

Minutes of the 47th Machine-Time Committee Meeting

Date and time: September 22, 2011; 13:30–16:10

Place: RIBF Bldg., Room 203

Attendees: Sakai^a (Chair), En'yo^{a,†}, Fukunishi^a, Hayashi^a (in lieu of Abe), Kase^a, Kubo^a, Morita^a, Sakurai^a, Shimoura^b, Teranishi^{c,†}, Ueno^a, Uesaka^a, Uwamino^a, Wakasugi^a

Absent: Abe^a, Haba^{a,†}, Kamigaito^a, Kubono^b, Motobayashi^{a,†}, Yoshida^{a,†}

^aRNC / ^bCNS / ^cRIBF-UEC / [†]Observer

(in random order)

Reports

1. Beam-time schedule changes (Sakai)

- On September 7, it was announced by the Executive Director in charge of facilities that the plan for energy conservation measures to be applied to the Wako Institute effective from September to March 2012 has been modified. In the revised plan, a maximum of 2.8 MW of the portion of external electric power supplied by Tokyo Electric Power Company to Nishina Center (RNC) will be newly provided. In response to this modification, the following AVF/RRC beam times (BTs) wait listed for the second half of FY2011 has been scheduled for September. It was noted that the maximum electric power available for RNC will be cut by 1 MW starting from October to the end of this fiscal year.
 - RI0702-AVF04-27 (Haba *et al.*, AVF-C03, Sept.24 at 21:00–Sept.26 at 21:00)
 - RI0702-AVF04-28 (Haba *et al.*, AVF-C03, Sept.27 at 9:00–Sept.29 at 9:00)
 - IB0702-RRC01-43 (Abe *et al.*, AVF-RRC-E5B, Sept/30 at 9:00–Sept.30 at 12:00)
 - ML0901-RRC20 -08 Izumi *et al.*, AVF-RRC-E5B, Sept.30 from 12:00–18:00)
- With this measure however, there is concern that the shortage of electric-power supply may occur when a RILAC/AVF single-use experiment runs in parallel with a BigRIPS-based experiment. In such cases, reduction of power consumption in RNC may be requested. (Kase)

2. Status of the SHE experiment (Morita)

Results obtained in the SHE experiment during the first half of FY2011 were reported. When compared with the results obtained in the previous BTs in which SHE events were observed, there was no significant statistical differences found for both $Z = 112$ and 113 measurements.

3. RIBF operation (Kase)

- AVF repair
The damaged O-ring and Dee electrode of the AVF chamber have been replaced by new ones. A beam acceleration test of AVF at the frequency $f = 23$ MHz was successful. The test will be also conducted at $f = 14, 16$ MHz and other frequencies.
- RRC repair
As the location of an RRC layer short has not been identified, RRC must operate in the existing

condition this autumn and winter. In addition, the trim coil system for RRC was damaged but will be completely repaired next week.

4. Status of the PAC meetings (Ueno)

- NP-PAC
 - 9th NP-PAC: The PAC report was sent to all representatives on July 20 following the approval of the report by the RNC & CNS directors. With a summary report sent out from the NP-PAC secretariat to both the directors on August 1, all procedures have been completed. Improvements is needed in the time unit requested for BT, announcement of the revision of RIB production yields, the guideline for multiple proposal submissions and/or presentations by the same person, and expanding the scope of the RNC participants invited to an informal gathering to promote the exchange of ideas among the members customarily held on the evening of the first day of the PAC meetings.
 - 10th NP-PAC: The meeting is scheduled for December 9-10. The call-for-proposals was distributed on September 15 (the submission deadline was set on October 20).
- ML-PAC: The 8th ML-PAC meeting was held on September 5-6 as scheduled. There were no proposals submitted for the RIBF-related BT.
- In-PAC: The 3rd In-PAC meeting will be held after the new head of the Industrial Cooperation Team is appointed in October.

Topics discussed

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

2. Review of Machine Study (MS) and Detector Development (DD) (Sakai)

New proposals in the MS and DD categories were reviewed through interviews or presentations by the experiment spokespersons.

- The following MS proposals were approved:

Accelerator development

- MS11-12 (Hasebe *et al.*, ^{238}U , RILAC2-RRC, foil baking, 2 days)^{*1}
- MS11-13 (Kuboki *et al.*, ^{86}Kr , RILAC, gas stripper tests, 3 days)
- MS11-14 (Sakamoto *et al.*, $d \uparrow$, AVF, beam study, 1 day)

RIBF key experimental devices (whose construction has been approved by PAC / TAC)

- MS11-03 (Kubo *et al.*, ^{124}Xe , BigRIPS, secondary beam production, 6 days)^{*2}
- MS11-09 (Kubo *et al.*, ^{238}U , BigRIPS, secondary beam production, 14 days)^{*2}
- MS11-16&17 (Nishimura & Doonenbal *et al.*, ^{18}O , EURICA commissioning, 2 days×2)

The review of the following two proposals will continue:

- MS11-10 (Yoneda *et al.*, ^{18}O , SAMURAI commissioning, 6 days)
- MS11-11 (Michimasa *et al.*, ^{18}O , SHARAQ commissioning, 2 days)

- The following DD requests were approved:

- DD11-01 (Ishiyama *et al.*, ^{40}Ca , AVF, 1 day)^{*2}
- DD11-02 (Lorusso *et al.*, ^{40}Ca , AVF, 6 hours)

^{*1} This request was approved without any presentation or interview since the baking of a stripper foil is required to deliver a ^{238}U beam.

^{*2} The proposals have already been approved in the past MT Committee meetings.

3. FY2011 second half-year BT schedule (Sakai)

- A plan for the BT schedule was proposed by working group. After discussions, the plan was approved except for the aforementioned two MSs (the BT allocation are tentative for them).
- The members of the working group are: Fukunishi, Haba, Kase, Kubo, Kubono, and Ueno from the MT Committee and Nakagawa TL, Okuno Deputy Group Director, and Sakamoto TL from the Accelerator Group, and Inabe from the BigRIPS Team as an observer. The plan was discussed at the WG meeting held on August 11. The plan was disclosed to the spokespersons who submitted a BT-scheduling request. Comments and further requests from them in response were received during the next two weeks. The plan was then revised so as to reflect such requests to the full extent possible. The In-House Safety Review Committee meeting was held on September 14 based on this BT plan. (Ueno)

4. BT cancellation in response to the 9th NP-PAC report (Ueno)

In response to the PAC report, a backlog of NP0702-RIBF28 (Takeuchi), BT = 2.3 days, was canceled, and upgraded to NP1106-RIBF73 (Steppenbeck & Takeuchi).

5. Definition of “tuning with beam” of BigRIPS-based experiments in the NP-PAC proposal form (Ueno)

It was pointed out by Kubo that from his experience in conducting the technical review of NP-PAC proposals, the interpretation of “tuning with beam” given in the proposal submission form varies among people (i.e., "tuning of RI beam production" and "tuning of experimental setups with beams" are mixed). In order to clarify the definition, it is also necessary to discuss whether i) BT should be approved to include the secondary-beam tuning or ii) BT for only datarun should be approved, with time for the secondary-beam tuning externally provided after an appropriate time length is estimated by the facility side. In the case of ii), a guideline for an appropriate time length of secondary-beam tuning is needed when frequent secondary-beam tuning is requested. The discussion will be continued through the exchange of opinion with the RIBF-UEC.

6. Next meetings

- The next MT Committee meeting will be held on Friday, October 21, 2011, at 13:30.
- The meeting after the next will be held on Friday, November 18, 2011, at 13:30.
- The next meeting after the next will be held on Friday, December 16, 2011, at 13:30.