Conventional Facilities
Budget Plan
FY 2001 - FY 2003

Jon Ives
July 28, 2000
Conventional Facilities Budget Plan

Goals for FY 2001

• Primary:
  Support NLC R&D with related facilities

• Secondary:
  Continue general development of concepts, costs and schedules for NLC facilities
Staffing Concept

- Level staffing (5 + ¾ designer) until CDR
- Ramp up for CDR/preliminary & final design
- A-E support
  - Four small consultant studies per year until CDR
  - Task Order A-E contract to support CDR development
  - A-E/CM to support prelim/final design and construction
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Candidate Consultant Studies - Pre-CDR

- Geology of representative California sites (completed)
- Cost estimate for NLC underground work (awarded)
- Cooling system/central plant studies (scope defined)
- Power plant feasibility study
- Electrical distribution system studies
- Geologic studies of SLAC 135
- Development of NLC facilities design criteria
- Fire hazard analysis
- Fire detection and suppression system studies
- Tunnel air cooling studies
- Radiation water treatment and disposal studies

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A-E Tasks for CDR - Planning & Analysis

• Preliminary site characterization studies
• Energy conservation and management plan
• SCADA system for energy monitoring & management
• Campus space planning studies
• Life cycle cost analysis for NLC facilities
• Update NLC facilities design criteria document
• Update fire hazard analysis
• CDR - document preparation, review and approval
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A-E CDR Tasks - Concept Designs, Costs & Schedules

- Site Layout
- Grading, drainage, roads and parking
- Electrical system
- Waste and water systems
- Administrative telephone systems
- Injectors
- Main Linacs
- Beam delivery
- Interaction halls
- Fire detection and suppression systems
- Control room facilities
- Campus industrial and warehousing facilities
- Campus security and emergency services facilities
- Central laboratory facilities
Schedule Assumption for Planning Purposes

- Assumed CDR authorized starting Q3, FY2002
- If later (or earlier . . .), the ramp-up of staffing and A-E costs will slide accordingly
### NLC Conventional Facilities Staffing & Budget Plan

**FY 2001 - FY 2003**

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<td>Q4</td>
<td>Q1</td>
<td>Q2</td>
<td>Q3</td>
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<tr>
<td>Totals</td>
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<td>Total Costs ($000)</td>
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**Notes:**

# Labor is estimated at an average cost of $100 k per FTE per year.

* M&S for the Conventional Facilities Group is estimated at $5 k per FTE per year.

** See "Planning Assumptions" for a discussion of the basis for the estimates of M&S for Contractor Support.

July 28, 2000