Informing Consent-Based Siting of a Consolidated Interim Storage Facility (CISF): Examining Public Engagement Through History and Evaluation of Prior & Current Outreach Results

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Program: Consent-Based Siting for SNF Management

ABSTRACT:

DOE-NE's developing consent-based siting process is focused on the process for siting a federal consolidated interim storage facility (CISF); to support this effort, there exists a wealth of data regarding the siting of commercial independent spent fuel storage installations (ISFSIs) and CISFs in the U.S. Thus, the Consortium for Risk Evaluation with Stakeholder Participation (CRESP) intends to aggregate and analyze data regarding public sentiments toward the engagements performed during the siting, licensing and operation of these commercial facilities to inform future consent-based siting efforts for a federal CISF. CRESP proposes to use two phases of research to assist DOE-NE in better understanding the factors that influence the nature and extent of public engagement necessary to fit the needs of different people and communities seeking to evaluate and make decisions regarding the siting of a future CISF. The objective of the proposed work is to establish a comprehensive view of the dialogues that have taken and continue to take place regarding licensing CISFs and ISFSIs on various public platforms. We have developed an accelerated schedule focusing on three important geographic areas of the U.S—the Southwest, the Midwest, and the Southeast. Each region presently stores commercial SNF at multiple NRC-licensed ISFSIs, as well as two recently licensed commercial CISFs. Phase 1 of the research focuses on understanding the historical licensing and relicensing of the ISFSIs and the recent licensing of the first commercial CISFs in TX and NM. Phase 1 will involve identification and iterative content analysis of available public records related to the move from pool to dry cask storage of SNF at reactors starting in the 1980s and the recent public engagements performed as part of licensing the CISFs in TX and NM. This approach will help the research team understand public viewpoints in the environments surrounding licensing facilities for interim storage of SNF. The takeaways from Phase 1 will help identify the key drivers of public engagement through: (1) a historical review of community participation during the licensing and relicensing of the ISFSIs and first commercial CISFs, and how they were similar or different from what would be considered a consent-based process; (2) a comparison of the levels of public engagement observed between communities in the three regions, and evaluation of differences using socioeconomic/demographic, trust, or other views; and (3) a summary of the concerns raised by communities being asked to live and work near sites that will house SNF for the foreseeable future. Phase 2 of this study is designed to develop an understanding of public engagement in the context of ongoing communication about commercial SNF stored at existing ISFSIs and CISFs. We will use mixed methods research—including surveys, information ecosystem analysis, and focus groups/interviews—to examine the communication from and about the facilities, as well as broader discussions of nuclear energy and radioactive waste storage. The takeaways from Phase 2 are: (1) an enhanced understanding of how to more effectively engage with public audiences via existing and emerging communication channels (e.g., the role of social media versus other communication channels); and (2) an understanding of potential adjustments in future communication efforts that could subsequently help to increase public trust and willingness to engage in discussions about nuclear energy.