

Section 232 Investigation: The Effect of Imports of Uranium on the National Security

Front End Survey



SCOPE OF ASSESSMENT

The U.S. Department of Commerce, Bureau of Industry and Security (BIS), Office of Technology Evaluation (OTE), is conducting a survey of the U.S. uranium mining, milling, conversion, enrichment, and fuel fabrication sectors. The survey results will be used to support an ongoing investigation of the effect of imports of uranium on the national security initiated under Section 232 of the Trade Expansion Act of 1962, as amended.

The principal goal of this survey is to assist the U.S. Department of Commerce in determining whether uranium is being imported into the United States in such quantities or under such circumstances as to threaten to impair the national security. Information collected will include facilities and production data, mergers and acquisitions, joint ventures, imports and exports, supply chain networks, customers, sales and demand data, employment information, conditions of domestic and global competition, research and development, and other financial factors. The resulting data will provide the U.S. Department of Commerce detailed uranium industry information that is otherwise not publicly available and needed to effectively conduct this Section 232 investigation.

RESPONSE TO THIS SURVEY IS REQUIRED BY LAW

A response to this survey is required by law (50 U.S.C. Sec. 4555). Failure to respond can result in a maximum fine of \$10,000, imprisonment of up to one year, or both. Information furnished herewith is deemed confidential and will not be published or disclosed except in accordance with Section 705 of the Defense Production Act of 1950, as amended (50 U.S.C. Sec. 4555). Section 705 prohibits the publication or disclosure of this information unless the President determines that its withholding is contrary to the national defense. Information will not be shared with any non-government entity, other than in aggregate form. The information will be protected pursuant to the appropriate exemptions from disclosure under the Freedom of Information Act (FOIA), should it be the subject of a FOIA request.

Notwithstanding any other provision of law, no person is required to respond to nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number.

BURDEN ESTIMATE AND REQUEST FOR COMMENT

Public reporting burden for this collection of information is estimated to average 14 hours per response, including the time for 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 to BIS Information Collection Officer, Room 6883, Bureau of Industry and Security, U.S. Department of Commerce, Washington, D.C. 20230, and to the Office of Management and Budget, Paperwork Reduction Project (OMB Control No. 0694-0120), Washington, D.C. 20503.

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General Instructions

Your organization is required to complete this survey of the U.S. uranium mining, milling, conversion, enrichment, and fuel fabrication sectors using an Excel template, which can be downloaded from the BIS website: <http://www.bis.doc.gov/uraniumFE>

A. If you are unable to download the survey document, at your request, BIS survey support staff will e-mail the Excel survey template directly to you.

For your convenience, a PDF version of the survey and required drop-down content is available on the BIS website to aid internal data collection. **DO NOT SUBMIT** the PDF version of the survey as your response to BIS. Should this occur, your organization will be required to resubmit the survey in the requested Excel format.

B. Respond to every question. Surveys that are not fully completed will be returned for completion. Use the comment boxes to provide any information to supplement responses provided in the survey form. Make sure to record a complete answer in the space provided, even if the space does not appear to expand to fit all of the information. **This is a comprehensive survey of the entire front end nuclear fuel industry. As such, some questions may not be relevant to your organization. Read each question carefully to determine applicability to your organization.**

DO NOT CUT AND PASTE RESPONSES WITHIN THIS SURVEY OR PASTE IN RESPONSES FROM OUTSIDE THE SURVEY. Survey inputs should be completed by typing in responses or by using a drop-down menu. The use of cut and paste can corrupt the survey template. If your survey response is corrupted as a result of cut and paste response, your survey will be rejected and your organization must immediately resubmit the survey.

D. **Do not disclose any USG classified information in this survey form.**

E. Upon completion of the survey, final review, and certification, **transmit the survey document via e-mail to:** Uranium232@bis.doc.gov

Questions related to the survey should be directed to BIS survey support staff at Uranium232@bis.doc.gov.

F. E-mail is the preferred method of contact.

You may speak with a member of the BIS survey support staff by calling (202) 482-3800.

For questions related to the overall scope of this Section 232 Investigation, contact Uranium232@bis.doc.gov or:

G. Brad Botwin, Director, Industrial Studies
Office of Technology Evaluation, Bureau of Industry and Security, Room 1093
U.S. Department of Commerce
1401 Constitution Avenue, NW
Washington, DC 20230

DO NOT submit completed surveys to Mr. Botwin's postal or personal e-mail address. All surveys must be submitted electronically to: Uranium232@bis.doc.gov

Definitions	
Term	Definition
Alternate Feeds	A classification created by the Nuclear Regulatory Commissions that includes material that is not traditional ore, that can be processed to recover uranium for its source material content.
Applied Research	A systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met. This activity includes work leading to the production of useful materials, devices, and systems or methods, including design, development, and improvement of prototypes and new processes.
Authorizing Official	An executive officer of the organization or business unit or another individual who has the authority to execute this survey on behalf of the organization.
Basic Research	A systematic, scientific study directed toward greater knowledge or understanding of the fundamental aspects of phenomena and of observable facts.
Boiling Water Reactor (BWR)	A common nuclear power reactor design in which water flows upward through the core, where it is heated by fission and allowed to boil in the reactor vessel. The resulting steam drives turbines, which activate generators to produce electrical power.
Capital Expenditures	Investments made by an organization in buildings, equipment, property, and systems where the expense is depreciated. This does not include expenditures for consumable materials, other operating expenses, and salaries associated with normal business operations.
Customer	Any organization (external or internal entity) for which your organization manufactures/processes any product comprised of, or containing, uranium in any form.
Conventional Mining	The act of removing uranium ore from deep underground shafts or shallow open pits.
Defense-related Activities	Any product or service that your organization produces that is ultimately used by the U.S. government for defense purposes, whether by the armed services, the Department of Defense, or any other U.S. government entity.
Depleted Uranium	Uranium in which the percentage fraction by weight of U-235 is less than 0.711 percent.
Development	The design, simulation, and testing of a prototype, including experimental software or hardware systems, to validate technological feasibility or concept of operation in order to reduce technological risk, or provide test systems prior to production approval.
Enriched Uranium	Includes enriched uranium oxide, enriched uranium hexafluoride, and other enriched uranium. Uranium enriched in U-235 and its compounds: alloys, dispersions (including cermets), ceramic products, and mixtures containing uranium enriched in U-235.
Exports	Shipments to destinations outside the United States.
Facility	A building or the minimum complex of buildings or parts of buildings that conduct mining, milling, conversion, enrichment, fuel fabrication, and/or nuclear power generation-related operations, in which an organization operates to serve a particular function, producing revenue, and incurring costs for the company. A facility may produce an item of tangible or intangible property or may perform a service. It may encompass a floor or group of floors within a building, a single building, or a group of buildings or structures. Often, a facility is a group of related locations at which organization employees work, together constituting a profit-and-loss center for the company, and it may be identified by a unique DUNS number.
Foreign Corrupt Practices Act of 1977 (FCPA) U.S.C. §§ 78dd-1	The Foreign Corrupt Practices Act (FCPA), enacted in 1977, generally prohibits the payment of bribes to foreign officials to assist in obtaining or retaining business. The FCPA can apply to prohibited conduct anywhere in the world and extends to publicly traded companies and their officers, directors, employees, stockholders, and agents. Agents can include third party agents, consultants, distributors, joint-venture partners, and others.

Fuel Assemblies	A structured group of fuel rods (long, slender, metal tubes containing pellets of fissionable material, which provide fuel for nuclear reactors).
Fuel Elements	Includes fuel rods or fuel pellets, non-irradiated, and other parts thereof.
Fuel Fabrication	The last step in the process of turning uranium into nuclear fuel rods, whereby enriched UF ₆ is converted to uranium dioxide powder that is pressed into pellets and inserted into fuel rods, grouped together to form fuel assemblies.
Full Time Equivalent (FTE) Employees	Employees who work for 40 hours in a normal work week. Convert part-time employees into "full time equivalents" by taking their work hours as a fraction of 40 hours.
Global Headquarters	A location that serves as the organization's hub of worldwide operations with all global branches or divisions reporting to it.
Harmonized Tariff Schedule (HTS)	A 10-digit numbering system that classifies a good based on its name, use, and/or the material used in its construction. The number provides Customs and Border Protection (CBP) with a standardized method of tracking all merchandise imported into the United States and sets out the tariff rates and statistical categories.
Import Value	Values reported should be landed, duty-paid values at the U.S. port of entry, including ocean freight and insurance costs, brokerage charges, and import duties (i.e., all charges except inland freight in the United States).
Inventory	The goods or materials an organization holds for its own use or for the ultimate goal of sale, or disposition or future conversion, enrichment, fabrication, or other use. This is material to which your organization has title; this does not include holding material for third-party use or storage.
In Situ Recovery (ISR)	Formerly known as in situ leach recovery, ISR is the process where uranium ore is chemically altered underground before being pumped to the surface for further processing.
Term Contract	Contracts with one or more uranium deliveries to occur after a year following the contract execution (signed date), and as such, may reflect some agreements of short and medium terms, as well as longer term.
Natural Uranium	Uranium with the same isotopic ratio as found in nature. This includes uranium ore and concentrates (U ₃ O ₈) and natural uranium hexafluoride (UF ₆).
Non-U.S. Facility	A facility that is physically located outside of the United States.
Organization	A company, firm, laboratory, or other entity that owns or controls one or more U.S. establishment or facility capable of designing and/or manufacturing products in the mining, milling, conversion, enrichment, or fuel fabrication activities of the nuclear fuel cycle.
Pressurized Water Reactor (PWR)	A common nuclear power reactor design in which very pure water is heated to a very high temperature by fission, kept under high pressure (to prevent it from boiling), and converted to steam by a steam generator. The resulting steam is used to drive turbines, which activate generators to produce electrical power.
Product/Process Development	Conceptualization and development of a uranium or nuclear fuel-related product or system prior to the production of the product for customers (i.e., utilities, governmental agencies etc.).
Production	The process of transforming inputs (raw materials, semi-finished goods, subassemblies, ideas, information, knowledge) into goods or services.

Research & Development	Basic and applied research in the engineering sciences, as well as design and development of prototype products and processes. Efforts that an organization conducts towards innovating, introducing and/or improving products and processes.
Russian Suspension Agreement	On October 16, 1992, the Department of Commerce suspended the antidumping duty investigations involving uranium imports from Russia on the basis of agreements by the country's government to restrict the volume of direct or indirect exports to the United States in order to prevent the suppression or undercutting of price levels of United States domestic uranium. The agreement expires in 2020.
Sales	All reported and unreported sales of uranium (natural, converted, enriched and/or fabricated), including sales to end-users, producers, conversion facilities, enrichers, financial entities, intermediaries, traders, distributors, et al.
Separative Work Unit (SWU)	The standard measure of enrichment services.
Spot Contract	Contracts with a one-time uranium delivery (usually) for the entire contract, and the delivery typically occurs within one year of contract execution (signed date).
Supplier	An entity from which your organization obtains inputs, which may be goods or services. A supplier may be another organization with which you have a contractual relationship, or it may be another facility owned by the same parent organization.
U.S. Department of Energy Uranium Transfer Program	The exchange of natural, enriched, or depleted uranium "tails," or uranium enrichment services between the U.S. Department of Energy and another party.
United States	The "United States" or "U.S." includes the 50 states, Puerto Rico, the District of Columbia, Guam, the Trust Territories, and the U.S. Virgin Islands.
Uranium Compounds	Includes uranium oxide, uranium hexafluoride, and other uranium compounds.
Uranium Concentrate	The end product of the mining and milling stage in which triuranium octoxide (U ₃ O ₈) is produced.
Uranium Conversion	The process whereby natural uranium in the form of an oxide is converted to natural uranium hexafluoride.
Uranium Metal (Natural)	A lustrous silver-white metal that is radioactive, malleable, ductile, and softer than steel. It contains an isotopic ratio of 99.27% U-238, 0.72 % U-235, and 0.0055 % U-234 by weight.
Uranium Metal (Depleted)	A byproduct of enrichment (tailings) or fission, DU has less than one-third of the concentration of U-235 and U-234 by weight. DU from fission (i.e., in reprocessed used nuclear fuel) is distinct because it also contains U-236.
Uranium Mill	A plant where uranium is separated from ore taken from mines, including both conventional mills and in situ recovery (ISR) plants.
Uranium Ore	Ore which contains uranium that has been obtained from conventional or in situ mining methods.
10 CFR § 40.42	Title and section of the U.S. Code of Federal Regulations that cover Nuclear Regulatory Commission's (NRC) regulation for the expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas.

BUSINESS CONFIDENTIAL - Per Section 705(d) of the Defense Production Act

1: Organization Information

Provide the following information for your organization

A.	Organization Name	
	Street Address	
	City	
	State	
	ZIP Code	
	Country of Global Headquarters	
	U.S. Point of Contact Name	
	U.S. Point of Contact Email	
	U.S. Point of Contact Phone	

Is this organization owned, in whole or in part, by any private or government entity? Indicate Yes/No, then identify the entities below, if applicable. List entities with at least 5% ownership.

Entity Name	Global Headquarters Street Address	Global Headquarters City	Global Headquarters State/Province	Global Headquarters Country	Ownership %

At the global headquarters level, identify the total number of uranium-related mining, milling, conversion, enrichment, fuel fabrication, uranium storage for third party materials, product development and design facilities, and research and development facilities that your organization currently operates, including standby/idle facilities, inside and outside the U.S.

Activity	Number of U.S. Facilities	Number of Non-U.S. Facilities
Uranium Mining		
Uranium Milling		
Uranium Conversion		
Uranium Enrichment		
Fuel Fabrication		
Product Development & Design		
Research & Development		
Uranium Storage Facility for Third Party Materials		
Other (specify)		

Comments:

2: Mergers, Acquisitions, Divestitures and Joint Ventures

Mergers, Acquisitions, and Divestitures

From 2014 - 2018, record the total number of mergers, acquisitions, and divestitures related to front-end uranium fuel cycle activities, including mining, milling, conversion, enrichment, fuel fabrication, product development and design, and R&D in which your organization participated.

Organization Name	Type of Activity	% of Equity Held by Partner Organization	Partner Organization Country Headquarters	Year Initiated	Primary Scope of Activity	Primary Purpose of Activity	Explain
1					Mining	Access to financial resources	
2					Milling	Broaden customer base	
3					Conversion	Access to technological resources	
4					Enrichment	Broaden customer base	
5					Fuel Fabrication	Creation of new technologies	
6					R&D	Improved access to foreign markets	
7					Development and Design	Improved access to U.S. markets	
8						Reduced costs	
9						Reduced lead times	
10						Risk sharing	
11						Shared/improved technology or skills	
12						Other objective/purpose (explain)	
13							
14							
15							

Joint Ventures

From 2014 - 2018, record the total number of joint ventures and other business partnerships related to front-end uranium fuel cycle activities, including mining, milling, conversion, enrichment, fuel fabrication, product development and design, and R&D, including public/private partnerships, in which your organization participated.

Organization Name	Type of Joint Venture	% of Equity Held by Organization	Organization Country Headquarters	Year Initiated	Primary Scope of Relationship	Primary Purpose of Relationship	Explain
1							
2							
3							
4							
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6							
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8							
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12							
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15							

Comments:

3a: Facility Information

U.S. Facilities

Identify the total number of facilities that your organization currently operates in the United States, including facilities that are standby/idle, involved in the front-end uranium fuel cycle, including mining, milling, conversion, enrichment, fuel fabrication, product development, uranium storage for third party materials, or R&D activities, including defense-related products or services. If a single facility performs multiple functions, list the facility on multiple lines and identify each separately.

List your organization's facilities involved in front-end uranium fuel cycle activities, including mining, milling, conversion, enrichment, or fuel fabrication, development & design, and R&D, that are located in the United States, identifying each facility's name, city, state, scope of work, operating status, whether the work is defense-related, and any expected change in operations (e.g. expansion, worker layoffs, shutdown, etc.) from 2019-2023. If the facility produced uranium in any form, report the 2018 production volume. If a single facility provides multiple functions, list the facility on separate lines, and indicate the scope of work and other relevant information separately.

	U.S. Facility Name	City	State	Scope of Activity	Facility Type	Operating Status				Defense-Related Activities?	2018 Production Volume		Expected Change 2019-2023
						Operating Status	Start Date of Standby/Idle or Decommissioning	Projected Completion/Operation	Status of Operating Permit		Product	Volume	
1				Mining	Surface - Open Pit Mining	Under development for future use							
2				Milling	Underground Mining								
3				Conversion	In-Situ Mining								
4				Enrichment	By Product Mining								
5				Fuel Fabrication	Conversion								
6				R&D	Gaseous Diffusion								
7				Development and Design	Gas Centrifuge								
8				Storage	Laser Separation								
9					Category 1 Fuel Facility								
10					Category 3 Fuel Facility								
11					Mixed Oxide Fuel Fabrication								
12					Nonpower Reactor Fuel								
13													
14													
15													

If any of your U.S. facilities are scheduled to close or may close in the 2019-2023 period, explain the circumstances of this action.

Non-U.S. Facilities

Identify the total number of facilities that your organization currently operates outside the United States, including facilities that are standby/idle, involved in the front-end uranium fuel cycle, including mining, milling, conversion, enrichment, fuel fabrication, product development, uranium storage for third party materials, or R&D activities, including defense-related products or services. If a single facility performs multiple functions, list the facility on multiple lines and identify each separately.

List your organization's facilities involved in front-end uranium fuel cycle activities, including mining, milling, conversion, enrichment, or fuel fabrication facilities, development & design, and R&D, that are located outside the United States, identifying each facility's name, city, country, scope of work, operating status, whether the work is defense-related, and any expected change in operations (e.g. expansion, worker layoffs, shutdown, etc.) from 2019-2023. If the facility produces uranium in any form, report the 2018 production volume. If a single facility provides multiple functions, list the facility on separate lines, and indicate the scope of work and other relevant information separately.

	Non-U.S. Facility Name	City	Country	Scope of Activity	Facility Type	Operating Status				Defense-Related Activities?	2018 Production Volume		Expected Change 2019-2023
						Operating Status	Start Date of Standby/Idle or Decommissioning	Projected Completion/Operation	Status of Operating Permit		Product	Volume	
1													
2													
3													
4													
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If any of your non-U.S. facilities are scheduled to close or may close in the 2019-2023 period, explain the circumstances of this action.

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3b: Undeveloped Uranium Resources

List any undeveloped uranium deposits held by your organization, whether inside the U.S. or outside the U.S.

If your organization does not own any undeveloped uranium deposits inside the U.S. or outside the U.S., please select 'Not Applicable' and proceed to 3c.

U.S. Undeveloped Deposits

U.S. Location Name	County	State	Deposit Size (Acres)	Recovery Method	Reserves	Measured Indicated Resources (Pounds)	Inferred Resources (Pounds)	Estimated Per-Pound Production Cost	Total Reserves and Resources by Forward Cost (Pounds)				Factors Affecting Development		Expected Required FTEs if Developed
									Up to \$30 per Pound	Up to \$50 per Pound	Up to \$100 Per Pound	Greater than \$100 Per Pound	Factor of Highest Impact	Degree of Impact	
1													Operations Costs	High	
2													Regulatory Compliance (Non-Environmental)	Medium	
3													Environmental Compliance	Low	
4													Employment Costs	None	
5													Legal Costs		
6													Uranium Spot Prices		
7													Other		
8															
9															
10															
11															
12															
13															
14															
15															

Are there any other factors impacting your decision to develop undeveloped U.S. deposits? If yes, describe.

Non-U.S. Undeveloped Deposits

Non-U.S. Location Name	Municipality	Country	Deposit Size (Acres)	Recovery Method	Reserves	Measured Indicated Resources (Pounds)	Inferred Resources (Pounds)	Estimated Per-Pound Production Cost	Total Reserves and Resources by Forward Cost (Pounds)				Factors Affecting Development		Expected Required FTEs if Developed
									Up to \$30 per Pound	Up to \$50 per Pound	Up to \$100 Per Pound	Greater than \$100 Per Pound	Factor of Highest Impact	Degree of Impact	
1													Operations Costs	High	
2													Regulatory Compliance (Non-Environmental)	Medium	
3													Environmental Compliance	Low	
4													Employment Costs	None	
5													Legal Costs		
6													Uranium Spot Prices		
7													Other		
8															
9															
10															
11															
12															
13															
14															
15															

Are there any other factors impacting your decision to develop undeveloped non-U.S. deposits? If yes, describe.

Comments

3c: Changes in U.S. Facility Operations, 1999 - Present

Since 1999, identify any front-end uranium fuel cycle-related facility closings, relocations, contractions, expansions, corporate acquisitions or consolidations, or other major changes in operations (report as many as applicable). For each change, provide the location, type of facility, reasons for the change in operations (e.g., loss of market share to imports, loss/gain of market share from domestic competition, declining/increasing demand, low/high profitability, firm restructuring, other), and units of product impacted as well as number of full-time-equivalent (FTE) employees impacted. Denote reductions with a "-" symbol. If a single facility has gone through multiple changes, list the facility on multiple lines and identify each separately.

Facility Name	Activity	Type of Change	Reason for Change	Date of Change	Impacted Products			FTEs Impacted	Explain
					Type of Change	Product	Number of Impacted Units		
1	Mining	Closure			Increase				
2	Milling	Standby/Idle			Decrease				
3	Conversion	Relocation			No Change				
4	Enrichment	Contraction							
5	Fuel Fabrication	Expansion							
6	R&D	Expansion							
7	Development and Design	Significant Modernization							
8		Transfer/Sale							
9		Deferred Production							
10		Other							
11									
12									
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Answer the following questions about facility changes for part B, regarding facilities that are completely shut down, and part C, regarding facilities that are in standby/idle. After completing parts B and C, proceed to part D.

If any of your organization's facilities are shut-down completely, how long would it take, if possible, to restart operations at that shutdown facility? For each facility that your organization operates, indicate the factors that might inhibit restarting operations and the degree of impact for each factor. Estimate the total costs associated with each factor, and then explain your reasoning for your choices.

Facility Name	Possible to Restart?	Estimated Time to Restart (in days)	Estimated Total Cost to Restart (\$1000s USD)	Factors Inhibiting Restart		Estimated Cost of Each Factor (\$1000s USD)	Explain
				Factor	Degree of Impact		
1				Operations	High		
				Regulatory Compliance (Non-Environmental)	Moderate		
				Environmental Compliance	Low		
				Employment	None		
				Legal			
2				Operations			
				Regulatory Compliance (Non-Environmental)			
				Environmental Compliance			
				Employment			
				Legal			
3				Operations			
				Regulatory Compliance (Non-Environmental)			
				Environmental Compliance			
				Employment			
				Legal			
4				Operations			
				Regulatory Compliance (Non-Environmental)			
				Environmental Compliance			
				Employment			
				Legal			
5				Operations			
				Regulatory Compliance (Non-Environmental)			
				Environmental Compliance			
				Employment			
				Legal			

B.	6				Operations				
					Regulatory Compliance (Non-Environmental)				
					Environmental Compliance				
					Employment				
					Legal				
	Other (specify)								
	7					Operations			
						Regulatory Compliance (Non-Environmental)			
						Environmental Compliance			
						Employment			
						Legal			
	Other (specify)								
	8					Operations			
						Regulatory Compliance (Non-Environmental)			
						Environmental Compliance			
Employment									
Legal									
Other (specify)									
9					Operations				
					Regulatory Compliance (Non-Environmental)				
					Environmental Compliance				
					Employment				
					Legal				
Other (specify)									
10					Operations				
					Regulatory Compliance (Non-Environmental)				
					Environmental Compliance				
					Employment				
					Legal				
Other (specify)									
11					Operations				
					Regulatory Compliance (Non-Environmental)				
					Environmental Compliance				
					Employment				
					Legal				
Other (specify)									
12					Operations				
					Regulatory Compliance (Non-Environmental)				
					Environmental Compliance				
					Employment				
					Legal				
Other (specify)									
13					Operations				
					Regulatory Compliance (Non-Environmental)				
					Environmental Compliance				
					Employment				
					Legal				
Other (specify)									
14					Operations				
					Regulatory Compliance (Non-Environmental)				
					Environmental Compliance				
					Employment				
					Legal				
Other (specify)									
15					Operations				
					Regulatory Compliance (Non-Environmental)				
					Environmental Compliance				
					Employment				
					Legal				
Other (specify)									

If any of your organization's facilities are in standby/idle, how long would it take, if possible, to restart operations at that facility? For each type of facility that your organization operates, indicate the factors that might inhibit operations and the degree of impact for each factor. Estimate the total costs associated with each factor, and then explain your reasoning for your choices.

	Facility Name	Possible to Restart?	Estimated Time to Restart (in days)	Estimated Total Cost to Restart (in \$1000s USD)	Factors Inhibiting Restart		Estimated Cost of Each Factor	Explain
					Factor	Degree of Impact		
1					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
2					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
3					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
4					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
5					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
6					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
7					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
8					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
9					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
10					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			

C.

11					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
12					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
13					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
14					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			
15					Operations			
					Regulatory Compliance (Non-Environmental)			
					Environmental Compliance			
					Employment			
					Legal			

Answer the following questions about postponement of decommissioning, and the costs associated with maintaining facilities in standby/idle.

D.	1	If any of your facilities are in standby, have you filed for a postponement of decommissioning under 10 CFR § 40.42?		If yes, explain:	
	2	If any of your facilities are in standby, do you plan on filing for a postponement of decommissioning under 10 CFR § 40.42 in the future?		If yes, explain:	
	3	Describe the costs associated with maintaining a facility in standby.			
Comments:					

Identify the quantity of each uranium type produced annually at your organization's U.S. facilities for the 2014 to 2018 period. Record the projected amount of uranium your organization will produce in 2019 (estimates accepted). Record the amounts in the measurements specified in parentheses next to each type, as well as the equivalent amount in Kg U-235.

Uranium Ore and Concentrates																			
Please select 'Not Applicable' if the below category of products below is not relevant to your organization.																			
Type of Uranium	2014			2015			2016			2017			2018			2019 (Projected)			
HTS Code: 2612.10.00.00	Pounds of U3O8	Equivalent Amount of U-235	Kg	Pounds of U3O8	Equivalent Amount of U-235	Kg	Pounds of U3O8	Equivalent Amount of U-235	Kg	Pounds of U3O8	Equivalent Amount of U-235	Kg	Pounds of U3O8	Equivalent Amount of U-235	Kg	Pounds of U3O8	Equivalent Amount of U-235	Kg	
Uranium Ore (Pounds of U3O8)																			
Uranium Concentrate (Pounds of U3O8)																			
Natural Uranium (Not Compounds)																			
Please select 'Not Applicable' if the below category of products below is not relevant to your organization.																			
Type of Uranium	2014			2015			2016			2017			2018			2019 (Projected)			
HTS Code: 2844.10.10.00 (Metal) HTS Code: 2844.10.50.00 (Other)	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	
Uranium Metal (Kg U)																			
Other (Kg U)																			
Uranium Compounds																			
Please select 'Not Applicable' if the below category of products below is not relevant to your organization.																			
Type of Uranium	2014			2015			2016			2017			2018			2019 (Projected)			
HTS Code: 2844.10.20	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	
Uranium Compounds - Oxide (Kg U)																			
Uranium Compounds - Hexafluoride (Kg U)																			
Uranium Compounds - Other (Kg U)																			
Depleted Uranium																			
Please select 'Not Applicable' if the below category of products below is not relevant to your organization.																			
Type of Uranium	2014			2015			2016			2017			2018			2019 (Projected)			
HTS Code: 2844.30.20 (Compounds and Other) HTS Code: 2844.30.50 (Metal)	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	
Depleted Uranium - Oxide (Kg U)																			
Depleted Uranium - Fluorides (Kg U)																			
Depleted Uranium - Other (Kg U)																			
Depleted Uranium - Metal (Kg U)																			
Enriched Uranium																			
Please select 'Not Applicable' if the below category of products below is not relevant to your organization.																			
Type of Uranium	2014			2015			2016			2017			2018			2019 (Projected)			
HTS Code: 2844.20.00	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	Kg U	Equivalent Amount of U-235	Kg	
Enriched Uranium - Oxide (Kg U)																			
Enriched Uranium - Hexafluoride (Kg U)																			
Enriched Uranium - Other (Kg U)																			
Fuel Assemblies																			
Please select 'Not Applicable' if the below category of products below is not relevant to your organization.																			
Type of Uranium	2014			2015			2016			2017			2018			2019 (Projected)			
HTS Code: 8401.30.00.00	Unit Specified	Equivalent Amount of U-235	Kg	Unit Specified	Equivalent Amount of U-235	Kg	Unit Specified	Equivalent Amount of U-235	Kg	Unit Specified	Equivalent Amount of U-235	Kg	Unit Specified	Equivalent Amount of U-235	Kg	Unit Specified	Equivalent Amount of U-235	Kg	
PWR (Finished Fuel Assembly Units)																			
Average Total LEU Contained in each PWR Fuel Assembly (KgU)																			
BWR (Finished Fuel Assembly Units)																			
Average Total LEU Contained in each BWR Fuel Assembly (KgU)																			
Other (Finished Fuel Assembly Units) (specify)																			
Average Total LEU Contained in each Other Fuel Assembly (KgU)																			
Comments:																			

4b: U.S. Production (Continued)

Answer the following questions about U.S. production and production capacity in parts A and B below.

Answer the following regarding production capacity of U.S. facilities.

A.	1	If any of your organization's facilities are not operating at full capacity, describe the factors that might influence a decision to increase production to full capacity.
	2	Describe the circumstances associated with producing at full capacity, and explain how long, on average, it might take for your organization to increase production to full capacity.

For 2014 to 2018 operations at your U.S. facilities, provide the operating production capacity, licensed production capacity, actual production, average marginal production cost per unit (2018 only), and the average utilization rate to maintain profitability (2018 only). If a single facility performs multiple functions, list the facility on multiple lines and identify each separately.

	Facility Name	Uranium Type	Production and Inventory	2014	2015	2016	2017	2018
				Operating Production Capacity	Licensed Production Capacity	Actual Production	Average Marginal Production Cost per Unit	Average Utilization Rate Required to Maintain Profitability
1			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
2			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Capacity Needed to Maintain Profitability					
3			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
4			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
5			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
6			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
7			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
8			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
9			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
10			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
11			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
12			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
13			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
14			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					
15			Operating Production Capacity					
			Licensed Production Capacity					
			Actual Production					
			Average Marginal Production Cost per Unit					
			Average Utilization Rate Required to Maintain Profitability					

Comments:

4c: U.S. Production (Continued)

For U.S. operations, provide the U.S. sales and export sales data for the 2014 to 2018 period for the below products. Include projected data for 2019 (estimates accepted). Sales includes shipments, book transfers, swaps, and trades. Record \$ in Thousands USD, e.g. \$12,000.00 = survey input of \$12

1	Uranium Type	U.S. and Export Sales	2014	2015	2016	2017	2018	2019 (Projected)
			U.S. Sales (Units)					
		U.S. Sales (\$)						
		Export Sales (Units)						
		Export Sales (\$)						
2	Uranium Type	U.S. and Export Sales	2014	2015	2016	2017	2018	2019 (Projected)
		U.S. Sales (Units)						
		U.S. Sales (\$)						
		Export Sales (Units)						
		Export Sales (\$)						
15	Uranium Type	U.S. and Export Sales	2014	2015	2016	2017	2018	2019 (Projected)
		U.S. Sales (Units)						
		U.S. Sales (\$)						
		Export Sales (Units)						
		Export Sales (\$)						

Comments:

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4d: Inventory and Production Capacity

Answer the following questions about your organization's uranium bearing product inventory for the 2014 to 2018 period. Record inventory information for the end of the given calendar year, and only include inventory for which your organization has title. Do not record inventory information that is designated for a third party.

	Type of Product in Inventory at any Facility	Average Amount in Inventory	Location of Inventory		Average Length of Time in Inventory (in days)
			U.S. Location (State)	Non-U.S. Location (Country)	
A.	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11				
	12				
	13				
	14				
	15				
	Does your organization have an excess of source materials or enriched materials beyond normal business needs?				
2	If yes, explain the factors contributing to the excess in inventory, and include whether the location of the inventory is primarily U.S. or Non-U.S. based. Explain what impact this has had on your business operations.				
Comments:					

5: Financials

Provide the following financial line items for your organization's uranium and nuclear fuel processing-related U.S. operations below for the 2014 to 2018 period.

A. Income Statement (Select Line Items)		Record \$ in Thousands, e.g. \$12,000.00 = survey input of \$12				
		2014	2015	2016	2017	2018
1	Net Sales (and other revenue)					
2	Cost of Goods Sold					
3	Total Operating Income (Loss)					
4	Earnings Before Interest and Taxes					
5	Net Income					

Balance Sheet (Select Line Items)		Record \$ in Thousands, e.g. \$12,000.00 = survey input of \$12				
		2014	2015	2016	2017	2018
6	Cash					
7	Inventories					
8	Total Current Assets					
9	Total Assets					
10	Total Current Liabilities					
11	Total Liabilities					
12	Retained Earnings					
13	Total Owner's Equity					

Note: Total Assets must equal Total Liabilities plus Total Owner's Equity.

B. Answer the following questions related to your organization's uranium and nuclear fuel processing-related tax expenditures.						
		2014	2015	2016	2017	2018
1	Federal Taxes Paid					
2	State Taxes Paid					
3	Local Taxes Paid					

Comments:	
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6: Capital Expenditures

Record your organization's uranium and nuclear fuel processing-related capital expenditures corresponding to the select categories below for the 2014 to 2018 period.

Capital Expenditure Activity Type		Record \$ in Thousands, e.g. \$12,000.00 = survey input of \$12				
		2014	2015	2016	2017	2018
A	Total Capital Expenditures					
1	Machinery, Equipment, and Vehicles [as a % of A]					
2	IT, Computers, Software [as a % of A]					
3	Land, Buildings, and Leasehold Improvements [as a % of A]					
4	Other (Specify) [as a % of A]					
5	Other (Specify) [as a % of A]					
Lines 1 through 5 must total 100%						

For the below categories, indicate whether your organization experienced significant changes (increases, decreases, or both), in uranium and/or nuclear fuel capital expenditures over the past ten years (2009-2018). Explain what factors have been affecting changes in your organization's capital expenditures from 2009 to 2018, including, but not limited to, U.S. Government or state government policies or regulations, domestic and foreign competition, and declining uranium prices.

		Yes/No	If Yes, Type of Change	Explain
		B		
1	Machinery, Equipment, and Vehicles			
2	IT, Computers, Software			
3	Land, Buildings, and Leasehold Improvements			
4	Other (Specify)			
5	Other (Specify)			

Comments:

7: Research & Development

A. Has your organization conducted uranium and/or nuclear fuel processing-related research and development (R&D) in the past ten years? If no, proceed to Section 8.

Record your organization's total R&D dollar expenditures and type of R&D expenditure for the 2014 to 2018 period.

		Record \$ in Thousands, e.g. \$12,000.00 = survey input of \$12				
		2014	2015	2016	2017	2018
B.	1 Total R&D Expenditures					
	2 Basic Research [as a % of B1]					
	3 Applied Research [as a % of B1]					
	4 Product/Process Development [as a % of B1]					
	5 Total of 2 - 4 [must equal 100%]	0%	0%	0%	0%	0%

Identify your organization's R&D funding sources, by percent total of R&D dollars sourced.

		Record \$ in Thousands, e.g. \$12,000.00 = survey input of \$12				
		2014	2015	2016	2017	2018
C.	1 Total R&D Funding Sources					
	2 Internal/Self-Funded/IRAD [as a % of C1]					
	3 Total Federal Government [as a % of C1]					
	4 Total State and Local Government [as a % of C1]					
	5 Universities - Public and Private [as a % of C1]					
	6 U.S. Industry, Venture Capital, Non-Profit [as a % of C1]					
	7 Non-U.S. Investors (as a percent of C1)					
	8 Other (specify here)					
	9 Total of 2 - 8 (must equal 100%)	0%	0%	0%	0%	0%

D. 1 For 2014 to 2018, did your organization experience constraints (for example, inadequate revenue) on U.S. R&D activities? If yes, explain and identify additional R&D activities that would occur absent those constraints.

From 2009 to 2018, list any U.S. exploration, drilling, mining, uranium recovery applications, or other permits (Federal, State, or Local) relating to the nuclear fuel cycle that your organization currently owns, or for which your organization currently has a pending application. Include the regulatory authority granting the permit, the type and description of the permit, the design type of the facility, the application date, the application status, and the location of the facility.

	Regulatory Authority	Type of Permit	Permit Description	Full Length of Permitting Process (Years)	Total Estimated Cost of Permitting Process	Design Type	Application Date	Application Status	Facility Location (City, State)
E.	1								
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
	10								

D. Has your organization encountered obstacles with the permitting process? If yes, indicate the type of difficulty and explain below.

Explain:

E. Have your licensing or permitting fees increased in the last five years? If so, explain.

F. Does your organization have any suggestions that would help improve the permitting process?

Comments:

Section 8: Imports

In Section 8 you will be asked to identify the suppliers, country of origin, manufacturer, end use, value, and volume for imports of uranium products. This information is subcategorized by different combinations of imports and end users. For the purpose of this survey, the different combinations of imports and end users of import subcategories have been divided into 6 general categories, as detailed below.

The list below contains links that can move you to a particular product and/or service segment. **Identify each general category in which your organization imports uranium products.** After completing this page you may skip to the sections with the import category that are applicable to your organization, but be sure to review all segments to ensure you do not omit any required information.

Imports categorized under each subcategory:

Subcategories A: Only complete if your organization provides milling services. List any uranium material imported into the U.S. that your organization receives for milling services. Subcategory A should include both material imported into the U.S. that is then re-exported out of the U.S. after milling services are completed and material imported into the U.S. for milling services that then stays in the U.S. after milling services are completed.

Subcategories B: Only complete if your organization provides conversion services. List any uranium material imported into the U.S. that your organization receives for conversion services. Subcategory B should include both material imported into the U.S. that is then re-exported out of the U.S. after conversion services are completed and material imported into the U.S. for conversion services that then stays in the U.S. after conversion services are completed.

Subcategories C: Only complete if your organization provides enrichment services. List any uranium material imported into the U.S. that your organization receives for enrichment services. Subcategory C should include material imported into the U.S. that is then re-exported out of the U.S. after enrichment services are completed and material imported into the U.S. for enrichment services that then stays in the U.S. after enrichment services are completed.

Subcategories D: Only complete if your organization provides fuel fabrication services. List any uranium material imported into the U.S. that your organization receives for fuel fabrication services. Subcategory D should include material imported into the U.S. that is then re-exported out of the U.S. after fuel fabrication services are completed and material imported into the U.S. for fuel fabrication services that then stays in the U.S. after fuel fabrication services are completed.

Subcategory E: Only complete if your organization has imported uranium into the U.S. for the sole purpose of increasing commercial inventory and/or for market resale.

Subcategory F: Only complete if your organization has imported uranium into the U.S. for any other reason not previously covered.

Subcategory	Product and Service Category	Applicable To Your Organization
A	Uranium imported into the U.S. for milling services.	
B	Uranium imported into the U.S. for conversion services.	
C	Uranium imported into the U.S. for enrichment services.	
D	Uranium imported into the U.S. for fuel fabrication services.	
E	Uranium imported into the U.S. for commercial inventory and/or market resale.	
F	Uranium imported into the U.S. for any form for a reason not previously covered.	

Enriched Uranium Hexafluoride (KgU)																		
Identify your organization's total number of suppliers for Enriched Uranium - Hexafluoride. Where necessary, input 0.																		
	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
M 1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
Enriched Uranium - Other (KgU)																		
Identify your organization's total number of suppliers for Enriched Uranium - Other. Where necessary, input 0.																		
	Supplier	Exporting Organization Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
N 1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
Fuel Assemblies (PWR, BWR, or Other) (Finished Units)																		
Identify your organization's total number of suppliers for Fuel Assemblies. Where necessary, input 0.																		
	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
O 1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
Comments:																		

8b: Imports - Conversion Services

Only complete if your organization provides conversion services. If your organization receives uranium that was imported into the U.S. for conversion services which is then re-exported to a foreign country for final use, identify the suppliers and the subsequent country origin of the material for each of the below products for the 2014 to 2018 period. If your organization receives uranium that was imported into the U.S. for conversion services that stays in the U.S. after conversion services are complete for final use, identify the suppliers and the subsequent country origin of the material for each of the below products for the 2014 to 2018 period. If the material is received by book transfer or flag swap from the same organization, record the information on separate lines. Exporting organizations should include any individual brokers and/or traders that your organization purchases uranium products from.

If this category of imports is not relevant to your organization, please select 'Not Applicable' and proceed to section Section 8cC

PLEASE NOTE THE UNITS OF MEASURE IN THE HEADINGS. E.G. URANIUM ORE SHOULD BE RECORDED IN POUNDS.

Uranium Ore (Pounds)

Identify your organization's total number of suppliers for Uranium Ore. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor, Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value), 2015 (Units, Value), 2016 (Units, Value), 2017 (Units, Value), 2018 (Units, Value). Rows 1-10.

Uranium Concentrate (Pounds U3O8)

Identify your organization's total number of suppliers for Uranium Concentrate. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor, Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value), 2015 (Units, Value), 2016 (Units, Value), 2017 (Units, Value), 2018 (Units, Value). Rows 1-10.

Uranium Metal (KgU)

Identify your organization's total number of suppliers for Uranium Metal. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor, Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value), 2015 (Units, Value), 2016 (Units, Value), 2017 (Units, Value), 2018 (Units, Value). Rows 1-10.

Natural Uranium - Not Compounds (KgU)

Identify your organization's total number of suppliers for Natural Uranium - Not Compounds. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor, Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value), 2015 (Units, Value), 2016 (Units, Value), 2017 (Units, Value), 2018 (Units, Value). Rows 1-10.

Uranium Compounds - Oxide (KgU)

Identify your organization's total number of suppliers for Uranium Compounds - Oxide. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

E

Uranium Compounds - Hexafluoride (KgU)

Identify your organization's total number of suppliers for Uranium Compounds - Hexafluoride. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
1																		
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		

F

Uranium Compounds - Other (KgU)

Identify your organization's total number of suppliers for Uranium Compounds - Other. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
1																		
2																		
3																		
4																		
5																		
6																		
7																		
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G

Depleted Uranium - Oxide (KgU)

Identify your organization's total number of suppliers for Depleted Uranium - Oxide. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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H

Enriched Uranium Hexafluoride (KgU)

Identify your organization's total number of suppliers for Enriched Uranium - Hexafluoride. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Enriched Uranium - Other (KgU)

Identify your organization's total number of suppliers for Enriched Uranium - Other. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
									N	1								
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Fuel Assemblies (PWR, BWR, or Other) (Finished Units)

Identify your organization's total number of suppliers for Fuel Assemblies. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Comments:

8c: Imports - Enrichment Services

Only complete if your organization provides enrichment services. If your organization receives uranium that was imported into the U.S. for enrichment services which is then re-exported to a foreign country for final use, identify the suppliers and the subsequent country origin of the material for each of the below products for the 2014 to 2018 period. If your organization receives uranium that was imported into the U.S. for enrichment services that stays in the U.S. after enrichment services are complete for final use, identify the suppliers and the subsequent country origin of the material for each of the below products for the 2014 to 2018 period. If the material is received by book transfer or flag swap from the same organization, record the information on separate lines. Exporting organizations should include any individual brokers and/or traders that your organization purchases uranium products from.

If this category of imports is not relevant to your organization, please select 'Not Applicable' and proceed to section Section 8D.

PLEASE NOTE THE UNITS OF MEASURE IN THE HEADINGS. E.G. URANIUM ORE SHOULD BE RECORDED IN POUNDS.

Uranium Ore (Pounds)

Identify your organization's total number of suppliers for Uranium Ore. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor (if different from exporting company), Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value (\$USD)), 2015 (Units, Value (\$USD)), 2016 (Units, Value (\$USD)), 2017 (Units, Value (\$USD)), 2018 (Units, Value (\$USD)). Rows 1-10.

Uranium Concentrate (Pounds U3O8)

Identify your organization's total number of suppliers for Uranium Concentrate. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor (if different from exporting company), Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value (\$USD)), 2015 (Units, Value (\$USD)), 2016 (Units, Value (\$USD)), 2017 (Units, Value (\$USD)), 2018 (Units, Value (\$USD)). Rows 1-10.

Uranium Metal (KgU)

Identify your organization's total number of suppliers for Uranium Metal. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor (if different from exporting company), Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value (\$USD)), 2015 (Units, Value (\$USD)), 2016 (Units, Value (\$USD)), 2017 (Units, Value (\$USD)), 2018 (Units, Value (\$USD)). Rows 1-10.

Natural Uranium - Not Compounds (KgU)

Identify your organization's total number of suppliers for Natural Uranium - Not Compounds. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor (if different from exporting company), Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value (\$USD)), 2015 (Units, Value (\$USD)), 2016 (Units, Value (\$USD)), 2017 (Units, Value (\$USD)), 2018 (Units, Value (\$USD)). Rows 1-10.

Enriched Uranium Hexafluoride (KgU)																		
Identify your organization's total number of suppliers for Enriched Uranium - Hexafluoride. Where necessary, input 0.																		
	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
M	1																	
	2																	
	3																	
	4																	
	5																	
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	7																	
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Enriched Uranium - Other (KgU)																		
Identify your organization's total number of suppliers for Enriched Uranium - Other. Where necessary, input 0.																		
	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
N	1																	
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	3																	
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	5																	
	6																	
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	9																	
	10																	
Fuel Assemblies (PWR, BWR, or Other) (Finished Units)																		
Identify your organization's total number of suppliers for Fuel Assemblies. Where necessary, input 0.																		
	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Comments:																		

8d: Imports - Fuel Fabrication Services

Only complete if your organization provides fuel fabrication services. If your organization receives uranium that was imported into the U.S. for fuel fabrication services which is then re-exported to a foreign country for final use, identify the suppliers and the subsequent country origin of the material for each of the below products for the 2014 to 2018 period. If your organization receives uranium that was imported into the U.S. for fuel fabrication services that stays in the U.S. after fuel fabrication services are complete for final use, identify the suppliers and the subsequent country origin of the material for each of the below products for the 2014 to 2018 period. If the material is received by book transfer or flag swap from the same organization, record the information on separate lines. Exporting organizations should include any individual brokers and/or traders that your organization purchases uranium products from.

If this category of imports is not relevant to your organization, please select 'Not Applicable' and proceed to Section 8E.

PLEASE NOTE THE UNITS OF MEASURE IN THE HEADINGS. E.G. URANIUM ORE SHOULD BE RECORDED IN POUNDS.

Uranium Ore (Pounds)

Identify your organization's total number of suppliers for Uranium Ore. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor (if different from exporting company), Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value (\$USD)), 2015 (Units, Value (\$USD)), 2016 (Units, Value (\$USD)), 2017 (Units, Value (\$USD)), 2018 (Units, Value (\$USD)). Rows 1-10.

Uranium Concentrate (Pounds U3O8)

Identify your organization's total number of suppliers for Uranium Concentrate. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor (if different from exporting company), Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value (\$USD)), 2015 (Units, Value (\$USD)), 2016 (Units, Value (\$USD)), 2017 (Units, Value (\$USD)), 2018 (Units, Value (\$USD)). Rows 1-10.

Uranium Metal (KgU)

Identify your organization's total number of suppliers for Uranium Metal. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor (if different from exporting company), Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value (\$USD)), 2015 (Units, Value (\$USD)), 2016 (Units, Value (\$USD)), 2017 (Units, Value (\$USD)), 2018 (Units, Value (\$USD)). Rows 1-10.

Natural Uranium - Not Compounds (KgU)

Identify your organization's total number of suppliers for Natural Uranium - Not Compounds. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor (if different from exporting company), Flag Swap?, Book Swap?, If re-exported outside of the U.S., provide country of final use, End-Use, 2014 (Units, Value (\$USD)), 2015 (Units, Value (\$USD)), 2016 (Units, Value (\$USD)), 2017 (Units, Value (\$USD)), 2018 (Units, Value (\$USD)). Rows 1-10.

Uranium Compounds - Oxide (KgU)

Identify your organization's total number of suppliers for Uranium Compounds - Oxide. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Uranium Compounds - Hexafluoride (KgU)

Identify your organization's total number of suppliers for Uranium Compounds - Hexafluoride. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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F

Uranium Compounds - Other (KgU)

Identify your organization's total number of suppliers for Uranium Compounds - Other. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Depleted Uranium - Oxide (KgU)

Identify your organization's total number of suppliers for Depleted Uranium - Oxide. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Enriched Uranium Hexafluoride (KgU)

Identify your organization's total number of suppliers for Enriched Uranium - Hexafluoride. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Enriched Uranium - Other (KgU)

Identify your organization's total number of suppliers for Enriched Uranium - Other. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Fuel Assemblies (PWR, BWR, or Other) (Finished Units)

Identify your organization's total number of suppliers for Fuel Assemblies. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Comments:

8: Imports - Commercial Inventory and/or Market Resale

If your organization imports directly or receives uranium that has been imported into the U.S., in any form, for the sole purpose of increasing commercial inventory and/or for market resale, identify the suppliers and the subsequent country origin of the material for each of the below products for the 2014 to 2018 period. If the material is received by book transfer or flag swap from the same organization, record the information on separate lines. Exporting organizations should include any individual brokers and/or traders that your organization purchases uranium products from.

If this category of imports is not relevant to your organization, please select 'Not Applicable' and proceed to Section 8F.

PLEASE NOTE THE UNITS OF MEASURE IN THE HEADINGS. E.G. URANIUM ORE SHOULD BE RECORDED IN POUNDS.

Uranium Ore (Pounds)

Identify your organization's total number of suppliers for Uranium Ore. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor, Flag Swap, Book Swap, If re-exported outside of the U.S., End-Use, and years 2014-2018 (Units, Value (\$USD)). Includes sub-headers for End-Use: Commercial, Research, Government (Civilian), Government (Defense), Other.

Uranium Concentrate (Pounds U3O8)

Identify your organization's total number of suppliers for Uranium Concentrate. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor, Flag Swap, Book Swap, If re-exported outside of the U.S., End-Use, and years 2014-2018 (Units, Value (\$USD)).

Uranium Metal (KgU)

Identify your organization's total number of suppliers for Uranium Metal. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor, Flag Swap, Book Swap, If re-exported outside of the U.S., End-Use, and years 2014-2018 (Units, Value (\$USD)).

Natural Uranium - Not Compounds (KgU)

Identify your organization's total number of suppliers for Natural Uranium - Not Compounds. Where necessary, input 0.

Table with columns: Supplier, Supplier Headquarters, Country of Uranium Ore Origin, Manufacturer/Processor, Flag Swap, Book Swap, If re-exported outside of the U.S., End-Use, and years 2014-2018 (Units, Value (\$USD)).

Uranium Compounds - Oxide (KgU)

Identify your organization's total number of suppliers for Uranium Compounds - Oxide. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Uranium Compounds - Hexafluoride (KgU)

Identify your organization's total number of suppliers for Uranium Compounds - Hexafluoride. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Uranium Compounds - Other (KgU)

Identify your organization's total number of suppliers for Uranium Compounds - Other. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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G

Depleted Uranium - Oxide (KgU)

Identify your organization's total number of suppliers for Depleted Uranium - Oxide. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Enriched Uranium Hexafluoride (KgU)																		
Identify your organization's total number of suppliers for Enriched Uranium - Hexafluoride. Where necessary, input 0.																		
	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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	3																	
	4																	
	5																	
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Enriched Uranium - Other (KgU)																		
Identify your organization's total number of suppliers for Enriched Uranium - Other. Where necessary, input 0.																		
	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
N	1																	
	2																	
	3																	
	4																	
	5																	
	6																	
	7																	
	8																	
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Fuel Assemblies (PWR, BWR, or Other) (Finished Units)																		
Identify your organization's total number of suppliers for Fuel Assemblies. Where necessary, input 0.																		
	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	2014		2015		2016		2017		2018	
									Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Comments:																		

Enriched Uranium Hexafluoride (KgU)

Identify your organization's total number of suppliers for Enriched Uranium - Hexafluoride. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	Explanation for Import	2014		2015		2016		2017		2018	
										Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Enriched Uranium - Other (KgU)

Identify your organization's total number of suppliers for Enriched Uranium - Other. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	Explanation for Import	2014		2015		2016		2017		2018	
										Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Fuel Assemblies (PWR, BWR, or Other) (Finished Units)

Identify your organization's total number of suppliers for Fuel Assemblies. Where necessary, input 0.

	Supplier	Supplier Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from exporting company)	Flag Swap?	Book Swap?	If re-exported outside of the U.S., provide country of final use	End-Use	Explanation for Import	2014		2015		2016		2017		2018	
										Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
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Comments:

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9a: Customers and Contracts

A	For 2009-2013 and 2014-2018, record the number of direct U.S.-based and non-U.S.-based customers for uranium or fuel products.	2009-2013		2014-2018	
		U.S.	Non-U.S.	U.S.	Non-U.S.

Identify your organization's top 15 current customers (by sales volume). For each current/active customer, enter type of customer, type of contract, contract dates, expected renewal, type and supply of uranium. For country of origin, please indicate the country from which the majority, by volume, of the uranium your organization supplies was originally mined.

	Customer Name	Customer's HQ (Country)	Type of Customer	Type of Contract	Contract Dates		End-Use		Renewal Expected?	Type and Supply of Uranium				Amount Supplied to Date	Estimated Percent of Total 2018 Sales Attributable to the Active Contract	Explain
					Start Date	End Date	End-user HQ (country)	End-use (if known)		Type	Country of Uranium Ore Origin	Minimum Price for Contract	Maximum Price for Contract			
1								Commercial								
2								Research								
3								Government (Civilian)								
4								Government (Defense)								
5								Other								
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																

If you indicated that some of your organization's contracts were not expected to be renewed, explain.

For your organization's inactive or former customers from 2009 to 2018, identify the type of customer, type of contract, contract dates, whether the contract was canceled, not renewed, or other, and the reason why. Also identify the type and supply of uranium, as well as the average price per unit. For country of origin, please indicate the country from which the majority, by volume, of the uranium your organization supplied was originally mined.

	Customer Name	Type of Customer	Type of Contract	Contract Dates		Reason for Contract End	Explain Reasoning	Type and Supply of Uranium				Amount Supplied Over Duration of Contract	Explain
				Start Date	End Date			Type	Country of Uranium Ore Origin	Minimum Price for Contract	Maximum Price for Contract		
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													

From 2009-2013, 2014-2018, and 2019-2023, record the number and dollar value of your organization's contracts (spot, short-term, mid-term, long-term) for uranium or fuel products.

Contract Type	2009-2013								2014-2018								2019-2023								
	Spot		Short-term		Mid-term		Long-term		Spot		Short-term		Mid-term		Long-term		Spot		Short-term		Mid-term		Long-term		
	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	
1 U.S.																									
2 Non-U.S.																									
3 Do you have contracts beyond 2023?	Y/N		If yes, complete the matrix to the right.																						
			Spot		Short-term		Mid-term		Long-term																
			Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value	
4 Has your organization experienced difficulty negotiating, renegotiating, or extending long-term contracts?	Y/N		If yes, explain any difficulties.																						

Comments:

9b: Customers and Contracts (Continued)

From 2014 to 2018, did your organization operate U.S. mining or milling facilities?

If no, proceed to Part B. If yes, complete Part A.

1 Has your organization used product (U3O8) purchased on the spot market in order to fulfill contracts?

If yes, indicate the percentage of U3O8 contract obligations that were fulfilled using product (U3O8) purchased on the spot market for the 2014 to 2018 period.

	2014	2015	2016	2017	2018
2					

A. Indicate the total amount of uranium purchases, in pounds of U3O8, that your organization purchased on the spot market for the 2014 to 2018 period.

	2014	2015	2016	2017	2018
3					

4 What average price per pound of uranium concentrate does your organization need in order to cover fully loaded costs, such as overhead, marketing, depreciation, depletion, amortization, and operating costs? Explain your reasoning.

From 2014 to 2018, did your organization provide U.S.-based enrichment services?

If yes, complete the questions in Part B.

1 Has your organization re-enriched tailings, whether from previous enrichment activities or adjusting current tails assay, and then re-sold the product?

If yes, indicate the percentage of your revenue that came from sales of re-enriched tailings for the 2014 to 2018 period.

	2014	2015	2016	2017	2018
2					

Provide the annual quantity, in KgU, of re-enriched tailings sales for the 2014 to 2018 period.

	2014	2015	2016	2017	2018
3					

4 What factors led your organization to begin selling re-enriched tails? Discuss the role that excess inventory has played in causing your organization to re-enrich tails.

5 If this is a new business activity, describe the factors that caused your organization to start selling re-enriched tails.

6 How would an increase in uranium spot prices affect your sales of re-enriched tails?

Comments:

Enriched Uranium Hexafluoride (KgU)																
Identify your organization's total number of consigners of Enriched Uranium - Hexafluoride. Where necessary, input 0.																
	Consigning Organization	Consigning Organization Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from consigning organization)	Book Swap?	End-Use	2014		2015		2016		2017		2018	
							Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
M	1															
	2															
	3															
	4															
	5															
	6															
	7															
	8															
	9															
	10															
Enriched Uranium - Other (KgU)																
Identify your organization's total number of consigners of Enriched Uranium - Other. Where necessary, input 0.																
	Consigning Organization	Consigning Organization Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from consigning organization)	Book Swap?	End-Use	2014		2015		2016		2017		2018	
							Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
N	1															
	2															
	3															
	4															
	5															
	6															
	7															
	8															
	9															
	10															
Fuel Assemblies (PWR, BWR, or Other) (Finished Units)																
Identify your organization's total number of consigners of Fuel Assemblies. Where necessary, input 0.																
	Consigning Organization	Consigning Organization Headquarters	Country of Uranium Ore Origin	Manufacturer/Processor (if different from consigning organization)	Book Swap?	End-Use	2014		2015		2016		2017		2018	
							Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)	Units	Value (\$USD)
O	1															
	2															
	3															
	4															
	5															
	6															
	7															
	8															
	9															
	10															
Comments:																

10: Employment

Record the total number of full time equivalent (FTE) employees and contractors for the 2014 to 2018 period.

		2010	2014	2015	2016	2017	2018	2019 (Projected)
A	FTE Employees							
	FTE Contractors							

Record the total number of employees for each occupation type below for 2010 and 2014 to 2018. Include projected data for 2019 numbers (estimates accepted).

		2010	2014	2015	2016	2017	2018	2019 (Projected)
B	Occupation							
	Administrative, Management, Legal Staff, IT Staff							
	Analysts, Environmental Compliance, Tailings Management Operators, Radiation Safety Technicians							
	Engineers, Scientists, Geologists, Geochemists, Geophysicists, Chemical Metallurgists							
	Electricians, Welders, Technicians, Operating Staff, Driller, Logger							
	Millwrights, Miners, Mill Operator, Mill Maintenance, Wellfield Operator, Wellfield Maintenance							
	Marketing and Sales							
Other								

Answer the following questions about employment difficulties, workforce age, educational requirements, vacancies, and changes in employment for the 2014 to 2018 period.

Occupation	Difficulty	Explanation for Difficulty, if Applicable	FTEs impacted (2014 - 2018)		Current Average Age of Worker (2018)	Formal Education Requirements	On the Job Training Requirements (OTJ)	Current Number of Vacancies (2018)	Average Weeks Vacant	Explanation
			Type of Impact	If FTEs were impacted due to changes in facility operations, indicate the number of employees impacted						
Administrative, Management, Legal Staff, IT Staff	Hiring					No Formal Educational Credential	No OTJ Required			
Analysts, Environmental Compliance, Tailings Management Operators, Radiation Safety Technicians						High School Diploma or Equivalent	Less Than A Month of OTJ Required			
Engineers, Scientists, Geologists, Geochemists, Geophysicists, Chemical Metallurgists	Retaining					Associate's Degree	Between 1 Month and 6 Months of OTJ Required			
Electricians, Welders, Technicians, Operating Staff, Driller, Logger	Both					Bachelor's Degree	Between 6 Months to 1 Year of OTJ Required			
Millwrights, Miners, Mill Operator, Mill Maintenance, Wellfield Operator, Wellfield Maintenance	None					Master's Degree	Between 1 and 2 Years of OTJ Required			
Marketing and Sales						Doctoral or Professional Degree	Over 2 Years of OTJ Required			
Other		(specify here)								

D Does the industry experience any amount of workforce cross-over between commercial and U.S. government uranium activities? If yes, explain below.

E Are the skills associated with the workforce in your organization transferable to other non-uranium industries? If yes, explain below.

F If you resumed operations at an idled facility, do you reasonably anticipate being able to hire or rehire workers? If so, in what timeframe?"

G Does the geographic location of your organization's facilities play any role in the challenges in hiring, retaining, and rehiring employees? If yes, explain below and specify the categories of employees that this challenge pertains to.

H Does your organization utilize or provide consulting services that assist in optimizing core business processes relating to your organization's role in the nuclear fuel cycle? If yes, describe the types of firms you work with, and the substance of the consulting work below. Consider the degree of integration of the uranium and nuclear fuel industries in your answer.

Comments:

11a: Competition and Demand Trends

From your organization's perspective, explain how demand within the United States and outside of the United States for uranium products and nuclear fuel assemblies has changed from 2009 to 2018. Explain any trends and describe the principal factors that have affected these changes in demand.

		Market	Overall Change	Explanation and Factors
A		Within the United States		
		Outside the United States		

From 2009 to 2018, indicate whether import competition has affected your U.S. manufacturing operations, sales, employment, planned expansions, etc. with respect to the production of any type of uranium products or nuclear fuel assemblies. Explain your answer below.

		Item	Yes/No	Explain
B.	1	Manufacturing Operations		
	2	Sales		
	3	Employment		
	4	Planned Expansions		
	5	Other (specify)		

From 2009 to 2018, has your organization experienced any negative effects on its return on investment or its growth, investment, ability to raise capital, existing development and production efforts, or the scale of capital investments as a result of imports of any type of uranium products or nuclear fuel assemblies into the United States? Indicate Yes/No to the right and explain below.

		Item	Yes/No	Explain
C.	1	Return on Investment		
	2	Investments		
	3	Ability to Raise Capital		
	4	Existing Development/ Production Efforts		
	5	Scale of Capital Investments		
	6	Other (specify)		

What is the current/future impact on your organization of competition in the U.S. market for uranium products or nuclear fuel assemblies originating from countries with state-owned enterprises, such as Russia, Kazakhstan, Uzbekistan, and China?

D.

E.	1	Describe the top five most significant challenges to the competitive position of your organization in the U.S. uranium market.		
		1		
		2		
		3		
		4		
	2	Describe the top five most significant challenges to the competitive position of your organization in the non-U.S. uranium market.		
		1		
		2		
		3		
		4		

Comments:

11b: Competitors

For each of the following factors, indicate whether uranium producers or nuclear fuel fabricators located inside the U.S. or outside the U.S. possess the competitive advantage, specify the country with the perceived advantage, and explain your reasoning.

Factor	U.S. or Non-U.S. Location with Advantage	Country with Perceived Advantage	Explain
Labor Costs			
Environmental Compliance Costs			
Material Costs			
Equipment Costs			
Facility Costs			
Supply of Skilled Workers			
Overall Finished Product Price			
Quality			
Lead Time			
Reduced Process Variability			
Reduced Cost			
Safety Requirements Costs			
Government Support/Subsidies			
Currency Valuation			
Regulatory Costs (Non-Environmental)			
Other (specify here)			
Other (specify here)			

A.

Identify your organization's leading U.S. competitor in the manufacture of any type of uranium, and identify their primary competitive attribute.

Top U.S. Competitors

#	Competitor Name	State	Global Headquarters Country	Primary Competitive Attribute	Explain
1					
2					
3					
4					
5					

B.

Identify your organization's leading non-U.S. competitor in the manufacture of any type of uranium, and identify their primary competitive attribute.

Top Non-U.S. Competitors

#	Competitor Name	Country	Global Headquarters Country	Primary Competitive Attribute	Explain
1					
2					
3					
4					
5					

Comments:

11c: Competitive Challenges

Please answer the following questions, and explain your answer.

Russian/China Presence on the Global Uranium Market		-Yes/No-	Explain
1	Have restrictions on imports of Russian uranium affected your organization?		
A 2	Would your organization's posture be affected by an increased Russian presence in the U.S. or global market?		
3	Will China's increasing global presence in the nuclear fuel sector affect your organization?		
Current Competitiveness		-Yes/No-	Explain
1	Has your organization changed its pricing practices in the past ten years?		
2	Has your organization engaged in any cost-cutting measures in order to compete with cheaper imports of uranium products and volatile prices?		
3	Has your organization made significant operational or strategic changes in order to better compete in the uranium market?		
B 4	Has the increasing presence of natural gas-fired power plants affected your organization's competitiveness?		
5	Have renewable energy technologies (e.g. solar and wind) affected your organization's competitiveness?		
6	Does the uranium concentration in ore recovered from U.S. mines impact your organization's competitiveness?		
7	Has your organization been impacted by the lack of a U.S.-technology based civilian enrichment facility?		
International Markets and Factors		-Yes/No-	Explain
1	While the nuclear power sector is declining domestically in terms of number of facilities, it is growing globally. Do you plan to participate, or increase participation, in the global uranium market?		
2	Apart from potential government subsidies, do you believe that foreign uranium producers operate at lower costs than U.S. producers?		
3	Do you consider all international suppliers of uranium products to your organization reliable?		
C 4	Do other countries' environmental standards give your international competitors an advantage? Describe.		
5	Does the nuclear industry face challenges in complying with the Foreign Corrupt Practices Act (FCPA) when purchasing imported uranium products from foreign countries? Identify any specific countries where these practices, as defined in the FCPA, are prevalent.		
6	Does your organization know of any direct subsidies or other state support received by your international competitors?		
7	Has the 2011 Fukushima disaster impacted your organization's operations? Explain.		
8	Do uranium producers operating in foreign market economies (e.g. Canada, Australia) have competitive advantages (e.g. geology, business practices, logistics chain) over U.S. producers?		
9	Do regulatory or legislative frameworks give operators in foreign market economies (e.g. Canada, Australia) advantages over U.S. producers?		
Domestic Operations and Factors		-Yes/No-	Explain
1	Does the United States currently have the uranium resources and associated infrastructure available to support U.S. national defense and critical infrastructure needs for the foreseeable future? If no, what actions do you believe are necessary to enhance the U.S. nuclear infrastructure.		

2	If your organization operates a uranium mill, have you had to rely on "alternative feed material" instead of "traditional ore" to support your business? If so, is it a sustainable business model?		
D 3	Have any U.S. regulatory regime changes in the last ten years impacted your organization's current competitiveness? Please list specific changes.		
4	Have uranium market conditions affected your organization's ability to obtain financing for operations to remain solvent?		
5	Has the U.S. Department of Energy's program of selling off natural uranium and low enriched uranium (LEU) stocks affected your organization?		
BUSINESS CONFIDENTIAL - Per Section 705(d) of the Defense Production Act			

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12: Certification

The undersigned certifies that the information herein supplied in response to this questionnaire is complete and correct to the best of his/her knowledge. It is a criminal offense to willfully make a false statement or representation to any department or agency of the United States Government as to any matter within its jurisdiction (18 U.S.C. 1001 (1984 & SUPP. 1197)).

Once your organization has completed this survey, save a copy and submit it via email to Uranium232@bis.doc.gov . Be sure to retain your survey for your records and to facilitate any necessary edits or clarifications.

Organization Name	
Organization's Internet Address	
Name of Authorizing Official	
Title of Authorizing Official	
E-mail Address	
Phone Number and Extension	
Date Certified	

In the box below, provide any additional comments or any other information you wish to include regarding this survey assessment.

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How many hours did it take to complete this survey?	
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