

## Minutes of the APS Users Organization/Partner User Council Joint Meeting

Friday, January 21, 2011  
Advanced Photon Source  
Building 401, Room E1100/E1200

Peter Eng, Acting Chair, APSUO  
Keith Brister, Acting Chair, PUC

**APSUO Steering committee members in attendance:** A. Sandy, D. Brown, E. Dufresne, J. Kropf, M. Miller, P. Eng, R. Suter

**Partner User Council members/alternates in attendance:** B. Fischetti, B. Bunker, D. Keane, G. Shen, J. Viccaro, K. Brister, L. Keefe, R. Gordon, R. Winarski, S. Sutton, S. Wasserman, W. Anderson, A. Joachimiak, J. Talsma

**APS Management/ Staff attendees:** B. Ruzicka, B. Stephenson, C. Vanni, D. Blair, D. Mills, G. Srajer, L. Young, R. Gerig, S. Strasser, M. Beno, J. Quintana, J. Maclean

### Welcome 9:15 am

#### APS Update ~ G. Brian Stephenson

*Note: The details of Stephenson's presentation are found at:*

*[http://www.aps.anl.gov/About/Committees/APS\\_Users\\_Organization/Meetings/2011/20110121\\_presentations.htm](http://www.aps.anl.gov/About/Committees/APS_Users_Organization/Meetings/2011/20110121_presentations.htm)*

#### *Safety:*

Stephenson described the electrical equipment inspection program and stated that inspections should be completed by September 2011. He emphasized the importance of working together to be sure that all inspections are complete. The APS-operated beamlines are on track to meet the deadline. Non-APS CATs should step up their inspections. For assistance please contact Clay White, 2-0300, [cawhite@aps.anl.gov](mailto:cawhite@aps.anl.gov).

Stephenson addressed the problem of space allocation along the beamline. Congestion in the aisles and along the outer wall of the walkway is a legitimate safety concern. Management is beginning discussions about how to de-clutter and reorganize storage spaces and areas. Bill Ruzicka is working on a map of the areas that are cluttered. Stephenson recommended that a member from both APSUO and PUC aid in forming a committee to help reorganize the space and re-evaluate how the space is currently used.

#### *Operations Schedule:*

For FY2011, the APS has scheduled 5000 hours of user time. The schedule is basically settled; allocation plans may be made accordingly.

#### *Budget:*

The APS is planning for regular operation under a continuing resolution. Some uncertainty about the budget still remains.

#### *Other news:*

Representatives of APS/DOE/ANL management will be meeting with BES staff in Washington DC January 24-25 to discuss the APS upgrade and budget. Stephenson does not expect definitive budget

answers for some time, but the DOE-BES management will provide some up-to-date advice on potential budget scenarios. They will also present the APS Upgrade status and plans culminating with the CD1 (Lehman) Review in May 2011.

The National User Facility Organization (NUFO), of which the APS is a member, is planning an Outreach Exhibition on Capitol Hill in the Rayburn House Office Building. Please contact Susan Strasser to volunteer (or recommend volunteers) to talk to attendees – one or more volunteers will be needed.

The DOE office of Biological and Environmental Research (BER) is planning a workshop/review of the impact of new and planned facilities to prioritize their support. Stephenson requests that the APS Life Sciences community provide input in preparing and reviewing the document to be submitted, as well as suggest participants for the presentation. Stephenson also recommends focusing on one or two beamline projects that could potentially be funded by BER, as well as providing an overview of the plans for Life Sciences at the APS.

A conceptual design is underway for the Advanced Protein Crystallization Facility (APCF), which is funded by the State of Illinois. The funding is now available, and the project is expected to begin in the Spring of 2012. The anticipated location of the building is outside of building 435, between sectors 16 and 17.

The construction of this building could restrict the extension of the beamlines; this factor has been considered in the planning. Some beamlines can extend around the new building. Beamline choices and plans are going to be better defined throughout the next six months. Some road-mapping exercises will identify placement of the new beamlines. The APCF building will be factored into these exercises.

In response to a question about who will support the operation of the APCF building, Stephenson responded that two programs funded by NIH, and another two by BER will be moving into the new building. Also, a detailed design has already been prepared (including instrument location). The APCF is not included in the APS Upgrade project because it was underway before the upgrade project. The upgrade project is a large portion of the expansion of APS, but not the whole of it.

Construction of “DC-CAT” is also being pursued. Funding is requested from the NSA, and while this project is not directly related to the APS upgrade project, it will have to be managed alongside the project. For questions regarding DC-CAT, please contact Kevin D’Amico.

Lynda Soderholm has suggested constructing a building near the APS to prepare radioactive samples. There was a workshop regarding this issue last year; the recommendation from the workshop was that the best solution was a separate building (versus a specialized beamline). For questions regarding this project, please contact Denny Mills or Lynda Solderholm.

The triennial review of the APS is scheduled for the end of summer 2011. The user community will be asked to contribute documents and presentations for the review. There will be an APS Upgrade review in the early part of summer 2011 that will address completing the upgrade without disturbing beamline operations.

## **APS Upgrade: Overview and Status ~ Dennis Mills**

*Note: The details of Mill's presentation are found at:*

*[http://www.aps.anl.gov/About/Committees/APS\\_Users\\_Organization/Meetings/2011/20110121\\_presentations.htm](http://www.aps.anl.gov/About/Committees/APS_Users_Organization/Meetings/2011/20110121_presentations.htm)*

### *Important Dates:*

April 22, 2010 - CD-0 (Approval of Mission Need) for the APS Upgrade was approved

Development of Science Cases in support of beamline proposals:

January 17, 2011 – First drafts due (14 received to date)

February 7, 2011 – Final drafts due – allowing for two weeks of internal reviewing and editing

February 21, 2011 – drafts made available to the SAC and guest reviewers before their arrival in March

March 7-9, 2011 – APS SAC meeting – prioritized list of Science Cases available at close of meeting

March 14-15, 2011 – ANL CD-1 External directors review of APS-U Project, prep for Lehman Review

May 17-19, 2011 - Lehman Review

BL Technical Design Reviews Dates and Reports – Mills says comments will be tracked and addressed. Each section will have a review. Contact Dean Haeffner with questions about the process of design reviews.

Criteria for Evaluation: All science cases will be broken into groups and assigned to a panel for review. Theme leaders will be assigned (APS and local), and the proposals will be reviewed by the leaders to provide feedback to the authors. This is the same process the SAC will use to evaluate.

Ongoing APS-U activities: APS-U staff are continuing to gather information from the beamline staff. This will make information available to the SAC members to review and allow them to consider additional benefits and possibilities presented by the upgrade. Accelerator physicists have been going around talking to people in XSD. This communication has been useful and may be extended to CAT staff as well.

*SAC Meeting, March 7-9, 2011:* The SAC and invited guest reviewers will be divided into five panels and will have break out sessions to review proposals and information. The panels will reconvene and discuss rankings. Beamline scientists will give proposal presentations; please note, the SAC meeting is not open to the general public; however, anyone participating in the preparation of a scientific case can sit in on that presentation. The presentations made to DOE will be different than those for the SAC. Reviewers were selected who can look across different scientific areas and make a value judgment without being specific to one field. The most competitive proposals will be those asking for a complete new sector.

*ANL Director's external review of the APS-U Project:* The goal is to prepare the project before it goes to the real evaluation (which will be more broad than just science); it will be a more comprehensive presentation for DOE. See slide presentation for more detailed information and a list of questions the committee should respond to.

*Develop the APS-U project baseline scope:* The baseline scope will be based on the input from the SAC. The scope will be designed to be consistent to the budget, and the scope is still changeable before going from conceptual to preliminary.

R&D: Superconducting Undulators & SPX project

*Superconducting Undulators:* Project is underway and LDRD is being generous with funding. Progress is being made but at a slower pace than hoped.

*SPX Project:* The APS is working closely with Jlab and making progress (details in Mills presentation).

Discussions/Questions:

*Define how ratings will work with SAC:* each panel will use the same rating scale with a well-defined set of criteria. It is understood that some panels may grade lightly in comparison with others. As a result, the panels will meet again and discuss their ratings, then re-evaluate their ratings based on the discussion. The scores will be assigned and then merged into a whole; however, the SAC and reviewers will discuss further to be sure the prioritization is correct. The SAC will then meet alone to come to their final decisions.

*International/National/Local Purpose for APS-U:* Is there a balance between the aspects? The upgrade will be attractive to all people who want to do experiments here. There is no real need to focus on any one regional aspect unless there is an express interest in experimentation at the APS.

*Perception by local scientists that they are not getting beamtime because of where they are:* Local scientists believe the General User review panels may be biased against local beamlines. It is believed that changing the composition of review panels will help this problem. The APSUO steering committee and PUC have been asked for recommendations for new panel members. The turnover rate of reviewers should be higher (note: a transition schedule has now been put in place with two-year terms for reviewers, renewable by mutual consent.) It was suggested that having industrial reviewers would be helpful on panels. Contact Susan Strasser with any suggestions for reviewers ([strasser@aps.anl.gov](mailto:strasser@aps.anl.gov) or x 2-5981).

### **User Week 2011: *Peter Eng***

Peter provided an overview of the meeting. It will be a combined APC/CNM/EMC meeting from May 2-4, 2011, and the structure has changed significantly from previous years. Eng noted the following:

- Nominees are being sought for the Compton award.
- The Committee is currently working to identify keynote speakers – possibly the Secretary of Energy, Harriet Kung, Senator Mark Kirk, or Norm Augustine.
- Better funding will be provided for speakers.
- There have been some complaints about the cost of the meeting. This year will be \$200.00 for regular admission and \$50 for students. Cost of dinner & entertainment (*Baby Wants Candy*) is estimated between \$25-\$30.
- More interaction with the vendors is desired
- Judges will be needed for student posters
-

## **Working Lunch: Discussion of Current Upgrade Plans and User Issues**

*Dennis Mills, Susan Strasser, John Maclean - Discussion Leaders*

*Some Sectors have received safety review letters (which are usually preceded by the sector review).*

Some confusion stemmed from the letter – sectors thought they were transitioning to cross-cut reviews vs. sector reviews. Notifications requesting sector review information for the comprehensive review will be sent out at the end of summer – eventually we will return to a sector-by-sector review, but for now the APS and SAC will continue with cross-cut reviews. The cross-cut is a nice way to look at the overall science program but not the best way to address management issues at a given sector. It would also be helpful to coordinate internal reviews with the external CAT reviews for funding purposes.

### *Badges & access:*

- Most areas are done with the card reader changes, some are still in progress.
- Users on weekends: We're hoping to be able to mail badges, but for now they will use gate passes and pre-programmed key cards to gain access to the building
- Individual beamline access groups will be created soon – contact is Monica Green ([mgreen@aps.anl.gov](mailto:mgreen@aps.anl.gov) or x 2-1783)
- Current badges will get people onsite through the expiration dates and badges without expiration dates will be good through the 2011-1 run.
- The system will be common to CNM as well, using the same card. Eventually all of the lab will convert to this system except for the TCS building. The library is located there and requires a different prox card for entrance. TCS does not currently plan to change systems.

### *Other questions/discussions:*

It was noted that some of the computer systems are outdated and it seems to take years to get them updated. This is a resource problem. Each system has a business owner, and the APS tries to make the updates high priority; however, there are not enough IT members to keep up with the demand.

New scheduling system: Rose Torres will be the contact for this system; users can also contact the IT help desk.

*12:25pm session adjourns*