



BRC Recommendation of a New Strategy for Back End of Fuel Cycle

Michael F. Weber

**Deputy Executive Director for
Materials, Waste, Research, State,
Tribal and Compliance Programs**

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**Key Messages,
BRC Strategy and its Elements,
and NRC Implications**

**Alicia Mullins, Project Manager
Office of Nuclear Material Safety
and Safeguards**

Agenda

- **Key Messages**
- **BRC's proposed strategy**
- **Elements of the proposed strategy and implications for NRC**
- **BRC recommendations**
- **BRC observations**

Key Messages

- **NRC actively engaged with BRC**
- **NRC positioned to respond to changes in National policy for back-end of fuel cycle**

Elements of BRC Strategy for Consent-based approach

- **Element 1: A consent-based approach to siting**
 - **Implications for NRC: Expanded outreach**

Elements of BRC Strategy for New Organization

- **Element 2: A new Waste Management Organization**
 - **Implications for NRC: No significant implication**
- **Element 3: Nuclear Waste Fund**
 - **Implications for NRC: Depends on how NWPA is revised**

Elements of BRC Strategy for Innovation

- **Element 7: Support for continued U.S. innovation in nuclear technology and for workforce development**
 - **Implications for NRC:**
 - **Possible expanded NRC outreach**
 - **Continued NRC staff development**

Elements of BRC Strategy for Leadership

- **Element 8: Active U.S. international leadership in safety, waste management, non-proliferation, and security**
 - **Implications for NRC:**
 - **Continued international cooperation and engagement**

**Implications of BRC Strategy
for Ongoing and Near-Term
NRC Programs for Disposal,
Storage, and Fuel Cycle**

**Brittain Hill, Senior Level Advisor
for Repository Science
Office of Nuclear Material Safety
and Safeguards**

Elements of BRC Strategy for Disposal

- **Element 4: Geologic disposal remains the fuel-cycle end point for foreseeable future**
 - **Implications for NRC:**
 - **Revise Part 60 considering:**
 - **Risk-informed, performance-based approach**
 - **Licensing and compliance options**

Elements of BRC Strategy for Disposal, cont.

– Implications for NRC:

- Consider regulatory framework for deep borehole disposal and potential policy issues**
- Coordinate development of standards and regulations with EPA**

Elements of BRC Strategy for Storage

- **Element 5: Centralized interim storage options**
 - **Implications for NRC:**
 - **Address NWPA siting restrictions in Part 72**
 - **Consider alternative SNF storage and shipment strategies**

Elements of BRC Strategy for Storage, cont.

- Implications for NRC, cont.:**
 - Enhance confidence in long-term storage**
 - Continue Extended Storage and Transportation program, identify potential policy issues**
 - Update to Waste Confidence rule**

BRC Observations on Fuel Cycle Technologies

- **BRC Observation: No changes foreseen in the next 30-40 years to alter current fuel-cycle approach**
 - **Implications for NRC:**
 - **Consider reprocessing technology and potential policy issues**
 - **Regulation of advanced technology**

BRC Observations on Fuel Cycle Technologies

- **BRC encourages NRC efforts to review and potentially revise the waste classification system**
 - **Implications for NRC:**
 - **Part 61 waste classification**

**Implications of BRC strategy
for Ongoing and Near-Term
NRC Programs for
Transportation Regulation**

**Earl Easton, Senior Level Advisor
for Transportation**

**Office of Nuclear Material Safety
and Safeguards**

Elements of BRC Strategy Transportation

- **Element 6: Prompt efforts for the eventual large-scale transport of waste**
 - **Implications for NRC:**
 - **No significant implications**
 - **Potential for increased stakeholder engagement**

BRC Recommendations on Transportation

- **BRC: Revisit NAS recommendations (specific to NRC)**
 - **Analyze long-duration fires**
 - **Independent technical assessment of transportation security**
 - **Full-scale package testing**

List of Acronyms

BRC	Blue Ribbon Commission
EPA	U.S. Environmental Protection Agency
HLW	High-Level Waste
NAS	National Academy of Sciences
NRC	Nuclear Regulatory Commission
NWPA	Nuclear Waste Policy Act
PPS	Package Performance Study
SNF	Spent Nuclear Fuel
U.S.	United States