

Service Coordination Board (SCB) Meeting Summary

Date: 16 October 2013

Members in attendance:

	Member	In Attendance
AES	John Maclean	√
	Geoff Pile	
ASD	Ju Wang	√
	Ali Nassiri	
XSD	Mark Beno	√
	Chris Jacobsen	
	Jonathan Lang	√
Upgrade Project	Tom Fornek	√
	Mohan Ramanathan	√

Secretary: D. Ferguson

Also in attendance: R. Torres, C. Eyberger

Agenda

Review of 18 September 2013 meeting minutes

Review of Open Action Items

Project Report Discussion

New Business

Meeting Summary

The meeting minutes from 18 September 2013 were approved with minor changes. Open action items were discussed. See below for details. New business discussed included R. Torres provided an update on the project report. This report can be accessed through the following links

Permanent URL to the newest [https://icmsdocs.aps.anl.gov/docs/idcplg?IdcService=DISPLAY_URL&dreleased revision: DocName=APS_1432632](https://icmsdocs.aps.anl.gov/docs/idcplg?IdcService=DISPLAY_URL&dreleased%20revision%3A%20DocName%3DAPS_1432632)

Permanent URL to the [https://icmsdocs.aps.anl.gov/docs/idcplg?IdcService=DISPLAY_URL&dselected revision: DocName=APS_1432632&dRevLabel=29](https://icmsdocs.aps.anl.gov/docs/idcplg?IdcService=DISPLAY_URL&dselected%20revision%3A%20DocName%3DAPS_1432632&dRevLabel%3D29)

Web Location: https://icmsdocs.aps.anl.gov/docs/groups/aps/@apsshare/@compute_rsystems/documents/list/aps_1432632.pdf

Native File: [Project Report Summary - September 2013 \(APS_1432632\).xlsx](#)

New Action Items

1. Contact individuals responsible for sector 35 strip line monitor project. Advise on proposal process [J. Wang] – Closed
2. Discuss the IEX project ticket vs scope of project with P. Den Hartog [J. Maclean] – Open
3. Obtain updates on projects 1253, 1254, 1373 and 1374 from T. Smith [J. Wang] – Open
4. Obtain clarification on status of Project 1294 with L. Emery and G. Goepner [R. Torres] - Closed
5. Send meeting calendar to J.Wang [D. Ferguson] - Closed

Open Action Items

1. Send email regarding project updates for ASD projects that will not be approved [Davey] – Open
2. Evaluate and document risk assessment for proposal 1713 (Beam Scraper) [Borland] – Postponed
3. Review project proposal 1713 for inclusion of design review. Provide updated information to R. Torres to include in the Project Report Summary [A. Nassiri]- Postponed
4. ASD and XSD to provide re-prioritization of the top five effort only (little to no M&S) projects to D. Ferguson [Beno, Nassiri] - Closed
5. Design review evaluation of the re-prioritized projects updates to be sent to R. Torres for inclusion in the Project Report Summary [Pile, Beno, Nassiri] – Open
6. Discuss ASD project proposals with management to determine status of projects [A. Nassiri] – Open

Agenda Topic Review of Minutes from September 18, 2013 SCB meeting

Minor corrections to the minutes were suggested. These corrections have been incorporated into the final meeting minutes posted on the web.

Agenda Topic Review of Open Action Items

Project 1713 has been postponed per ASD. All new and open action items associated with it have been identified as such. A. Nassiri will replace M. Borland as the primary ASD representative. J. Wang has been added to the SCB as an additional ASD representative. The revised SCB charter has been posted to the webpage. The Sector 35 strip project was discussed. J. Wang will follow up on this project. The reprioritization of the top five effort only (little to no M&S) projects was received from AES. They are as follows:

- Complete LN2 system upgrades
- Insertion Device Control Upgrade
- Gen 1 Upgrade
- Move from solaris to red hat linux
- Integrated work management system

Other divisions will follow up at next SCB meeting. This was further discussed in New Business. S. Davey provided A. Nassiri “submitted” and “draft” ASD project proposals. An “action items pending” email to effect SCB members was sent prior to this meeting.

Agenda Topic Review Project Report Summary Discussion

Updates to the project plan are reflected in the summary below.

Approved:

ASD P-1153 1m long SCU prototype magnet and SCU cryostat (90% complete) – Y. Ivanyushenkov: Per Emil Trakhtenberg, one designer needed for 2 months to complete the cryostat and another designer for 1 month to complete the magnet. Effort was reported from Green Sheet System.

ASD P-1154 X-ray BPM Enhancement (Decker/B. Yang) (36% complete). Ramanathan –Soon-Hong Lee will be working 75% on this project and the rest on Upgrade activities. B. Yang, N. Sereno!: In August and September of 2013, we performed several thermal transfer simulations and x-ray scattering calculations. We are now confident that we have a workable configuration for the Compton-scattering XBPM for canted undulator front end. More detailed simulations and x-ray scattering calculations are in progress to optimize the design geometry. We are in preparation of a tech note to document these findings. Mechanical design of the chamber and support structure is in progress. In September 2013, we estimate that we have made progress of 4% for the entire project. Effort was reported from Green Sheet System

XSDP- 482 Instrumentation of 1-ID-E Hutch for High Energy Diffraction (Benda) (48% complete): Den Hartog: will be impacted by the release of the 6 contract engineers. Impact not fully understood yet. Benda: Progress slowed during the month of September. However, with the recent addition of effort from Mike Fisher and Oliver Schmidt, the project could experience significant traction during the fall quarter. As of Oct. 15, engineering effort seems good but there is anticipation that the MBA lattice project, LCLS undulators or the contract engineer layoff will cause turbulence and continue to delay this project. In addition, designer effort has been extremely unreliable due to significant sick time and/or job reassignments.

AeroTech (43% complete): The progress is dependent upon design and delivery of a new precision high-capacity double arc rotation stage. Peter Kenesei is in communication with Huber on the design and specification of this item but there are significant challenges for the company. The arc defines the supporting table height and general design so design and procurement of the table cannot move forward until either an arc is ordered or determined to be impossible to build.

MTS Table (95% complete): No changes have occurred. A PUP continues in October and scientists do not want to touch the table at all. Tweaks or modifications will have to occur afterwards mid-October or so. Modifications are not very extensive. The drawing set for the table still needs to be released. It will be released in its initial configuration and a revision will need to be made.

Overhead Rail (37% complete): Progress has been limited to further meetings for collaboration and brainstorming on the design. Mike Fisher has been recently assigned to investigate the specifications of the overhead rail and feasible solutions. S1 staff (led by Jun Park) are currently evaluating vendors and bids for the conical slits manipulation system and a final selection could be made soon. This subproject is the most difficult of the entire 482 project as it requires integration with and forethought of the Hydra 2.0, MTS table and related E-hutch instrumentation.

Hydra 2.0 (8% complete): Recently secured effort from Oliver Schmidt to investigate this subproject. The staffing level of MED group is currently turbulent and its unknown whether Oliver will actually be able to make any progress before being reassigned to something else.

Very Far (90% complete) and SAXS Table (60% complete): Minimal change in status.

XSD P-1454 DOE Early Career Award: Vacuum System with Motion System - Den Hartog: will be impacted by the release of the 6 contract engineers. Impact not fully understood yet. SCB - Beno/Lang – would like this project to continue.

No updates from: SCB – J. Wang: Will follow up with T. Smith on updates.

ASD P-1253 Fundamental PAR RF Cavity Beam Tube Assembly (Smith) (37% complete)

ASD P-1254 Harmonic PAR Circulator (Smith) (93% complete)

ASD P-1373 Linac Transverse Deflecting Cavity (Smith) (22% complete)

ASD P-1374 APS New Electron Gun (Smith) (60% complete):

Projects on hold:

AES P-408 SR Vacuum Chamber Cooling Skid Exchanger Replacement (Swetin)

AES P-426 Process Cooling Water Flowmeter Upgrade (Swetin)

AES P-1173 Accelerator Server Upgrades (Sidorowicz) (60% complete) Due to the loss of funding there won't be any additional updates for August and September.

AES P-1174 X-Ray Network and Server Upgrades (Sidorowicz) (70% complete): Due to the loss of funding there won't be any additional updates for August and September.

XSD P-543 Quick XAFS Mono for 9-BM (Haljiti) (5% complete): SCB - Beno/Lang: XSD high priority. Funds will be available as soon as ANL works out the details on how to accept the Exxon funds. Change status to Provisionally Approved. Send out to GLs for effort commitment. Haljiti: Project on-hold pending available Exxon funding. Expecting funding from Exxon the first quarter. Hoping to get APS matching funds also in 2nd quarter by Dec. Den Hartog: will be impacted by the release of the 6 contract engineers. Impact not fully understood yet.

XSD P-546 Replacement of 11-ID EPS System and Beamline Diagnostics (Markovich) (5% complete) - M. Beno: Project on-hold pending available funding.

XSD P-547 High-Temperature Sample Environment (Haljiti) (50% complete): M. Beno: Project on hold pending available funding. Haljiti: Project on hold no change, no activities for Sept.

XSD 1097 High-Throughput Development for 11-ID-B (Haljiti) (40% complete) – Beno: Project on hold due to funding. DenHartog: on hold because we (MED) are laying off all (6) of our contract engineers effective Oct. 25. Other projects and tickets will also see an impact. Received commitment from GLs.

XSD P-1098 Engineering of modular Kirkpatrick-Baez mirror systems (65% complete) – Beno: Project on hold due to funding. Shu: Project on hold due to funding for the X-ray Optics Fabrication & Characterization – 1) procurement of mechanical components (\$120K) and 2) procurement of laser interferometry for each system (50K).

Provisionally Approved:

AES 1793 APS LCLS Undulator Development (Pile) - Pile: asked that the project be on provisionally approved status to be able to track effort. No plan has been submitted.

ASD P-1713 Sector 37 Scraper Upgrade - Yong-Chul Chae – Nassiri: Project postponed. Yong-Chul - We had a physics design/scheduling meeting (Y.Chae and J.Dooling (ASD-AOP), L. Moorison and Jie Liu (AES-MED) and J. Hoyt (AES-MOM) attending). The low-impedance physics design is 90% complete, the material selection is 50% complete. Jeff Dooling will continue to research a couple of more alloys. The engineers recommended to revise the installation schedule to September in 2014 instead of May. The recommendation was accepted and the new milestones were worked out. Group Leaders (Farnsworth, Den Hartog, Goepfner, Rusthoven) approved the requested resources - project schedule needs the approval.

XSD 508 11-BM Complete Assembly of Sample Changing Robot Hand (Chupas/Preissner) (47% complete) – Beno: Project on hold due to funding.

XSD P-1753 GISAXS Sample Changer (Upgraded Sample Environments for 8-ID-E) – SCB – Beno/Lang: Most of the M&S costs being funded by U of C. Change status to Approved. Group Leaders approved the requested resources (Joseph Strzalka, Requester, Mike Fisher, Project Manager). Den Hartog: Den Hartog: MED can (and is) supporting this project. Group Leaders (Farnsworth, Den Hartog, Goepfner, Rusthoven, Jemian) approved the requested resources.

Miscellaneous:

ASD 1293 Conversion of A:H4 Correctors to Skew Quadrupoles (50% complete) (Emery) – Draft Status. SCB – J. Wang – will follow-up with L. Emery to obtain more details on percent complete and hours provided to date. Emery Update: submitted project plan and mentions that the project is 50% complete. The "hours" (total of 1311 out of the 2397 planned) have been provided, but not sure that the groups have counted hours as accurately as the plan indicates. These baseline quantities are the best estimates that the MOM (and ASD-MD) groups have provided me after some of the work has been done. Engineering effort is from the ASD group for magnet measurement (ASD-MD, 4 hours per magnets, and we have 40 magnets), but not from AES groups. I entered now ASD-MD in cells for "Responsible Org."

Completed Projects:

AES 418 Replace Ion Pump Controller in PAR (Gagliano)

PSC P-1453 6-BM Beamline Installation (Erdmann) (100% complete) SCB - Beno/Lang – project is complete and should be closed. Den Hartog: I think there are a few loose ends but yes, you can close it out. We'll take care of those as tickets.

XSD P-1095 Upgrade to High-Energy Monochromators 11-ID-B,C (85% complete) – SCB - M. Beno: The project proceeded last fiscal year using the group's M&S. It is now finished and no further engineering is required. Please ask for final hours used and change the status to completed.

Haljiti: After initial testing, we have established that the upgrades and improvements implemented at 11-ID-B during this shut down have yielded a factor of 15 increase in intensity at the sample position at our "standard" X-ray energy (311 reflection, ~58 keV). Moving forward, a similar mono bender will be installed for 11-ID-C in the next shutdown. The bender assembly and necessary infrastructure are ready to go (having been set up in parallel with the 11-ID-B components during this shutdown). As of today, all components in the 11-ID-C station have been moved to the most outboard position possible (shifting the E from the shoulder of the 10th harmonic towards the 9th harmonic) resulting in a 30% increase in intensity. We are exploring the possibility of moving the beam transport (through B-station) further outboard so that 11-ID-C will be directly on the 9th harmonic.

New Business

Scope versus using the ticket system for the IEX project was discussed. J. Maclean to follow-up with P. Den Hartog.

The proposed AES Non-Upgrade Projects for FY 14 – No or little funding required were discussed. Other divisions to provide their prioritization at the next SCB meeting.

Next Meeting: November 20, 2013, 401/B4100, 11:15