hazards of fusion machines. NRC should support Agreement State efforts to address these gaps by defining qualifications necessary for license reviewers and by assisting the development of technical review support networks through the Organization of Agreement States (OAS).

The NRC's Vision and Strategy document identifies the need to prepare NRC and Agreement State staff for effective fusion machine oversight.[14] The proposed rule's regulatory analysis's assertion that Agreement States will benefit from less resource-intensive licensing may understate the magnitude of the new technical challenge. A single commercial fusion facility may possess upward of one million curies of tritium. The case-by-case approach for security and waste classification further amplifies the need for specialized expertise at the state level.

Tritium Safety and Reporting Thresholds

The NRC specifically requests comment on whether to revise the tritium reporting thresholds in 10 CFR 30.55(c) and 10 CFR 20.2201 to accommodate the large quantities of tritium that commercial fusion machines will use and produce. The proposed rule acknowledges that commercial fusion machines could possess tritium exceeding 100 grams (approximately one million curies) and that accurately tracking tritium will be difficult.

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[14]NRC, "Vision and Strategy: Regulating Fusion Machines Across the National Materials Program," Rev. 1, Objective 3 (2025). Available at: https://www.nrc.gov/materials/fusion/vision-strategy.

New York is concerned about any proposal to raise tritium reporting thresholds without first establishing robust alternative accountability mechanisms. The current reporting thresholds in section 20.2201 serve a critical safety function. Raising thresholds broadly, without compensating safeguards, could create an environment in which significant quantities of tritium go unreported.

Tritium poses both radiological and environmental risks.[15] Tritium released into the environment contaminates groundwater, surface water, and biological systems. As a state with significant water resources, including the Great Lakes, the Hudson River, and extensive drinking water systems, New York has a heightened interest in ensuring that tritium accountability standards remain protective. The 12.3-year half-life of tritium means that chronic low-level releases or undetected losses can accumulate over time. Rather than raising reporting thresholds, the NRC should require fusion machine licensees to develop and demonstrate validated tritium accounting methodologies, and only then consider whether threshold adjustments are warranted.

Waste Management and the Part 61 Classification Tables

We reiterate and stand by the New York comment letter dated July 15, 2024, as it pertains to waste disposal considerations. The proposed rule acknowledges that the waste classification tables in 10 CFR 61.55 may not address risk-significant radionuclides in fusion machine waste because those tables were developed based on expected waste streams in the early 1980s. Despite this acknowledged gap, the NRC declines to revise the tables, citing insufficient information. New York is concerned that this approach creates regulatory uncertainty and potential gaps in the protection of individuals who might inadvertently intrude into disposed waste. The proposed rule's reliance on section 61.7's general conceptual descriptions as a substitute for the quantitative classification tables introduces subjectivity and could lead to inconsistent disposal decisions.

The ACRS recommended revising the section 61.55 tables to address fusion-generated radionuclides.[16] The Commission's direction to defer table updates[17] means that fusion waste classification could remain unresolved for years after commercial facilities begin operation. We

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[15]Conference of Radiation Control Program Directors, "Technical White Paper: State Regulation of Fusion Machines" at 12–13 (June 5, 2025). Available at: https://crcpd.org/wp-content/uploads/2025/08/25-2-Technical-White-Paper-State-Regulation-on-Fusion-Machines.pdf.

[16]Advisory Committee on Reactor Safeguards, Letter to NRC Chairman (Oct. 21, 2022); see also 91 Fed. Reg. at 9485. ACRS information at https://www.nrc.gov/about-nrc/regulatory/advisory/acrs.html.

[17]NRC Staff Requirements Memorandum, SRM-SECY-08-0147, dated March 18, 2009. Available at: https://www.nrc.gov/waste/llw-disposal/decision-support/uw-streams.

encourage the Commission to revisit its 17-year-old decision and direct the NRC staff to initiate a parallel rulemaking to update the Part 61 tables.

Environmental Review Under NEPA and Part 51

The proposed rule would require that an environmental report be prepared for the construction and operation of a fusion machine, unless a categorical exclusion applies. The NRC states that it expects to prepare an EA for most applications. New York is concerned that the environmental review framework may not result in sufficiently rigorous review for commercial-scale fusion facilities. Environmental review confined to an EA may be inadequate for first-of-a-kind commercial facilities where the environmental impacts are largely unknown.

We reiterate and stand by New York's July 15, 2024 comments as pertains to environmental analyses specifically regarding categorical exclusions to National Environmental Policy Act (NEPA) environmental review requirements made for R&D and educational fusion machines. New York agrees that distinguishing fusion machines by commercial, R&D, and educational purposes is arbitrary as the environmental impacts of the fusion machines, regardless of their purpose, are the same. We further note that, under the proposed rule, fusion machines, including those with R&D and educational purposes, would not be exempt from state and local environmental review requirements. The application timeframes should thus allow time for state and local environmental review procedures, like the New York State Environmental Quality Review Act (SEQRA) and New York City Environmental Quality Review (CEQR).[18]

For novel technologies, NEPA[19] counsels more searching environmental review, not less. The proposed rule notes that Part 51 is not required as a matter of compatibility for Agreement States. This creates a potential patchwork where environmental review rigor varies. For New York, which has SEQRA, the NRC's environmental review approach sets a baseline. A more robust federal environmental review process would provide greater consistency and public confidence.

Emergency Preparedness and Offsite Dose Evaluation

The proposed rule states that the NRC would continue to require applicants to determine if the maximum dose to a person offsite could exceed 1 rem (10 mSv). The proposed

[18]New York City Environmental Quality Review (CEQR) Technical Manual. See https://www.nyc.gov/site/oec/environmental-quality-review/technical-manual.page.

[19]42 U.S.C. §§ 4321 et seq. (National Environmental Policy Act of 1969). See EPA NEPA overview at https://www.epa.gov/nepa.

rule relies on existing requirements in 10 CFR 30.32(i) and the schedule of quantities in 10 CFR 30.72.[20]

While New York does not support the placement of fusion machine regulations within Part 30, the requirements pertaining to emergency response for offsite releases under 10 CFR 30.32(i) should be adopted and followed with clearer applicability to the quantities of tritium utilized in fusion research and development and power production. We reiterate and stand by New York's July 15, 2024 comments as pertains to the Emergency Response for Offsite Releases under 10 CFR 30.32(i). The pre-decisional NUREG-1556, Volume 22, consolidated guidance requires applicants to describe systems and develop written emergency procedures to address situations that could lead to an uncontrolled release of radioactive and hazardous materials onsite or into the environment. In meeting this requirement, the draft consolidated guidance indicates that applicants "may consider evaluating" potential initiating or contributing events of incidents, including plasma energy, magnetic energy, thermal energy, explosive energy, cryogenic energy, fire caused by electrical shorts or chemical reactions, and natural disasters.[21]

New York agrees with the need for these evaluations and recommends that they be made mandatory for all fusion machine applicants, as considering and evaluating potential sources of incidents as part of an applicant's emergency procedures should not be optional. Guidance language should be modified from "An applicant may consider evaluating the following as potential initiating or contributing events of incidents…" to "An applicant shall evaluate the following as potential initiating or contributing events…" (pp. 8-54, lines 23–24). Additionally, the applicant's response should confirm assessments performed and include confirmatory statements equivalent to the model response: "The incident initiating pathways identified in NUREG-1556 Vol. 22 section 8.10.6.3 have been considered as potential realistic emergency scenarios."

New York is concerned that the emergency preparedness framework is inadequately tailored to the unique characteristics of commercial fusion machines. A facility possessing millions of curies of tritium presents challenges qualitatively different from those associated with traditional byproduct material licenses. The proposed rule acknowledges that potential hazards include significant quantities of tritium in structural materials, high-energy neutron and gamma radiation, activation products, and dust from plasma-surface interactions.[22] These

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[20] 10 CFR § 30.72, Schedule C. Available at: https://www.ecfr.gov/current/title-10/section-30.72.

[21] Draft NUREG-1556, Vol. 22, § 8.10.6.3, at pp. 8-54, lines 23–24 (emergency procedure guidance for fusion machine applicants). Available at: https://www.regulations.gov/docket/NRC-2023-0071.

[22] 91 Fed. Reg. at 9480 (listing potential radiological hazards of fusion machines). Available at: https://www.federalregister.gov/documents/2026/02/26/2026-03865/regulatory-framework-for-fusion-machines.

hazards may require emergency response capabilities that exceed what most state and local organizations currently possess.

Physical Security for Activation Products and Tritium

The proposed rule notes that tritium is not considered risk-significant for Part 37 purposes. Activation products may not be listed in Appendix A,[23] and the NRC will determine security requirements on a case-by-case basis.

New York agrees that the modification to 10 CFR 37.5 (definitions) to accommodate fusion and fusion-related machines is appropriate. Since the applicability under Part 37 regulations will apply primarily to incidental activation products in fusion machines, regulatory programs may have significant difficulty in determining radionuclide speciation/identification and activity for activated components within fusion machines to determine if Part 37 regulations may apply. Without information provided by the licensee, gamma spectroscopy and on-site activity measurements will be needed to determine if activated products will meet Category 1 or 2 quantities in Appendix A to Part 37, which may increase the duration of inspections, require additional costs for regulators and licensees, and potentially lead to inconsistent application of Part 37 requirements.

While theft, sabotage, or hostile action drives the need for physical protection requirements, additional provisions in Part 37 should delineate applicability more clearly to fusion machines independent of the isotopic composition and activity of activation products. Providing clearer applicability for Part 37 would reduce the regulatory costs for licensees and promote clearer requirements and consistency by Agreement State Programs with very limited resources.

New York is concerned that the absence of explicit, codified security requirements creates a regulatory gap. Commercial fusion facilities may possess tritium at quantities measured in millions of curies. Pre-established security standards are justified rather than reliance on case-by-case license conditions.[24] A standardized approach to security would provide consistency, predictability, and enforceability advantages over case-by-case license conditions. The NRC has successfully applied this approach in Part 37 for other categories of risk-significant radioactive material. Extending a proportionate framework to commercial fusion

[23] 10 CFR Part 37, Appendix A. Available at: https://www.ecfr.gov/current/title-10/part-37/appendix-Appendix%20A%20to%20Part%2037.

[24] Morgan Lewis, "NRC Proposes Regulatory Framework for Fusion – Up & Atom" (Mar. 4, 2026). Available at: https://www.morganlewis.com/blogs/upandatom/2026/03/nrc-proposes-regulatory-framework-for-fusion.

facilities would ensure uniform application across the National Materials Program and reduce the burden on individual Agreement States.

Decommissioning and Financial Assurance

The NRC states that it is not proposing changes to decommissioning and financial assurance under 10 CFR 30.35. While New York does not support placement of fusion machine regulations within Part 30, the requirements pertaining to financial assurance under 10 CFR 30.35 should be adopted and followed with clearer applicability to the quantities of tritium utilized and incidental activation products generated in fusion R&D and power production. Without intimate knowledge on the components and mechanisms for decommissioning cost estimates, the ability to consider or determine financial assurance valuations from this emergent technology may lead to variability in cost estimates for decommissioning. NUREG guidance should be provided to address decommissioning plans and decommissioning cost estimates specifically for fusion machines, as components, uses, and disposal options may vary substantially from other byproduct material licenses, and may place Agreement States in a financially vulnerable position should a decommissioning funding plan be needed. While it is expected that financial assurance is needed for fusion machines, Agreement States will need significant guidance in order to apply these requirements consistently and accurately. With several fusion-related startup companies emerging from this changing regulatory framework, the financial instability of some of these companies may underscore the need for financial assurance valuations and decommissioning cost estimates in a potentially competitive market.

New York's experience with decommissioning nuclear facilities underscores the importance of establishing adequate financial assurance requirements before the first commercial fusion facilities begin operation. The NRC should require fusion machine license applicants to submit preliminary decommissioning cost estimates that specifically account for activated structural components, tritium-contaminated materials, and breeder blanket materials.

Public Participation and Transparency

The Part 30 framework does not provide the same opportunities for public participation as reactor licensing under Parts 50, 52, and 53.[25] Host communities and the public deserve a meaningful opportunity to understand and participate in fusion machine licensing decisions. The NRC acknowledges that rulemaking enables stakeholder interaction.[26] This principle should

[25] See 10 CFR Parts 50 and 52; cf. 10 CFR Part 30. See https://www.ecfr.gov/current/title-10/part-50 and https://www.ecfr.gov/current/title-10/part-30.

[26] 91 Fed. Reg. at 9480 (public participation enables stakeholder interaction and understanding of risks). Available at: https://www.federalregister.gov/documents/2026/02/26/2026-03865/regulatory-framework-for-fusion-machines.

extend to individual licensing decisions, consistent with the NRC's Principles of Good Regulation.[27]

NRC already has a workable structure for public participation and transparency. Some examples of targeted actions for public involvement from Parts 50, 52 and 53 that could be utilized in the licensing process for fusion machines include but are not limited to:

- A public meeting or hearing and public notice as early as practicable[28]
- Direct notice to host municipalities, counties, states and Tribal governments[29]
- Public availability of non-sensitive application materials[30]
- Plain language project summary[31]
- Defined written-comment period[32]
- Opportunity for public involvement or hearing regarding license amendments[33]

Proposed Requirements Under 10 CFR 30.32(k) and NUREG-1556, Volume 22

New York concurs with establishing regulations consistent with the information in 10 CFR 30.32(k), however, believes that this information should be provided in a new Part under 10 CFR. Furthermore, we agree that the information contained within the proposed rulemaking under 10 CFR 30.32(k), "Applications for a Specific License", specifically 10 CFR 30.32(k)(2), should be elaborated in the NUREG-1556, Vol. 22 "Program-Specific Guidance About Possession Licenses for Fusion Machines." In review of this draft rulemaking under 10 CFR 30.32(k) and supplementary guidance, New York advocates for more concrete and specific standards, model procedures, and guidance to strengthen consistency between applicants, and further determine how to properly evaluate the "alternative" pathway under 10 CFR 30.32(k)(2)(iv).[34]

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[27] NRC, Principles of Good Regulation. Available at: https://www.nrc.gov/about-nrc/values.html.

[28] See 10 CFR §§ 2.101; 2.104(a) and (c); and 2.105. Note Part 2, Subpart A, " Subpart A. Procedure for Issuance, Amendment, Transfer, or Renewal of a License, and Standard Design Approval" "prescribes the procedure for issuance of a license; amendment of a license at the request of the licensee; transfer and renewal of a license; and issuance of a standard design approval under subpart E of part 52 or subpart H of part 53 of this chapter." See 10 CFR § 2.100

[29] 10 CFR § 2.101(a)(3)(ii) and (e)(5)

[30] 10 CFR § 53.1100(a)(1)-(3); See also 10 CFR 50.22(j)

[31] 10 CFR § 2.101(f)(ii) requiring NRC to post a summary of the applications in a local newspaper

[32] 10 CFR 2.101(f)(1)(i)-(ii)

[33] 10 CFR §50.91; See 10 CFR Part 2, subpart L, amendments subject to hearings; *See also* renewal of operating licenses under 10 CFR Part 54 *et. seq.*

While we acknowledge the current variability in fusion-machine technology and the subsequent difficulties associated with incorporating concrete standards and prescriptive guidance, the current proposed language of 10 CFR 30.32(k) and affiliated guidance may lead to multiple interpretations and burden placed on regulatory programs within and between States. New York requests that the requirements proposed under 10 CFR 30.32(k) are moved into a separate Part under 10 CFR, and NUREG-1556, Volume 22, is modified to establish detailed standards, model procedures and guidance to assist Agreement States and licensees alike in consistent interpretation to reduce regulatory costs and undue licensing delays.

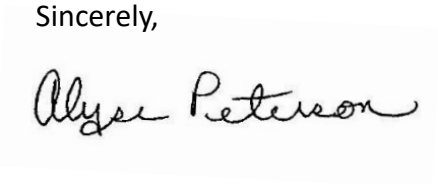
Conclusion

The State of New York appreciates the opportunity to comment on this proposed rule. The proposed rule requires strengthening in several critical areas. The framework's heavy reliance on Agreement State implementation necessitates a commensurate investment in state regulatory capacity, including dedicated federal funding and license fee benchmarks. Tritium accountability must not be weakened prematurely. Waste classification tables must be updated. Environmental review, emergency preparedness, physical security, and decommissioning provisions must be scaled to the novel hazards and industrial scope of commercial fusion facilities. The public must have meaningful opportunities to participate in licensing decisions. And the NRC should give serious consideration to whether a new, dedicated Part of 10 CFR would better serve the long-term regulatory needs of this emerging technology than modifications to the existing Part 30 framework.

New York urges the NRC to carefully consider these comments and to engage Agreement States as full partners in developing a regulatory framework that protects public safety, builds public confidence, and enables the responsible development of fusion energy.

Thank you for the opportunity to comment. If you have any questions or concerns, please contact me.

Sincerely,



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w/Attachment