



12-September-2025

Project Number: 99902080

US Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555-0001

**SUBJECT: ATOMIC ALCHEMY CONSTRUCTION PERMIT APPLICATION FOR THE
MEITNER-1 NON-POWER PRODUCTION OR UTILIZATION FACILITY**

REFERENCES:

- 1) Letter from Atomic Alchemy, Inc., to U.S. Regulatory Commission, "AAL-2019-002, Notice of Intent and Application," dated August 29, 2019, [ADAMS Accession Number ML19323F758]
- 2) Letter from Atomic Alchemy, Inc., to U.S. Regulatory Commission, "AAL-2025-003, Regulatory Engagement Plan," dated August 14, 2024, [ADAMS Accession Number ML-ML25226A255]

ENCLOSURES:

- 1) AFF-2025-005, Affidavit Pursuant to 10 CFR 2.390
- 2) AAI-PSAR-00 Rev 0, Atomic Alchemy Inc. Part I Construction Permit Application for the Meitner-1 NPUF
- 3) AAI-PSAR-01 to -11 and -13 to -15 Rev 0 (P), Atomic Alchemy Inc. Part II Construction Permit Application for the Meitner-1 NPUF, Chapters 1 to 11 and 12 to 15 (Proprietary)
- 4) AAI-PSAR-01 to 18 Rev 0 (NP), Atomic Alchemy Inc. Part II Construction Permit Application for the Meitner-1 NPUF, Chapters 1 and 18 (Non-Proprietary)
- 5) PDD-001 Rev 2, Atomic Alchemy Inc. Part II Construction Permit Application for the Meitner-1 NPUF, Chapter 12A, Quality Assurance Program (Non-Proprietary)
- 6) Letter from Atomic Alchemy, Inc., to U.S. Regulatory Commission, "AAL-2025-006, Atomic Alchemy Exemption Request for Construction Permit Application for Meitner-1 Non-Power Production or Utilization Facility" dated September 12, 2025

The purpose of this letter is Atomic Alchemy Inc.'s ("Atomic Alchemy" or "AAI") transmittal of a construction permit application on behalf of the applicants and intended licensees, Atomic Alchemy Operators LLC., and VIPR Idaho LLC, both of which are under common ownership with Atomic Alchemy, and all of which are ultimate subsidiaries of Oklo Inc. Further details on the relationship and purpose of these entities are provided in Enclosure 2. To simplify the discussions throughout Enclosures 3 through 5, Atomic Alchemy or AAI is used without explicit call outs for Atomic Alchemy Operators or VIPR Idaho.

Pursuant to Title 10 *Code of Federal Regulations* (CFR) Part 50.30, included is a construction permit (CP) application to construct a radioisotope production facility (Meitner-1), a Non-power Production and Utilization Facility (NPUF) that can house four Versatile Isotope Production Reactors (VIPRs) of Atomic Alchemy's design.

Part I of the application includes the general information as required by 10 CFR 50.33, and Part II of the application includes the preliminary safety analysis report (PSAR) as required by 10 CFR 50.34(a). An Environmental Report as required by 10 CFR 50.30(f) is contained in Chapter 19 of the PSAR, which will be submitted to NRC at a later date per 10 CFR 2.101(a)(5) and the exemption request is included in Enclosure 6.

The application follows the guidance in NUREG-1537, "Guidelines for Preparing and Reviewing Applications for the Licensing of Non-Power Reactors," and its corresponding Interim Staff Guidance augmentation for the licensing of radioisotope production facilities. NUREG-1537 combines activities regulated under NRC requirements other than 10 CFR Part 50 (e.g., 10 CFR 70 and 30), in accordance with 10 CFR 50.31 and 10 CFR 50.32. The licensing treatment of activities which fall under 10 CFR Parts 70 and 30 is addressed in Reference 2.

Pursuant to 10-CFR 50.37, the applicants will not allow access to Restricted Data or classified National Security Information until the individual and/or the facility has been approved for access under provisions of 10 CFR 25, "Access Authorization," and/or 10 CFR 95, "Facility Security Clearance and Safeguarding of National Security Information and Restricted Data." Additionally, all fees related to this application shall be paid in accordance with 10 CFR 50.30(e), 170.12, 170.20, and 170.21.

The application contains commercially sensitive, proprietary, and security, and, as such, we are requesting that this information be withheld from public disclosure in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Request for Withholding." Export control information is also marked for withholding per 10 CFR Part 810, "Assistance to Foreign Atomic Energy Activities." This information is contained within Enclosure 3, which includes redacted (bracketed) sensitive information that should be withheld from public disclosure. This proprietary information is appropriately marked within the document and an affidavit documenting the basis for this request is provided in Enclosure 1. A Non-proprietary version of the Enclosure is also attached as Enclosures 4.

There are no commitments made in this submittal.

If there are any questions or a need for additional information, please contact via email.

Sincerely,

Thomas Eiden
CEO, Atomic Alchemy Inc.

Cc:

Nuclear Regulatory Commission:

Jeffrey Rady, U.S. NRC Branch Chief

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Atomic Alchemy Inc.

Mory Diané, Chief Operating Officer