U.S. DEPARTMENT OF ENERGY
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

NUCLEAR WASTE TECHNICAL REVIEW BOARD

SUBJECT: PROJECT IMPLEMENTATION PROCESS: OVERVIEW

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Project Implementation Overview

- SCP Top-level Strategy
- Evolution of the Strategy
- Project Implementation
- Status
- Conclusions

SCP Top-Level Strategy

- Defined in the Site Characterization Plan (SCP) as preliminary and conservative
- Intended as a guide for initial planning based on preliminary understanding of site behavior
- Defined a comprehensive program to allow for uncertainty

SCP Top-Level strategy

- Focused on preclosure and postclosure performance
  - The unsaturated zone
  - The saturated zone
  - The engineered barrier system
  - Preclosure radiation safety
  - Disruptive events (preclosure and postclosure)

SCP Top-Level Strategy

- Intended to evolve as
  - Results from site, performance assessment, and design activities are completed and analyzed
  - Uncertainties are reduced

Evolution of the Strategy

- The understanding of the site has evolved
  - Site data corroborate the tentative SCP finding of low flux
  - DOE has revised the SCP strategy to focus on site characteristics that influence the results of total system performance assessment
  - Revised strategy documented in the 1994 Program Plan

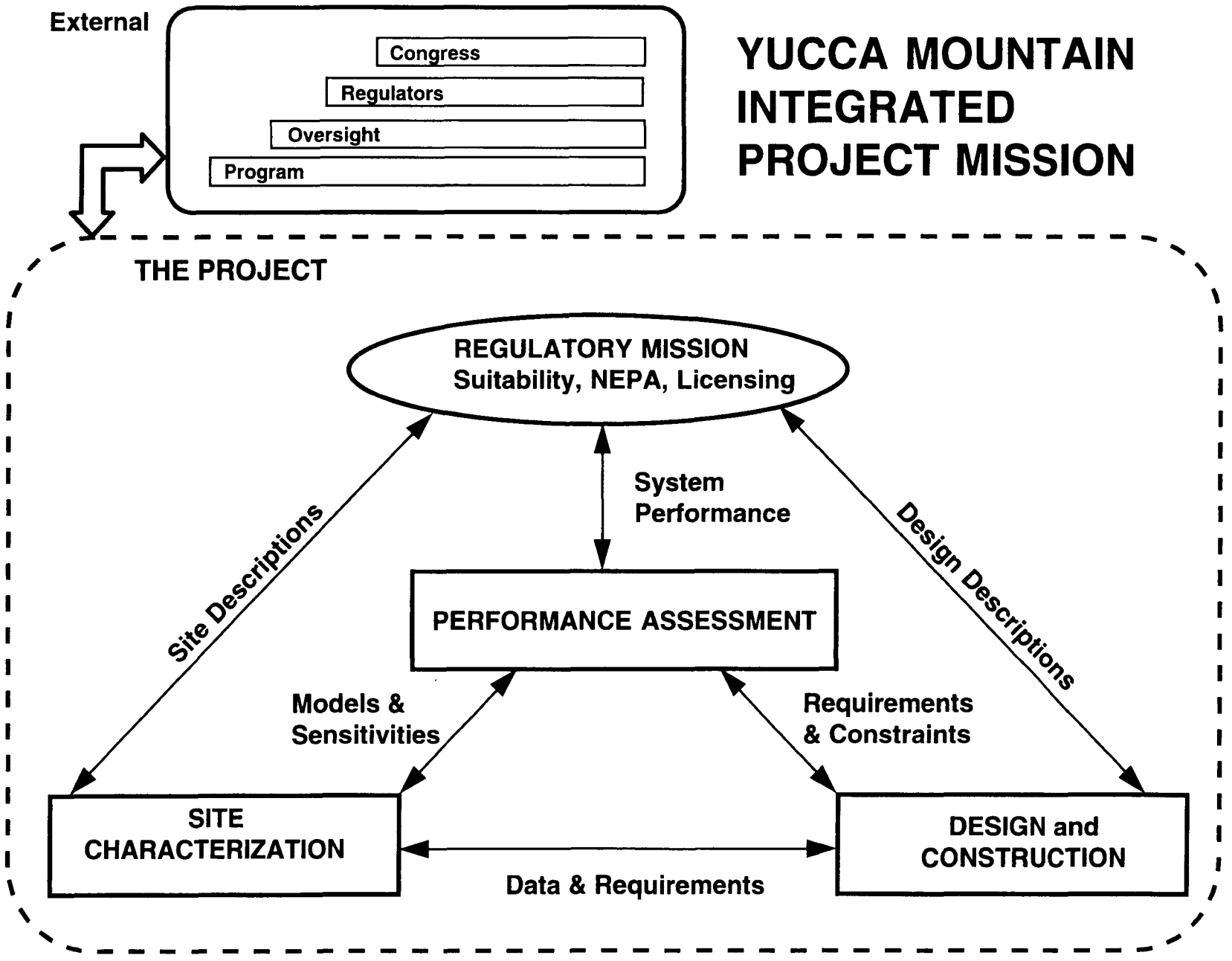
Evolution of the Strategy

- The 1996 Program Plan further refines the SCP strategy
  - Focused on a core safety case for Yucca Mountain (Waste Isolation and Containment Strategy)
  - Provides a framework to more efficiently evaluate the safety case

Project Implementation

- The DOE has refined Project activities to emphasize
  - Core scientific activities
  - Excavation of the Exploratory Studies Facility
  - Completion of conceptual design for repository and waste package
- Scientific work is focused on parts of the natural barrier that are important to waste isolation and containment

YUCCA MOUNTAIN INTEGRATED PROJECT MISSION



Project Implementation

- Review results of previous work
- Identify critical activities for Viability Assessment, NEPA, Site Recommendation, and License Application
- Prioritize activities and allocate funding by priority
- Refine the integrated cost/schedule leading to License Application

Project Implementation

- Develop an integrated schedule
- Define and cost the detailed workscope
- Evaluate programmatic risk
- Baseline the results and manage to the baseline

Integrated Schedule

- Develop logic network
- Specify logical relationships among work activities
- Define cost and duration for each activity
- Iterate the network to achieve a balanced program
- Assign responsibilities for each activity

Workscope

- Define work in the context of the Viability Assessment, NEPA, Site Recommendation, and the License Application
  - Focus on preclosure radiological safety
  - Focus on waste isolation and containment

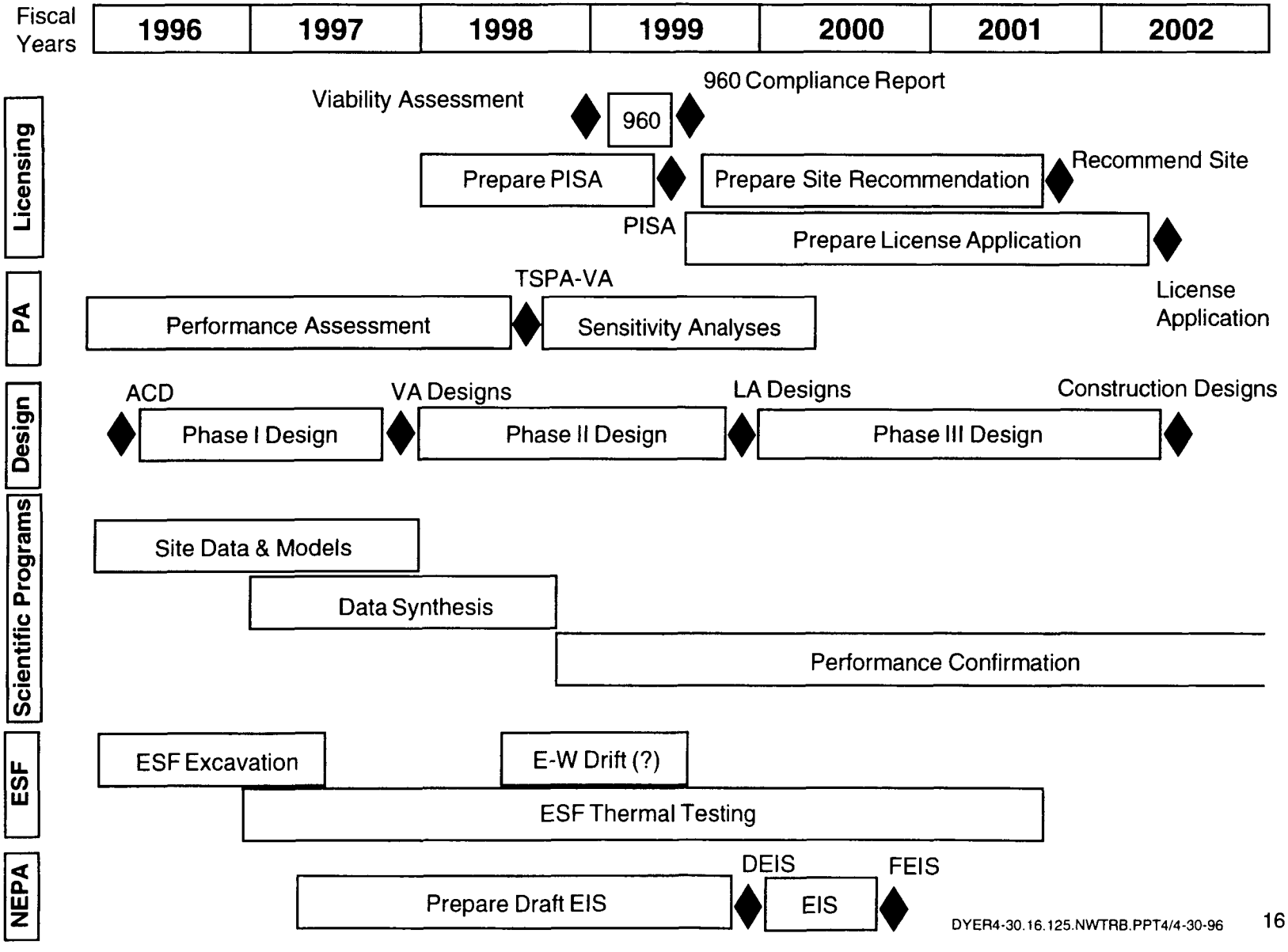
Programmatic Risk

- Evaluate programmatic risk in terms of scopes, schedules, and cost
  - Technical risk is associated with the approach taken to perform the task
  - Schedule risk is associated with meeting deadlines in the schedule
  - Cost risk is the schedule risk expressed in terms of resource estimates

Status

- Ongoing activities
  - Developed prelinimary logic network (Project Summay Schedule)
  - Developing workscope statements and acceptance criteria (validate the Project Summary Schedule)

Summary Schedule



Status

- **Next Steps**
  - **Baseline the new Project Summary Schedule: May-June1996**
  - **Complete Project Implementation Plan for fiscal years 1997 and 1998: September 1996**

Conclusions

- **Project Implementation is accomplished through**
  - **Reviewing results and defining and integrating workscope in the annual planning process (TSPA, site studies, design analyses)**
  - **Good communication within and among technical disciplines**

Conclusions

(Continued)

- The following presentations will discuss
  - System studies as an integrated technical basis for program decisions
  - Implementation of performance assessment recommendations in the engineering, environmental, and site programs
  - MDGS design process to prioritize design activities with respect to regulatory risk and long lead times