

The Uranium Enrichment Market

The American Nuclear Energy Revival Briefing Series

September 23, 2010

Ruthanne G. Neely

Senior Vice President, Enrichment &
General Counsel

The Ux Consulting Company, LLC



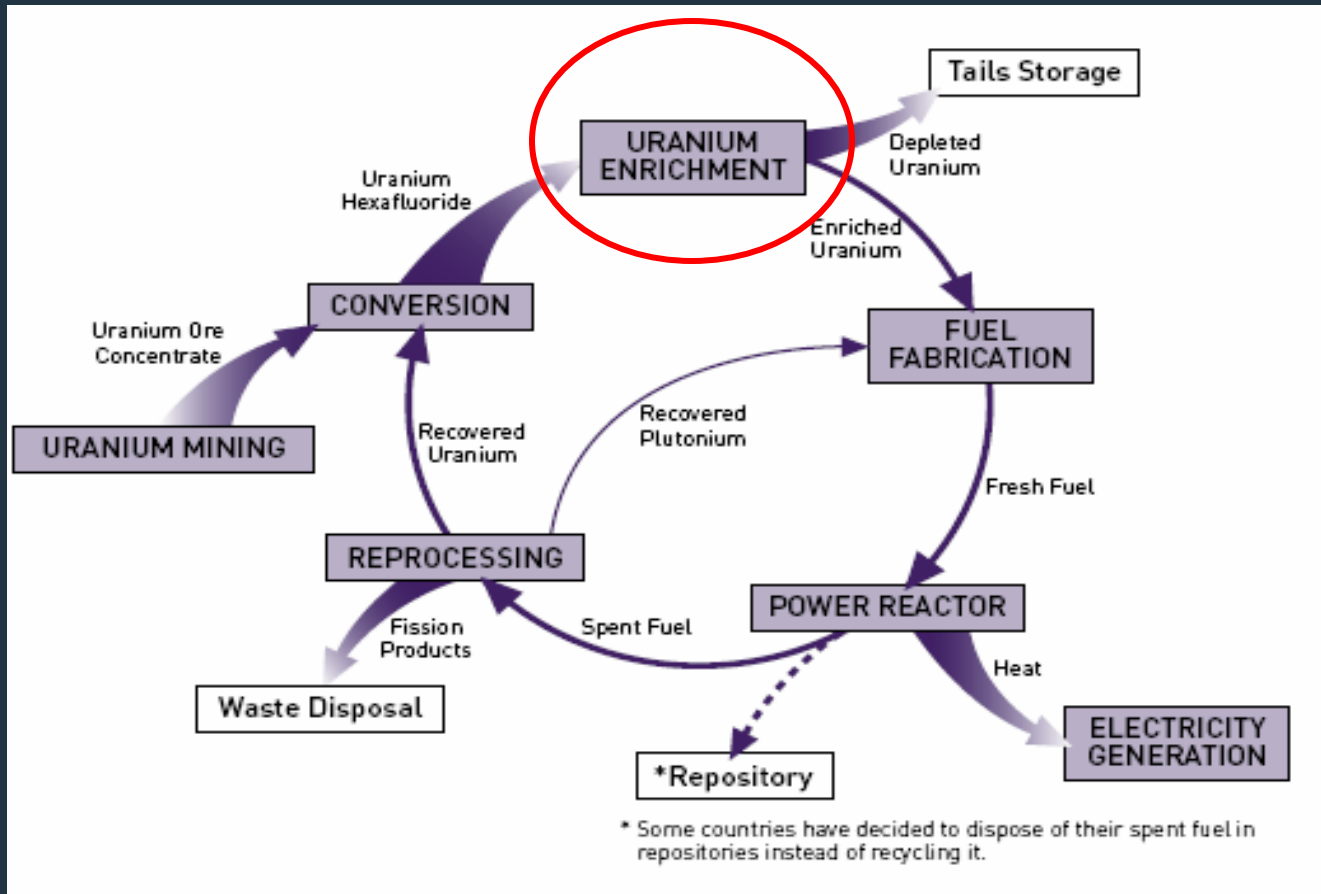


The Ux Consulting Company

- Founded in March 1994
- Provides nuclear fuel consulting and market information services to suppliers, utilities, investors and government agencies internationally
- Publishes:
 - *Ux Weekly* (publication started in 1987)
 - UxC News Headlines
 - Quarterly *Market Outlook* reports with price forecasts
 - Uranium, Conversion, Enrichment, and Fabrication
 - *Nuclear Power Outlook*
 - *Uranium Suppliers Annual*
 - The Changing Geopolitics of the Nuclear Fuel Market
 - Country Uranium Mining and Export Policies
 - UxC Policy Watch briefing service
 - *SpentFUEL* and *StoreFUEL*
- Launched uranium futures contract with NYMEX in May 2007
- Offices located in Atlanta, GA, Washington, DC, and other locations
- The most complete and accurate consulting service in the market, backed by senior industry experience and strong fundamental analysis



The Nuclear Fuel Cycle

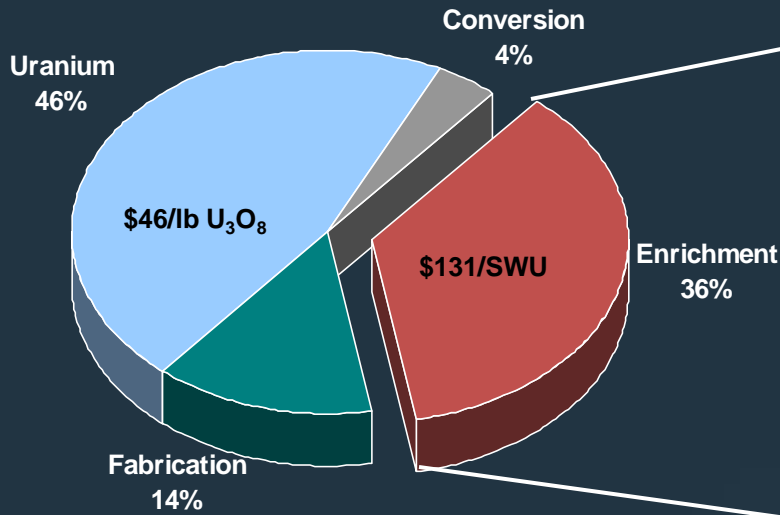


Source: <http://www.icnnd.org/reference/reports/ent/part-ii-5.html>



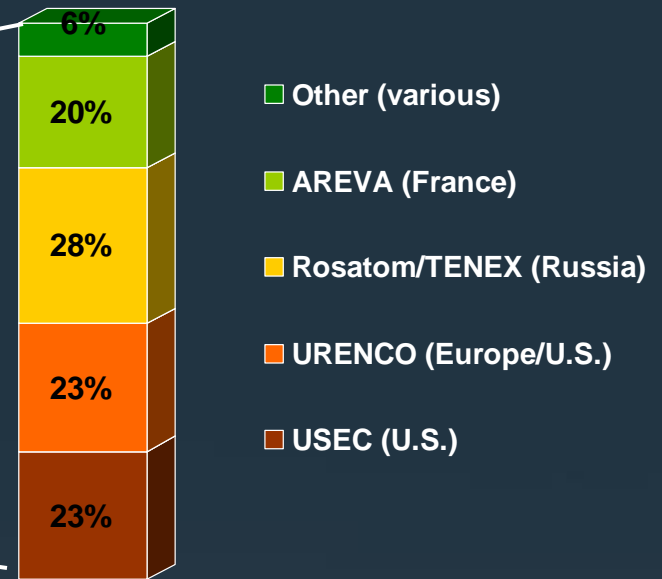
Enrichment Is A High Value Component

2009 Front-End Nuclear Fuel Market Values



**Front-End Nuclear Fuel Industry:
\$18 Billion**

2009 Market Shares of Major Enrichers



**Enrichment Industry:
≈ 50 MMSWU or \$6.5 Billion**

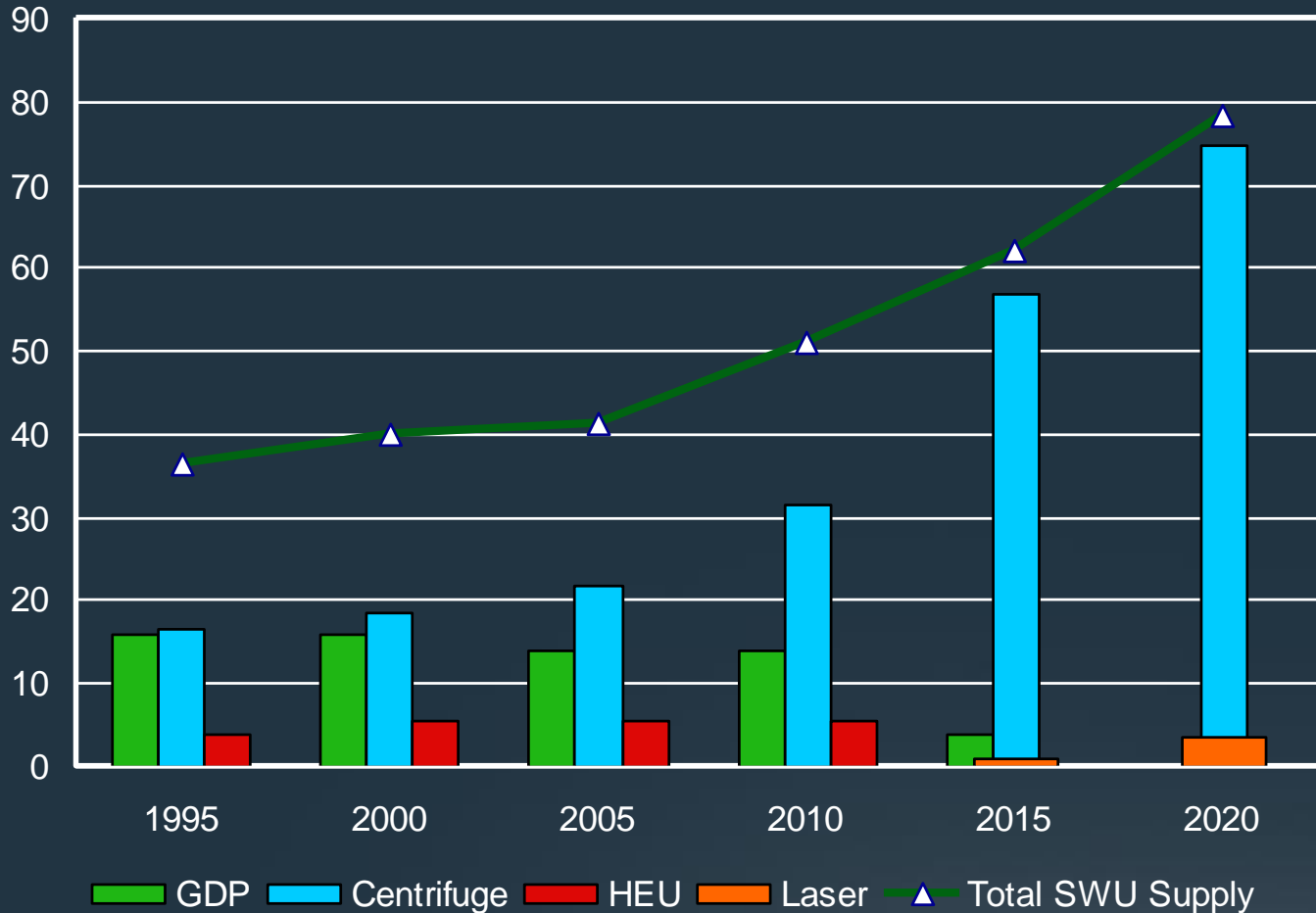
Note: USEC chart updated by Ux Consulting

Changing Enrichment Technology 1995-2020



Million SWU

© UxC





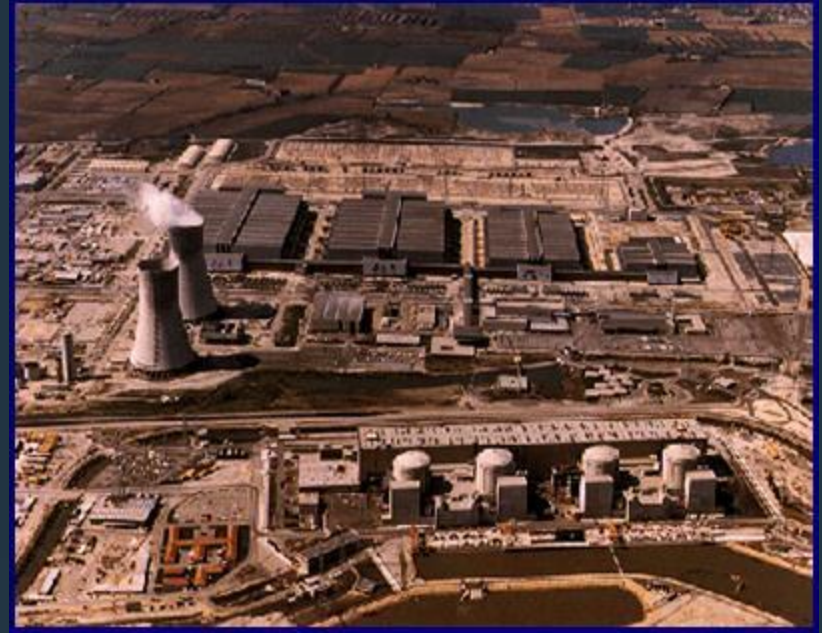
The Two GDP Facilities

USEC Paducah GDP



Closed by the end of 2016 ??

AREVA/Eurodif Tricastin GDP



Closed by the end of 2012 ??

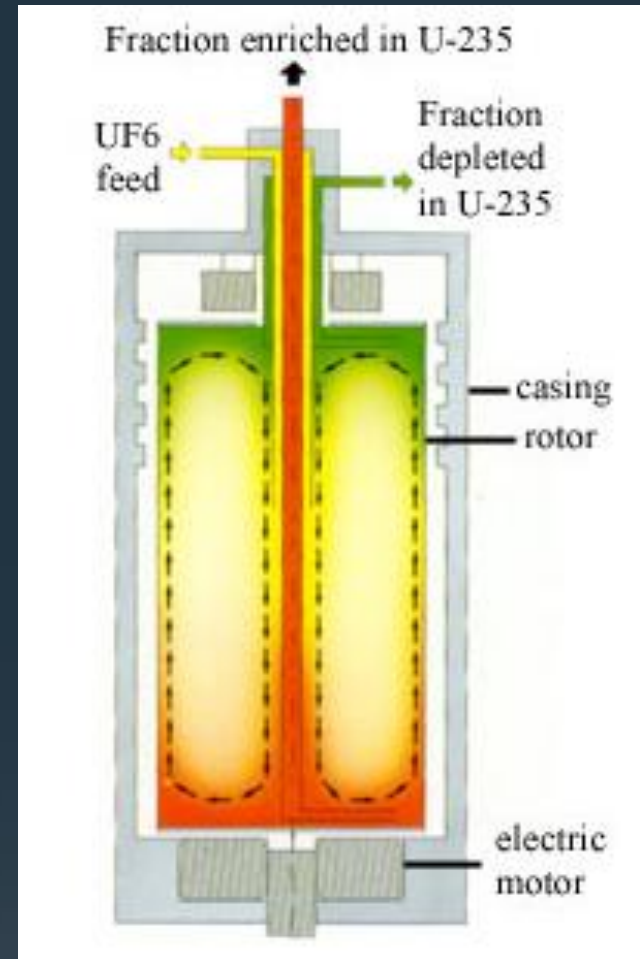
**Combined optimal economic capacity
of 14.0 million SWU/year**



Gas Centrifuge Technology



Uses 5% of the electric power required by a gaseous diffusion plant





New Enrichment Plant Projects

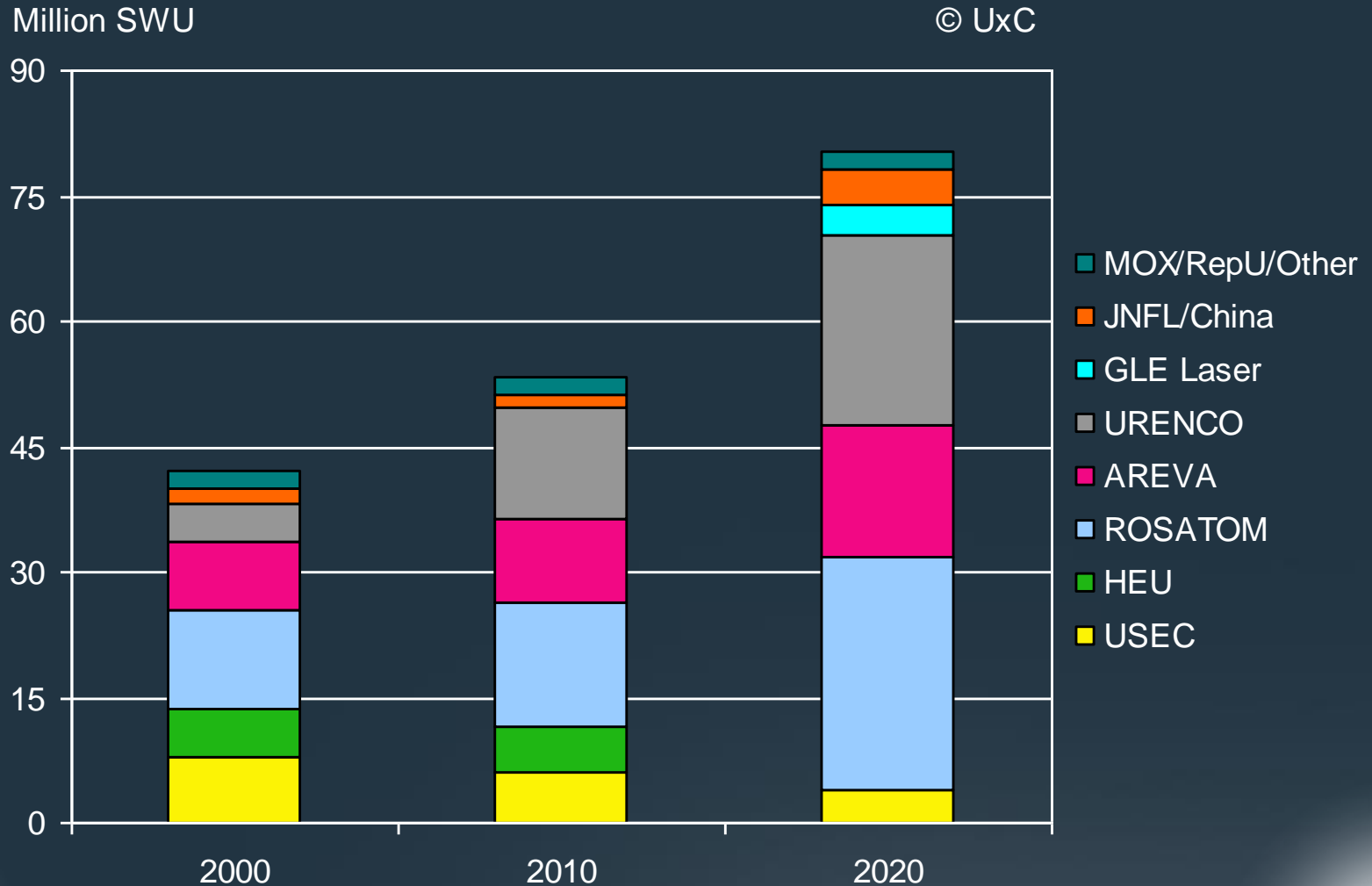
New Enrichment Plant Projects – All Gas Centrifuge But One

Company	Project	Location	Final Capacity (million SWU)
USEC	ACP	Portsmouth, OH	3.8*
URENCO	URENCO USA/LES	Eunice, NM	5.9*
AREVA	Georges Besse II	Tricastin, France	7.5*
AREVA	Eagle Rock Enrichment Facility (EREF)	Idaho Falls, ID	3.0*
JNFL	New Centrifuge Plant	Rokkasho-mura, Japan	1.5
China	Phase 4 Enrichment Plant	Hanzhong, China	1.5*
GLE	GLE-SILEX Laser Project	Wilmington, NC	3.0-6.0

* These publicly announced “final” SWU capacities could very well be increased before 2020, if market demand exists and licensing and regulatory permits are in place.



Major SWU Suppliers / Marketable Supplies 2000, 2010, 2020





SWU Supply and Demand 2008-2030

