

## **KEYNOTE SPEECH, CHALLENGES FACING A GEOLOGIC REPOSITORY AT YUCCAMOUNTAIN, NEVADA, USA**

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The U.S. Department of Energy has been directed by the U.S. Congress to characterize the Yucca Mountain, Nevada site for consideration as America's first geologic repository for the permanent disposal of spent nuclear fuel and high-level waste. The Department recently completed two major products (Viability Assessment, 1998 and Draft Environment Impact Statement, 1999) that are key milestones on the Department's path to a suitability evaluation for the Yucca Mountain site. With supporting documentation, these products present the current understanding of the natural system and a reference design concept that together will protect public health and safety and the environment for tens of thousands to hundreds of thousands of years. While the concept of geologic disposal remains the option of choice in the United States and most foreign countries, it continues to be debated due to the unprecedented long time frame necessary for waste isolation. DOE recognizes this and that some uncertainties will remain at the time it intends to proceed with site recommendation and license application, if the site is determined to be suitable. To achieve success, the DOE must address a number of internal and external challenges that include addressing remaining technical uncertainties, proceeding under regulatory uncertainty, and continued US Administration and Congressional support.