PANEL SESSION 13 - Progress by the US National Blue Ribbon Commission on America's Nuclear Future – What Have They Been Told And Who Are They Listening To?

Co-Chairs: Roger Nelson, *US DOE;*
Dorothy Davidson, *AREVA Federal Services, LLC*
Reporter: Elizabeth Saris, *Science Applications International Corporation*

Panelists Included:

- Richard Meserve, *Blue Ribbon Commission on America's Nuclear Future*
- John Kessler, *Electric Power Research Institute*
- Mark Nutt, *Argonne National Laboratory*
- Cliff Singer, *University of Illinois*
- Dan Metlay, *Nuclear Waste Technical Review Board*

Some 100 people were present to hear this session on the Progress by the U.S. National Blue Ribbon Commission (BRC) on America's Nuclear Future. Following introduction of the Panelists and the Co-Chair, **Roger Nelson** opened the proceedings. He gave the reason for the panel. Since its Charter was filed with Congress just before the WM2010 Symposia, the BRC has, over the past year, conducted several meetings and heard testimony from several witnesses who have presented before the Commission over their first year of deliberations. The Commission has also undertaken a comprehensive review of policies for managing the back end of the nuclear fuel cycle; including alternatives for the storage, processing, and disposal of civilian and defense used nuclear fuel and nuclear waste. With the Commission's interim report scheduled to be issued in July of 2011, the Panel will discuss perspectives heard from individuals and organizations in the past year and all aspects of managing the back end of the US nuclear fuel cycle.

Dr. Richard Meserve's presentation focused on an overview of BRC including its Charter, its 15 members, meetings held over the past year and visits made by the BRC to affected communities in the US and abroad. He further elaborated upon the organizational structure of the Commission and its three subcommittees: Reactors Fuel Cycle Technology, Transportation and Storage, and Disposal. These subcommittees have been extremely active holding open sessions to hear witnesses and will prepare reports that will become public documents. Furthermore, Dr. Meserve indicated the next steps for the BRC include continued meetings, an interim report to be issued at the end of July followed by a final report in January 2012. Lastly, Dr. Meserve encouraged all interested parties to follow the work of the Commission on their website, www.brc.gov.

John Kessler began his talk by stating he would focus on "What I feel they (BRC) have been told, what I hope they are listening to, and what is to be accomplished" offering his viewpoints throughout. His main message centered on the process of selecting and developing disposal and centralized sites. Mr. Kessler viewed the process to be "broken" primarily due to funding and management problems. He articulated the push-pull of managing the waste, i.e., not in my backyard, but get the waste out of my state. BRC has been presented with the option to centralize storage at a federal site, but the transportation of all the waste to a single site will

require considerable effort and there is no definitive date certain for ultimate disposal. Mr. Kessler recommended that we work to "close" the fuel cycle needs to accelerate disposition. EPRI urges addressing fast reactors first, then considering reprocessing. With respect to geologic disposal considerations, Mr. Kessler noted that there are many suitable sites, WIPP being just one of them. He questioned whether the regulatory framework was effective and whether the EPA and NRC combined effort is working. He strongly urged the BRC to avoiding setting disposal criteria. Mr. Kessler concluded his remarks by noting that not much ground had been unplowed on the issue of managing the back end of the nuclear fuel cycle and wondered if too much was being expected of the BRC. He concluded that the one thing that the BRC could do now was to recommend an implementable public process for siting.

Mark Nutt gave a talk entitled "Together, Shaping the Future of Electricity" summarizing the remarks made by Dr. Peters to the Disposal Subcommittee on 9/1/10 (full presentation may be obtained on the BRC website). Mr. Nutt's key points included the suggestion that EPA and NRC look at regulations before siting recommendations and discussed the technical aspects of regulations that need to be considered. He encouraged leveraging what could be learned from international experience in developing a new set of U.S. regulations. He commented that revising the waste classification system needs to be considered to support future fuel cycles and that a risk-based approach to waste classification would be most appropriate.

Cliff Singer's talk questioned how BRC will reach consensus regarding recommendations and focused on a few key points. Do exposure pathways such as Neptunium-237 (NP-237) isolation for thousands of years make future generations more or less safe? He questioned voluntary participation of U.S. States and remarked that this would require tenths of total project costs in financial gain versus a few percentage points. He questioned how many repositories we should try to license and suggested that the US should probably try to license three sites. He noted the successful Scandinavian model and suggested the US begin with six states. He stated the greatest possible pitfall would be the voluntary participation of States and the necessary incentives.

Dan Metlay discussed establishing the Technical Basis for Industrial Prescriptions. Establishing technical basis involves expert judgment and a systematic assessment and evaluation of institutional options. He remarked that problematic institutional design questions show how social sciences can improve the recommendations of BRC. With respect to volunteer host communities, Mr. Metlay discussed consultation and concurrence morphing into consultation and cooperation, site selection, and community conditional acceptance as institutional designs. He gave the Nuclear Waste Negotiator, the development of the Private Fuel Storage Facility, and the siting of WIPP as examples. He spoke about lessons learned from abroad with respect to utility-owned consortiums (Finland and Sweden) and also Government agency oversight (France, US Yucca Mountain, WIPP). Mr. Metlay remarked on the importance of a decision making approach to implementing the repository program stressing that stepwise decision making works best when incentives are moderate and value conflicts are low.

Public Comment and/or Questions – ***continued on next page***

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Comment – The BRC charter says nothing about Yucca Mountain.
Answer – The BRC will not comment on Yucca Mountain.

Question: Will the BRC have sufficient clout to make something happen?
Answer: That remains to be seen. Bu the BRC effort includes many respected members of the Commission on both sides of the aisle in Congress. It is impossible, however, to comment on what influence the BRC's report will have.

Question: What role does the National Academy of Sciences have in this process?
Answer: The NAS can contribute by helping facilitating the addition of scientific thoughts into something that can be implemented. NAS's participation in the public comment process is always welcome.

Comment: Splitting the defense and commercial HLW should be considered. If we address cool versus hot canisters then we could send vitrified HLW to WIPP. Would BRC consider splitting the defense and commercial HLW a good idea?
Answer: The BRC has heard testimony on that suggestion.

Question: Do we need centralized interim storage for SNF absent clear national policy on reprocessing and disposal? How would we convince a community when we do not know where we are going? You may be accommodating a policy in a situation where we may never have a repository.
Answer: It is expensive not to have centralized storage. The best approach is to license a repository; it is both feasible and desired.

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