

# Blue Ribbon Commission on America's Nuclear Future Public Meeting on Its Draft Report to the Secretary of Energy Minneapolis, Minnesota

October 28, 2011

On October 28, 2011, the Blue Ribbon Commission on America's Nuclear Future (BRC) held a public meeting in Minneapolis, Minnesota about its July 29, 2011 Draft Report to the Secretary of Energy. The purpose of the meeting, which was the last in a series of five meetings around the country, was to provide an opportunity for interested parties to discuss and comment on the Draft Report.

The BRC was formed by the Secretary of Energy at the request of the President to conduct a comprehensive review of policies for managing the back end of the nuclear fuel cycle and to recommend a new strategy. The Draft Report highlights the Commission's findings and conclusions to date and articulates a preliminary set of consensus recommendations for public review and input.

During the afternoon, approximately 85 meeting attendees participated in breakout sessions to discuss the Draft Report's recommendations in more detail. The purpose of the breakouts was to enable information exchange and discussion among participants – not to seek consensus or to gather comments for the record. Attendees were divided equally among the breakouts and distributed to provide a diverse cross-section of viewpoints in each group. The four sessions (with about 20 persons in each session) lasted for about two hours each and focused on the following questions:

- How do we create meaningful roles for affected units of government in selecting sites and overseeing facilities for consolidated storage or disposal?
- What additional measures can we take to make sure transportation remains safe and uneventful?
- What are the potential impacts on communities of very long-term storage of spent nuclear fuel, and how can we mitigate those impacts?

Below is a brief high-level summary of the key points from the breakout sessions.

### **Roles for Government Entities**

Participants suggested that the roles and responsibilities of units at the different levels of government should be defined early in the siting process. In particular, the roles for DOE, the NRC, and other agencies should be clarified early in the process, while being flexible enough to allow for tribal, regional, state, and local needs that may vary from case to case. The roles for all levels of government, including a potential new government entity to manage nuclear waste, should be designed to be efficient and effective. The roles should outline a clear mission and empower governments to use time and resources effectively to work toward resolution on all relevant issues. Specific suggestions for outlining and defining these roles included:

- Before any siting process can begin, the federal government needs to establish general (that is non-site specific) standards for an acceptable facility (storage or long-term disposal). These standards should address all aspects, including the scientific considerations, engineering considerations, and social science considerations. The process for developing these standards should involve state, tribal, and local voices early and throughout the siting process. There are many examples of regional groups that have successfully incorporated state and local interests in decisions about nuclear waste. These groups could serve as a model for state and local engagement.
- Citizen involvement is a critical part of the consent process. Scientists and
  engineers can oversee and address the technical concerns of a project, but
  citizens, and their elected representatives, need to be able to review the
  information in a public setting in order to ensure that their safety is being
  protected.
- An operational definition of local consent should be developed. Decisions need to be made that are broadly supported, but it is not practical to have a process that can be stopped by the veto of a small group or single community.
- Monitoring needs to be a significant component of the consent-based siting model, ensuring public engagement throughout the life of the facility. Monitoring by qualified organizations selected by and responsible to the citizenry should a key part of the process. Monitoring should not be viewed as a pretext for long-term storage at any facility, however.
- A common body of knowledge that all parties can use as a starting point for further discussions will be important. In the current dialogue, people and groups with different perspectives seem to approach discussions with

- different data and information; a process to identify the truth amongst all of the information would be beneficial for future processes.
- Targeted and appropriate incentives need to be developed for governments at all levels.
- The time frames for the operation of storage and disposal facilities should be clearly outlined in any agreements that are made.
- Siting and management processes should be adaptive and staged, allowing for adjustments in accordance with changing situations.

# **Transportation Issues**

Participants suggested that a better system needs to be developed to work with communities and other interested parties along transportation routes. This system should include the relevant groups and government agencies, including towns, transportation operators (i.e. railroads), fire-fighters, emergency responders, citizen groups, and transportation officials. Specific policy considerations for addressing the transportation of nuclear waste included:

- The system should provide ways for states, towns, and tribes to address and work through their concerns; however, states, tribes, and towns should not be able to unilaterally veto transportation plans.
- Additional funding needs to be provided for rail and highway transportation infrastructure. Of particular concern is transportation of waste from sites to major transportation routes along feeder routes. Often, these feeder routes are in poor condition, and state and local governments are left to provide the funding to maintain and upgrade these routes (both rail and highway). Additional support is necessary to make certain these routes can handle the movement of waste to storage and disposal facilities. Additionally, standards and criteria for siting new nuclear facilities should include an assessment of the current transportation infrastructure and future needs.
- The report should not state a preference for transportation methods.
   Instead, it should outline a process for determining the safest method for transportation, and use that process to select transportation methods and routes.
- There are many advantages to rail transport, including the ability to transport more waste in one shipment and carry heavier loads; however, the rail transport system cannot support nuclear waste transport in many regions, so highway transport may need to be used until the rail system is upgraded.

- Funding will have to be allocated to upgrade and maintain transportation systems for nuclear waste transport. This funding could be seen as part of an incentives package.
- The risks and costs of transporting nuclear waste should be measured against the risks and costs of storing such waste onsite before making final decisions about developing consolidated storage sites and moving waste.
- The federal government has a strong safety record transporting nuclear waste. In many cases transportation plans have been built from the ground up, involving and informing all stakeholders, and as a result transportation of nuclear waste has been uneventful. This track record should be considered when determining whether to move nuclear waste, and should be noted when considering the risks of nuclear waste transport.

# **Long Term Storage Options**

Participants identified the need for long-term storage strategies need to address both consolidated interim storage and long-term on-site storage. They suggested that funding mechanisms should be available for both types of storage and standards should address both possibilities. Comprehensive strategies are needed to address the impacts from nuclear waste storage. Some of the impacts identified by participants included:

- Increased costs for emergency preparedness, health, and safety infrastructure in host communities;
- Cost impacts on taxpayers and ratepayers as storage continues beyond original timelines, especially after a plant has been decommissioned and revenue streams disappear;
- Long-term economic and viability impacts on communities hosting storage sites;
- Increased transportation safety concerns if waste is transported to a consolidated facility;
- The potential for increased health risks; and
- A deterioration of trust in government as long-term solutions are not found.

Participants said both consolidated and on-site storage need to address the continued burden of nuclear fuel storage on communities, including the costs of maintaining and operating infrastructure and support services (police, fire, roads, etc.), the burden of those costs on tax- and rate-payers, and the impact on

local economic viability. Participants identified a number of possibilities for mitigating impacts from nuclear waste storage:

- Storage plans should include safety, health, and environmental monitoring. This monitoring should be active and continuous. However, better monitoring strategies would not reduce the need to identify a permanent disposal site.
- Long-term storage strategies need to address both the current regulatory environment and be adaptable to changes in the regulatory environment in the future.
- Nuclear waste reprocessing could reduce the need for long-term storage and disposal.
- DOE could take title of the spent nuclear fuel at storage sites. This would allow for consistent storage standards to be used across the country. It would also provide a pathway for using funds from the nuclear waste fund to cover storage and related costs, reducing the burden on local communities.
- If federal funding is used to manage storage sites, it will be important for state, tribal, and local voices to continue to be involved. States could conceivably manage storage sites in accordance with federal standards. Significant amounts of responsibility should remain at the state, tribal, and local level.
- An updated vulnerability assessment should be conducted on long-term dry cask storage. This assessment can be used by communities to make decisions about storage strategies and infrastructure. If conducted by an independent third party, it could come to serve as a source of commonly recognized and agreed-to facts and knowledge. There should also be a process for extending this assessment to a site-specific level.
- Decisions about consolidated and on-site storage should be based on a comprehensive risk assessment of both options.

Participants also noted the need to address storage in nuclear facility host communities. First, it would be valuable to assess the state of current storage facilities and determine if they are suitable for storage over a longer time period. Second, in many cases, host communities that agreed to host nuclear power plant operations did not believe that spent nuclear fuel would be stored long-term in their communities. Many of these communities do not feel they have consented to a storage process that may last several decades.

# Other Thoughts

In addition to the identified topic areas, some participants made additional suggestions for the BRC:

- It is difficult to address nuclear waste disposal until there is a better
  understanding of the role of nuclear energy in the country's energy
  production. A national energy policy that clearly outlines the role of
  nuclear relative to other forms of power would provide some clarifying
  context for these discussions.
- It is important to determine how the currently existing nuclear waste will be stored and disposed of; however, since this is such a challenging issue and these materials can be hazardous, it is important to take steps to reduce and eventually stop the generation of these materials by eliminating the use of nuclear power.
- Nuclear waste fund money should be used for research and development, including for developing multi-use casks, that is, types of casks that can be used for storage, transportation, and disposal.
- Science should be used deliberately to sort through complex issues, understand past missteps, and outline a path forward.

### Conclusion

Many participants expressed their appreciation to the BRC for this process, noting the valid attempts to engage stakeholders and share information. However, they also noted their concern about the next steps. There were suggestions that further steps should be taken to make the process apolitical, with an emphasis on generating real results and making progress. Frustration with the repetition and length of the process was expressed. A timeline of activities and next steps could be developed and used as a measure of progress. It was also suggested that the process should continue stakeholder engagement processes in order to ensure the validity and acceptability of future decisions.