DRAFT: Minutes of ML-SCRF Technology Meeting (121121)

Date & Time:

14:00-15:13 GMT, November 21, 2012, via Webex.

Participants:

R. Geng, H. Hayano, T. Peterson, C. Nantista, S. Fukuda, A. Yamamoto, M. Ross, N. Walker, J. Carwardine, W. Bialowons, B. List, and T. Shidara

Presentation files are available at the following Indico site: https://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=5905

1) Report from Project Managers (Akira Yamamoto, Nick Walker and Marc Ross)

Akira started the meeting by visiting the usual SCRF related meeting schedule; ILC-PAC, External Cost Review, ICFA/ILCSC which will start the transition to the next organization, IPAC, ECFA-LC 2013, and so on, but he expressed his intension to focus on "SCRF related TDR status" and preparation for ILC-PAC.

Akira shortly presented the LCWS2012 discussion which was a joint meeting of CLIC and ILC. $\underline{\text{http://www.uta.edu/physics/lcws12/}}$

2) Reports from Group Leaders (Rongli Geng, Hitoshi Hayano, Tom Peterson and Chris Nantista)

Rongli reported that they had TTC meeting at J-Lab. They had fruitful formal- and informal- discussions including the attempt to collect information on cavity string assembly performance. http://www.jlab.org/conferences/ttc2012/

Hitoshi reported that the leakage problem in the CM2 of FNAL was caused by the 2-phase helium bellows part. At NML, an RF-gun, a klystron (although with some trouble), a capture cavity (only one cavity) were set. At STF, the operation of the Quantum Beam accelerator became stable, collision studies with laser beam were started, and the timing adjustment is now underway.

Tom reported that he roughly estimated the cost for gas and liquid He storage issues which were pointed out at the FNAL internal cost review.

Chris reported that the big-pipe (40-m KCS WG) was successfully high-power tested by pressuring up to 18 psi. Chris and Chris Adolphsen were revising the SCRF-related TDR part-1.

Marc pointed out that the HLRF related heat load and beam tunnel temperature issues should be revisited following the internal cost reviewers' comments. Marc has already revised the dummy heat load and tunnel temperature for KCS, but he requested Shigeki and Asian CFS team to check the parameters for DKS.

3) Special Discussion (Akira Yamamoto, Marc Ross and Nick Walker)

Akira walked through the SCRF related TDR Part-2 (chapter 3) and thanked Nick and editors for their effort to improve this part. Marc commented that since this part is highly linked with CFS chapter, so the authors should check the related parts, especially speaking the heat transfer and heat load part. Nick thanked the authors for their hard work. This part will be sent to PAC for review and the final version will be printed next April.

Akira visited the SCRF related TDR Part-1 (chapter 2), but editors are still struggling in some parts. Chris Adolphsen sent the modulator and components parts and these will be checked by editors soon. Nick commented that this part was significantly edited by eliminating duplicate description and will be sent to PAC next week.

Akira shortly explained the internal cost review at FNAL and presented the updated TDR cost estimate by focusing SCRF related cost; cavity and cryomodule.

As a note, TDR1 and TDR2 are now available for co-authors to read and to check the content, as follow. TDR1 draft was submitted to the EC for review on Monday evening, to be the topic of a special EC meeting scheduled for this Friday. The submitted pdf can be downloaded from Forge via this link: https://forge.linearcollider.org/attachments/download/1503/20121126-EC-TDR1-master.pdf

TDR2 draft, meanwhile, is with the PAC committee members ahead of the baseline design review at KEK on 13-14 December. The submitted pdf can also be downloaded from Forge via this link: https://forge.linearcollider.org/attachments/download/1436/20121116-ILC-TDR2-PAC.pdf

In both cases, please use either your Forge personal credentials or the common account (TDR12, ilctdr12) to access the files.

Akira shortly explained the internal cost review at FNAL and presented the updated TDR cost estimate by focusing SCRF related cost; cavity and cryomodules.

Marc presented the preparation status for PAC, which is a biannual review and TDR Part-2 will be reviewed in one day. SCRF related part will be presented by Shigeki, Marc (ML Layout & HLRF) and Akira (SCRF). Presentation draft is due till November 30, and the preparation files will be reviewed through Webex on December 3 (ML Layout & HLRF), December 4 (CFS), and December 5 (others).

4) Further Plans and Meetings

ML-SCRF Webex

19 December (tentative)

ILC-PAC Meeting at KEK

13-14 December

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