

**Minutes of the APSUO Steering Committee Meeting
Held on April 11, 2002, at Argonne National Laboratory**

Attendees:

J. Budai, L. Chen, D. Cookson, S. Davey, J. Day, P. Dehmer, S. Durbin, P. Dutta, R. Gerig, M. Gibson, H. Grunder, D. Haeffner, B. Hartline, R. Hislop, L. Keefe, R. Klaffkey, D. Mills, P. Montano, T. Rauchas, J. Rose, A. Rosenzweig, G. Srajer, B. Stephenson, S. Strasser, I. Thomas, R. Torres, M. Vigliocco-Hagen, and P. Zschack.

Routine Business:

Paul Zschack, APSUO Chair, called the meeting to order and introduced Dr. Herman Grunder, Director of Argonne National Laboratory. Dr. Grunder welcomed the group and offered his thoughts on the importance of the APS user community in the Argonne community.

Budget Update:

Zschack then introduced Patricia Dehmer, Iran Thomas, and Pedro Montano from the Office of DOE Basic Energy Sciences (BES). They fielded questions from the group regarding future budget challenges relative to the new funding guidelines issued for CATs that receive operational funding from BES. It is the intention to transfer the operational support funds for these CATs to the APS facility budget. BES would still provide research support directly to the CATs on a competitive basis. Under this plan, staff members on the operations side would be APS employees and would be managed by both the CAT and the APS. This new policy should provide a stable operational support for BES-funded CATs.

Operational Update:

Tony Rauchas presented the group with an operational update. Thus far in the current run (02-1), the APS is at 97.2% availability. To date, 73% of scheduled time was with low-emittance top-up operation. During top-up operation, injector availability was at or near 95%. An eight-hour studies period was conducted on April 1 with user participation. During this study, the storage ring operated at 130 mA, quite a significant achievement. This test will be repeated on June 24.

The plan for FY2003 indicates that there will be three user runs and three maintenance periods. This schedule will eliminate one start-up cycle, allow for more effective utilization of maintenance periods, and provide increased time available for user operation (beyond 5000 hours).

Recent achievements have been numerous. During the present run, the orbit correction duty cycle was increased from 0.4 Hz to 1.5 Hz, resulting in a factor of 5 reduction of transient effects due to the ID gap changes. New orbit restoration software has increased

speed and accuracy of reproducing steering following major lattice changes: e.g., low versus high emittance, singlet and hybrid filling patterns.

Future plans include the refinement in particle beam position monitor (BPM) timing to allow for the elimination of the “missing singlet” creating a totally uniform singlet fill without gaps. “Bunch cogging” will eliminate top-up-related orbit transients. These plans should be implemented during the next user run. The implementation of ID x-ray BPM feedback coupled with feedforward on the ID gap is imminent. This implementation is expected to improve long-term pointing stability to better than 0.5 microradians rms made possible by the Decker lattice displacement. Plans are continuing to be developed on restoring particle beam orbit to the center of the machine aperture, together with alignment of radiation trajectory down the beamlines. Analysis is ongoing.

APS Update/PEB Review:

Dr. Gibson outlined the APS reorganization for the group. This reorganization was carried out to better focus on user science, to keep the machine reliable and at the cutting edge, to increase the effectiveness of the organization, and to retain and motivate the best people. The new organization will better facilitate implementation of the new APS Mission Statement and Goals where the mission is to deliver world-class science and technology by operating an outstanding synchrotron radiation research facility accessible to a broad spectrum of researchers. The goals to help carry out the mission are to operate a highly reliable 3rd generation synchrotron x-ray radiation source; to foster a productive environment for conducting research; to enhance the capabilities available to users of the APS facility; to assure the safety of the facility users, staff, and the environment; to maintain an organization that provides a rewarding environment that fosters professional growth; and to optimize the scientific and technological contribution to the DOE and society from research carried out at the APS.

This reorganization and other changes are needed to support the future science at the APS while meeting budget challenges, responding to external reviews, addressing a new management perspective, and dealing with the natural maturing of the facility.

The DOE/BES review conducted last October identified some things worth noting. The machine is performing very well with greater science expected in the future. Changes to be implemented immediately include centralization of the Independent Investigator program.

Dr. Gibson indicated that he had also identified some areas to improve/change since last October when he was appointed. Among those are to improve the partnership with the users, to facilitate the success of CATs by combining the best of the European and U.S. models, to increase enhancements to the existing machine, to obtain stable support for our activities, to articulate a clear mission for operations, and to create and maintain an efficient, flexible, and non-duplicative organization.

To that end, the APS workforce was reduced by 9%, to a total of 405. The new organization has three major divisions instead of the former four divisions and eliminates duplication of effort in the mechanical engineering and IDs areas, as well as centralizes computer support. The reorganization also consolidated the management of the SRI-CAT and established the CAT Operations group. The reorganization will be a work in progress and will continue to “attack boundaries between boxes.”

APS/User Strategic Planning Meeting:

George Srajer outlined the proposed agenda for the upcoming APS/Users Strategic Planning Meeting in Lake Geneva, Wisconsin, on May 15-17, 2002. The motivation behind this meeting is twofold – to establish a stronger partnership between the APS and its user community and to involve both in APS strategic planning, while identifying strengths and weaknesses, exploring ideas and avenues for enhanced performance, and demonstrating a continued commitment toward excellence. The strategies used to achieve these goals will be to examine technical issues, user support, the II program, compliance issues, and publicity and outreach and formulate plans for the future in these areas.

The first session will begin at 1:00 P.M. on Wednesday, May 15, with a plenary session on strategic planning. Later in the day, there will be talks on user perspective on environmental science, physics, biological sciences, and materials science.

On Thursday morning, there will be breakout sessions on user technical needs, user support, the benefits and drawbacks of a centralized II program, as well as compliance issues. Findings from the breakout sessions will be discussed later that morning. In the afternoon, other breakout sessions will be held to focus on APS needs – publicity, funding, advocacy, and information flow between users and APS. Findings from these sessions will be discussed later in the afternoon. After dinner on Thursday evening, a plenary session will focus on APS competitiveness with the next-generation sources.

Friday morning will be devoted to the future of the CAT system in the areas of reorganization, beamline specialization, funding issues, and the future of the BES- and non BES-funded CATs.

The organizing committee asked for any questions and comments that would enhance the retreat. One thing that was brought up was the possibility of adding something from the chemistry area to the discussions. The agenda-planning committee will be conducting a meeting to further discuss the meeting on Monday, April 15, 2002, at 9:00 A.M.

DOE/BES Review Report:

Dr. Gibson led a discussion on the summary of the DOE/BES review held in October. The review summary included positive comments, but some issues were raised, some actions were recommended, and immediate actions were requested. The APS response

will focus on ongoing actions, task forces, dialog with users, with a goal for a formal response within three months.

Specific comments were that the APS was an excellent facility that was operating well but currently underachieving. Staffing should be adjusted to conform to the operations phase. There should be increased communication between the APS and the users, as well as a restructuring of the PEB to expand its role. Increased operational support to the CATs must be addressed. SRI-CAT operations need to be reexamined. The general user or Independent Investigator (II) program should be restructured to a more centrally supported model, and increased LEUTL activities should be cut back with those efforts redirected to user operations.

Those actions that require immediate action include the implementation of a centralized review and beam time allocation process for II proposals, the establishment a proposal evaluation panel for the II program, the provision for the majority of SRI-CAT beam time to Independent Investigators, and strengthening ANL's line responsibility and oversight of ES&H for the CATs.

Actions that have been recommended are to conduct a bottoms-up review of APS operations, plan for facility operation and management of BES-funded CATs, and increase CAT participation in decision-making process of future accelerator upgrade activities.

Plans for conforming with requested and recommended actions include APS/user dialog at the meeting in May, task groups being formulated on specific issues (II program, ES&H, etc.), realigning the SRI-CAT (in progress), organizational changes in the APS (primarily completed), and the proposed strengthening of the review processes.

The formal response to these issues will be compiled and forwarded within three months.

Executive Session:

Steve Durbin reported that he and Paul Zschack would be going to Washington, D.C., to meet with members of Congress and OMB to discuss funding matters. Durbin and Zschack will report the results of that meeting at the retreat in May. This goes along with an action item from the January 17, 2002, APSUO meeting where the subject of advocacy actions by non-U.S. citizen users living in foreign countries needed to be addressed. Non-U.S. citizen users are encouraged to write general letters of support about the APS to the House and Senate leadership, as well as to Illinois senators and Judy Biggert, the representative from the Congressional District that includes Argonne. These letters should stress the importance of the APS to their research, the importance of sufficient funding for the APS, and the consequences of insufficient funding to international scientific cooperation.

Zschack recommended that perhaps someone be appointed to attend the weekly Operations Division Meeting. It was suggested that it be attended for a three-month

period to see if it would be worthwhile to the committee. David Cookson was asked to attend and report to the group at the APSUO July Meeting. Cookson asked for any suggestions members could offer to make this experience worthwhile to all.

After much discussion, it was decided that the committee would not provide a new Argonne Library Committee member. Paul Fenter, the current Library Committee representative, could stay on if he so desires. It is noted that Mary Straka was singled out as being a valuable resource in the APS library and was very helpful to those who ask for help.

The Colloquium Committee was discussed, and the group thought that Jin Wang and Kathy Harkay were doing a good job in organizing these colloquia. The group would like to see something in the area of physics or biophysics. Amy Rosenzweig and Lisa Keefe will come up with some names for future talks.

It was decided that the matter of the nominating committee would be tabled until the July APSUO Meeting.

User needs and priorities will be discussed further at the May retreat.

The committee members will notify the users of the DOE/BES issues and gather issues from them relative to the II program.

Action Items:

For the APS:

1. Establish the dates for the next APS User Meeting (sometime in the late spring of 2003). (Susan Strasser)
2. Provide information developed for User Advisory Committee Chairs' trip to Washington to all Steering Committee members.
3. Notify Paul Fenter that he has been asked to remain on the ANL Library Committee as the APS User representative.
4. Investigate posting of Argonne/APS events of the week on a bulletin board in the Guest House lobby. (Susan Strasser)
5. Arrange for a talk on science publicity from the APS at next APSUO Steering Committee.

For Steering Committee members:

1. Distribute an overview or summary of each Steering Committee meeting to all badged users. (Paul Zschack)

2. Send suggestions to Susan Strasser for representative Independent Investigators (IIs) to serve on the APS/User II Task Force. (All Steering Committee members)

Next Meeting:

The next meeting of the APSUO Steering Committee Meeting will be held on July 18, 2002.