INTRODUCTION: STATUS OF PROGRAM ACTIVITIES

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Outline

• OCRWM reorganization
  - HQ and YMSCO

• Legislative update

• Yucca Mountain activities
  - ESF construction and testing
  - 10 CFR 960 Siting Guidelines
  - Waste Containment and Isolation Strategy
  - EIS activities

• Waste acceptance, storage, and transportation activities
  - Regional Service Agents
  - Topical Safety Analysis Reports
  - Actinide Burn-Up Credit Topical Report
Legislative Update

- On January 21, the Nuclear Waste Policy Act of 1997 was introduced in the U.S. Senate by Senators Murkowski and Craig
  - The bill is identical to S.1936 passed by the Senate last year
  - The first hearing on the bill is scheduled for February 4
- The bill calls for
  - Construction of an interim storage facility in Nevada
  - Transportation of spent nuclear fuel
  - Continued studies at Yucca Mountain
- Confirmation hearing for Secretary-designate Federico Peña scheduled for January 30
Program Focus

• Several things could impact the direction of the OCRWM Program
  – New Secretary of Energy
  – New OCRWM Director
  – Congressional legislation

• However, the OCRWM Program remains focused on implementing the 1996 draft Program Plan

• We are on schedule for achieving
  – The 1998 Viability Assessment for Yucca Mountain
  – Implementation of the market-driven initiative for waste acceptance, storage, and transportation
Yucca Mountain Activities
TUNNEL BORING MACHINE PROGRESS

-3.3 % Ahead of Schedule
   In terms of meters
-24 Days Ahead of Schedule
   In terms of calendar days

Performance Measurement Revised 6-13-96

<table>
<thead>
<tr>
<th>METERS</th>
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<td>7378.2</td>
<td>24,206.4</td>
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Total Scheduled Progress in 7378.2 24,206.4
Total Actual Progress in 7137.6 23,417.0

Data Posted on 01-20-97

North Portal
Starting Date
September 20, 1994

North Portal
#3

South Portal
78+76 meters

Southern Ghost Dance Fault
Alcove #7

Northern Ghost Dance Fault
Alcove #6

TSW1
10+67

TSW2
62+05

Drill Hole West End

00+90

10+00

15+00

20+00

25+00

5+00

12+80

Excavation Complete

Complete

Complete

Ridge Fault

Total Scheduled Progress in 7378.2 24,206.4
Total Actual Progress in 7137.6 23,417.0

Deferred

Data Posted on 01-20-97

Drawing Not To Scale

Scheduled

Actual

TBMPQREV.12G.CDR/10-28-96
Testing Activities

Thermal Testing

- Alcove 5
  - Testing is underway in the single-element heater test
  - Remaining construction for the drift-scale test to be completed by February 1997
  - 150 holes will be drilled and instrumented by November 1997
  - Heaters scheduled to be started in December 1997

- Finishing preparation of the Large Block Test
  - Scheduled to start heaters in February 1997
Testing Activities
(Continued)

Unsaturated Zone Hydrology

• North Ghost Dance Fault Alcove
  – Excavated up to 15 meters from the fault and penetrated the fault with drillholes
  – Drillhole testing is underway (to be completed by March 1997)
  – Full excavation into the fault to be completed by May 1997

• South Ghost Dance Fault Alcove
  – Constructed approximately 50 percent of the 135-meter drift
  – Construction to be completed in March 1997
Testing Activities
(Continued)

Saturated Zone Hydrology

- At C-Well complex, conducted hydraulic testing of all flow-producing zones
- Completed conservative and reactive tracer testing of the most productive zone
- Expect to continue additional testing throughout FY97
10 CFR 960 Siting Guidelines

- Proposed revision published in the Federal Register on December 16, 1996
- Hearings conducted on January 23, 1997
- Final rule targeted for finalization by the end of FY 1997
- Comment period extended to March 17, 1997
- Comments on the proposed rule must be submitted in writing to DOE by March 17, 1997, in order to be considered
Waste Containment and Isolation Strategy

System Attributes

- Rate of water seepage into repository
- Waste package lifetime (containment)
- Rate of release of radionuclides from a breached waste package
- Radionuclide transport through the engineered and natural system
- Dilution in the saturated zone below the repository
Waste Containment and Isolation Strategy
(Continued)

Status

• A summary of the strategy (Highlights) was distributed at the NWTRB meeting in July 1996

• A comprehensive version of the strategy is in preparation and will include
  - The technical basis for the strategy
  - Information to be used in determining the priorities for testing and analysis

• The draft is being revised to include recent refinements in the conceptual model of the unsaturated zone

• The comprehensive strategy will be completed in late FY 97
EIS Activities

- EIS contractor (Jason Associates) fully on board
- EIS public scoping period ended December 5, 1995
- Comments received from the EIS scoping process are currently being evaluated
- A comment summary document is to be completed by May 1997
- The Draft EIS is scheduled to be issued for comment in July 1999
Waste Acceptance, Storage, and Transportation Activities
Regional Service Agents

- This OCRWM initiative would result in contracts with private industry to provide waste acceptance, transportation, and delivery services for commercial spent nuclear fuel
- Federal Register notice issued on December 27, 1996, requesting comments on draft RFP
- Comments due on March 31, 1997
- Pre-solicitation conference scheduled for February 25, 1997
Topical Safety Analysis Reports (TSAR)

- TSARs are part of the generic work to support waste acceptance
- TSAR for dry transfer system
  - Submitted to NRC for review in September 1996
  - DOE awaiting comments
  - NRC Safety Evaluation Report expected by April 1998
- TSAR for interim storage facility (Phase 1)
  - Phase 1 TSAR being prepared
  - Phase 1 TSAR scheduled to be submitted to NRC for review in May 1997
  - NRC Safety Evaluation Report expected by November 1998
Actinide Burnup Credit Topical Report

• Burnup credit is considered to be a cost-effective criticality control option for the DOE
• DOE is seeking to obtain early NRC review and acceptance of the concept
• Topical Report submitted to NRC in May 1995
• NRC’s second round of questions are currently being addressed
• Revised Topical Report scheduled to be submitted to NRC in March 1997
Summary

- The OCRWM Program remains focused on implementing the 1996 draft Program Plan
- We are on schedule for achieving
  - The 1998 Viability Assessment for Yucca Mountain
  - Implementation of the market-driven initiative for waste acceptance, storage, and transportation