

# Domestic Uranium Production Report 4th Quarter 2014

January 2015















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### **Contacts**

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#### **Preface**

The U.S. Energy Information Administration (EIA) reports data spanning 1996 through fourth quarter 2014 on U.S. uranium production activities in this report, *4th Quarter 2014 Domestic Uranium Production Report*. 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 <a href="http://www.eia.gov/uranium/production/quarterly">http://www.eia.gov/uranium/production/quarterly</a>

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

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#### 4th Quarter 2014

U.S. production of uranium concentrate in the fourth quarter 2014 was 1,100,111 pounds  $U_3O_8$ , down 25% from the previous quarter and up 16% from the fourth quarter 2013. During the fourth quarter 2014, U.S. uranium was produced at seven U.S. uranium facilities, one less than in the previous quarter. Uranium was not produced at the White Mesa Mill in Utah, but was operating-processing alternate feed in the fourth quarter 2014.

U.S. uranium mill in production (state)

none

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

- 1. Alta Mesa Project (Texas)
- 2. Crow Butte Operation (Nebraska)
- 3. Hobson ISR Plant/La Palangana (Texas)
- 4. Lost Creek Project (Wyoming)
- 5. Nichols Ranch ISR Project (Wyoming)
- 6. Smith Ranch-Highland Operation (Wyoming)
- 7. Willow Creek Project (Wyoming)

#### **Preliminary 2014 total**

U.S. uranium concentrate production totaled 4,905,909 pounds  $U_3O_8$  in 2014. This amount is 5% higher than the 4,658,842 pounds produced in 2013. U.S. production in 2014 represents about 11% of the 2014 anticipated uranium market requirements of 46.5 million pounds for U.S. civilian nuclear power reactors.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> 2013 Uranium Marketing Annual Report, Table 12

Table 1. Total production of uranium concentrate in the United States, 1996 – 4th Quarter 2014 pounds U<sub>3</sub>O<sub>8</sub>

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
P2014	1,242,179	1,095,011	1,468,608	1,100,111	4,905,909

E = Estimated data. P = Preliminary data.

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.

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

**Uranium concentrate processing facilities** 

End of	Mills - conventional milling <sup>1</sup>	Mills - other operations <sup>2</sup>	In-situ-leach plants <sup>3</sup>	Byproduct recovery plants <sup>4</sup>	Total
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
4th Quarter 2014	0	0	7	0	7

<sup>&</sup>lt;sup>1</sup> Milling uranium-bearing ore.

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

<sup>&</sup>lt;sup>3</sup> Not including in-situ-leach plants that only produced uranium concentrate from restoration.

<sup>&</sup>lt;sup>4</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				Oį	perating status at end of
Owner		(existing and planned	(short tons of ore per day)	2013	1st quarter 2014	2nd quarter 2014	3rd quarter 2014	4th quarter 2014
EFR White Mesa LLC	White Mesa Mill	San Juan, Utah	2,000	Operating- Processing Alternate Feed	Operating- Processing Alternate Feed	Operating	Operating	Operating- Processing Alternate Feed
Energy Fuels			2,000	, accinate reed	- Titernate reca	Operating	Operating	7 illerriate i cea
Resources		Montrose,		Permitted And	Permitted And	Permitted	Permitted	Permitted And
Corporation	Pinon Ridge Mill	Colorado	500	Licensed	Licensed	And Licensed	And Licensed	Licensed
Energy Fuels		Fremont,						
Wyoming Inc	Sheep Mountain	Wyoming	725	Undeveloped	Undeveloped	Undeveloped	Undeveloped	Undeveloped
Kennecott Uranium Company/Wyoming Coal Resource	Sweetwater	Sweetwater,						
Company	<b>Uranium Project</b>	Wyoming	3,000	Standby	Standby	Standby	Standby	Standby
Uranium One Americas, Inc.	Shootaring Canyon Uranium Mill	Garfield, Utah	750	Standby	Standby	Standby	Standby	Standby
Total Capacity:			6,975					

<sup>&</sup>lt;sup>1</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.

Notes: Capacity for 4th Quarter 2014. An operating status of "Operating" indicates the mill usually was producing uranium concentrate at the end of the period.

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

		County, state (existing and	Production capacity (pounds				Operatin	g status at end of
In-situ-leach plant owner	In-situ-leach plant name	planned locations)	u U₃O <sub>8</sub> per year)	2013	1st quarter 2014	2nd quarter 2014	3rd quarter 2014	4th quarter 2014
		Campbell,						
AUC LLC	Reno Creek	Wyoming	<u>-</u>	Developing	Developing	Developing	Developing	Developing
	Crow Butte							
Cameco	Operation	Dawes, Nebraska	1,000,000	Operating	Operating	Operating	Operating	Operating
				Partially	Partially	Partially	Partially	Partially
Hydro Resources,		McKinley, New		Permitted	Permitted And	Permitted And	Permitted	Permitted And
Inc.	Church Rock	Mexico	1,000,000	And Licensed	Licensed	Licensed	And Licensed	Licensed
				Partially	Partially	Partially	Partially	Partially
Hydro Resources,		McKinley, New		Permitted	Permitted And	Permitted And	Permitted	Permitted And
Inc.	Crownpoint	Mexico	1,000,000	And Licensed	Licensed	Licensed	And Licensed	Licensed
		Sweetwater,						
Lost Creek ISR, LLC	Lost Creek Project	Wyoming	2,000,000	Operating	Operating	Operating	Operating	Operating
Mestena Uranium								
LLC	Alta Mesa Project	Brooks, Texas	1,500,000	Producing	Producing	Producing	Producing	Producing
Power Resources,	Smith Ranch-							
Inc. dba Cameco	Highland	Converse,	F F00 000	<b>.</b>	•	<b>.</b>		<b>.</b>
Resources	Operation	Wyoming	5,500,000	Operating	Operating	Operating	Operating	Operating
		Fall River and			Partially	Partially	Partially	Partially
Damarta da LICA	Dewey Burdock	Custer, South	1 000 000	Davalanina	Permitted And	Permitted And	Permitted	Permitted And
Powertech USA	Project	Dakota	1,000,000	Developing	Licensed	Licensed	And Licensed	Licensed
South Texas Mining								
Venture	Hobson ISR Plant	Karnes, Texas	1,000,000	Operating	Operating	Operating	Operating	Operating
South Texas Mining								
Venture	La Palangana	Duval, Texas	1,000,000	Operating	Operating	Operating	Operating	Operating
				Partially	Partially			
				Permitted	Permitted And	Permitted And	Under	Under
Strata Energy Inc	Ross CPP	Crook, Wyoming	375,000	And Licensed	Licensed	Licensed	Construction	Construction
URI, Inc.	Kingsville Dome	Kleberg, Texas	1,000,000	Restoration	Restoration	Restoration	Restoration	Restoration
URI, Inc.	Rosita	Duval, Texas	1,000,000	Restoration	Restoration	Restoration	Restoration	Restoration
On, mc.	Nosita	Davai, i chas	1,000,000	Nestoration	Nestoration	restoration	ACSIOIGUOII	Restoration

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

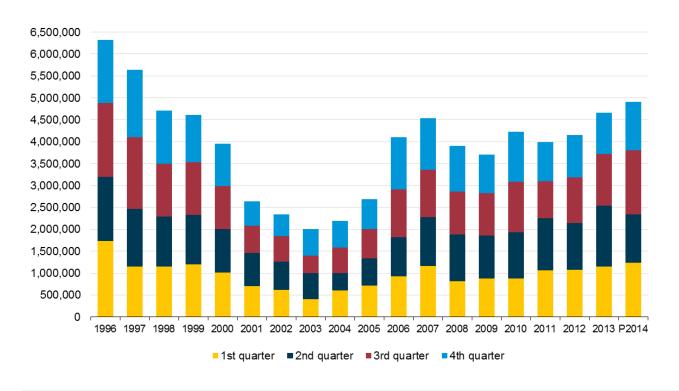
		County, state (existing and	Production capacity (pounds				Operating	status at end of
In-situ-leach plant owner	In-situ-leach plant name	planned locations)	U₃O <sub>8</sub> per year)	2013	1st quarter 2014	2nd quarter 2014	3rd quarter 2014	4th quarter 2014
LIDI Inc	Maarina	Dunal Tares	900 000	Dantauntiau	Dastavatian	Dastaustiau	Dantauntina	Daatawatiaw
URI, Inc.	Vasquez	Duval, Texas	800,000	Restoration	Restoration	Restoration	Restoration	Restoration
Uranerz Energy	Nichols Ranch ISR	Johnson and Campbell,		Under	Under			
Corporation	Project	Wyoming	2,000,000	Construction	Construction	Producing	Operating	Producing
Uranium Energy	Goliad ISR Uranium			Permitted And	Permitted And	Permitted And	Permitted And	Permitted And
Corp.	Project	Goliad, Texas	1,000,000	Licensed	Licensed	Licensed	Licensed	Licensed
Uranium One		Sweetwater,						
Americas, Inc.	Jab and Antelope	Wyoming	2,000,000	Developing	Developing	Developing	Developing	Developing
Uranium One		Campbell,		Permitted And	Permitted And	Permitted And	Permitted And	Permitted And
Americas, Inc.	Moore Ranch	Wyoming	500,000	Licensed	Licensed	Licensed	Licensed	Licensed
	Willow Creek	Campbell and						
Uranium One	Project (Christensen	Johnson,						
Americas, Inc.	Ranch and Irigaray)	Wyoming	1,300,000	Producing	Producing	Operating	Operating	Operating
<b>Total Production</b>								
Capacity:			24,975,000					

<sup>- =</sup> No data reported.

Notes: Production capacity for 4th Quarter 2014. 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.

Figure 1. Uranium concentrate production in the United States, 1996 – 4th Quarter 2014

pounds U<sub>3</sub>O<sub>8</sub>



P = Preliminary data.