

# DRAFT: Minutes of ML-SCRF Technology Meeting (120626)

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## **Date & Time:**

13:00-14:14 GMT, June 26, 2012, via Webex.

## **Participants:**

R. Geng, C. Ginsburg, H. Hayano, P. Pierini, T. Peterson, C. Nantista, S. Fukuda, A. Yamamoto, M. Ross, N. Walker, W. Bialowons, J. Carwardine, B. List, E. Elsen, C. Pagani, S. Michizono, and T. Shidara,

Presentation files are available at the following Indico site:

<http://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=5675>

### **1) TDR Preparation Status (John Carwardine)**

The meeting was started by John because of his time conflict circumstances with other meeting. He showed the TDR writing status and he thanked to the writers for their new submissions in the past two weeks. He reminded us the milestones; Melbourne EC (July 12-13, 1st snapshot), IWLC'12 (October 22-26, complete draft), PAC submission (November 18, final draft). Approximately 40% of both Part I and II documents were submitted and first iteration editing has done – probably <10% level. He asked the writers to finish the writing as soon as possible and to provide high quality original figures. He mentioned again to use an upload mechanism on the Forge portal that is quite convenient with useful links and resources for writing. (<http://forge.linearcolider.org/tdr>) He announced new additions to editorial team; Kaoru Yokoya, Mike Harrison and Chris Adolphsen who will assist Akira with SCRF chapters.

### **2) Report from Project Managers (Akira Yamamoto, Nick Walker and Marc Ross)**

Akira continued the meeting by announcing the organization updated; Chris Adolphsen accepted the SCRF Associate PM role in place of Jim Kerby. He showed the usual SCRF related meeting plan first, but he expressed his intention to focus on “SCRF related TDR writing status”.

Nick commented that we are not in the writing phase but in the editing phase, and it requires much time for consistency check. He urged us to provide draft texts which are inevitable to proceed to edit, ASAP.

### **3) Reports from Group Leaders (Tom Peterson and Shigeki Fukuda)**

No special reports from cavity and cavity integration GLs.

Tom reported that he is reviewing and updating the spread sheet of ML cryogenics plant power. He is planning to have a Webex meeting with Paolo for TDR writing preparation.

Shigeki reported that SLAC sent the Marx modulator and it arrived at KEK. He will send an isolator to SLAC soon. 3D-CAD data of HLRF power distribution system were successfully sent to DESY EDMS system.

### **4) Special discussion**

● Discussion on TDR preparation status for individual sections:

- Overview ... A. Yamamoto

Akira walked through his prepared documents. He is intending to add several photos, figures and tables for S1-Global effort, FLASH and NML, KEK cavity fabrication facility, and historical progress in terms of vendors and laboratories which contributed to reach the ILC specification of 35 MV/m. The chapter overhead now addresses all the items that will appear in the sections of the text, and it might be better to leave it roughly at this level and see how the text flows with the main chapters.

- High gradient SCRF cavity R&D ... R. Geng

Rongli walked through his well prepared document. He anticipated that the most content of Section 3.3.1 should go to Part II. However, it would be useful to keep a brief description of TESLA cavity in Part I since the TESLA cavity is an important predecessor of GDE effort of high-gradient SCRF cavity R&D. Eckhard and Nick anticipated the volume of his description (too long more than 26 pages). Nick suggested that some part might be better to be ILC reports and be cited since TDR is a summary document.

- Cavity Integration, S1-Global experiment and Cavity integration (couplers, tuners etc.) ... H. Hayano

Hitoshi has already submitted S1-Global and Quantum Beam part. Cavity integration (couplers, tuners etc.) part will be finished till the end of June or early July at the latest.

- Cryomodule, thermal balance, Quad R&D and Cryogenics... P. Pierini/T. Peterson

Draft has been submitted, with pending contribution from Jim on the split magnet and a short section to introduce the baseline to be finalized together. Pierini and Tom will have a Webex meeting next Monday for

discussion. Nick preferred the Part II description should be almost the same except for Figures and Tables.  
- HLRF ... S. Fukuda / C. Nantista

Shigeki and Chris have almost completed their writing and are checking now. They will submit their documents soon.

\*Off-line comment: Beam-Test Facilities ... J. Carwardine

The FLASH 9mA studies write-up should be ready for comments and submission by the end of this week. Since they have additional study time in September, they will (hopefully) need to update some of the key results for klystron overhead and gradient margin and associated text. John can either hold back submitting the subsection specifically describing those final results or will have to make it clear in the submission which subsections are likely to need updating.

\*Off-line comment: Low-level RF Control ... J. Carwardine

This is split into three pieces for the ML Tech, Mountain- and Flat- sites. Shin Michizono had already sent John his text for the LLRF configuration for the mountain site. John tries to send the three sections soon.

\*Akira summarized the present TDR writing status: Part I more than 50% finished. Chris Adolphsen will support the Part II and we need to notice the section change; common + Flat and Mountain topography Layout. Akira needs to discuss with Jim to complete his responsible sections.

\*Nick appreciated all the progress in SCRF part, and strongly asked again to submit the remaining documents ASAP. He anticipated where the cryogenics system description should go. It may be worked out after receiving the relevant document.

- ADI Action Items remaining

We still have works to be done in ADI action items with respect to ML-SCRF. We need someone to update the ML lattice file for Mountain Topography site.

- ILC Central Region Cryogenics for DR, BDS/MDI, and Detectors

The "Central Region Cryogenics Layout" issue was discussed in the cryogenics Webex meeting on June 20. Details may be found in the following Indico page.

<http://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=5646>

## 5) Further Plans and Meetings

ML-SCRF Webex

25 July

\*\*Although this date is in the midst of summer vacation, Akira will ask the writers to provide their progress reports on TDR writing when it is not possible for them to join this meeting.

LINAC-2012 (Tel Aviv)

10-14 September

ALCPG-LCWS (U Texas-Arlington)

21-24 October