Supporting Statement for Survey of High-Assay, Low-Enriched Uranium (HALEU) Needs for Civilian Domestic Research, Development, Demonstration, and Commercial Use

Survey of High-Assay, Low-Enriched Uranium (HALEU) Needs for Civilian Domestic Research, Development, Demonstration, and Commercial Use.

Part A: Justification

OMB No. 1910-XXXX

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Introduction

Provide a brief introduction of the Information Collection Request. Include the purpose of this collection, note the publication of the 60-Day Federal Register Notice, and provide the list of forms within this collection.

HALEU is defined as uranium enriched between 5% and 20% uranium-235, and HALEU enriched between 10-20% will be required by several advanced reactor designs currently under development. Multiple stakeholders will require HALEU for commercial and research purposes in the coming years, including advanced reactor designers, traditional nuclear fuel and nuclear reactor vendors, Advanced Reactor Demonstration Program awardees, and other companies and organizations engaged in nuclear research and development.

The Energy Act of 2020, Section 2001, instructs DOE to conduct biannual surveys of HALEU needs. The 60-day notice for this instrument was published on April 8, 2022.

A.1. Legal Justification

Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the information collection.

Section 2001 of The Energy Act of 2020 (Pub. L. 116–260, Dec. 27, 2020) directs the Secretary to establish and carry out, through the Office of Nuclear Energy (NE), a program to support the availability of HALEU for civilian domestic research and development, demonstration, and commercial use. The Act directs multiple actions to facilitate the development of a commercial HALEU supply chain including establishing a consortium of fuel cycle entities to partner with DOE in making HALEU available, and to provide HALEU to consortium members during development of commercial domestic sources. NE is developing plans to establish the HALEU Availability Program to implement these and other-directed actions, including those related to HALEU fuel fabrication, enrichment, and transportation.

A.2. Needs and Uses of Data

Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the agency has made of the information received from the current collection.

NE will use the data collected for program planning for the HALEU Availability Program, as outlined in the Energy Act of 2021, Section 2001. Knowing the quantities, chemical form, and other related information about HALEU needs is necessary for accurate program planning to incentivize the production of HALEU along with the size of the fuel cycle required to support that amount of HALEU production. This includes transportation, storage, and other parts of the fuel cycle.

The Survey of HALEU Needs for Civilian Domestic Research, Development, Demonstration, and Commercial Use asks for basic information related to HALEU needs and projections in the near term and longer term. This includes questions about how much material is needed, when it is needed, the enrichment percentage required, and the chemical form required. The survey is a straightforward request

of basic information regarding the HALEU needs of stakeholders for commercial and research purposes in the coming years. Requests for material for each stakeholder will generally be far greater than a metric ton per year, depending on schedule and reactor and project needs.

Some stakeholders also have needs for small quantities of material to be used for testing, research, development, and similar needs. In order for the Department to handle requests for small amounts of material under a metric ton, the Department is also asking for basic information about those requests. This includes quantities, material specifications, delivery dates, end use of the material, and the maturity level of the project requiring small amounts of HALEU.

Small-quantity HALEU requests are needed to develop and test fuels and to finalize reactor designs and qualifications. They don't require large amounts of newly produced HALEU, but they require prioritization by the Department from existing stock or newly down blended material. Receiving this information will help the Department get small amounts of material to stakeholders and developers in a timely manner. Knowing how mature the projects are that require small quantities of HALEU will help prioritize these limited resources as the larger HALEU Availability Program to produce far larger quantities is developed.

A.3. Use of Technology

Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses.

Due to the limited amount of information requested and the limited number of respondents, a simple email form is the easiest and least burdensome way to collect the information requested. All information requested by the department will be collected electronically.

A.4. Efforts to Identify Duplication

Describe efforts to identify duplication.

The Federal Government does not currently have any other instruments that specifically request information about HALEU.

A.5. Provisions for Reducing Burden on Small Businesses

If the collection of information impacts small businesses or other small entities, describe any methods used to minimize burden.

The collection is very limited in scope and will not adversely affect small business or entities.

A.6. Consequences of Less-Frequent Reporting

Describe the consequence to Federal program or policy activities if the collection is not conducted or is conducted less frequently, as well as any technical or legal obstacles to reducing burden.

Less frequent reporting would lead to gaps in information regarding the planning and execution of a HALEU Availability Program. Two-year survey time periods give enough time between collections for meaningful information to be captured without overburdening respondents.

A.7. Compliance with 5 CFR 1320.5

Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines:

- (a) requiring respondents to report information to the agency more often than quarterly;
- (b) requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;
- (c) requiring respondents to submit more than an original and two copies of any document;
- (d) requiring respondents to retain records, other than health, medical government contract, grantin-aid, or tax records, for more than three years;
- (e) in connection with a statistical survey, that is not designed to product valid and reliable results that can be generalized to the universe of study;
- (f) requiring the use of statistical data classification that has not been reviewed and approved by OMB;
- (g) that includes a pledge of confidentially that is not supported by authority established in stature of regulation, that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or
- (h) requiring respondents to submit proprietary trade secrets, or other confidential information unless the agency can demonstrate that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.

Collection requirements will be conducted in a manner consistent with OMB guidelines.

A.8. Summary of Consultations Outside of the Agency

If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the agency's notice, required by 5CFR 320.8(d), soliciting comments on the information collection prior to submission to OMB. Summarize public comments received in response to that notice and describe actions taken in response to the comments. Specifically address comments received on cost and hour burden. Describe efforts to consult with persons outside DOE to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or report.

DOE published a 60-day notice in the *Federal Register*, Vol. 87, No. 69 on April 11, 2022 seeking comment on the information collection. No comments were received.

DOE published a 30-day notice in the *Federal Register*, Vol. 88, No. 72, on April 14, 2023 seeking comment on the information collection. No comments were received.

The Department had informal conversations with the Nuclear Energy Institute (NEI) regarding their own private survey of their members regarding HALEU needs. The Department took steps to minimize the burden to respondents in the DOE survey informed by these informal discussions.

A.9. Payments or Gifts to Respondents

Explain any decision to provide any payment or gift to respondents, other than remuneration of contractors or grantees.

No payments or gifts will be provided to respondents.

A.10. Provisions for Protection of Information

Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or agency policy.

No PII is requested as part of the collection. Business confidential information sent to the Department (if any) will be protected as Controlled Unclassified Information (CUI) following Department guidelines.

A.11. Justification for Sensitive Questions

Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why DOE considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

No questions in the survey are of a sensitive nature.

A.12A. Estimate of Respondent Burden Hours

Provide estimates of the hour burden of the collection of information. The statement should indicate the number of respondents, frequency of response, annual hour burden, and <u>an explanation of how the burden was estimated</u>. Unless directed to do so, DOE should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample fewer than 10 potential respondents is desirable.

The burden was estimated using an estimate of the amount of time it would take to answer basic questions about HALEU and small quantity requests. Companies developing reactors and requiring HALEU generally already have these projections on hand as part of their normal business planning and simply need to fill out the survey with their known needs and basic requirements.

Table A1. Estimated Respondent Hour Burden

Form Number/Title (and/or other Collection Instrument name)	Type of Respondents	Number of Respondents	Annual Number of Responses	Burden Hours Per Response	Annual Burden Hours	Annual Reporting Frequency
HALEU Survey	Industry	25	25	8	200	1
TOTAL		25	25		200	

A.12B. Estimate of Annual Cost to Respondent for Burden Hours

Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage rate categories. The cost of contracting out or paying outside parties for information collection activities should not be included here. Instead, this cost should be included under 'Annual Cost to Federal Government'.

The hourly wage rate was determined to be \$66.88 using the fully burdened "Management, professional, and related" occupational group. http://www.bls.gov/news.release/ecec.nr0.htm

Table A2. Estimated Respondent Cost Burden

Type of Respondents	Total Annual Burden Hours	Hourly Wage Rate	Total Respondent Costs	
Industry	200	66.88	\$ 13,376	
TOTAL	200		\$ 13,376	

A.13. Other Estimated Annual Cost to Respondents

Provide an estimate for the total annual cost burden to respondents or recordkeepers resulting from the collection of information.

There is no additional annual cost burden to respondents resulting from the collection of information.

A.14. Annual Cost to the Federal Government

Provide estimates of annualized cost to the Federal government.

Annualized costs to the Federal government include costs associated with personnel processing the completed forms, estimated to be four employees.

Four employees x 40 hours x \$84.84/hr salary (using the step 5, GS-15 DC locality of the GS pay scale) equals \$13,574.

A.15. Reasons for Changes in Burden

Explain the reasons for any program changes or adjustments reported in Items 13 (or 14) of OMB Form 83-I.

This is a new collection so there are no changes in burden.

A.16. Collection, Tabulation, and Publication Plans

For collections whose results will be published, outline the plans for tabulation and publication.

Results will be used for internal planning purposes for the HALEU availability program and not publicly published.

A.17. OMB Number and Expiration Date

If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.

The Department is not seeking this approval.

A.18. Certification Statement

Explain each exception to the certification statement identified in Item 19 of OMB Form 83-I.

There are no exceptions to the certification statement.