

Ad Hoc Subcommittee on Commingling of Wastes

December 2, 2011



BLUE RIBBON COMMISSION
ON AMERICA'S NUCLEAR FUTURE

Origins of Ad Hoc Subcommittee

- At May 13, 2011 meeting, Co-Chairmen asked the Disposal subcommittee to “investigate whether the United States should consider reversing the 1985 decision to commingle defense and civilian waste for disposal and provide its views for consideration by the full BRC in late 2011”
- Co-Chairmen later decided, due to interest and expertise in this issue by Commissioners not on the Disposal subcommittee, to instead form an ad hoc subcommittee to investigate commingling issue



BLUE RIBBON COMMISSION
ON AMERICA'S NUCLEAR FUTURE

Membership

- Dr. Allison Macfarlane – Chair
- Mr. Mark Ayers
- Senator Pete Domenici
- Dr. Richard Meserve
- Dr. Ernie Moniz
- Dr. Per Peterson
- Rep. Phil Sharp



BLUE RIBBON COMMISSION
ON AMERICA'S NUCLEAR FUTURE

Approach

- Highlighted issue for input during public comment meetings on draft BRC report
- Panel discussion of commingling issue at October 20, 2011, public comment meeting in Washington, DC
- Staff-prepared background and options paper (posted on BRC web site)
- Subcommittee deliberative teleconference

Issue Background

- Since a 1985 decision by President Reagan that a separate permanent repository for disposal of defense high level waste was not required, DOE has planned for disposal of all high-level waste and spent fuel from national defense activities and DOE's own research activities in a repository for commercial waste developed under the Nuclear Waste Policy Act (NWPA)
- The Commission has heard recommendations from some commenters that this decision be revisited, or even reversed, in light of developments that have occurred since the original assessment and decision were made
- Other commenters have urged that the decision not be revisited

External Input on Commingling Issue

- We also considered input from many state agencies, NGOs and others who commented on this issue.
- A few examples:
 - Washington State Dept. of Ecology - Regarding Recommendation 2, which proposes a single-purpose organization to manage the transportation, storage and disposal of nuclear wastes, we suggest a change to the Recommendation stating that the United States Department of Energy HLW and spent fuel waste should be considered separately. This would allow this legacy defense waste to be dispositioned sooner, reduce risk to human health and the environment associated with those storage sites, and save tax dollars by reducing the long-term burden.

External Input on Commingling Issue (cont'd)

- South Carolina Department of Health and Environmental Control – “The Draft Report recommends formation of a new organization to manage civilian and defense spent fuel and high-level nuclear waste. DHEC believes that breaking the waste into two categories (commercial spent fuel and DOE managed spent fuel/high level waste), while retaining DOE as the managing organization for its waste, is a more practical option for several reasons...”
- Yakama Nation – “...a separate repository process would be beneficial for defense high-level waste and a significant number of other waste streams that would greatly damage the environment if they were to be disposed of in shallow land facilities or simply left as buried wastes on DOE sites like Hanford. Such a repository would likely save money and be less complicated and difficult to site than a co-mingled repository”

External Input on Commingling Issue (cont'd)

- State of Idaho – “Idaho believes [DOE’s and the Navy’s] obligations can be best achieved by managing the DOE inventory separately from commercial spent fuel. Idaho agrees with the Commission's proposed recommendation that a new entity be created to implement a waste management program as to commercial spent fuel. However, Idaho believes the Commission should recommend that DOE retain responsibility for the DOE inventory and take expeditious actions to permanently dispose of such materials in a deep geologic disposal facility.”



BLUE RIBBON COMMISSION
ON AMERICA'S NUCLEAR FUTURE

External Input on Commingling Issue (cont'd)

- October 20 public comment meeting:
 - Mike Lawrence (fmr. DOE Hanford site manager) - “I do believe that commingling, in my opinion, is the right thing to do if it can be done, and if it makes sense from an environmental, economic and safety [perspective]”
 - Brian O’Connell (NARUC) – “our preference is for a combined facility, and let's move expeditiously and safely”
 - Beatrice Brailsford (Snake River Alliance) – “reversing commingling would cause some additional problems...now we have one waste stream and all of a sudden we'd have two...there is a little sense that if defense waste went to the front of the line, there would be a real effort to reverse the decision that WIPP would be used only for defense transuranic waste, and its mission would be expanded substantially”
 - Steve Kraft (NEI) – “I really think that if what you're interested in is success in managing the back end of the fuel cycle...I don't see how that success is aided by undoing a commingling decision that has withstood the test of time”



BLUE RIBBON COMMISSION
ON AMERICA'S NUCLEAR FUTURE

Present Context

- The subcommittee has considered facts and factors that have changed since the 1985 evaluation :
 - Shift in focus in DOE from production of materials for nuclear weapons to cleanup and disposal of legacy wastes
 - Establishment of legally binding site clean-up commitments
 - The current lack of statutory authority to develop a repository other than Yucca Mountain under the NWPA
 - Successful operation of the WIPP geologic repository
 - mission explicitly limited to disposal of only TRU waste from defense activities
 - Recommended establishment of a new organization outside of DOE to develop and operate repositories under the NWPA
 - Existence of wastes for which DOE has assumed disposal responsibility other than those specifically named in the NWPA (e.g. GTCC, West Valley HLW, damaged TMI spent fuel, and others)

Unresolved issues identified by the Subcommittee

- Should the definition of the wastes that could go to a “defense” repository be broadened?
- Would responsibility for disposal of DOE wastes remain with DOE or go to the new waste management organization?
- Could a repository first developed for “defense” waste later be used for commercial waste?
- What are the implications of the fact that most defense waste is not yet in a form suitable for disposal?



Unresolved issues identified by the Subcommittee (cont'd)

- How could pursuing separate paths for siting defense and commercial waste affect either?
- What are the technical issues associated with the performance of different waste forms in different repository environments?
- How can appropriate compensation and incentives be provided for a host community for a “defense” repository?



Subcommittee Status

- Still considering development of a recommendation on this issue
- Implementation of the BRC recommendations should not wait for the commingling issue to be resolved
- Congressional or Administration efforts to implement the BRC recommendations can and should proceed expeditiously issue



BLUE RIBBON COMMISSION
ON AMERICA'S NUCLEAR FUTURE