

# Domestic Uranium Production Report 3rd Quarter 2018

November 2018















is report was prepared by the U.S. Energy Information Administration (EIA), the statistical and
alytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are dependent of approval by any other officer or employee of the United States Government. The views this report therefore should not be construed as representing those of the Department of Energy or ner federal agencies.

### **Contacts**

This report was prepared by the staff of the Power and Uranium Operations Team, Office of Electricity, Renewables, and Uranium Statistics. If you have questions about the preparation and content of this report, email us at InfoNuclearData@eia.gov.

## **Contents**

Contacts	. ii
Introduction	. 1
Third guarter of 2018	. 2

### **Tables**

Table 1. Total production of uranium concentrate in the United States, 1996–3rd quarter of 20183
Table 2. Number of uranium mills and plants producing uranium concentrate in the United States4
Table 3. U.S. uranium mills and heap leach facilities by owner, location, capacity, and operating status5
Table 4. U.S. uranium in-situ-leach plants by owner, location, capacity, and operating status6

# **Figures**

Figure 1. Uranium concentrate production in the United States, 1996–3rd quarter of 2018 ......8

### **Introduction**

In this report, the U.S. Energy Information Administration (EIA) reports U.S. uranium production from 1996 through the third quarter of 2018. Data in this report are based on information reported on Form EIA-851A, *Domestic Uranium Production Report (Annual)*, and Form EIA-851Q, *Domestic Uranium Production Report (Quarterly)*.

Previous issues of this report are available on the EIA website.

Definitions for terms used in this report are available in EIA's **Energy Glossary**.

### **Third Quarter of 2018**

U.S. production of uranium concentrate in the third quarter of 2018 was 528,870 pounds of uranium concentrate (U<sub>3</sub>O<sub>8</sub>), up 45% from the second quarter of 2018 but down 18% from the third quarter of 2017. During the third quarter of 2018, U.S. uranium was produced at seven U.S. uranium facilities, the same number as in the second quarter of 2018.

U.S. uranium mill in production (state)

• White Mesa Mill (Utah)

U.S. uranium in-situ leach plants in production (state)

- Crow Butte Operation (Nebraska)
- Lost Creek Project (Wyoming)
- Nichols Ranch ISR Project (Wyoming)
- Ross CPP (Wyoming)
- Smith Ranch-Highland Operation (Wyoming)
- Willow Creek Project (Wyoming)

Table 1. Total production of uranium concentrate in the United States, 1996–3rd quarter of 2018 pounds U308

Calendar- year quarter	1st quarter	2nd quarter	3rd quarter	4th quarter	Calendar-year total
1996	1,734,427	1,460,058	1,691,796	1,434,425	6,320,706
1997	1,149,050	1,321,079	1,631,384	1,541,052	5,642,565
1998	1,151,587	1,143,942	1,203,042	1,206,003	4,704,574
1999	1,196,225	1,132,566	1,204,984	1,076,897	4,610,672
2000	1,018,683	983,330	981,948	973,585	3,975,545
2001	709,177	748,298	628,720	553,060	2,639,256
2002	620,952	643,432	579,723	E500,000	E2,344,107
2003	E400,000	E600,000	E400,000	E600,000	E2,000,000
2004	E600,000	E400,000	588,738	E600,000	2,282,406
2005	709,600	630,053	663,068	686,456	2,689,178
2006	931,065	894,268	1,083,808	1,196,485	4,105,626
2007	1,162,737	1,119,536	1,075,460	1,175,845	4,533,578
2008	810,189	1,073,315	980,933	1,037,946	3,902,383
2009	880,036	982,760	956,657	888,905	3,708,358
2010	876,084	1,055,102	1,150,725	1,146,281	4,228,192
2011	1,063,047	1,189,083	846,624	892,013	3,990,767
2012	1,078,404	1,061,289	1,048,018	957,936	4,145,647
2013	1,147,031	1,394,232	1,171,278	946,301	4,658,842
2014	1,242,179	1,095,011	1,468,608	1,085,534	4,891,332
2015	1,154,408	789,980	774,541	624,278	3,343,207
2016	626,522	745,306	818,783	725,947	2,916,558
2017	450,215	726,375	643,212	622,987	2,442,789
P2018	226,780	365,421	528,870	-	1,121,071

E = Estimated data. P = Preliminary data. NA = Not available. -- = Not applicable.

Note: The reported 4th-quarter 2002 production amount was adjusted by rounding to the nearest 100,000 pounds to avoid disclosure of individual company data. This adjustment also affects the 2002 annual production. The reported production amounts in 2003 and 1st, 2nd, and 4th quarter 2004 were adjusted by rounding to the nearest 200,000 pounds to avoid disclosure of individual company data. The reported 2004 total is the actual production for 2004. Totals may not equal the sum of components because of independent rounding.

Production reflects primary-source uranium from the six operating in-situ leach facilities as well as primary, alternate, and recycled feed at the White Mesa Mill in Utah. The owner of the White Mesa Mill, Energy Fuels Inc., provides additional information on the mill's operations in its financial filings, including the amount of U308 produced from alternative feeds. The company's financial filings are, as of this writing, available at http://www.energyfuels.com/investors/financials/.

Table 2. Number of uranium mills and plants producing uranium concentrate in the United States

<sup>&</sup>lt;sup>a</sup> Milling uranium-bearing ore.

<sup>&</sup>lt;sup>b</sup> Not milling ore, but producing uranium concentrate from other (non-ore) materials.

<sup>&</sup>lt;sup>c</sup> Not including in-situ-leach plants that only produced uranium concentrate from restoration.

<sup>&</sup>lt;sup>d</sup> Uranium concentrate as a byproduct from phosphate production.

Table 3. U.S. uranium mills and heap leach facilities by owner, location, capacity, and operating status

		County, state	Capacity (short	Operating status at end of							
Owner	Mill and heap Leach <sup>a</sup> Facility name	(existing and planned locations)	tons of ore per day)	2017	1st quarter 2018	2nd quarter 2018	3rd quarter 2018	4th quarter 2018			
	Shootaring Canyon	Garfield,									
Anfield Resources Inc.	Uranium Mill	Utah	750	standby	standby	standby	standby				
				operating-	operating-	operating-	operating-				
		San Juan,		processing	processing	processing	processing				
EFR White Mesa LLC	White Mesa Mill	Utah	2,000	alternate feed	alternate feed	alternate feed	alternate feed				
Energy Fuels Wyoming		Fremont,									
Inc	Sheep Mountain	Wyoming	725	undeveloped	undeveloped	undeveloped	undeveloped				
Kennecott Uranium Company/Wyoming											
Coal Resource	Sweetwater	Sweetwater,									
Company	Uranium Project	Wyoming	3,000	standby	standby	standby	standby				

#### Total Capacity 6,475

#### - = No data reported

Notes: Capacity for the 3rd quarter of 2018. An operating status of operating indicates the mill usually was producing uranium concentrate at the end of the period.

<sup>&</sup>lt;sup>a</sup> Heap leach solutions: The separation, or dissolving-out from mined rock, of the soluble uranium constituents by the natural action of percolating a prepared chemical solution through mounded (heaped) rock material. The mounded material usually contains low-grade mineralized material and/or waste rock produced from open pit or underground mines. The solutions are collected after percolation is completed and processed to recover the valued components.

Table 4. U.S. uranium in-situ-leach plants by owner, location, capacity, and operating status

		County, state (existing and	Production capacity (pounds		Oper	ating status at e	nd of	
In-situ-leach plant		planned	U₃O <sub>8</sub> per		1st quarter	2nd quarter	3rd quarter	4th quarter
owner	In-situ-leach plant name	locations)	year)	2017	2018	2018	2018	2018
				partially	partially	partially	partially	
		Campbell,		permitted	permitted	permitted	permitted	
AUC LLC	Reno Creek	Wyoming	2,000,000	and licensed	and licensed	and licensed	and licensed	
		Fall River and		partially	partially	partially	partially	
		Custer, South		permitted	permitted	permitted	permitted	
Azarga Uranium Corp	Dewey Burdock Project	Dakota	1,000,000	and licensed	and licensed	and licensed	and licensed	
		Dawes,						
Cameco	Crow Butte Operation	Nebraska	1,000,000	operating	operating	operating	operating	
				partially	partially	partially	partially	
		McKinley, New		permitted	permitted	permitted	permitted	
Hydro Resources, Inc.	Church Rock	Mexico	1,000,000	and licensed	and licensed	and licensed	and licensed	
				partially	partially	partially	partially	
		McKinley, New		permitted	permitted	permitted	permitted	
Hydro Resources, Inc.	Crownpoint	Mexico	1,000,000	and licensed	and licensed	and licensed	and licensed	
		Sweetwater,						
Lost Creek ISR LLC	Lost Creek Project	Wyoming	2,000,000	operating	operating	operating	operating	
Mestena Uranium								
LLC	Alta Mesa Project	Brooks, Texas	1,500,000	standby	standby	standby	standby	
Power Resources,								
Inc. doing business as		Converse,						
Cameco Resources	Smith Ranch-Highland Operation	Wyoming	5,500,000	operating	operating	operating	operating	
South Texas Mining								
Venture	Hobson ISR Plant	Karnes, Texas	1,000,000	standby	standby	standby	standby	
South Texas Mining								
Venture	La Palangana	Duval, Texas	1,000,000	standby	standby	standby	standby	
		Crook,						
Strata Energy Inc	Ross CPP	Wyoming	375,000	operating	operating	operating	operating	

Table 4. U.S. uranium in-situ-leach plants by owner, location, capacity, and operating status (cont.)

		County, state (existing and	Production capacity	Operating status at end of				
In-situ-leach plant owner	In-situ-leach plant name	planned locations)	(pounds U₃O <sub>8</sub> per year)	2017	1st quarter 2018	2nd quarter 2018	3rd quarter 2018	4th quarter 2018
Uranerz Energy Corporation (An Energy Fuels	Nichala Basah ISB Basisat	Johnson and Campbell,	2 000 000					
company)	Nichols Ranch ISR Project	Wyoming	2,000,000	operating partially	operating	operating partially	operating	
				permitted	partially permitted	permitted	partially permitted	
Uranium Energy Corp.	Goliad ISR Uranium Project	Goliad, Texas	1,000,000	and licensed	and licensed	and licensed	and licensed	
Uranium One		Sweetwater,						
Americas, Inc.	Jab and Antelope	Wyoming	2,000,000	developing	developing	developing	developing	
Uranium One		Campbell,	500.000	partially permitted	partially permitted	partially permitted	partially permitted	
Americas, Inc.	Moore Ranch	Wyoming	500,000	and licensed	and licensed	and licensed	and licensed	
Uranium One USA, Inc.	Willow Creek Project (Christensen Ranch and Irigaray)	Campbell and Johnson, Wyoming	1,300,000	operating	operating	operating	operating	
Total Production Capacity	g	,	24,175,000	, , , , , ,	,			

Notes: Production capacity for the 3rd Quarter of 2018. An operating status of *Operating* indicates the in-situ-leach plant usually was producing uranium concentrate at the end of the period. Hobson ISR Plant processed uranium concentrate that came from La Palangana. Hobson and La Palangana are part of the same project. ISR stands for insitu recovery. Christensen Ranch and Irigaray are part of the Willow Creek Project. Uranerz Energy has a tolling arrangement with Cameco Resources. Uranium is first processed at the Nichols Ranch plant and then transported to the Smith Ranch-Highland Operation plant for final processing into uranium concentrate. CPP stands for central processing plant.

6,500,000 6,000,000 5,500,000 5,000,000 4,500,000 4,000,000 3,500,000 3,000,000 2,500,000 2,000,000 1,500,000 1,000,000 500,000 0 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017P2018 ■1st quarter ■2nd quarter ■3rd quarter ■4th quarter

Figure 1. Uranium concentrate production in the United States, 1996–3rd quarter of 2018 pounds U308

P = Preliminary data