# **Draft: Minutes of ML-SCRF Technology Meeting (090821)**

#### Date & Time:

12:00-12:55 GMT, August 21, 2009, via WebEx.

#### **Participants:**

A. Yamamoto, M. Ross, N. Ohuchi, H. Hayano, J. Kerby, Y. Yamamoto, R. Geng, T. Shidara, M. Champion, W. Bialowons, T. Peterson, Z. Conway, B. Kephart, S. Mishra

Presentation files are available at the following Indico site; <a href="http://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=4108">http://ilcagenda.linearcollider.org/conferenceDisplay.py?confId=4108</a>

# 1) Report from ML Project Managers (A. Yamamoto)

• Akira presented the slides given to Barry for the ILCSC (posted), and commented on the upcoming timeline for the efforts. Rongli, among others, commented that the effort has gotten off to a very good start and thanked the members of the team for their efforts on it. He noted that there remains work to do, such as how to handle the various materials, vendors, and processes, but noted the database effort go a long ways to being able to review such things in an organized manner. He noted that as new vendors succeed (such as the recent AES result) having the database will be a more and more important tool. The next S0 Cavity Group Webex is Tuesday 25 August.

## 2) GL Reports

Rongli reported on the recent successful test of 9-cell cavity "AES9" to 34MV/m in pi mode w/  $Q_0$  of 1e10, limited in later tests to 30MV/m by field emission. Studies are continuing and it will be reported in more detail at next week's S0 meeting, but it is certainly a good result and the best result for this vendor to date.

### 3) Topics

### • S1 Global Status (N. Ohuchi)

Norihito presented the status of the S1 cryomodule (slides posted), in particular reviewing the schedule and showing pictures of the considerable progress seen at Zanon during his visit there in late July. Norihito noted the upcoming schedule, including the timing of Cryomodule C and A in 2010 due to assembly constraints in the tunnel. Upcoming discussions include a visit to FNAL Sept 10-11-12 to review the preparations of a cavity for HTS testing at Fermilab, understanding of the tuner control system(s), and alignment and assembly procedures. A visit is also under discussion for DESY a week later to discuss the DESY delieverables to S1 Global, including possible DESY participation in the assembly of the couplers to the FNAL cavities in Cryomodule C. Bob Kephart notes that progress at FNAL on cavities has been slowed recently due to handling issues.

#### • ALCPG09 Planning (A. Yamamoto)

Akira presented a list of topics we would like to cover at ALCPG09 (slides posted), noting that this conference is one of the last group meetings before the writing of the updated design report, so a focus will be on preparing inputs for the AD&I effort. The main organizers of the Main Linac sessions are Hitoshi Hayano and Chris Adolphsen. Akira would like a discussion / presentation of the cavity yield work at the meeting. Jim noted that in his view the plug compatibility discussion is closely coupled with the industrialization discussion / model, and that a couple of models might be defined by upper management for discussion as opposed to it being completely ground up. Norihito noted he would not be attending due to other travels, and Akira asked Jim to help organize the plug compatibility, industrialization, S1 global, and conduction cooled quadrupole discussions. Hitoshi agreed to handle the S1 Global test preparations. Tom Peterson offered to Webex in from CERN for the cryogenics discussions, as needed. Webex or alternative means of communication may also be needed for others, particularly those participating in SRF09. Comments or questions on the organization should be sent to Hitoshi and Chris.

### 4) Further Plans and Meetings

The upcoming ML-SCRF webex meetings are scheduled for 16 Sept, 14 Oct, 11 Nov, 9 Dec.

SRF09: Sept 21-25 (Berlin)

ALCPG09: Sept 29 – Oct 3 (Albuquerque)

AD&I 2: tentatively scheduled for early December (DESY?)

AAP Review #2: Jan. 6-8, 2010 (Oxford) GDE meeting: March, 2010 (Beijing) TTC: probably in April, 2010 (FNAL) IPAC: 24 – 28 May, 2010 (Kyoto)

Akira mentioned his willingness to organize an informal satellite meeting on the SCRF cavity R&D collaboration between laboratories and industries during the International Particle Accelerator Conference, to be held in Kyoto, May 2010. An informal discussion may be held during the SRF conference to prepare for it. More announcements will be made.

# 5) Next SCRF Meeting Schedule

• Next ML-SCRF WebEx meeting: 16 September, 13:00- GMT, with the main topic tentatively scheduled to be cavity database status (to be confirmed).