

CFS & Global Systems Monthly Webex Meeting

August 26, 2009

AGENDA

1. Project Managers' Report (M. Ross)
2. CFS Report (V. Kuchler, J. Osborne, A. Enomoto)
3. FLASH 9mA Studies Update (J. Carwardine)

Attendance

A. Enomoto, A. Yamamoto, V. Kuchler, M. Ross, J. Osborne N. Toge, P. Garbincius, T. Lackowski, J. Carwardine.

MEETING NOTES

Project Managers' Report (Marc)

- Marc noted that highest priority at the present time is preparing for the upcoming GDE at ALCPG in Albuquerque. The focus of the meeting will be Accelerator Design & Integration, and the expectation is that we will finish the meeting with an agreement of the SB2009 configuration and a clear path forward. There is a very tight timeline for completing the TDP Report, which is due to Executive Committee and Accelerator Advisory Panel at the end of December. Marc showed a proposed outline for the SB2009 proposal document.
- Marc showed a draft meeting outline:
 - Tuesday afternoon: plenary with Detector/Physics groups: will include summary talks on SNS, CLIC, and other?, PM report and general meeting with Detector/ Physics group
 - Wednesday morning GDE plenary will be specifically a session on 'AD & I.' It is anticipated that the session will comprise presentations on Availability, single tunnel safety, and the SB2009 configuration proposal.
 - Wednesday after morning break – Friday afternoon will comprise parallel sessions of the Working Groups. The focus of the WGs should be AD&I.
 - On Friday afternoon there will be a second 'AD & I' Session to review the activities of the parallel sessions.
 - Saturday will be a closing plenary with summaries from each Working Group.
- Upcoming meetings
 - A second AD&I meeting is planned for the first week of December at DESY, where there will be a final review of the draft report and resolution of any remaining issues from the ALCPG meeting.
 - The Second AAP review will be held in England from January 4th to 6th 2010.
 - LCWS will be in Beijing from 26-30 March, 2010
- PM Issues
 - Re-evaluating the baseline cavity gradient. A plan is due to AAP in January 2010.
 - Planning for CLIC/ILC collaboration presentations for ALCPG09 and CLIC09.
 - CFS R&D Plan items (see next talk)

- Preparation of the report from the Dubna site study.
- The CFS portion of the SB2009 Report as three components
 - AD&I activities (to be written in collaboration with Ewan)
 - R&D Plan Value Engineering work, including the one vs two tunnel assessments
 - Integration and collaboration with CLIC and XFEL

Conventional Facility and Siting Group report (Vic, John, Atsushi)

AD&I

- Vic noted that a lot of work has been done by the group on the AD&I.
- The first CFS AD&I Meeting was held at SLAC on July 20-21, and a second meeting is planned for early September at the Daresbury. The Daresbury agenda provides time for discussion with each Area System (just as with the SLAC Meeting).
- The weekly CFS Meeting has been used for direct discussion with Area System representatives to finalize area system criteria and layout requirements
- With the exception of the issue of cavity gradient, all of the SB2009 working assumptions are reflected in the criteria developed for the various areas systems.
- Peter noted that he didn't think the changes in CFS costs resulting in a new gradient selection would have a significant effect on the overall ILC costing.
- Initial 2d drawings are being prepared at Fermilab with consultant support and will be used as the basis for discussion at the Daresbury meeting. Development of 3d layout drawings has started at CERN, and Fermilab and KEK will begin their efforts soon. The goal is to have a complete 2D baseline drawing package by the end of ALCPG.
- A full 3D drawing should be completed by the DESY AD&I meeting.
- Vic showed a template for the CFS criteria being collected from each region.
- John reported that CERN is continuing efforts on the 3-D model of the central region. He noted that the transfer tunnel around the detectors has been moved to the other side from the layout shown at the last CFS/Global meeting.

Klystron Cluster and DRFS Information and Cost Estimates

- Americas
 - Klystron Cluster Design and Cost Estimate Complete
 - DRSF Design and Cost Estimate in-Progress
- Asia
 - Klystron Cluster Design Complete, Cost Estimate in-Progress
 - DRFS Design Complete, Cost Estimate in Progress
- Europe
 - Klystron Cluster Design and Cost Estimate in-Progress
 - DRFS Design and cost Estimate in Progress

The objective is for all three regions to complete design assessments for both HLRF options as appropriate for their reference sites Efforts on the two systems are at different stages in the three areas, but it is still the goal to have the effort completed by Albuquerque.

Planning for ALCPG

- Vic reported that the CFS group is hoping to have sessions with all the Area Systems representatives to go over the completed requirements tables.

- The group plans to internally review and to level any discrepancies in the costings of the two HLRF options in the three regions.

Other

- Vic noted that the CLIC/ILC joint working group has been very active, and they will have a lot to report at the Autumn CLIC Collaboration Meeting.

FLASH 9mA Update (John)

- FLASH stopped user operation 10 days ago, and is now in the midst of a shutdown to replace the dump vacuum line and install new diagnostics. Work is progressing well.
- This week there are RF-only commissioning activities and some studies over night. The major commissioning effort is on ACC456 LLRF system, where a new 'SimconDSP' system has been installed that should provide better noise characteristics and allow higher feedback gains compared with the older 'DSP' system.
- DESY LLRF group is also aiming to demonstrate closed-loop operation of their newly developed ATCA Low-Level RF system, which is a prototype for the XFEL.
- We plan gradient studies and Cavity loaded-Q studies for later this week.
- Next week it is expected we will close the tunnels and start beam commissioning around midweek. We then have two full weeks of beam time between Sept 7th and Sept 21st.
- We plan to be conservative with increasing the beam power, stopping at particular power levels in order to characterize machine operation and to gain experience running steady-state at the higher power levels.
- John showed a flowchart of the general approach to be taken to ramping up the beam power.
- If all goes well, we will reach beam powers up to 36kW (2400 3nC bunches at 3MHz repetition rate). There are several studies proposals for using the higher power beams should we reach our goals with time to spare.

Next Meeting: September 23, 2009