



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

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**April 10, 2012**

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

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# 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  
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# **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

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