

Supporting Statement for Uranium Data Program

Part A: Justification

Form EIA-851A Domestic Uranium Production Report (Annual)

Form EIA-851Q Domestic Uranium Production Report (Quarterly)

Form EIA-858 Uranium Marketing Annual Survey

OMB No. 1905-0160

August 9, 2018















Table of Contents

Pa	rt A: Justification	2
	Introduction	2
	A.1. Legal Justification	2
	A.2. Needs and Uses of Data	4
	A.3. Use of Technology	6
	A.4. Efforts to Identify Duplication	6
	A.5. Provisions for Reducing Burden on Small Businesses	7
	A.6. Consequences of Less-Frequent Reporting.	7
	A.7. Compliance with 5 CFR §1320.5	8
	A.8. Summary of Consultations Outside of the Agency	8
	A.9. Payments or Gifts to Respondents	9
	A.10. Provisions for Protection of Information.	9
	A.11. Justification for Sensitive Questions	9
	A.12. Estimate of Respondent Burden Hours and Cost	10
	A.13. Annual Cost to the Federal Government	10
	A.14. Changes in Burden	10
	A.15. Reasons for Changes in Burden	12
	A.16. Collection, Tabulation, and Publication Plans	12
	A.17. OMB Number and Expiration Date	13
	A.18. Certification Statement	13

Part A: Justification

Introduction

The U.S. Energy Information Administration (EIA) is the statistical and analytical agency within the U.S. Department of Energy (DOE). It collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding regarding energy and its interaction with the economy and the environment.

EIA is requesting a three-year extension with a reduction in burden and no changes to Forms EIA-851A, EIA-851Q, and EIA-858.

The uranium surveys discussed constitute EIA's *Uranium Data Program* (UDP) and are part of EIA's comprehensive energy data program. The surveys collect statistical data on domestic uranium supply and demand activities including production, exploration and development, trade, purchases, and sales available to the U.S. The UDP surveys are:

- Form EIA-851A Domestic Uranium Production Report (Annual), collects annual data from the U.S. uranium industry on uranium milling and processing, uranium feed sources, uranium mining, employment, drilling, expenditures, and uranium reserves.
- Form EIA-851Q *Domestic Uranium Production Report (Quarterly)*, collects data from the U.S. uranium industry on uranium production and sources (mines and other) on a quarterly basis.
- Form EIA-858 Uranium Marketing Annual Survey, collects annual data from the U.S. uranium
 market on uranium contracts and deliveries, inventories, enrichment services purchased,
 uranium in fuel assemblies, feed deliveries to enrichers, and unfilled market requirements.
 Uranium deliveries, feed deliveries to enrichers, and unfilled market requirements are reported
 both for the current reporting year and for the following ten years.

A.1. Legal Justification

The authority for this mandatory data collection is provided by the following provisions:

- a. 15 U.S.C. §772(b) states:
 - a. "All persons owning or operating facilities or business premises who are engaged in any phase of energy supply or major energy consumption shall make available to the Administrator such information and periodic reports, records, documents, and other data, relating to the purposes of this Act, including full identification of all data and projections as to source, time and methodology of development; as the Administrator may prescribe by regulation or order as necessary or appropriate for the proper exercise of functions under this chapter."
- b. 15 U.S.C. §764(b) states that to the extent authorized by subsection (a), the Administrator shall:
 - a. (1) advise the President and the Congress with respect to the establishment of a comprehensive national energy policy in relation to the energy matters for which the

- Administration has responsibility, and, in coordination with the Secretary of State, the integration of domestic and foreign policies relating to energy resource management;
- b. (2) assess the adequacy of energy resources to meet demands in the immediate and longer range future for all sectors of the economy and for the general public;
- c. (3) develop effective arrangements for the participation of State and local governments in the resolution of energy problems;
- d. (4) develop plans and programs for dealing with energy production shortages; ...
- e. (5) promote stability in energy prices to the consumer, promote free and open competition in all aspects of the energy field, prevent unreasonable profits within the various segments of the energy industry, and promote free enterprise:
- f. (6) assure that energy programs are designed and implemented in a fair and efficient manner so as to minimize hardship and inequity while assuring that the priority needs of the Nation are met;
- g. (7) develop and oversee the implementation of equitable voluntary and mandatory energy conservation programs and promote efficiencies in the use of energy resources;
- h. (8) develop and recommend policies on the import and export of energy resources;
- i. (9) collect, evaluate, assemble, and analyze energy information on reserves, production, demand, and related economic data;
- j. (10) work with business, labor, consumer and other interests and obtain their cooperation:
- k. (11) in administering any pricing authority, provide by rule, for equitable allocation of all component costs of producing propane gas. Such rules may require that (a) only those costs directly related to the production of propane may be allocated by any producer to such gas for purposes of establishing any price for propane, and (b) prices for propane shall be based on the prices for propane in effect on May 15, 1973. The Administrator shall not allow costs attributable to changes in ownership and movement of propane gas where, in the opinion of the Administrator, changes in ownership and movement occur primarily for the purpose of establishing a higher price;
- (12) perform such other functions as may be prescribed by law."
- c. As the authority for invoking subsection (b), above, 15 U.S.C. §764(a) states:
 - a. "Subject to the provisions and procedures set forth in this Act, the [Secretary] shall be responsible for such actions as are taken to assure that adequate provision is made to meet the energy needs of the Nation. To that end, he shall make such plans and direct and conduct such programs related to the production, conservation, use, control, distribution, rationing, and allocation of all forms of energy as are appropriate in connection with only those authorities or functions
 - i. (1) specifically transferred to or vested in him by or pursuant to this chapter;
 - ii. (2) delegated to him by the President pursuant to specific authority vested in the President by law; and
 - iii. (3) otherwise specifically vested in the Administrator by the Congress."
- d. Additional authority for this information collection is provided by 15 U.S.C. §790(a) which states;
 - a. "It shall be the duty of the Director to establish a National Energy Information System...[which] shall contain such information as is required to provide a description of and

facilitate analysis of energy supply and consumption within and affecting the United States on the basis of such geographic areas and economic sectors as may be appropriate... to meet adequately the needs of..."

- i. (1) the Department of Energy in carrying out its lawful functions;
- ii. (2) the Congress;
- iii. (3) other officers and employees of the United States in whom have been vested, or to whom have been delegated energy-related policy decision-making responsibilities;
- iv. (4) the States to the extent required by the Natural Gas Act [15 U.S.C. §717 et seq.] and the Federal Power Act [16 U.S.C. §791a et seq.].
- b. "At a minimum, the System shall contain such energy information as is necessary to carry out the Administration's statistical and forecasting activities, and shall include... such energy information as is required to define and permit analysis of;
 - (1) the institutional structure of the energy supply system including patterns of ownership and control of mineral fuel and non-mineral energy resources and the production, distribution, and marketing of mineral fuels and electricity;
 - ii. (2) the consumption of mineral fuels, non-mineral energy resources, and electricity by such classes, sectors, and regions as may be appropriate for the purposes of this chapter;
 - iii. (3) the sensitivity of energy resource reserves, exploration, development, production, transportation, and consumption to economic factors, environmental constraints, technological improvements, and suitability of alternate energy sources;
 - iv. (4) the comparability of energy information and statistics that are supplied by different sources;
 - v. (5) industrial, labor, and regional impacts of changes in patterns of energy supply and consumption;
 - vi. (6) international aspects, economic and otherwise, of the evolving energy situation; and
 - vii. (7) long-term relationships between energy supply and consumption in the United States and world communities."

A.2. Needs and Uses of Data

EIA's *Uranium Data Program* collects data on domestic uranium supply and demand activities, including production, exploration and development, trade, and purchases and sales available to the U.S. The users for these data includes the Congress and Congressional staff, the Congressional Research Service, Nuclear Regulatory Commission, Department of Energy's Office of Nuclear Energy, the nuclear and uranium industry, and the public. There are Executive Branch agencies who collect data related to the uranium industry who also rely on UDP (listed on page 6).

The data collected on Form EIA-851A *Domestic Uranium Production Report (Annual)*, are used to publish annual information on:

- Exploration and development drilling activities in the U.S. uranium production industry including data on number of holes and drilling footage;
- U.S. uranium mine production and number of operating mines;
- Activities at U.S. uranium mills, heap leach, and in-situ leach plants including uranium concentrate production and shipments;
- Owner, location, capacity, and operating status of existing and planned uranium concentrate facilities:
- Employment in the U.S. uranium production industry by exploration, mining, milling, processing, and reclamation categories, and by state;
- Expenditures for land, exploration, drilling, production, and reclamation in the U.S. uranium production industry;
- U.S. uranium reserve estimates by mining method, state, and status.
- U.S. questionnaire input to the *Uranium Resources*, *Production and Demand* "Red Book" (OECD/Nuclear Energy Agency and International Atomic Energy Agency);
- U.S. questionnaire input to the *Nuclear Energy Data* "Brown Book" (OECD/Nuclear Energy Agency);
- U.S. input for the U.S. Country Nuclear Power Profile (International Atomic Energy Agency);
- In March 2012, EIA and U.S. Geological Survey (USGS) entered into a Confidential Information
 Protection and Statistical Efficiency Act of 2002 (CIPSEA) Information Access Agreement to
 support USGS studies. This agreement allows individually-identifiable information submitted to
 EIA to be shared with USGS for statistical purposes only. Form EIA-851A data is used by the
 USGS to calculate grade/tonnage curves of existing uranium resources including undiscovered
 uranium resources.

The data collected on Form EIA-851Q *Domestic Uranium Production Report (Quarterly)*, are used to publish quarterly information on:

- U.S. production of uranium concentrate from ore and/or solutions from different methods of mining, including in-situ leaching, open pit, underground, heap leach, and other sources;
- Number of U.S. uranium facilities producing uranium concentrate;
- Owner, location, capacity, and operating status of existing and planned uranium concentrate processing facilities.

The data collected on Form EIA-858 *Uranium Marketing Annual Survey*, are used to publish annual information on:

- Sellers and the origin countries of any uranium and enrichment services purchased or imported into the United States by owners or operators of any U.S. civilian nuclear power reactors;
- Uranium marketing activities in the United States, including quantities, prices and origins of uranium transactions and enrichment services, contract and material types, domestic and foreign purchases and sales, origin and destinations of enrichment feed deliveries, quantity of uranium loaded into U.S. civilian nuclear power reactors, and uranium inventories;
- Data on U.S. uranium market requirements, including future contracted deliveries (filled requirements), unfilled market requirements, and projected enrichment feed deliveries;

- U.S. questionnaire input to the *Uranium Resources*, *Production and Demand* "Red Book" (OECD/Nuclear Energy Agency and International Atomic Energy Agency);
- U.S. questionnaire input to the Nuclear Energy Data "Brown Book" (OECD/Nuclear Energy Agency);
- U.S. input for the U.S. Country Nuclear Power Profile (International Atomic Energy Agency).

Data from UDP surveys appear in EIA reports, including the following:

- Domestic Uranium Production Report Annual
 - o http://www.eia.gov/uranium/production/annual/
- Domestic Uranium Production Report Quarterly
 - 0 http://www.eia.gov/uranium/production/quarterly/
- Uranium Marketing Annual Report
 - 0 http://www.eia.gov/uranium/marketing/

A.3. Use of Technology

Surveys in the *Uranium Data Program* use Internet-based data collection systems as the primary means of data collection. The majority of contact with respondents (e.g., notification that a survey has opened for a collection cycle) is performed using email.

Internet data collection is the primary collection mode for UDP surveys. The Internet-based systems allow respondents to enter their data directly into the EIA databases, which reduces the time needed for data collection and processing. The systems automatically identify data that fail edit specifications prior to submission, allowing respondents to make necessary corrections or explain unusual situations impacting the reported data. This data editing process reduces respondent burden by reducing the number of times a respondent must resubmit forms prior to acceptance by EIA. It also improves the timeliness of reporting the information to the public. The only equipment and software required of the respondents are a connection to the Internet and a standard industry web browser.

A.4. Efforts to Identify Duplication

EIA is the only principal statistical agency that collects and/or maintains uranium data in the federal government. The data collected on the UDP surveys are unique. Although limited amounts of similar data may be available from other federal agencies, industry, and private sources, those data collections are not reasonable alternatives for the data sets obtained through the UDP surveys.

Non-statistical agencies that collect and/or maintain uranium data in the U.S. Federal Government include:

- Department of Commerce, Bureau of Industry and Security (BIS), U.S. Additional Protocol (AP)
- Department of Commerce, International Trade Administration (ITA)
- Department of Energy, Office of Environmental Management (EM)

- Department of Energy, Office of Legacy Management (LM)
- Department of Energy, Office of Nuclear Energy (NE)
- Department of Energy, National Nuclear Security Administration (NNSA), Nuclear Materials
 Management & Safeguard System (NMMSS)
- Department of the Interior, Bureau of Land Management (BLM)
- Environmental Protection Agency (EPA)
- Nuclear Regulatory Commission (NRC)
- U.S. Geological Survey (USGS)
- U.S. International Trade Commission (US ITC)

EIA evaluated the above sources of publicly available uranium data and found no other source as comprehensive, timely, or detailed as the data collected on Forms EIA-851A, EIA-851Q, and EIA-858. EIA also reviewed three major private sector sources of nuclear information and data; TradeTech, UxC, and World Nuclear News (WNN). TradeTech only makes public a North American Uranium spot price. UxC makes public spot prices for U_3O_8 (uranium concentrate), UF_6 (converted uranium) and enrichment services for both North American and European Union markets. UXC updates U_3O_8 prices weekly and updates prices for UF $_6$ and enrichment services on a monthly basis. WNN is a news provider only. EIA's uranium reports publish data on (1) uranium milling and processing, (2) uranium feed sources, (3) employment, (4) drilling, (5) expenditures (for drilling, production ,and land/other), (6) uranium mining, (7) contracts, (8) deliveries (during the report year and projected for the next ten years), (9) enrichment services purchased, (10) inventories, (11) use in fuel assemblies, (12) feed deliveries to enrichers (during the report year and projected for the next ten years), and (13) unfilled market requirements for the next ten years. This data exists nowhere else and is a direct result of EIA's mandatory data collection authority.

A.5. Provisions for Reducing Burden on Small Businesses

To the extent possible, EIA designs its data surveys so that small operations are not unduly affected. This is especially important to UDP as small business constitute a sizeable portion of the U.S. uranium industry. Small firms participate in a limited or full range of industry activities from land acquisition through exploration, drilling, mining, milling, processing, conversion, and U.S. market broker/traders. To minimize burden, UDP survey forms only request data for items that are normally recorded in the ordinary course of their business operations. Because of this, EIA anticipates that little time will be required of small companies to prepare their responses. The use of electronic data collection is also intended to reduce the response burden on small business.

A.6. Consequences of Less-Frequent Reporting

EIA conducted a customer satisfaction survey in the summer of 2017 to determine if it could discontinue the quarterly EIA-851Q. The results of this survey were strongly in favor of continuing the quarterly collection and publication of uranium production data. Industry relies on this quarterly data as an

indicator of current market conditions throughout the year in between the more comprehensive annual reports published in May or June of each year.

A.7. Compliance with 5 CFR §1320.5

The UDP surveys are operated in accordance with 5 CFR §1320.5.

A.8. Summary of Consultations Outside of the Agency

On August 23, 2017, EIA launched a Uranium Customer Satisfaction Survey on its website. The survey requested stakeholder input into the uses of EIA's uranium data, other sources of similar data, and what frequency of uranium data publication was necessary to meet their needs (annual, semi-annual, or quarterly). Email notices soliciting input were sent to all respondents of the uranium forms and trade publications. National Mining Association and Uranium Producers of America were also contacted for input. 128 responses were received. 51% of the participants reported using UDP data for assessing domestic supply conditions and planning future nuclear fuel purchases. 80% of participants stated that they do not use an alternative data series. Participants that used an alternative data series named private services that use EIA data as part of their proprietary analyses. The majority of responses supported continued collection of quarterly data. Additionally, letters from Uranium Producers of America and TradeTech, a company that provides uranium market analysis for their clients, were received urging EIA to continue publication of quarterly uranium production data.

On December 6, 2017, EIA conducted an outreach session via both WebEx and in-person attendance options. Invitations were extended to respondents, relevant trade associations and other stakeholders known to EIA. Eight parties participated via WebEx. EIA's presentation covered the uses and purposes of the forms that comprise the UDP. As no changes were proposed in the 60 Day Federal Register Notice (FRN), none were discussed. Ur-Energy raised some issues (filed as a written comment and discussed below) which were reviewed and discussed.

EIA received one written comment in response to the 60 Day FRN from Ur-Energy. The comment encouraged EIA to: separate the reported produced pounds by primary mine production and mill production; collect and report on a complete spectrum of resource/reserves to date; and to verify that facilities reported in capacity for uranium mines/mills could start production within six months. EIA held additional conversations on these issues with Ur-Energy on January 30, 2018. In response to the comment, EIA stated it will take several months to determine how to definitively address these issues. EIA cannot report the amount of uranium produced from milling without revealing the data for an individual entity. This would violate CIPSEA data protection terms by disclosing the production at one respondent facility which, is the only facility of its type in the U.S. EIA has added text to its uranium production publication that alerts readers to the issue and directs readers to relevant filings with the U.S. Securities and Exchange Commission.

EIA currently collects information on the Reasonably Assured Resources available to each active mining and exploration operation. It is not practical for EIA to develop and publish national estimates of

uranium reserves on its own. EIA will track the current work of the Securities and Exchange Commission to define uranium reserves and consult with U.S. Geological Survey on the availability of national uranium reserve estimates.

EIA will investigate whether it is practical for respondents to report the length of time it would take to bring inactive facilities back into operation.

Because of the amount of time this research is expected to take, EIA will proceed with the current nochange clearance. EIA will begin to conduct the research and consultations discussed above. Based on the results of this work, EIA may propose modified surveys for OMB approval.

A.9. Payments or Gifts to Respondents

There will not be any payments made or gifts given to respondents as an incentive to complete the *Uranium Data Program* surveys.

A.10. Provisions for Protection of Information

For Forms EIA-851A, EIA-851Q, and EIA-858 the CIPSEA confidentiality pledge is:

The items RESPONDENT IDENTIFICATION Company Name and all of ITEM X: FACILITY INFORMATION on Form EIA-XXX will be considered public information and may be publicly released in company or individually identifiable form.

The information you provide on Form EIA-XXX will be used for statistical purposes only and is confidential by law. In accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002 and other applicable Federal laws, your responses will not be disclosed in identifiable form without your consent. Per the Federal Cybersecurity Enhancement Act of 2015, Federal information systems are protected from malicious activities through cybersecurity screening of transmitted data. Every EIA employee, as well as every agent, is subject to a jail term, a fine, or both if he or she makes public ANY identifiable information you reported.

A.11. Justification for Sensitive Questions

There are no questions of a sensitive nature.

A.12. Estimate of Respondent Burden Hours and Cost

The total annual burden is estimated to be **1,200 hours** (see Table A1, below). Based on the estimated rate of \$75.69 per hour for employees who would complete these forms, the total annual respondent cost for all forms is estimated to be \$90,828.

The equation for calculating the burden cost is

(hourly rate) x (hours per year) = (annual respondent burden); or

\$75.69/hour x 1,200 hours/year = \$90,828.

An average cost per hour of \$75.69 is used because that is the average loaded (salary plus benefits) cost for an EIA employee assigned to data survey work. EIA assumes that the survey respondent workforce completing surveys for EIA is comparable with EIA workforce.

Annual Annual **Number of Burden Hours Annual EIA Form Number/Title** Reporting Number of Respondents Per Response Burden Hours Frequency Responses Form EIA-851A - Domestic Uranium Production 48 5.00 240 Report (Annual) Form EIA-851Q - Domestic Uranium Production 60 15 0.75 45 Report (Quarterly) Form EIA-858 - Uranium Marketing Annual Survey 915 1 61 61 15.00 TOTAL 124 169 1,200

Table A1. Estimated Respondent Burden

A.13. Annual Cost to the Federal Government

The ongoing annual costs of the UDP data collection to the federal government, including survey frame maintenance, data collection, data processing, report publication and systems maintenance totals \$93,856.

Activity **Labor hours** x Rate = Cost Survey frame and maintenance 160 75.69 \$ 12,1: Data collection and processing \$ 60,5! 800 75.69 \$ Data dissemination 18,10 240 75.69 \$ Data systems maintenance and enhancements 40 75.69 \$ 3,02 **Total Annual Cost** \$ 93,8

Table A2. Annual Cost to the Federal Government

A.14. Changes in Burden

There is a slight change in estimated burden due to changes in the number of respondents. The number of respondents for Form EIA-851A has decreased from 53 to 48. The number of respondents for Form EIA-851Q has increased from 14 to 15. The number of respondents for Form EIA-858 has increased from 60 to 61. The total change in burden for all respondents has decreased from 1,207 hours to 1,200 hours.

Table A3. Changes in Burden

							onango								
										Annual Number of Repsonses			Annual Burden Hours		
EIA Form Number/Title	Annual Reporting Frequency	Number of Respondents (Previously Approved)	Number of Respondents (Requested)	Annual Number of Responses (Previously Approved)	Annual Number of Responses (Requested)	Burden Hours Per Response (Previously Approved)	Burden Hours Per Response (Requested)	Annual Burden Hours (Previously Approved)	Annual Burden Hours (Requested)	Change Due to Agency Discretion	Change Due to Adjustment in Agency Estimate		Change Due to Agency Discretion	Change Due to Adjustment in Agency Estimate	
EIA-851A Domestic Uranium Production Report (Annual)	1	53	48	53	48	5	5	265	240	0	-5	-5	0	-25	-25
EIA-851Q Domestic Uranium Production Report (Quarterly)	4	14	15	56	60	0.75	0.75	42	45	0	4	4	0	3	3
Form EIA-858 Uranium Marketing Annual Survey	1	60	61	60	61	15	15	900	915	0	1	1	0	15	15

A.15. Reasons for Changes in Burden

Table A4. ICR Summary of Burden

	Requested	Program Change Due to Agency Discretion	Change Due to Adjustment in Agency Estimate	Previously Approved
Total Number of Responses	169	0	0	169
Total Time Burden (Hr)	1,200	0	-7	1,207

The frame for Form EIA-851A declined by five respondents because these five companies are no longer exploring or holding land for uranium production due to low prices in uranium markets. EIA-851A covers exploration and production companies and five respondents are no longer in the uranium exploration and production business because the price of uranium is too low for them to support these activities. The five respondents do not complete any other EIA surveys. One company that already reports on EIA-851A is developing a uranium production facility was added to EIA-851Q. This is a quarterly survey, so the number of annual responses increases by 4, 1 respondent x 4 quarterly surveys. An additional uranium trader was added to EIA-858's frame since the last clearance.

A.16. Collection, Tabulation, and Publication Plans

The data collected on the UDP forms will be aggregated in EIA reports and made available on the EIA website. Paper submissions, if any, have the same due dates as online submissions.

Table A5. UDP collection and publishing schedule

Form	Start Date	Due Date	Period	Publications	On EIA website
EIA- 851A	January 2	March 1	Annual	Domestic Uranium Production Report - Annual http://www.eia.gov/uranium/production/annual/	May
EIA- 851Q	January 2; April 1; July 1; October 1	January 15; April 15; July 15; October 15	Quarterly	Domestic Uranium Production Report - Quarterly http://www.eia.gov/uranium/production/quarterly/	February; May; August; November
EIA- 858	January 2	March 1	Annual	Uranium Marketing Annual Report http://www.eia.gov/uranium/marketing/ Domestic Uranium Production Report - Annual http://www.eia.gov/uranium/production/annual/	Мау

A.17. OMB Number and Expiration Date

The OMB number 1905-0160 and expiration date will be displayed on the data collection forms and instructions.

A.18. Certification Statement

There are no exceptions to the certification statement identified in Item 19, "Certification for Paperwork Reduction Act Submissions," of OMB Form 83-I. This information collection request complies with 5 CFR §1320.9.