

This report is **mandatory** under Public Law 93-275 and section 1015 of the Energy Policy Act of 1992 (Public Law 102-486). Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For the sanctions and the provisions concerning the confidentiality of information submitted on this form, see the instructions. **Title 18 USC 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.**

## INSTRUCTIONS

### SANCTIONS

The timely submission of Form EIA-858 by those required to report is mandatory under Section 13(b) of the Federal Energy Administration Act of 1974 (FEAA) (Public Law 93-275), as amended. Failure to respond may result in a penalty of not more than \$2,750 per day for each civil violation, or a fine of not more than \$5,000 per day for each criminal violation. The government may bring a civil action to prohibit reporting violations, which may result in a temporary restraining order or a preliminary or permanent injunction without bond. In such civil action, the court may also issue mandatory injunctions commanding any person to comply with these reporting requirements.

### CONFIDENTIALITY

The items **RESPONDENT IDENTIFICATION NAME** and **OTHER PARTY NAME (ITEM 1A)**, and **SELLER'S NAME (ITEM 2B)** on Form EIA-858 are **NOT considered confidential** and may be publicly released in identifiable form. In addition to the use of the information from these data fields by EIA for statistical purposes, this information may be used for any nonstatistical purposes such as administrative, regulatory, law enforcement, or adjudicatory purposes.

**All other information you provide on Form EIA-858 will be considered as confidential and used for statistical purposes only. In accordance with the Confidential Information Protection and Statistical Efficiency Act of 2002 (Title 5 of Public Law 107-347) and other applicable Federal laws, your responses will not be disclosed in identifiable form without your consent. By law, every EIA employee, as well as every agent, is subject to a jail term, a fine of up to \$250,000, or both if he or she discloses ANY identifiable information about you.**

### REPORTING BURDEN

Public reporting burden for this collection of information is estimated to average 15 hours per response, including the time of reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Energy Information Administration, Statistics and Methods Group, EI-70 Forrestal Building, 1000 Independence Avenue SW, Washington, D.C. 20585-0670; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503. A person is not required to respond to the collection of information unless the form displays a valid OMB number.

### EIA-858 SURVEY MANAGER AND CONTACT

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**WHO MUST RESPOND:** Firms and individuals that were involved in the (domestic) U.S. uranium industry must complete the Form EIA-858.

**WHEN TO RESPOND:** The Form EIA-858 must be filed with the EIA by March 1, 2009.

**METHODS OF FILING RESPONSE:** Survey respondents should submit data electronically using EIA's secure Single Sign-On internet data collection system. This system uses security protocols to protect information against unauthorized access during transmission. If you have not registered with EIA's Single Sign-On system, send an e-mail requesting assistance to [EIA-858@eia.doe.gov](mailto:EIA-858@eia.doe.gov). If you have registered with Single Sign-On, log on at <https://signon.eia.doe.gov/ssoserver/login>. If you are having a technical problem with accessing or using the Single Sign-On system, send an e-mail requesting assistance to [EIA-858@eia.doe.gov](mailto:EIA-858@eia.doe.gov).

An alternative to the preferred Single Sign-On system that is also electronically secure is EIA's Secure File Transfer (SFT) system. To use SFT, save the form to your hard drive and refer to the following website for further instructions: <https://signon.eia.doe.gov/upload/notice858.jsp>.

Or file the form by the following nonsecure methods:

- E-mail the form to [douglas.bonnar@eia.doe.gov](mailto:douglas.bonnar@eia.doe.gov).
- Fax the form to (202) 287-1944.
- Mail the form to: U.S. Department of Energy, Energy Information Administration, Mail Stop: BG-076 (Form EIA-858), 1000 Independence Avenue, SW, Washington, DC 20077-5651.

Note that commonly used facsimile and e-mail transmissions (including files attached to e-mail messages) travel over ordinary telephone lines and are not considered secure electronic methods of transmitting survey data. Please retain a copy of your submission for your files.

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## INSTRUCTIONS

**ITEM 1. CONTRACT** covers all *Purchase, Sale, Exchanges, Loans, Loan Repayments*, and/or *Other* transactions (transfer of title) active during the Survey Year. Exchanges include physical material, country of origin, and ownership changes of uranium. Report each contract that was active or that was completed (performed) by your firm during the Survey Year. If, during the Survey Year, your firm held or entered into other contracts, a separate Item 1 must be completed to report each such new contract, including those completed during the year. EIA must be able to account for all *transfers of title to uranium materials* during the Survey Year. Any transaction that involved a transfer of title, i.e., the Purchase, Sale, Exchange, Loan, Loan Repayment, and/or Other should be reported. A separate Item 1 must be completed to report all information requested under Items 1.A through 1.F for a transfer-of-title contract during the Survey Year. Under certain conditions, a Sale or Purchase of separative work units (SWU) in the secondary market constitutes a transfer of title to uranium. A contract that involves, in fact, a transfer of title to enriched uranium for a title to natural uranium, or vice-versa, should be reported as an Exchange.

**Item 1.A. Other Party Name:** The other party or parties named in the contract.

**Item 1.B. Date Contract Signed:** Give the date the contract was originally signed. If applicable, give the latest date it was renegotiated and indicate whether this was price related.

**Item 1.C. Contract Type:** **Spot Contract** - A one-time delivery of the entire contract quantity to occur within one year of contract execution.  
**Long-Term Contract** - One or more deliveries to occur after a year following contract execution.

### Item 1.D Uranium Deliveries in Reporting Year

**Item 1.D.1 Transaction Type:** Indicate whether each delivery is a Purchase, Sale, Exchange, Loan, Loan Repayment, and/or Other transfer of title. If Other, specify. If more than one transaction type is involved, use the next row, and so on. For a Loan or Loan Repayment, indicate whether your firm was the Lender or the Borrower. An Exchange must be marked appropriately as sent and received separately for each delivery.

**Item 1.D.2 Material Type:**  $U_3O_8$  - Uranium oxide (Uranium concentrate or yellowcake) **Natural  $UF_6$**  - Uranium Hexafluoride **Enriched Uranium**

**Item 1.D.3. Country of Origin:** Enter the country in which the uranium was mined.

**Item 1.D.4. Quantity (thousand pounds):** Enter quantity of uranium oxide ( $U_3O_8$ ) and  $U_3O_8$  equivalent uranium-component quantity specified in the contract for each delivery of natural  $UF_6$  and enriched uranium during the Survey Year.

**Item 1.D.5. Price (US\$ per pound):** Enter price of uranium oxide ( $U_3O_8$ ) and  $U_3O_8$  equivalent uranium-component price specified in the contract for each delivery of natural  $UF_6$  and enriched uranium during the Survey Year. In the price, do not include the conversion service and enrichment service components. Note that prices should not be reported for Exchanges, Loans, Loan Repayments, and Other transactions.

**Items 1.D.6. Pricing Mechanism:** Report whether the pricing arrangement under the contract is specified as base-price escalated or fixed price, or whether the price is based on a spot-market price. If the contract specifies a different pricing mechanism, mark "Other" and briefly describe. Note that pricing mechanisms prices should not be reported for Exchanges, Loans, Loan Repayments, and Other transactions.

### Item 1.E Future Deliveries

**Item 1.E.1. Year:** Enter each year that deliveries stated in the contract, allowing for firm and optional quantities.

**Item 1.E.2. Transaction Type:** Indicate whether each future delivery is a Purchase, Sale, Exchange, Loan, Loan Repayment, and/or Other transfer of title. If Other, specify. If more than one transaction type is involved for a future year, use the next row reporting that same year, and so on. For a Loan or Loan Repayment, indicate whether your firm was the Lender or the Borrower. An Exchange must be marked appropriately as sent and received separately for each future delivery.

**Item 1.E.3. Material Type:**  $U_3O_8$  - Uranium oxide (Uranium concentrate or yellowcake) **Natural  $UF_6$**  - Uranium Hexafluoride **Enriched Uranium**

**Item 1.E.4-5. Minimum and Maximum Quantity (thousand pounds):** Report the minimum and maximum quantities as stated in the contract for each year, to allow the option of either increasing or decreasing quantities. If a future delivery is firm or fixed, report that same quantity under both minimum and maximum.

**Item 1.F. Contract Completed:** Indicated if this survey year delivery is the last delivery under the terms of this contract. If a contract was completed during the Survey Year, please report YES, and be sure to return that contract with your survey form.

**Item 2.A-E. Enrichment Services Purchased by Owners and Operators of Civilian Nuclear Power Reactors:** Report purchases of enrichment services made during the Survey Year. In Item 2D, report individual quantities in units of separative work units (SWU), not thousand SWU, purchased by the country where the enrichment service was performed (country where enrichment plant is located) or SWU-origin in Item 2A, seller's name in Item 2B, and the appropriate type of contract (Spot or Long-Term) in Item 2C. A purchase of SWU through assignment of an enrichment contract should be reported under this item. In Item 2E, report the average SWU price paid in U.S. dollars per SWU for the total quantity of enrichment services purchased during the Survey Year. Owners and operators of civilian nuclear power reactors are required to report their purchases of enrichment services during the Survey Year under the provisions of Section 1015 of the Energy Policy Act of 1992 (P.L. 102-486).

**Item 3. Uranium Inventories:** State the inventory quantities, both domestic- and foreign-origin, as of the end of the Survey Year to which your firm own, held title, and/or held under financial lease. Reported quantities should agree with inventory quantities reported last year and with data provided elsewhere in Form EIA-858. That is, inventory quantities should reflect last year's amounts with adjustments for subsequent stock changes, purchases, sales, exchanges, loans, and usages, etc., reported on other parts of this form.

**Item 4. Uranium Used In Fuel Assemblies in the Survey Year (Owners and Operators of Civilian Nuclear Power Reactors only):** Report only the total of unirradiated new fuel assemblies loaded into the reactor(s) during the Survey Year and during the prior-year by domestic- and foreign-origin. Do not include uranium removed from a reactor that subsequently will be reloaded.

**Item 5. Uranium Feed Deliveries to U.S. and Foreign Enrichers in the Survey Year:** Enter the country origins and associated quantity of uranium feed shipped to enrichment plants, indicating each country where enrichment plant is located. Do not include deliveries placed in your usage agreement account that are not intended for withdrawal until in the next calendar year or later. Withdrawals of enriched uranium from your usage agreement account in the Survey Year, however, should be included as appropriate in your response(s).

**Item 6. Projected Enrichment Feed Deliveries and Unfilled Market Requirements:** In the second column, enter your firm's total projected enrichment feed shipments to enrichment service suppliers (U.S. and foreign suppliers) for each year. Include enriched uranium to be received through all purchase and exchange contracts in effect as of the end of the Survey Year. Exclude feed deliveries of uranium scheduled for a cancelled reactor, unless the enriched product will be used in another of your firm's reactor units.

In the third column, enter your firm's total unfilled market requirements for each year.

**Note:** The total projected shipments in the second column are the contracted deliveries plus unfilled requirements reported in the third column.

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## GLOSSARY

**Base-Escalated Pricing Mechanism:** The delivery price determined when a contract is signed. It can be a fixed price or a base price escalated according to a given formula.

**Domestic:** The 50 States and the District of Columbia. *Note:* The United States has varying degrees of jurisdiction over a number of territories and other political entities outside the 50 States and the District of Columbia, including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Johnston Atoll, Midway Islands, Wake Island, and the Northern Mariana Islands. EIA data programs may include data from some or all of these areas in U.S. totals. For these programs, data products will contain notes explaining the extent of geographic coverage included under the term "United States."

**Domestic purchase:** A uranium purchase from a firm located in the United States.

**Domestic sale:** A uranium sale to a firm located in the United States.

**Domestic uranium industry:** Collectively, those businesses (whether U.S. or foreign-based) that operate under the laws and regulations pertaining to the conduct of commerce within the United States and its territories and possessions and that engage in activities within the United States, its territories, and possessions specifically directed toward uranium exploration, development, mining, and milling; marketing of uranium materials; enrichment; fabrication; or acquisition and management of uranium materials for use in commercial nuclear power plants.

**EIA:** The Energy Information Administration. An independent agency within the U.S. Department of Energy that develops surveys, collects energy data, and analyzes and models energy issues. The Agency must meet the requests of Congress, other elements within the Department of Energy, Federal Energy Regulatory Commission, the Executive Branch, its own independent needs, and assist the general public, or other interest groups, without taking a policy position. See more information about EIA at <http://tonto.eia.doe.gov/abouteia/>.

**Enriched Uranium:** Uranium in which the U-235 isotope concentration has been increased to greater than the 0.711 percent U-235 (by weight) present in natural uranium.

**Enrichment feed deliveries:** Uranium that is shipped under contract to a supplier of enrichment services for use in preparing enriched uranium product to a specified U-235 concentration and that ultimately will be used as fuel in a nuclear reactor.

**Enrichment Services:** (See Separative Work Units).

**Fabricated fuel:** Fuel assemblies composed of an array of fuel rods loaded with pellets of enriched uranium dioxide.

**Fixed Pricing Mechanism:** The delivery price determined when a contract is signed. It can be a fixed price or a base price escalated according to a given formula.

**Foreign purchase:** A uranium purchase of foreign-origin uranium from a firm located outside of the United States.

**Foreign sale:** A uranium sale to a firm located outside the United States.

**Long-term contract:** One or more deliveries to occur after a year following contract execution.

**Natural uranium:** Uranium with the U-235 isotope present at a concentration of 0.711 percent (by weight), that is, uranium with its isotopic content exactly as it is found in nature.

**Nuclear electric power (nuclear power):** Electricity generated by the use of thermal energy released from the fission of nuclear fuel in a reactor.

**Nuclear reactor:** An apparatus in which a nuclear fission chain reaction can be initiated, controlled, and sustained at a specific rate. A reactor includes fuel (fissionable material), moderating material to control the rate of fission, a heavy-walled pressure vessel to house reactor components, shielding to protect personnel, a system to conduct heat away from the reactor, and instrumentation for monitoring and controlling the reactor's systems.

**Respondent:** A company or individual who completes and returns a report or survey form.

**Separative Work Units (SWU):** The standard measure of enrichment services. The effort expended in separating a mass  $F$  of feed of assay  $x_f$  into a mass  $P$  of product assay  $x_p$  and waste of mass  $W$  and assay  $x_w$  is expressed in terms of the number of separative work units needed, given by the expression  $SWU = WV(x_w) + PV(x_p) - FV(x_f)$ , where  $V(x)$  is the "value function," defined as  $V(x) = (1-2x) \ln((1-x)/x)$ .

**Spot contract:** A one-time delivery of the entire contract to occur within one year of contract execution.

**Spot-market price:** The price for a one-time open market transaction for immediate delivery of a specific quantity of product at a specific location where the commodity is purchased "on the spot" at current market rates.

**Unfilled requirements:** Requirements not covered by usage of inventory or supply contracts in existence as of January 1 of the survey year.

**Uranium:** A heavy, naturally radioactive, metallic element (atomic number 92). Its two principally occurring isotopes are uranium-235 and uranium-238.

Uranium-235 is indispensable to the nuclear industry because it is the only isotope existing in nature, to any appreciable extent, that is fissionable by thermal neutrons. Uranium-238 is also important because it absorbs neutrons to produce a radioactive isotope that subsequently decays to the isotope plutonium-239, which also is fissionable by thermal neutrons.

**Uranium concentrate:** A yellow or brown powder obtained by the milling of uranium ore, processing of in situ leach mining solutions, or as a byproduct of phosphoric acid production.

**Uranium hexafluoride (UF<sub>6</sub>):** A white solid obtained by chemical treatment of U<sub>3</sub>O<sub>8</sub> and which forms a vapor at temperature above 56 degrees Centigrade. UF<sub>6</sub> is the form of uranium required for the enrichment process.

**Uranium oxide:** Uranium concentrate or yellowcake. Abbreviated as U<sub>3</sub>O<sub>8</sub>.

**Yellowcake:** A natural uranium concentrate that takes its name from its color and texture. Yellowcake typically contains 70 to 90 percent U<sub>3</sub>O<sub>8</sub> by weight. It is used as feedstock for uranium fuel enrichment and fuel pellet fabrication.