

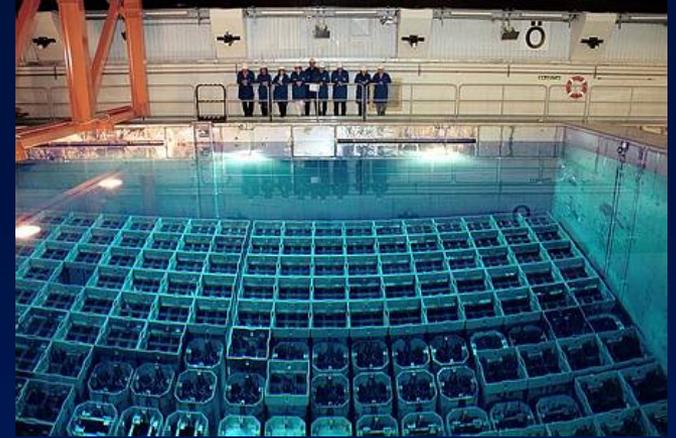


Managing High-Level & Low-Level Waste

*National State Liaison Officers Conference
August 19, 2009*

George Pangburn, FSME

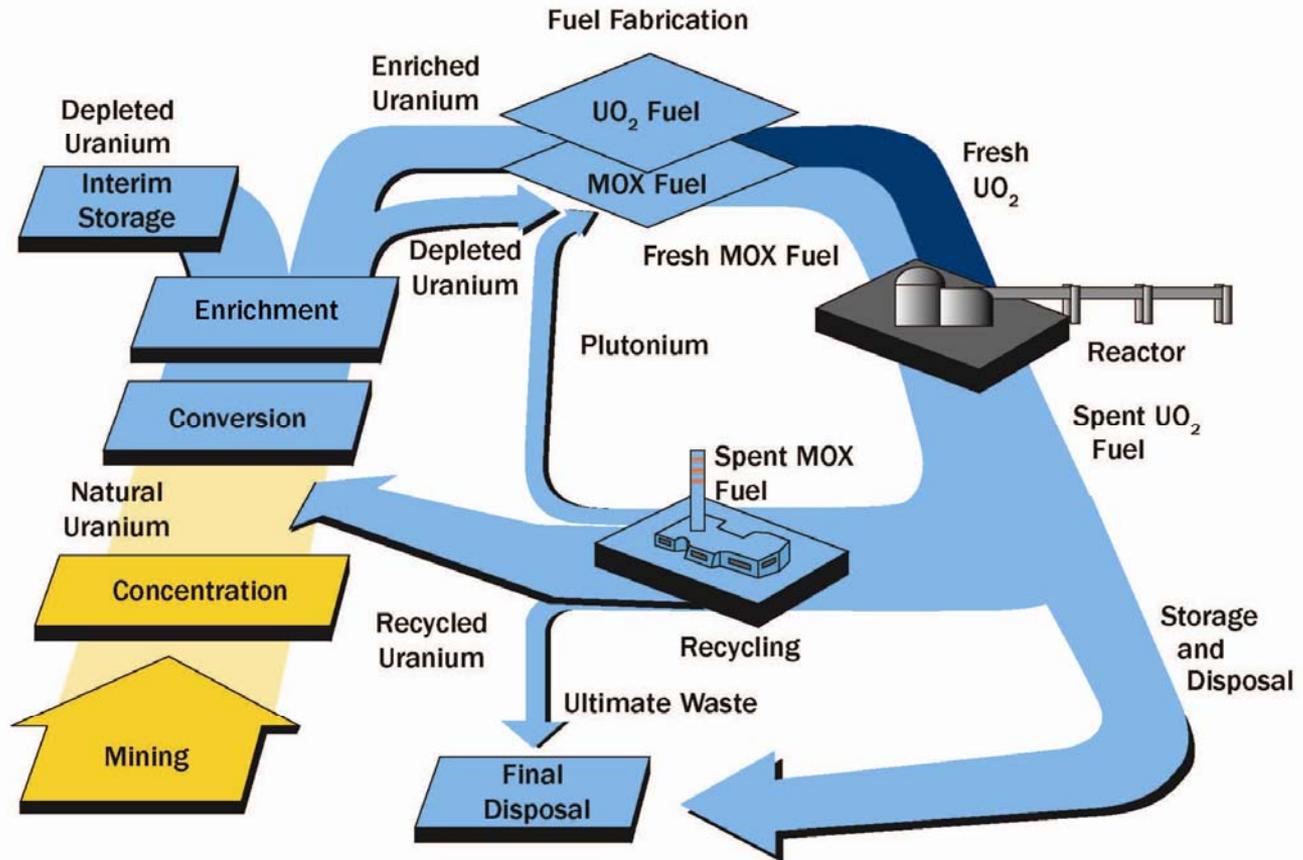
Michael Weber, NMSS



Overview

- Nuclear Fuel Cycle and Radioactive Waste
- Low-Level Waste
 - Status, Challenges, Opportunities
- Spent Fuel and High-Level Waste
 - Status, Challenges, Opportunities
- Questions and Comments

The Nuclear Fuel Cycle



Low-Level Waste - Status

- Adequate low-level waste (LLW) disposal capacity
- LLW currently being safely stored or disposed of
- Continued reduction in LLW generation rates

Commercial LLW Sites in U.S.



Facility	Waste	Compact Restrictions
Hanford, WA	Class A, B, C	11 western states in 2 LLW Compacts only
Clive, UT	A only	None, all US generators OK
Barnwell, SC	A, B, C	SC, NJ, CT only beginning mid-2008 (Atlantic Compact)
Andrews Cty, Texas	A, B, C	Texas and VT only (Texas Compact)

- Operating facility
- ▲ Proposed facility

WCS Site in Andrews County, TX



EnergySolutions Clive, Utah, Disposal Facility



Low-Level Waste - Challenges

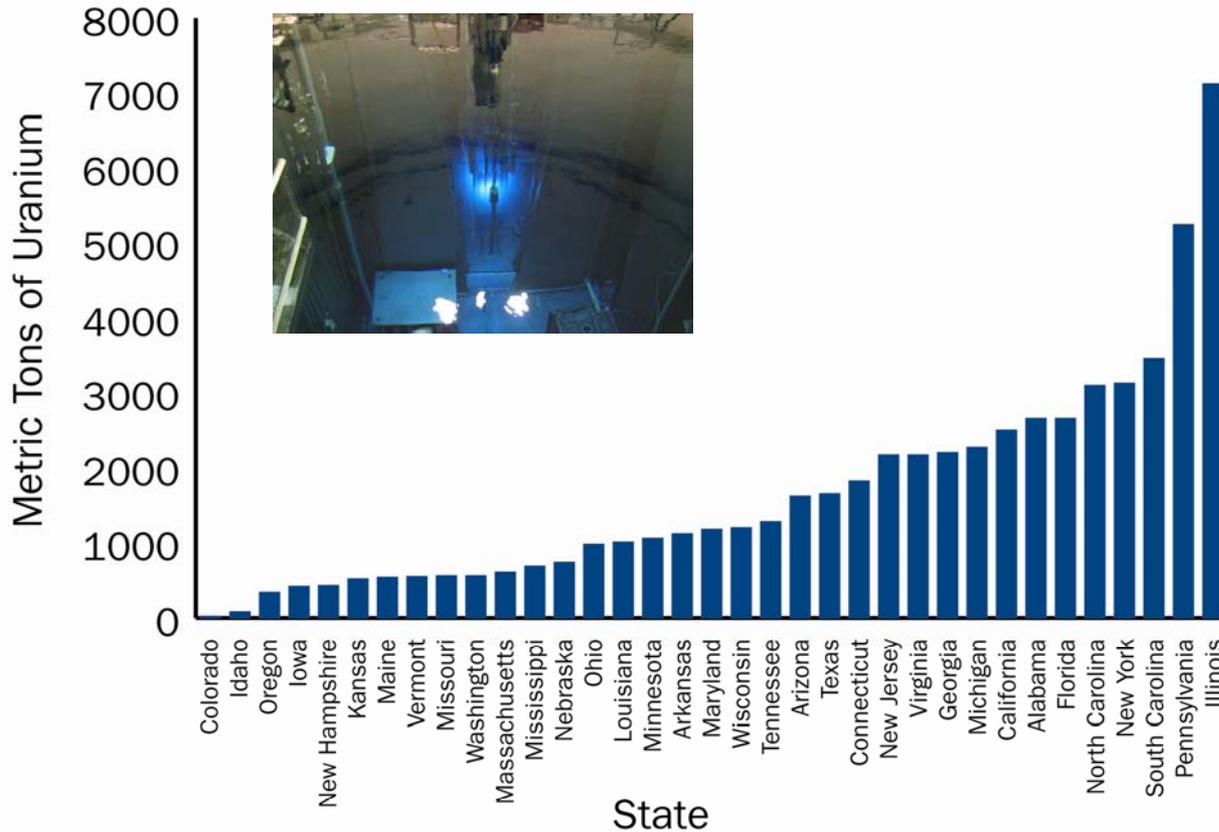
- Depleted uranium disposal
- Increasing Class B and C LLW disposal access
- Alternative disposal of Low Activity Waste containing special nuclear material
- GTCC disposal access
- LLW blending
- Safely storing LLW until disposal capacity exists
- LLW imports
- Disposal of unused radioactive sources

Low-Level Waste - Opportunities

- September workshops on depleted uranium disposal
- October meeting on impacts of restricted disposal access
- WCS LLW disposal facility license pending
- Request for Low Activity Waste disposal at USEI
- Department of Energy's GTCC DEIS

Spent Fuel and High-Level Waste - Status

Storage of Commercial Spent Fuel by State through 2007



Note: Idaho is holding used fuel from Three Mile Island, Unit 2. Data are rounded up to the nearest 10 tons.
 Source: ACI Nuclear Energy Solutions and U.S. Department of Energy. Updated February 2008.

Spent Fuel and High-Level Waste - Challenges



Yucca Mountain

Spent Fuel and High-Level Waste - Opportunities

- Extended reliance on dry cask storage
- The Administration's Blue Ribbon Commission
- Anticipated revisions to National legislation
- Leveraging existing capabilities and three decades of experience
- Cooperation with foreign counterparts
- Waste Confidence rulemaking
- Confirming the safety and security basis

Questions & Comments

<http://www.nrc.gov/waste.html>

<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/radwaste.html>

<http://www.nrc.gov/reading-rm/doc-collections/nuregs/brochures/br0216/>

<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/dry-cask-storage.html>

<http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/fs-yucca-license-review.html>