

# GDE ACCELERATOR ADVISORY PANEL REVIEW

# CONVENTIONAL FACILITIES AND SITING GROUP

CLOSING OVERVIEW

V. KUCHLER



### **Outline**

- Technical Design Phase I
- Technical Design Phase II
- Some Additional TDP Thoughts
- CFS Effort After the TDP
- Transition to Site Selection Process



# Technical Design Phase I

- Identify Cost Drivers from RDR Estimate
- Identify Possible Alternative Design Solutions
- Analyze Alternatives Using the Value Engineering Process
- Select Alternatives and Roll-up into a Revised Baseline Design Solution
- CFS Progress To Date has been Provided in the Previous Presentations



# Technical Design Phase II

- Review Criteria with Area and Technical Systems Based on Revised Baseline Design
- Finalize Baseline Design Solution with Adjusted Configuration and Criteria
- Develop a Cost Estimate for the Revised Baseline Design Solution
- Develop CFS Text for Inclusion into the Technical Design Report

#### Some Points to Consider

- The ILC R&D Plan Outlines Specific CFS Tasks that Need to be Completed to Produce the Technical Design Report
- The TDR will "produce the technical information required and agreed by the contracting governments as necessary to proceed to approval of the project"
- The RDR Used the Sample Site Approach to Siting Considerations (One Sample Site per Region)
- The TDR Will Develop A Baseline Configuration that may not be Completely Suited to One or More of the Sample Sites or Other sites Currently Being Considered
- Preliminary Site Characterization will be Required to Identify Adjustments to the Revised Baseline Design Needed to Adapt to a Specific Considered Site



#### How Will This Affect the CFS Effort

- Preliminary Site Characterization and Design Adaptation Should be Considered in the CFS TDP Effort
- An Appreciation of the Adjustments and Cost Impact Between the Revised Baseline Design and a Possible Site is Important Information to Have
- In This Way, the CFS Group Will be able to Provide More Credible and Comprehensive Information in Support of the Project Approval Process
- The Challenge for the CFS Group will be to Include this Analysis in the Current and Anticipated Funding Profile
- This Effort will be an Important Improvement for the TDR and Reflect More Maturity in the Design Process With Respect to the RDR
- This Effort is not Intended to Begin the Site Selection Process
- It is However the Next Step Forward in the CFS Conceptual Design Process

#### CFS Effort Beyond the Technical Design Phase

- The CFS Group is the Central Collection Point for all Conventional Facilities Information Whether Developed In-House or with consultant Support
- The Group Should Continue and Support the Project Approval Process
- This is a Process that Remains Undefined at this Point
- If Momentum for the Project is to Continue after the Release of the TDR, Planning for the CFS Role Should be Considered During the TDP
- The Preliminary Site Characterization Activities
   Mentioned Previously Could Lead to Eventual In-Depth
   Review of Sites Under Preliminary Consideration
- This of Course has Regional and Political Implications but is Still a Necessary Step in the Process

#### Transition to the Site Selection Process

- When the Actual Site Selection Process will Begin is Certainly Unknown at this Time
- It is Probable that the Time Required to Establish the Process, Prepare and Review Proposals and Select a Host Site will be Measured in Years not Months
- This Time Frame Must be Considered and Included in the General ILC Planning Effort if Only as a Placeholder at this Point in Time
- It is Possible that this Process Needs to Start, at Least in a Preliminary Fashion, During this Technical Design Phase
- The CFS Group Should be Positioned to Assist in this Important Process



#### **Summary**

- The CFS Group has Clear Direction and Milestones that are Established in the ILC R&D Plan
- Conventional Facilities Continues to be A Substantial Portion of the Overall Project Cost
- Current Resource Levels Provided for the CFS Group Support the Workload Outlined in the ILC R&D Plan
- This Effort is a Fundamental and Necessary Part of a Process to Generate a Complete Project Proposal
- The CFS Role Beyond the TDP is Likely to Depend on Factors that may be in Motion Prior to Release of the TDR and, at Some Level, Beyond the control of the CFS Group
- The CFS Group will Welcome the Chance to Participate in the Discussion of Our Role in the Post TDP Period