

## **JLab Users Group Board of Directors**

Minutes of the meeting on Wednesday, March 1, 2006

**Present:** Gordon Cates, Marc Vanderhaeghen, Raffaella de Vita, Peter Bosted, John Arrington, Peter Monaghan, Paul Stoler, Julie Roche, Gail Dodge, Thia Keppel, Rachel Harris

1. Gordon Cates introduced Rachel Harris. Motion to approve her as the new recording secretary was seconded and passed unanimously.
2. Christoph Leemann gave an abbreviated version of his State of the Laboratory address ([link to the State of the Laboratory presentation](#)):
  - a. He noted that the recently released President's budget called for increases of 10% per year for the next seven years in the DOE Office of Science. The proposed budget includes \$7 million for Project Engineering and Design (PED) for the 12 GeV upgrade.
  - b. SURA and its industry partner, CSC, submitted their proposal to run Jefferson Lab to DOE in February. They hope the contract will be awarded soon. Under their proposal, Jefferson Lab would be operated by a limited liability company called Jefferson Lab Associates (JSA) that would be run by a board of 11 people, including 6 appointed by SURA, 4 appointed by CSC and the lab director. The chair of the board will be John Casteen, President of UVa. Please see the State of the Laboratory talk for details.
  - c. CD-1 has been approved, as announced by Secretary of Energy Bodman who visited the laboratory on Feb. 22, 2006. A link to the video of Bodman's visit is available on the [JLab in the News web page](#).
  - d. JLab has an outstanding safety performance record and has received three awards from the National Safety Council in 2005.
  - e. The 8.9% reduction in JLab funding during FY06 will result in a 33% decrease in physics running, down to 26 weeks.
  - f. The priorities of the lab are
    - i. 12 GeV upgrade
    - ii. Robust 6 GeV research program which will deliver highest priority physics in all 3 halls
    - iii. 30+ weeks of running per year
    - iv. Cutting edge FEL program
    - v. Leadership in SRF

The members of the users board pointed out that the users have not been informed of many important recent developments and suggested that all relevant emails to the staff at JLab also be sent to the users email list. Christoph suggested that users regularly check the [JLab insider web page](#).

3. Will Brooks and Allison Lung presented the schedule for the upgrade. There will be an internal project review for the Hall D tagger and the photon beamline. The Annual Project Review (Lehman) will be June 27-29. Four to six weeks later the CD-2A

review will examine long lead-time procurement items. Also planned for late summer is a superconducting magnet review and the cryomodule design review. In FY06 JLab is spending \$1.5 million on research and development and \$3 million on advanced conceptual design.

4. Tony Thomas mentioned that he and Gordon Cates have planned a series of meetings between the users and the JLab management to discuss issues related to the transition from 6 to 12 GeV. The first is during the satellite meeting at the spring APS meeting. The second will be during the User's meeting in June and the third will be during PAC30 in August. He said that perhaps 80% of the currently approved experiments can be run with the President's budget and that more money has been requested to increase that fraction. He also discussed the Science Policy Advisory Group (SPAG), which already exists. If SURA & SCS are awarded the contract to manage JLab, SPAG will be chaired by Tom Appelquist (Yale University) who will sit on the board of directors of JSA. Tony remarked that he would like to see more experiments with  $A > 3$  and hopes that one of the new PAC members will have some expertise in that area.
5. Swapan Chattopadhyay spoke about activities in the accelerator division, particularly the laboratory's efforts to increase the energy of the accelerator towards 6 GeV. Planning continues as we write these minutes and a detailed energy plan will be published by the laboratory within a few weeks. Laboratory management is committing significant amount of resources, manpower and high-level priority in refurbishing the cryomodules in the two linacs at the fastest rate achievable, given the available funding. The current informal projections are: refurbishing at the rate of three cryomodules per year starting immediately in March 2006, with projected energy reaching a robust 5.75 GeV by the Fall/Winter of 2007/2008 (October 2007 – February 2008) with subsequent rise to 6 GeV in a time-frame determined in the interim by the needs of the experimental program in the Halls, the 12 GeV program and having space and an additional spare cryomodule available to work on. The board pointed out that the users do not care too much about whether we get 5.75 versus 6 GeV and that it is not acceptable to wait for 12 GeV to run a 6 GeV experiment. The accelerator division will proceed as quickly as possible to produce 5.75 GeV. Swapan noted that when they removed cryomodules for reprocessing, they found unanticipated problems with the valves separating one cryomodule from the rest of the accelerator, which complicates the refurbishment. He pointed out that JLab now has unique experience with RF-vacuum interaction and aging cryomodules that may be of use to other laboratories.
6. We discussed the Annual users meeting June 12-14, 2006. David Gross has accepted Gordon's invitation to deliver the keynote address. Paul Souder has been asked to organize a session on parity. John Arrington, Thia Keppel, Peter Bosted and Paul Stoler form a subcommittee to organize the User's meeting. The plan is to have another graduate student poster session.
7. Larry Cardman discussed the timing for the next NSAC long range plan (LRP) which will be due in October (or later) of 2007. The planning activity will begin at this spring's DNP/APS meeting. He asked for feedback on his plan to accept only 12 GeV proposals for the summer PAC and only those proposals that would use the baseline upgrade equipment (CLAS12, SHMS, Hall D), and which would involve a

commitment to contribute to the upgrade construction. The timing for this plan is driven by the fact that we need to define the manpower and equipment for the upgrade before the CD-2B review in April or May 2007. Institutions need approved experiments to request funding to build equipment from their governments. He would expect to have approximately one 12 GeV PAC per year. He expects to send out a call for proposals soon. It was suggested by the board that the call for proposals be very clear about what was considered “base equipment” experiments. For example, will Hall A proposals be accepted (probably not) or will Hall C proposals using only the HMS be accepted (probably not). It was also suggested that they consider accepting “low energy” Hall B proposals because of the lack of experiments that do not require the highest possible energy. Jeopardy will be delayed until PAC 31 for remaining 6 GeV experiments, and there may be a PAC reevaluation of the remaining 6 GeV program at some future date.

8. Larry Cardman also discussed his plan to achieve full operation, defined as 30 weeks per year of running with physics in 2.25 halls on average. He warned that different budget scenarios make a big difference in the amount of physics we can do. For example, under the President’s budget we can run 80% of the currently approved program. Hall C is one year oversubscribed. Hall B will fit comfortably within the remaining schedule and Hall A barely fits within the remaining time. Volker Burkert pointed out that if low energy proposals are not accepted at the next PAC, Hall B may have a problem finding experiments to run, especially if there is any delay in achieving 5.75 GeV. In response to a question about the tradeoffs between achieving 6 GeV and running the current program, Larry cited the following budget facts: It costs roughly \$8 million per year to run 70 Hall weeks. It costs \$1 million to refurbish one cryomodule and we can do three per year. The users board suggested to Larry that (a) Hall B be allowed to submit low energy (less than 6 GeV) proposals to PAC 30 and (b) that the accelerator division try to achieve 5.75 GeV as quickly as possible and then move to 6 GeV at whatever refurbishment pace is necessary to achieve 12 GeV on time.
9. Kees de Jager presented the [status in Hall A](#). He noted that the Gen installation was completed on schedule. He noted that the significant budget cut in FY06 caused him to stop work on the development of new instrumentation. In FY07 capital funds must be restored (normal funding PLUS what was lost in FY06) in order to have a fighting chance to run the approved program before the shutdown. He needs \$1 million in FY07.
10. Volker Burkert presented the [status in Hall B](#). He highlighted the BoNuS run last fall and the success of the new Cerenkov counter as part of the currently running EG4 experiment. He is concerned that if the frozen spin target is delayed Hall B will have nothing to run before next year because the rest of the program requires 5.75 GeV.
11. Steve Wood presented the [status in Hall C](#). He noted that less than 10% of the approved experiments use only the base equipment and there are only three days of approved running that are rated at B+ or below. Like Hall A, Hall C is worried that they will get enough capital equipment to run the program.
12. The users board discussed judging for the thesis prize and the APS satellite meeting, which Thia will organize.

13. Thia Keppel reported on space issues. There are lots of complaints about the new F wing, chiefly that it is very noisy, the desks are too low and the door locks are not adequate (broken or only one key). Several people have complained that the water tastes bad. Roy Whitney promised to solve the problems. He is already working on the noise of the air handlers. Anyone who wants to have his/her desk raised may do so. The board suggested that posters be put up that explain where to call for help with new building problems.
14. Michael Dallas, the representative from CSC, was introduced to the board. Mike promised to help run the organization as efficiently as possible so that there is more money available to do science. In the JSA organization chart he will be the chief operating officer and report directly to Christoph.
15. Julie Roche and Peter Monaghan discussed Post-doc and graduate student concerns. Julie showed a plot of the number of post-doc and faculty openings as a function of time. They are both down a factor of two in the past five years. Gordon expressed some optimism that things may improve if the hoped-for increase in government funding for the physical sciences actually comes to pass. It was suggested that with the 12 GeV coming soon, it would be a good time to re-institute a substantial number of JLab-University bridge positions. Thia volunteered to talk to SURA President Jerry Dreyer about this.
16. John Arrington reported on quality of life issues. Users want timely, informative minutes of the UGBoD meetings. John proposed that a board member be assigned to ensure rapid release of the minutes. It is important for users to give as many JLab talks as possible to let the broader community know what we are doing. Abstracts are now being accepted for the upcoming Intersections meeting, which is a good forum. Users continue to find the wireless connections to laptops a bit frustrating (frequent changes, lack of full coverage in all areas, issue of what (limited) services non-CUE users can expect, and how to find out). Users would like an easy-to-find link to a web page listing all experiments that have run at JLab, including when they ran, for how long, in what hall, name of contact person, and, when available, a link to the experiment-specific web site. Dennis said that he would take care of providing this to users. Peter B. suggested that it would also be useful for PAC members. Thia asked people to send her suggestions for mini-symposia at the APS annual and DNP meetings.
17. Raffaella de Vita reported on PAC issues. Some users expressed concern about the lack of uniformity in access to PAC members prior to and after the meeting, and wondered if the process of user-PAC communication could be more formalized. Some users observed that for the last PAC meeting, some PAC members were not able to make time to read all of the proposals before the meeting. Gordon observed that a dedicated "reading" time worked well on a review that he recently served on. Peter B. suggested that perhaps the first day of the PAC meeting could be set aside as a "reading day". Peter B. also volunteered to write up his experiences as a new PAC member, which might be useful to future new members to orient them to the process and expectations of users. Regarding nominations for new PAC members, Larry indicated that he would like to see nominations for people who are not actively working on ongoing experiments or proposals, as the current percentage of such "insiders" is a bit too high to make for effective discussions. He also suggested that it

would be nice to have someone with expertise in nuclear (as opposed to nucleon) physics. It was decided that board members should send their nominations for the PAC (name and brief description) to Rachel Harris within a week. Several people suggested that the Technical Advisory Process should be more uniformly detailed and thorough, especially if the goal is to have a broader perspective PAC membership (with fewer members who have detailed technical knowledge of JLab experiments).

Reporting for the board,  
Gail Dodge