



U.S. Department of Energy
Office of Civilian Radioactive Waste Management



Status of the DOE/OCRWM Program

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Program Update

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Principles

- **Yucca Mountain is the solution approved by the President and Congress**
- **Yucca Mountain is still needed under any Fuel Cycle Scenario**
- **Proceeding on base case to deal with current and planned Spent Nuclear Fuel (SNF) and High-Level Radioactive Waste (HLW) inventory**
- **FY 2006 Budget supports Program on four broad and important fronts**
- **Release of Technical Impacts Report**
- **Significant focus on improving organizational quality**



Where We Are Going

- **Strong, defensible license application based on simplified design, licensing and operations using a clean-canistered approach**
- **Scientific and technical work that is traceable, transparent and in compliance with quality assurance requirements**
- **Sandia National Laboratories to coordinate and manage science work**
- **Use of independent, university-based reviews of work to ensure quality products**
- **Culture that is ready to assume responsibilities inherent in nuclear operations**



Program FY 2006 Objectives

- **Develop a License Application for submission to the Nuclear Regulatory Commission (NRC) based on a safer and simpler approach to handling SNF and operating the repository known as the *clean-canistered* approach**
- **Develop a nuclear safety culture of the highest standards that demonstrate we have earned the trust required to conduct nuclear operations**
- **Develop the transportation infrastructure through necessary long-lead procurement actions, and continued rail line development**
- **Improve Yucca Mountain site infrastructure to ensure worker, regulator, and visitor safety**
- **Expect to publish schedule for License Application submittal this summer; need to evaluate clean/canister design and fully factor in final Environmental Protection Agency Radiation Protection Standard**



Canister Approach - Program Redirection

- **Canister for Transportation, Aging and Disposal (TAD) minimizes handling of assemblies and limits need for multiple complex surface facilities**
- **Canister provides simplification in repository design, licensing, construction, and operation**
- **Spent nuclear fuel will be delivered to the repository primarily in canisters for spent fuel aging and emplacement underground**



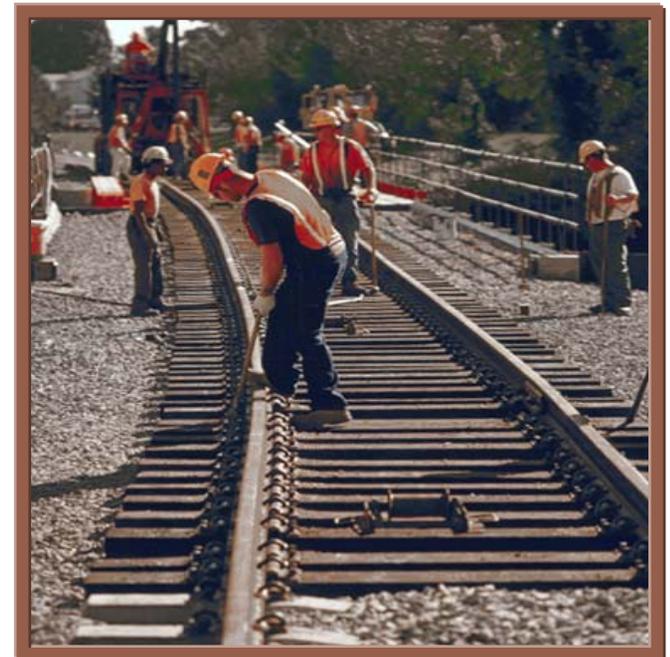
Yucca Mountain Key Activities

- **Continue design of clean-canistered based repository facilities**
- **Work with industry to complete the preliminary design for the TAD standard canister**
- **Conduct additional pre-closure and post-closure safety analysis work to support the design basis**
- **Update License Application as clean-canistered modifications mature**
- **Continue upgrades to communication, emergency response and workplace infrastructure**



Transportation Key Activities

- **Nevada Rail Alignment-Environmental Impact Statement (EIS) and Record of Decision (ROD)**
 - Issue draft EIS in June 2006
 - Issue final EIS and ROD in 2007
- **Continue the procurement process for truck and rail casks and associated specialized equipment. Design & develop prototype of the rail car for security escorts**
 - Three to five years before commencement of shipments
- **Continue to work with stakeholders on topics such as:**
 - Section 180(c)
 - Routing
 - Security
 - Operational practices

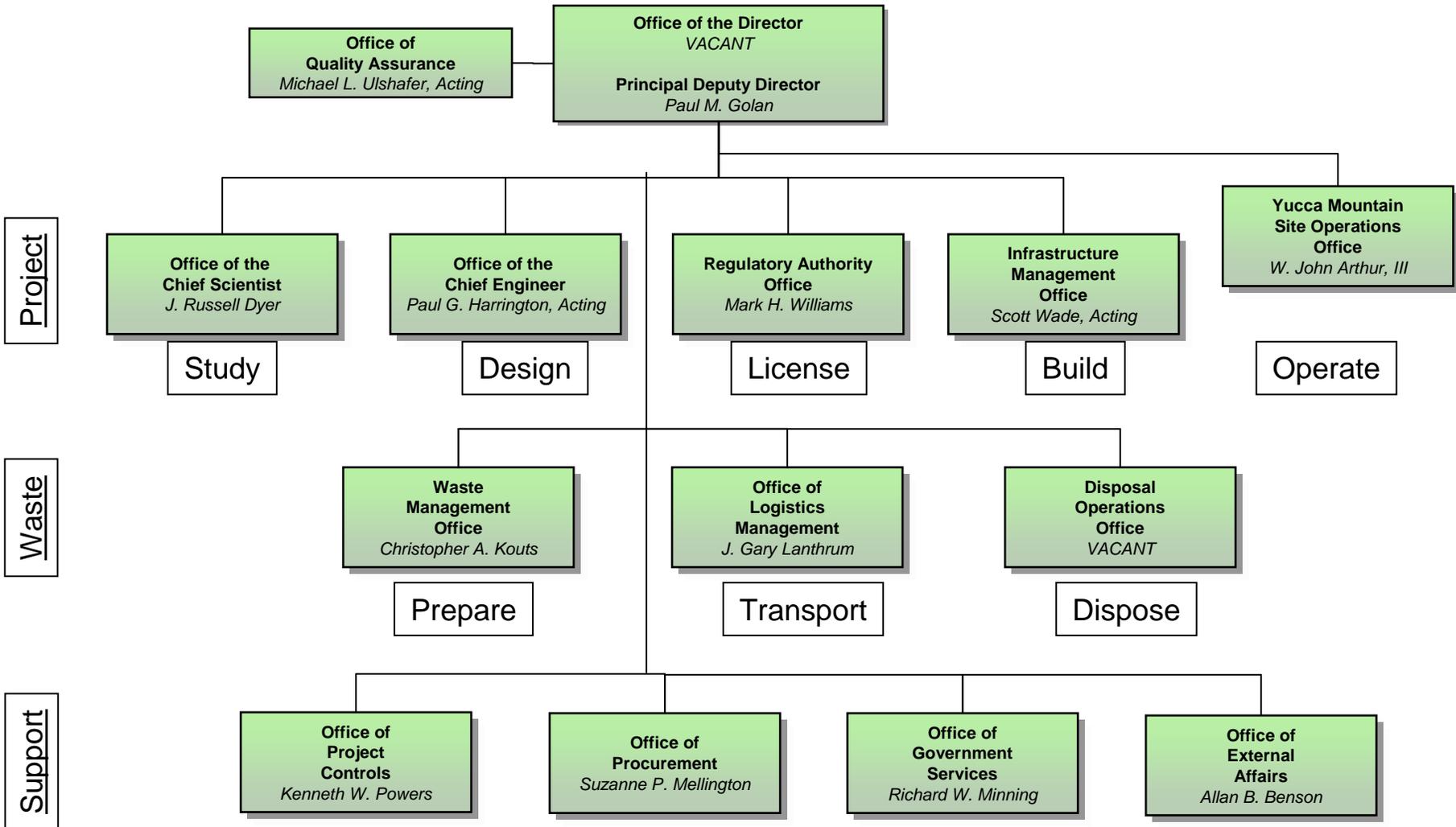


Program Management & Integration Key Activities

- **Utilize Sandia National Laboratories to manage and integrate scientific studies for the program**
- **Develop a nuclear safety culture, including improving design configuration control, effective issue resolution processes, and encouraging employees to identify issues**
- **Continue to implement project management improvements, including clear requirements definition and maintenance, and project control through earned value management system**



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GNEP and Yucca Mountain

- **Yucca Mountain is still needed under any Fuel Cycle Scenario**
- **We are proceeding with our base case to deal with current and planned inventory of SNF/HLW inventory**
- **If the technology is proven and developed: GNEP could provide improvements to spent fuel disposal at the repository**
 - **Significantly reduce the volume of waste**
 - **Enhance thermal management by reducing waste form heat load**
 - **Reduce the amount of long-lived radionuclides requiring disposal**
- **GNEP technologies could allow Yucca Mountain to satisfy all the requirements for spent nuclear fuel for this century, ensuring that Yucca Mountain is the only site needed for generations**



FY 2007 Budget Request Summary

(dollars in millions)

	FY 2006 Approp	FY 2007 Request
Yucca Mountain	\$ 305.9	\$ 355.4
Transportation	19.9	67.7
Prog Mgmt & Integration/Prog Direction	119.7	121.4
Integrated Spent Fuel Recycling Facilities	49.5	0.0
TOTAL PROGRAM	495.0	544.5
Nuclear Waste Fund	99.0	156.4
Integrated Spent Fuel Recycling Facilities	49.5	0.0
Defense Nuclear Waste Disposal	346.5	388.1



Summary

- **Entering an important period for the nuclear industry and for the disposition of nuclear waste in America**
- **The Department is committed to the development of Yucca Mountain as a geologic repository**
- **GNEP has the potential to eliminate the added cost to ratepayers for multiple repositories**

