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Public Preferences on Options for Radioactive Waste Management in US

Hank C. Jenkins-Smith, Carol L. Silva, Kuhika Gupta
Center for Energy, Security & Society
University of Oklahoma, Norman. OK, USA

Rob P Rechard, Evaristo J. Bonano
Nuclear Energy & Fuel Cycle Programs Center 6200
Sandia National Laboratories, Albuquerque, NM 87185-0747, USA

Abstract

The President's Blue Ribbon Commission on America's Nuclear Future recommended an adaptive, staged, and consent-based approach to siting future facilities for radioactive waste in the US. A prerequisite prior to entering into a consent-based approach is to understand public awareness about current radioactive waste management practices and preferences and support for future management options and siting of the associated facilities. The Center for Energy, Security & Society has tracked the evolution of public dialogue on nuclear energy and the management of the resulting radioactive waste through national annual surveys and in social and news media since 2006. The public's knowledge about the current US nuclear waste management policy dramatically increased in the period following the motion to withdraw the application for licensing the Yucca Mountain repository in 2010, and following the Fukushima nuclear plant accident in 2011. While previous surveys had suggested that the level of public knowledge was dropping back to that preceding the Fukushima nuclear plant accident, the 2016 results suggest a resurgence in the percentage of respondents who knew about current US waste management policy. The 2016 survey included questions about different storage and disposal options for radioactive management. Options range from continued reliance on on-site storage to building permanent disposal facilities deep underground. In general, the 2016 results show that support for a permanent disposal facility was higher than that for continued on-site storage or building one or more interim storage facilities. As regards the nation's defense wastes generated during military and strategic research, 2016 survey results indicate a preference for co-mingling defense waste with commercial SNF in a repository rather than emplacing defense waste in its own separate repository. Finally, public support for an underground mine-like repository is significantly higher than that for a surface storage facility, similar to past survey results. Support for deep borehole disposal ranks second, but well ahead of a surface storage option.

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