Defining "Consent Based"

In January 2010, at the request of President Obama, the U.S. Secretary of Energy (the Secretary) formed the 15member Blue Ribbon Commission on America's Nuclear Future (BRC) and directed it to conduct a comprehensive review of current national policies for managing the back end of the nuclear fuel cycle and to recommend a new national strategy (www.brc.gov). The BRC submitted its final report to the Secretary for consideration on January 26, 2012. The report identified eight key elements deemed to embody substantial nuclear waste management policy, program, and international standing improvements. At the February 26-March 1, 2012, Waste Management Symposium (WM2012), considerable attention was given to the BRC report. However, although the starting point is very clear in key element 1, "A new consent-based approach to siting future nuclear waste management facilities." i.e., voluntary host communities, the intended application of "consent based" remains unclear. [Editor's Note: For more on the BRC report and the WM2012 discussion of the report, see "The Final Report of the Blue Ribbon Commission on America's Nuclear Future-January 2012: Executive Summary," this issue, page 45, and "Analyzing the Blue Ribbon Commission Report," this issue, page 55.]

As illustrated in the United States and abroad for more than 30 years, "consent" means different things to different people because it is a subjective (indeterminate) term, i.e., the beauty is in the eyes of the beholders. It is thus very susceptible to ideological and political interpretations and challenges. Indeed, unless "consent-based" is more clearly defined, it could serve as an unintended catalyst for time-consuming debates and legal challenges that will continue to delay the siting and opening and increase the cost of new nuclear waste management facilities critical to Homeland Security and economic stability and growth in the United States regardless of their compliance with applicable laws and regulations. Because time might be of essence, I am therefore submitting for consideration and comment the following "raw" synopsis of two suggestions on how the term "consent based" could be made clearer and how its related risk group(s) might be identified based on 34 years of related relevant experiences:

1. Add the word "majority" to "consent based."

2. Use applicable space- and time-dependent characteristics of the intended radionuclide inventory, the proposed geological medium, and the proposed engineered barriers to define the area subjected to potential health-risks from radiation for each proposed waste management facility to which the term "majority-consent-based" would apply.

Due to the fact that the current empirical database on nuclear waste transportation in the United States alone exceeds 70 years, conceivably a similar methodology could be used to define the areas/corridors subjected to potential health risks from radiation related to the transportation of nuclear waste and materials. The combination of the two methodologies would allow the initial identification of the following three main "facility-specific" areas and related radiation-risk groups:

- 1. Facility stakeholders.
- 2. Waste-transportation stakeholders.
- 3. Interested parties.

Simply stated, the populations of counties and states not having an area in which the population is defined as "facility stakeholders" belong in either group 2 or group 3. However, the constituency of each group may change with time, based on new data. Majority-consent would be required by both the voluntary host-county and its host state before a given site is selected for investigation. In other words, the two suggestions would accommodate a defensible distinction between parties actually affected by the proposed facility and those affected by other conditions, and their respective concerns, issues, and suggestions can be treated accordingly. For example, only suggestions, concerns, and issues supported by the majority of the legal residents or their elected state representatives in the facility stakeholders group would require further attention.

In closing, one critical integral component to the successful siting of a nuclear facility only partially addressed herein is political realities. As a minimum, the facility host community will have "permanent" political overlays at both the facility-host-state and the national levels, and their respective roles and authorities remain to be established.

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