

Minutes of the 53rd Machine-Time Committee Meeting

Date and time: March 16, 2012; 13:30–14:50

Place: RIBF Bldg., Room 203

Attendees: Sakai^a (Chair), Abe^a, En'yo^{a, †}, Fukunishi^a, Haba^{a, †}, Kase^a, Kubo^a, Kubono^b, Morita^a,
Motobayashi^{a, †}, Nishimura^{a, †}, Suda^{c, †, ‡}, Ueno^a, Uesaka^a, Uwamino^a, Wakasugi^a, Yamaguchi^{b, †}

Absent: Kamigaito^a, Sakurai^a, Shimoura^b, Yoshida^{a, †}

^a RNC / ^b CNS / ^c RIBF-UEC / [†] Observer / [‡] TV Attendee
(in random order)

Reports

1. Change of the beam time schedule (Ueno)

Due to trouble of RILAC, the start of ML1006-LINAC27-02 (Haba) was delayed for 1.3 days. After a delay of one day, it ended on March 9 at 9:00. After a delay of 1.2 days, the subsequent beam time (BT) of NP0702-LINAC12-14 (Morita) started on March 13 at 14:46. The other BTs scheduled for last month were conducted as planned.

2. RIBF operation (Fukunishi)

- Conditions of RRC during the BT of NP0912-RIBF34-02 (Sekiguchi)

It was announced in the last meeting that the suspension of BT schedule for the urgent repair of RRC will be determined depending on the condition of RRC during this BT. Fortunately, there was no serious trouble resulting from the layer-short problem of RRC in the accelerator tuning for the beam delivery. The BT was completed as scheduled. Still with the risk of RRC trouble, the operation of RIBF will be continued until RRC is repaired in August.

- Status of the ¹⁸O beam delivery

The accelerator tuning for the beam delivery was quite smooth. It was completed ahead of the schedule. The beam current was 250–500 pA, which was higher than requested. The beam energy will be changed from $E/A = 300$ to 230 MeV in the second half of the ¹⁸O beam series. This is the lowest energy ever been delivered by SRC. Its beam current was not mentioned due to the lack of reference data.

3. Official facility inspection of SAMURAI (Uwamino)

The on-site official facility inspection requested in last May and December regarding the application for modification approval of radiation facilities was carried out and approved. This modification enables us to use four areas, BigRIPS main room, SAMURA, ZD, EURICA, as separated radiation controlled areas from each other: Experimenters could have access to these areas even during a BT if a beam is not delivered to the site.

4. Status of the maintenance and construction of BigRIPS/SAMURAI (Kubo)

- The construction of SAMURAI and a related beam line have been completed. The BT for the first commissioning in the Machine Study (MS) category has started today since 13:00.
- A new movable base has been equipped with STQ-18 for the switchover of the downstream beam

line of BigRIPS between ZD and SAMURAI. A typical operation time required for the switchover system is 0.5 days. In addition, STQ-25 has been newly installed at 4 m upstream of SAMURAI.

- A quench of STQ-1 occurred unexpectedly when the training of the BigRIPS superconducting magnets was performed as usual. Although its recovery took time because a compressor was also halted by this quench, the BT schedule was not delayed.

5. Status of EURICA installation/maintenance (Nishimura)

A pipe to carry liquid N₂ from B3F to F11 and a reservoir tank at F11 will be installed in a short time period from just after the SAMURAI commissioning (MS11-10) up to the start of the first EURICA commissioning scheduled to start from March 28 (MS11-17).

6. Change of MT Committee members (Sakai)

Following the retirement of Professor Kubono from CNS, the University of Tokyo in March, 2012, Dr. Yamaguchi, who is a Lecturer of CNS, the University of Tokyo, was appointed by the RNC director En'yo as a new MT Committee member from April in accordance with the Article 4–(9) of RIBF MT Committee Bylaws. This appointment was based on an agreement between RNC and CNS at the CNS–RIKEN Research Collaboration Liaison Meeting.

7. FY2012 first half year BT schedule (Ueno)

- The BT plan approved by the MT Committee in the previous meeting was disclosed to the relevant representatives. The subsequent week was spent making adjustments by taking into account their comments, and in the end, there were no further corrections made on the BT plan. It was announced that the SRC-use BTs scheduled for July has been scheduled as tentative BTs until the electricity supply situation in the summer becomes clear.
- The In-House Safety Committee meeting was held on March 13 on the BTs that have been scheduled based on the Accelerator-Use Planning Sheets (AUPS) submitted from the representatives. They were requested to make improvements on their experimental plan with regard to the matters pointed out by the Committee by the end of March.
- The Accelerator Group requested that MSs which only conduct test of beam delivery without any additional experimental devices should be excluded from the safety review by the Safety Committee since in such MSs, the accelerators are operated in the same mode as a normal accelerator operation.^{*1} (Fukunishi)

^{*1}After the meeting, the request was discussed among the RNC Safety Management Group Director, Radiation Protection Liaison Officer, and Substitute Radiation Protection Liaison Officer. The request was accepted (Uwamino). However, for the purpose of BT information management, a new form, in which only information on the beam and the representative are indicated, will be prepared instead of AUPS (Ueno).

8. Status of PAC meetings (Ueno)

- 11th NP-PAC (June 18–19): The call-for-proposals was sent out on March 15 (submission deadline is May 2). The number of BT days requested in the cover page of proposals has been modified to reflect the decision made at the 51st MT Committee Meeting. Moreover, Dr. Doornenbal has been assigned as the detector contact person of DALI2.

- 9th ML-PAC & 3rd In-PAC: under preparation

Topics discussed

1. Approval of the minutes of the previous meeting (Sakai)

2. Modification of NP1012-SHARAQ06 (Sakai)

A representative proposed to modify NP1012-SHARAQ06 to conduct a by-product measurement through another reaction by inserting an additional target at the position of SHARAQ-FH9 in parallel with the measurement of reaction, the main purpose of the experiment, approved by PAC (Yako). While the Committee agreed that the result from the by-product measurement is useful for the main purpose, they argued that the by-product result can be considered as an independent research result. By confirming that the by-product measurement would not interfere with the other PAC-approved programs, the Committee approved the modification to maximize the output from RIBF within the limited BT. This result of the discussion was reported to the RNC director who also approved it. The UEC chair requested that the Committee give due consideration to fairness to all other programs when these issues are raised (Suda). Note that the by-product measurement will be reported to the NP-PAC at a later date by the director.

3. Next meetings

- The next meeting, the first one in FY2012, will be held on Friday, April 20, 2012, at 13:30
- In principle, the meetings in the next fiscal year starting from April will be held on the third Friday, at 13:30. As exceptions, it was noted that the meeting will not be held in August and that the meeting in October will be held on the second Friday (12th).