HLRF Agenda May 18-19, 2006

- R. Larsen
  - Cost goals, timeline for first draft
- C. Jensen
  - BCD: Modulator Power
  - BCD: Cryo WG pre-assembly, install
- C.Nantista
  - BCD: WG modification for 2-WG penetration
- S. Kazakov
  - ACD: Distribution system options
- Other

Cost Goals & Timeline - Original

17-Apr	April 20th- HLRF4	**Review Modulator Cost model, estimates, status**
24-Apr	April 27th – HLRF5	**Review Klystron Cost model, estimates, status**
1-May	May 4th- HLRF6	**Review Distribution Cost model, estimates, status**
8-May	May 11th – HLRF7	**Review Controls/ Intlks/ Protection models & costs**
10-13 May	GDE ML Review DESY No HLRF Meeting	**Review Power and Water models & costs**
15-May	May 18th- HLRF8	**Review LLRF, Controls Interface models & costs**
22-May	May 25th- HLRF9 Ray Absent	**Review Cable Plant & Rack Space models & costs**
29-May	June 1st- HLRF10 Ray Absent	Reviews
5-Jun	June 8th – HLRF11	Reviews
12-Jun	June 15th- HLRF12	Reviews
19-Jun	June 22nd –HLRF13	**All First cut budgets due to Area Systems**

Costs All Late

Cost Goals & Timeline – Rev 051806

15-May	May 18th- HLRF8	**Final Confrmation BCD Cost Models**
22-May	May 25th- HLRF9 Ray Absent	**Review costs Klystrons, Cooling, Magnet Power**
29-May	June 1st- HLRF10 Ray Absent	**Review Cost WG Distribution System, Cooling**
5-Jun	June 8th – HLRF11	**Review Costs Damping Rings, Modulators, Interlocks, Controls**
12-Jun	June 15th- HLRF12	**Review Costs LLRF System, Racks**
19-Jun	June 22nd –HLRF13	**Review First cut all HLRF budgets --due to Area Systems**

BCD Manufacturing Models

- AC Power System
  - Use Corvin proposed commercial solution
- Charger
  - Use current FNAL numbers; revise if get better ones before June 22.
- Modulator
  - Use FNAL estimates from Snowmass; Jensen will review for changes before June 22; review Learning Curve assumptions
- Klystron
  - Use bottom-up estimate after review by Neubauer, consider comm'l quotes as available
- Distribution
  - Review bottom-up as feasible; get commercial quantity quotes possible sources in US, Japan, Europe, Russia

Additional Cost Factors

- Final costs will include:
  - Sustaining engineering, tests before install
  - System installation, integration and test
- If time permits, model the process and perform bottom-up estimate
  - M&S costs for testers, space, special moving fixtures
  - Labor costs will dominate: Installers, Engineers and Techs for pre-test, integration, checkout
- If no time, choose parametric cost as % of total manufacturing cost (from best experience, reality check of results)

Must Meet the Schedule!

- We'll have chances for corrections and modifications later
- Extremely important to generate first comprehensive cost model on time
  - Make sure we have WBS placeholders for *all* components
  - Complete WBS so Area System Managers can take results cleanly into Area rollups
  - Don't worry about small stuff that is *not* major cost driver

ACD Activities

- Will continue as time permits
  - None are crucial to Vancouver result
  - *Make cost generation your #1priority until completed*