

APS/Users' Operations Monthly Meeting

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Advanced Photon Source

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Agenda

I. APS Update (D. Mills)

II. Update on 2006 User Meeting (Thomas Gog)

**III. The Small Angle Scattering Scientific Interest Group
(Pete Jemian)**

**IV. APS Involvement in the International Linear Collider
(Kwang-Je Kim)**



APS News

- Nothing new on the budget for FY07 (released after President's State of the Union Address last week in January).
- The APS Scientific Advisory Committee (SAC) will be meeting next week (Tuesday, Wednesday and Thursday)
 - Crosscut review on “Polymer Science at the APS” will be held Wednesday morning and is open to everyone.
 - http://www.aps.anl.gov/News/Meetings/APS_Cross_Cut_Reviews/2006/
- Detector Workshop held at ANL Dec. 8 and 9, 2005
 - Most talks are on the web
 - Article for SNR written and about to be submitted
 - White paper from workshop will soon be posted on the web
 - It will be sent to all US facility directors
 - It will be sent to various DOE, NSF, and NIH funding officials

Radiation Safety Systems Training

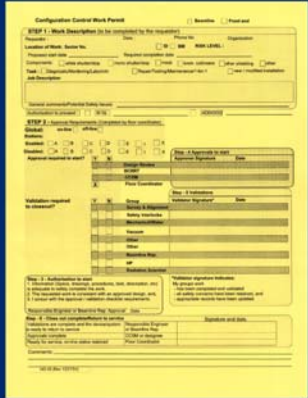
- **Implement a uniform sign for all Radiation Safety component in the whole facility**
 - The sign clearly identifies the component as a Radiation Safety Component
 - Has the name of the component
 - Identifies the component with a unique ID
 - Has a BAR Code of the component ID
 - Clearly states that it cannot be removed or changed without an approved work permit
 - Clearly identify who needs to be contacted
- **The new APS Radiation Safety signs will be replacing all existing signs in the whole facility (current yellow Configuration Control tags and red Critical Component tags)**
- **If you missed the training presentation last week, contact Susan Strasser.**

STOP!

This sign



on a radiation safety component means **DO NOT TOUCH** unless you have an approved permit:



Two Extended Downtimes Last Run

- We saw two extended downtimes in the run 2005-3 accounting for more than half the total run downtime.
- The first was a sequence of several problems, the predominate one was the **failure of the klystron in rf4**.
 - This particular failure mode of the klystrons is hard to detect
 - We spent a considerable amount of time trouble shooting before determining that the beam losses were due to rf4. (once this was realized the fix is pretty quick, only a waveguide switch to rf1)
 - A goal is to improve the beam and hardware based diagnostics to more quickly identify these faults
- The other was the **booster dipole supply**.
 - In the end we determined that nothing broke, only the phase difference between the two feeds on the incoming AC had changed.
 - While the downtime might well have been shortened if we had been informed by Com Ed and PFS (we are working on that), the lesson was that nobody had really looked hard at this supply for many years, and it is unlikely that we would do things differently in retrospect.

High Current Run

- In December Sushil and Mohan presented the current assessment of the state of the ongoing heat load studies to the ADDs/DDDs.
- A quick review of the beamlines that Sushil has looked at shows that the majority of interested beamlines can go to 130mA operation safely.
- Going forward, for each beamline (or series of beamlines), a beamline advocate needs to be appointed to prepare a report to the BSDRSC for higher current operation. The report needs to include:
 - Reference to TB-50 for front ends
 - Identification of the beamline RSS components with either engineering analysis or references to existing analysis and extrapolation methods.
- The BSDRSC then uses its existing safety review process to validate (or invalidate if appropriate) the request.
- More information will be forthcoming.

Joint APSUO and Partner User Council

- Met last week (Thursday, January 12) at a joint meeting.
- Items of discussion:
 - “Project” status for General User proposal in the updated Scientific Access Policy
 - APS Strategic Plan
 - APSUO - planning for 2006 User Meeting (more later...)
- Several grass-roots interest groups (Scientific Interest Groups or SIGs) have self-assembled over the last several years for discussions of common interests:
 - XAS (Julie Cross/Matt Newville)
 - High pressure (Guoyin Shen)
 - Macromolecular crystallography (Steve Ginell)
 - Liquid and soft matter surface scattering (Ivan Kuzmenko)
 - Interface Scattering (Paul Zschack)
 - Small angle x-ray scattering (Pete Jemian)
 - Tomography (Francesco De Carlo)

http://www.aps.anl.gov/Users/Communications/Scientific_Interest_Groups/index.html