



Independent Statistics & Analysis
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Domestic Uranium Production Report 4th Quarter 2017

February 2018



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Preface

The U.S. Energy Information Administration (EIA) reports data spanning 1996 through fourth quarter 2017 on U.S. uranium production activities in this report, *Domestic Uranium Production Report 4th Quarter 2017*. 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 may be found on the EIA website at <http://www.eia.gov/uranium/production/quarterly>

Definitions for terms used in this report can be found in EIA’s Energy Glossary: <http://www.eia.gov/tools/glossary/>.

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4th Quarter 2017

U.S. production of uranium concentrate in the fourth quarter 2017 was 622,987 pounds U_3O_8 , down 3% from the third quarter 2017 and down 14% from the fourth quarter 2016. During the fourth quarter 2017, U.S. uranium was produced at seven U.S. uranium facilities, the same number as in the third quarter 2017.

U.S. uranium mill in production (state)

1. White Mesa Mill (Utah)

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

2. Crow Butte Operation (Nebraska)
3. Lost Creek Project (Wyoming)
4. Nichols Ranch ISR Project (Wyoming)
5. Ross CPP (Wyoming)
6. Smith Ranch-Highland Operation (Wyoming)
7. Willow Creek Project (Wyoming)

Preliminary 2017 total

Preliminary U.S. uranium concentrate production totaled 2,442,789 pounds U_3O_8 in 2017. This amount was 16% lower than the 2,916,558 pounds produced in 2016 and the lowest annual U.S. production since 2,282,406 pounds were produced in 2004.

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. Much of the recycled uranium feed has already been counted at some point in previous production totals and in 2017, this contribution comprises a significant portion of the total uranium production. 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 U_3O_8 produced from alternative feeds. The company's financial filings are, at this writing, available at <http://www.energyfuels.com/investors/financials/>.

Table 1. Total production of uranium concentrate in the United States, 1996 – 4th Quarter 2017pounds U₃O₈

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
P2017	450,215	726,375	643,212	622,987	2,442,789

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

Notes: 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 also affects the 2002 annual production. The reported 2003 and 1st, 2nd, and 4th quarter 2004 production amounts 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 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. Much of the recycled uranium feed has already been counted at some point in previous production totals and in 2017, this contribution comprises a significant portion of the total uranium production. 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 U3O8 produced from alternative feeds. The company's financial filings are, at this writing, available at <http://www.energyfuels.com/investors/financials/>.

Source: U.S. Energy Information Administration: Form EIA-851A and Form EIA-851Q, "Domestic Uranium Production Report."

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

End of	Uranium concentrate processing facilities				Total
	Mills - conventional milling ¹	Mills - other operations ²	In-situ-leach plants ³	Byproduct recovery plants ⁴	
1996	0	2	5	2	9
1997	0	3	6	2	11
1998	0	2	6	1	9
1999	1	2	4	0	7
2000	1	2	3	0	6
2001	0	1	3	0	4
2002	0	1	2	0	3
2003	0	0	2	0	2
2004	0	0	3	0	3
2005	0	1	3	0	4
2006	0	1	5	0	6
2007	0	1	5	0	6
2008	1	0	6	0	7
2009	0	1	3	0	4
2010	1	0	4	0	5
2011	1	0	5	0	6
2012	1	0	5	0	6
2013	0	1	6	0	7
2014	0	0	7	0	7
2015	0	0	4	0	4
2016	0	1	6	0	7
4th quarter					
2017	0	1	6	0	7

¹ Milling uranium-bearing ore.

² Not milling ore, but producing uranium concentrate from other (non-ore) materials.

³ Not including in-situ-leach plants that only produced uranium concentrate from restoration.

⁴ Uranium concentrate as a byproduct from phosphate production.

Source: U.S. Energy Information Administration: Form EIA-851A and Form EIA-851Q, "Domestic Uranium Production Report."

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

Owner	Mill and Heap Leach ¹ Facility name	County, state (existing and planned locations)	Capacity (short tons of ore per day)	Operating status at end of				
				2016	1st quarter 2017	2nd quarter 2017	3rd quarter 2017	4th quarter 2017
Anfield Resources Inc.	Shootaring Canyon Uranium Mill	Garfield, Utah	750	Standby	Standby	Standby	Standby	Standby
EFR White Mesa LLC	White Mesa Mill	San Juan, Utah	2,000	Operating-Processing Alternate Feed	Operating-Processing Alternate Feed	Operating-Processing Alternate Feed	Operating-Processing Alternate Feed	Operating-Processing Alternate Feed
Energy Fuels Wyoming Inc	Sheep Mountain	Fremont, Wyoming	725	Undeveloped	Undeveloped	Undeveloped	Undeveloped	Undeveloped
Kennecott Uranium Company/Wyoming Coal Resource Company	Sweetwater Uranium Project	Sweetwater, Wyoming	3,000	Standby	Standby	Standby	Standby	Standby
Pinon Ridge Corporation	Pinon Ridge Mill	Montrose, Colorado	500	Permitted and Licensed	Permitted and Licensed	Permitted and Licensed	Permitted and Licensed	Permitted and Licensed
Total Capacity:			6,975					

¹ 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.

- = No data reported

Notes: Capacity for 4th Quarter 2017. An operating status of "Operating" indicates the mill usually was producing uranium concentrate at the end of the period.

Source: U.S. Energy Information Administration: Form EIA-851A and Form EIA-851Q, "Domestic Uranium Production Report."

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

In-situ-leach plant owner	In-situ-leach plant name	County, state (existing and planned locations)	Production capacity (pounds U ₃ O ₈ per year)	Operating status at end of				
				2016	1st quarter 2017	2nd quarter 2017	3rd quarter 2017	4th quarter 2017
AUC LLC	Reno Creek	Campbell, Wyoming	2,000,000	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed
Azarga Uranium Corp	Dewey Burdock Project	Fall River and Custer, South Dakota	1,000,000	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed
Cameco	Crow Butte Operation	Dawes, Nebraska	1,000,000	Operating	Operating	Operating	Operating	Operating
Hydro Resources, Inc.	Church Rock	McKinley, New Mexico	1,000,000	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed
Hydro Resources, Inc.	Crownpoint	McKinley, New Mexico	1,000,000	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed	Partially Permitted And Licensed
Lost Creek ISR LLC	Lost Creek Project	Sweetwater, Wyoming	2,000,000	Operating	Operating	Operating	Operating	Operating
Mestena Uranium LLC	Alta Mesa Project	Brooks, Texas	1,500,000	Standby	Standby	Standby	Standby	Standby
Power Resources, Inc. dba Cameco Resources	Smith Ranch-Highland Operation	Converse, Wyoming	5,500,000	Operating	Operating	Operating	Operating	Operating
South Texas Mining Venture	Hobson ISR Plant	Karnes, Texas	1,000,000	Standby	Standby	Standby	Standby	Standby
South Texas Mining Venture	La Palangana	Duval, Texas	1,000,000	Standby	Standby	Standby	Standby	Standby
Strata Energy Inc	Ross CPP	Crook, Wyoming	375,000	Operating	Operating	Operating	Operating	Operating

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

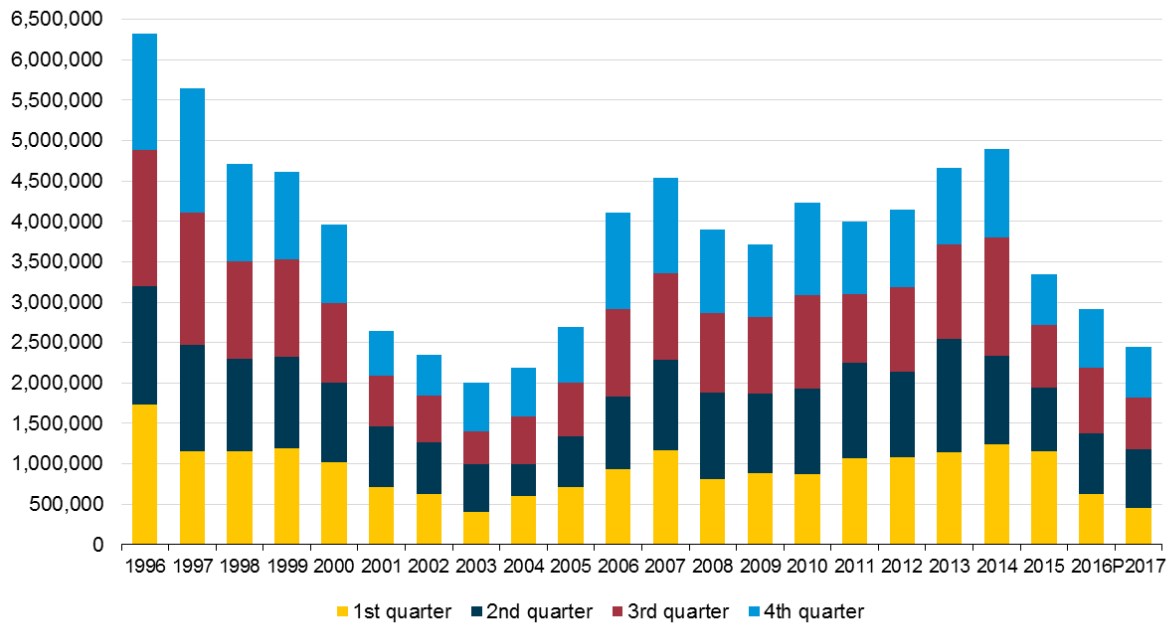
In-situ-leach plant owner	In-situ-leach plant name	County, state (existing and planned locations)	Production capacity (pounds U ₃ O ₈ per year)	2016	Operating status at end of			
					1st quarter 2017	2nd quarter 2017	3rd quarter 2017	4th quarter 2017
Uranerz Energy Corporation (An Energy Fuels company)	Nichols Ranch ISR Project	Johnson and Campbell, Wyoming	2,000,000	Operating	Operating	Operating	Operating	Operating
	Goliad ISR Uranium Project	<i>Goliad, Texas</i>	1,000,000	Permitted And Licensed	Permitted And Licensed	Permitted And Licensed	Permitted And Licensed	Permitted And Licensed
Uranium Energy Corp. Americas, Inc.	Jab and Antelope	<i>Sweetwater, Wyoming</i>	2,000,000	Developing	Developing	Developing	Developing	Developing
Uranium One Americas, Inc.	Moore Ranch	<i>Campbell, Wyoming</i>	500,000	Permitted And Licensed	Permitted And Licensed	Permitted And Licensed	Permitted And Licensed	Permitted And Licensed
Uranium One USA, Inc.	Willow Creek Project (Christensen Ranch and Irigaray)	Campbell and Johnson, Wyoming	1,300,000	Operating	Operating	Operating	Operating	Operating
Total Production Capacity:			24,175,000					

Notes: Production capacity for 4th Quarter 2017. 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 in-situ 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 Uranerz's uranium concentrate. CPP stands for central processing plant.

Source: U.S. Energy Information Administration: Form EIA-851A and Form EIA-851Q, "Domestic Uranium Production Report."

Figure 1. Uranium concentrate production in the United States, 1996 – 4th Quarter 2017

pounds U₃O₈



P = Preliminary data.

Source: U.S. Energy Information Administration: Form EIA-851A and Form EIA-851Q, "Domestic Uranium Production Report."