

technical services group

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February 27, 2012 Waste Management Symposium

The Babcock & Wilcox Company

Government Operations

B&W Technical Services Group, Inc.

B&W Nuclear Operations Group, Inc.



ages and operates
consequence
ties, provides
nical services and

Power Generation Systems

B&W Power Generation Group, Inc.

B&W Nuclear Energy, Inc.



Manufactures and services coal, biomass, CNG, concentrated solar power plant equipment, & Nox, Sox, mercury scrubbers



Manufactures commercial nuclear components and provides services to commercial nuclear market

Manages and operates high-consequence facilities, provides technical services and support to government agencies and private customers

Core Competencies

- Technology development and laboratory operations
- Infrastructure & capital facility management construction
- Engineering procurements / construction management
- Nuclear materials & operations management
- Manufacturing & assembly (machining, chemical process, component assembly)
- Safeguards & Security
- Nuclear & non-nuclear facility D&D
- Environmental remediation

Infrastructure Metrics

28 projects & operations in 13 states

- ~ 9,500 employees
- ~ \$ 3 Billion DOE annual site budgets managed
- ~ 2,649 square miles >State of Delaware
- ~ 5,300 Buildings
- ~ 41,000,000 Gross Ft² under roof
- ~ 5,000Vehicles maintained
- ~ 800 Miles of road
- ~ 900 Cranes
- ~ 12 Substations operated/maintained
- ~ 450 Miles electric transmission & distribution lines
- ~ 1,200 Miles of piping
- ~ 18 Wastewater treatment plants
- ~ \$480,000,000 total annual maintenance budget

B&W TSG Operations & Projects



Nuclear Fuel Manufacturing and R&D

Only U.S. NRC 100% enrichment licensee

Single source for HEU downblending

Advanced LEU fuel development

Nuclear fuel and components

 Lynchburg Technology Center (Hot Cell, Automated NDE, R&D)

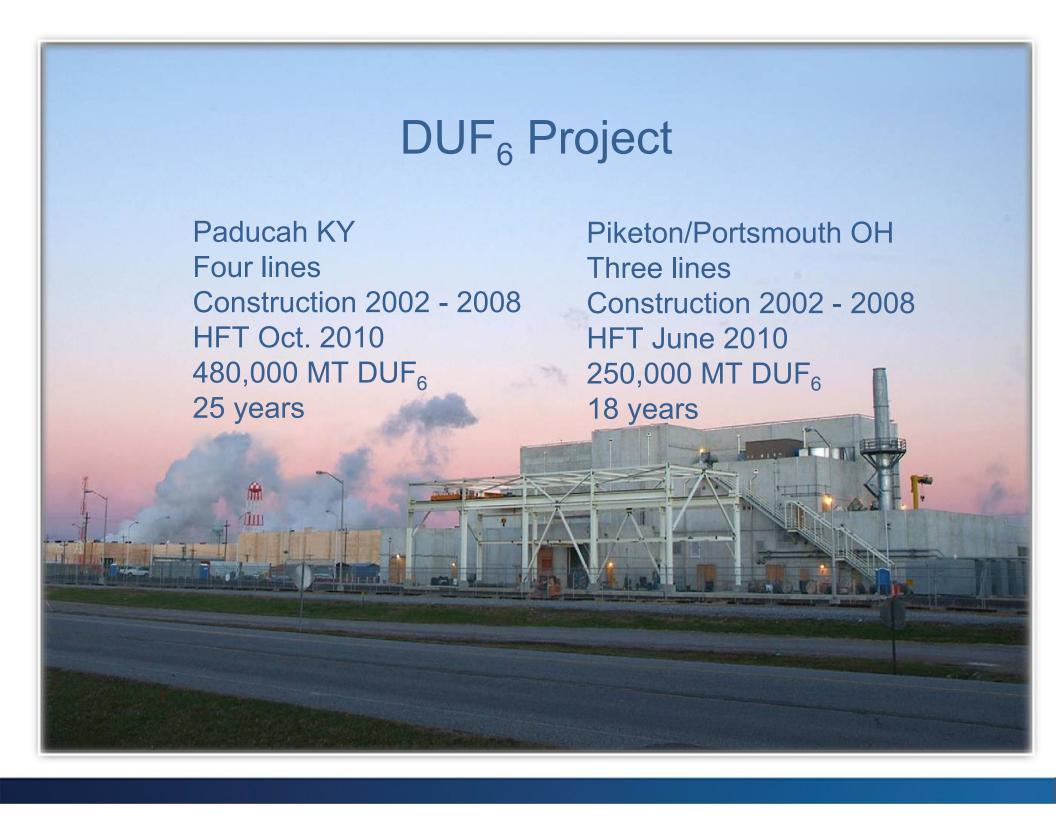


U.S. leader for advanced and high-enriched fuel

Waste Management Capabilities

- Waste management facilities operations
 - Wastewater treatment plants
 - Hazardous waste storage facilities
 - Operation of supercompactor
 - Lead recovery operation programs
 - Waste disposal trenches/ ponds/pits
 - High level waste tank farm
- Safe storage of spent nuclear fuel, HLW & TRU waste

- Waste minimization/pollution prevention
- Recycling metallic waste
- Characterization, handling & treating waste
- Handling & treating waste
 - Treatment and disposal of Mixed, TRU and hazardous waste
 - Conversion and disposition of DUF₆





Assumed contract March 29, 2011

Achieved fully operational status Sept. 30, 2011 with Phased Restart program

First new nuclear materials processing facilities in years

Ahead of target for 2012 extended runs. Currently in partial conversion status

On target for 2013 full commercial production

Want to know more about DUF₆ operations?

Our plant managers –
Paducah and Portsmouth –
will discuss operations at
the Portsmouth session
Wednesday afternoon.

Session 79.

(another commercial)





While we are busy with our 105 sessions and multiple tours, parties, receptions and banquets,



LET'S NOT IGNORE THE ELEPHANT IN THE ROOM.

WHERE are we going to put all this stuff?



- AEC/NAS recommended disposal solution 56 years ago, 11 years after the first bomb.
- Other countries are progressing with deep geologic disposal.
- How long are we going to delay the Nuclear Renaissance waiting for a disposal solution?
- The Blue Ribbon Commission issued its report this January.
- More study is not an effective solution.

RATIONALIZE:NERATOR

• TO APPLY THE PRINCIPLES OF SCIENTIFIC MANAGEMENT FOR A DESIRED RESULT.

STORAGE

 TO PROVIDE PLAUSIBLE BUT UNTRUE REASONS FOR CONDUCT

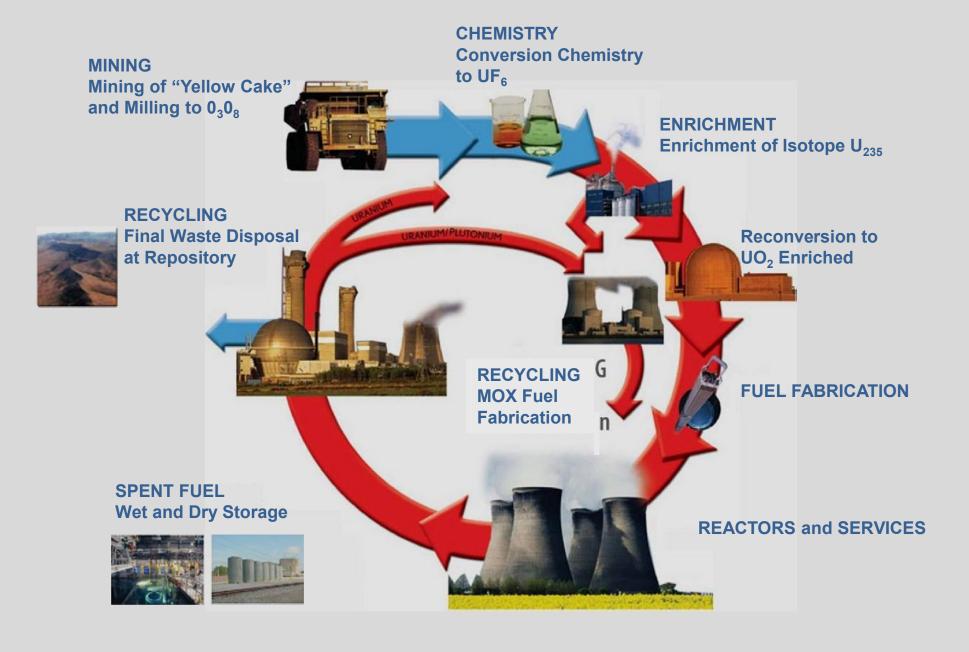
RECYCLING TREATMENT

DEEP GEOLOGICAL DISPOSAL

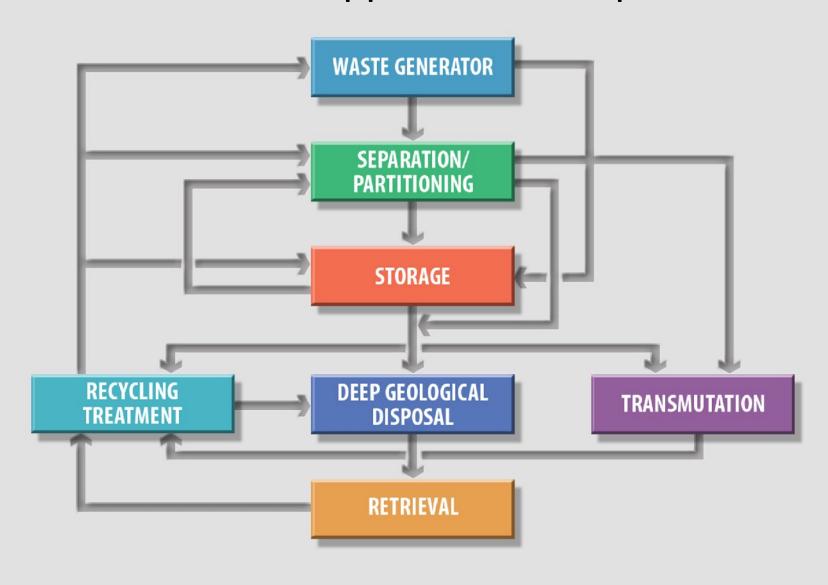
TRANSMUTATION

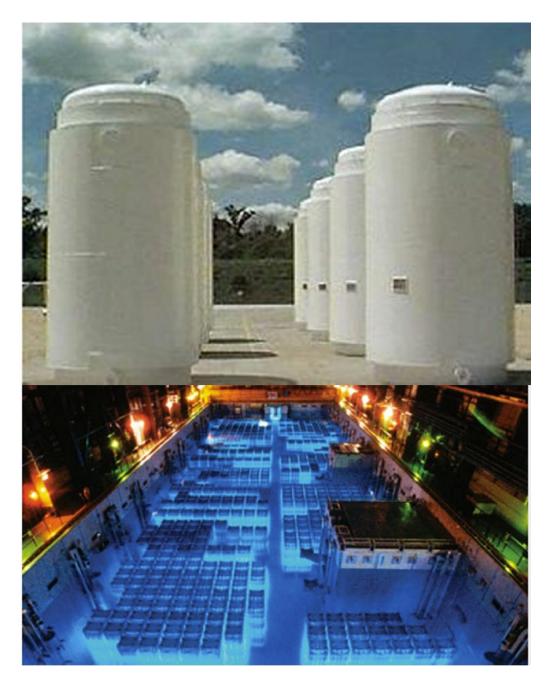
RETRIEVAL

Nuclear Fuel Cycle



A rationalized approach for disposition





Given our knowledge and experience, what can we do, NOW, to solve the nuclear waste problem?

BLUE RIBBON COMMISSION ON AMERICA'S NUCLEAR FUTURE

<u>Charler — Beview policies în managing line back end pidine muclear încl</u> cycle; respondende new sirelegy, (2010)

- Consent-based facilities siting
- New organization for the waste management program
- Use nuclear waste funds
- Move on siting geologic disposal facilities
- Site one or more MRS
- Get ready for large-scale transportation of waste
- Support leadership in nuclear waste management







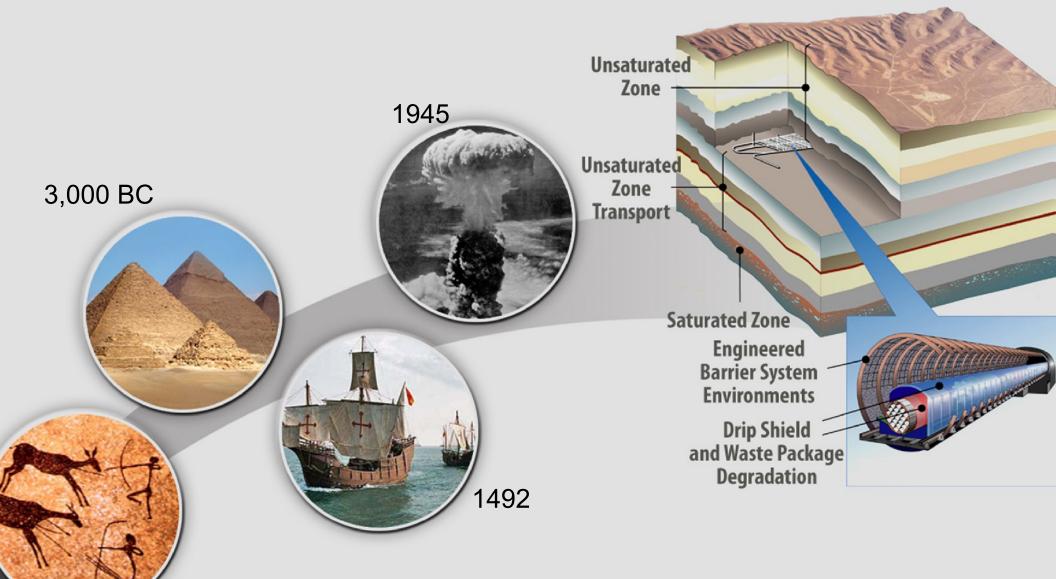






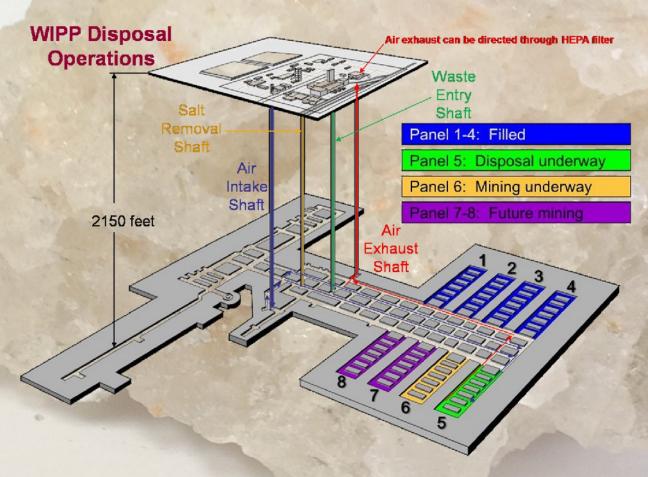
Think about this:

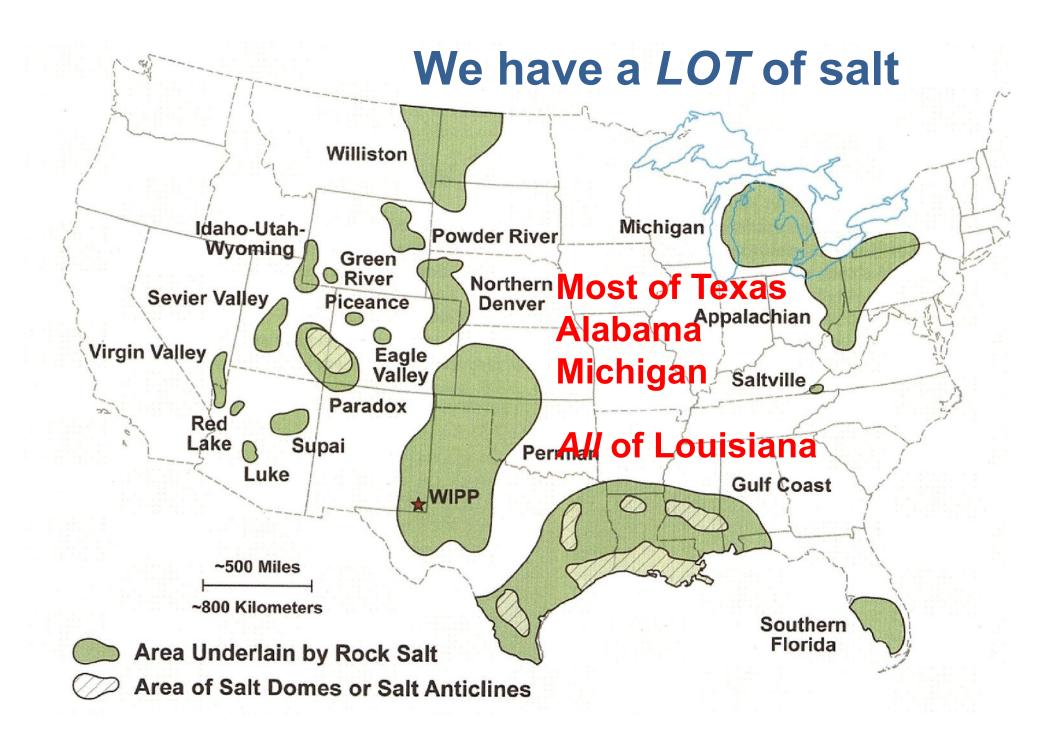
5,000 BC



Is it time for WIPP II?

And this salt:





Right now, we can do this:

- 1. Create and fund the nuclear waste organization.
- 2. Establish regional MRS facilities in volunteer states and communities
- 3. Streamline the licensing and regulatory framework
- 4. Evaluate and select repository sites
 - Reconsider Yucca Mountain
 - Insure local awareness and acceptance
 - Engage and learn from the international waste management community

15

We can do this in 15 years.

Let's get at it.

