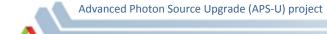
Update on APS Upgrade

George Srajer

Argonne National Laboratory

APS Users Monthly Operations Meeting
April 25, 2012



Outline

- 1. Hiring update
- 2. Upcoming reviews
- 3. Preliminary Design Report schedule
- 4. Roadmap scenarios update
- 5. Budget and effort

1. Hiring Update

Project Manager: Jim Kerby (May 14, 2012)

 Deputy Project Manager and Associate Project Manager for Integration:
 Tom Fornek

Deputy Associate Project Manager for Accelerator (May 14, 2012)

Tom Mann

Document Preparation: Elizabeth Freer

Quality Assurance: Mike Skonicki











Jim

Tom Fornek

Elizabeth

Mike

Tom Mann

2. Upcoming Reviews

• Status Review by Lehman: June 13, 2012

- Assess readiness for CD-2

Director's review: September 11-13, 2012

• CD-2 Lehman review: December 4-6, 2012

Upcoming Technical Reviews

Accelerator

- Machine Advisory Committee: May 1-2

- SPX: August 15-16

Beamlines

- Diffraction: August 14-16

- Imaging: July 17-18

- Spectroscopy: July 19-20

- Ultrafast: August 7- 8

Front Ends and Enabling Technologies

- Standard components and FE: July 24

Status Review Agenda

Draft AGENDA

Advanced Photon Source Upgrade (APS-U) Status Review June 13, 2012

Time 7:30 8:00	Duration 0:30 0:15	Topic Executive Session Welcome	Speaker Lehman Isaacs/Stephenson		
8:15	1:15	Project Overview and Management	Srajer/Kerby/Pile		
9:30	0:45	Accelerator	White		
10:15	0:15	Break			
10:30	1.00	Beamlines	Haeffner		
11:30	0:30	Front Ends etc.	Ramanathan		
12:00	1:00	Executive Session Working Lunch			
1:00	0:45	Cost/Schedule/Funding	Bailey/Pile		
1:45	1:00	Executive Session			
2:45	0:15	Break			
3:00	0:30	Closeout			
3:30		Adjourn			

3. Required Documents for CD-2 Project Baseline

- Project Implementation Plan (PIP)
- Project Execution Plan (PEP)
- Quality Assurance Plan
- Hazard Analysis Plan
- Preliminary Design Report (7 Chapters and ~ 700 pages)
- Configuration Management Plan
- Risk Management Plan
- Acquisition Strategy
- Integrated Safety Management Plan
- Value Management Plan
- Security and Vulnerability Assessment Report
- Requirements Management Plan
- National Environmental Policy Act (NEPA) Documentation

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Preliminary Design Report Outline

APS-U Preliminary Design Report Outline

Preliminary Draft

Draft 4/23/2012

Section	Title	WBS Element	Responsible Person	Pages	Notes and Questions
L	Project Overview		Jim Kerby		
.1	Executive Summary		George Srajer	1	
_	total desired				
2	Introduction		George Srajer		Discuss including an interdependency table
	Project scope overview		George Srajer	1	
	Scientific Program Overview		George Srajer	1	
	Facility Overview		George Srajer (?)	1	
	Capabilities and Performance Goals (KPPs)		George Srajer	3	
.2	Project Management	U1.01	Geoff/Kathy	1	
	Project Organization and Governance	0 2.02	Project Manager (GP)		Include high-level org chart? (Kathy Bailey)
	Oversight and Advisory Functions		Kathy Bailey	2.5	
	Work Breakdown Structure (to Level 3?)		Kathy Bailey	3	
		U1.01.01.03	Kathy Bailey / Jeff Chan	5	
	Resource Support from ANL (MOAs)		Kathy Bailey	2	
	Other Participating Institutions/Agencies (MOUs)		Kathy Bailey	1	
	Requirements Management and Controls		Tom Fornek	2	
.3		U1.01.05	Elizabeth Freer	0.25	
	Project Execution Plan	-		0.5	
	Project Implementation Plan			0.5	
	Configuration Management Plan			0.25	
	Risk Management Plan			0.25	
	Value Management Plan			0.25	
	Cost, Schedule, Staffing				
.1	Project Cost		Kathy Bailey		
	Summary Cost Estimate		Kathy Bailey / Pile/Kerby	1	
	Cost estimate by WBS Element		Kathy Bailey / Pile/Kerby	3	Level 3?
	Basis of Estimate		Kathy Bailey / Pile/Kerby	2	
	Escalation		Kathy Bailey / Pile/Kerby	0.5	
	Contingency and Management Reserve		Geoff Pile / Jim Kerby	0.5	
.2	Project Schedule		Project Manager/Director	5	
	Summary Schedule		Kathy Bailey		
	Var. & #illarkaman		Vetha Beller		

4. Roadmap Scenarios: Follow Up Meetings and Feedback

- Meeting with SBC-CAT and BIO-CAT Directors: March 15
 - Both favor leaving BIO in sector 18 and SBC in sector 19
- SAC Meeting: March 20-21
- Mark Schlossman and Kent Blaise (LSS): April 9
- Microscopy Group: April 11
- Steve Wang (TXM): April 19
- Jonathan Lang and Doug Robinson (MD): April 19
- Barry Lai and Stefan Vogt (ISN, XSD mFluor): April 19
- Stakeholders Committee: April 23
- Alan Goldman: April 27



Revised Scenarios Summary

Program	BASE	Option 1	Option 2		
	J	0	J'		
DCS	35-ID	35-ID	35-ID		
ISN	9-ID-2	9-ID-2	32-ID-2		
MS-S	2-ID-2	2-ID-2	2-ID-2		
RIXS	27-ID	27-ID	27-ID		
S3DD micro	34-ID-2	34-ID-2	34-ID-2		
S3DD nano	34-ID-1s	34-ID-1s	34-ID-1s		
WFI	20-ID	20-ID	20-ID		
XIS	28-ID	28-ID	28-ID		
ASD-D	30-ID	30-ID	30-ID		
ASL	25-ID	25-ID	25-ID		
BCDI	32-ID-2	9-ID-1	9-ID-2		
BIO	18-ID	18-ID	18-ID		
MD	2-ID-1	32-ID-2	2-ID-1		
SBC	19-ID	19-ID	19-ID		
XSD LSS	28-ID*	28-ID*	28-ID*		
XSD mDiff	34-ID-1s	34-ID-1s	34-ID-1s		
XSD mFluor	9-ID-1	2-ID-1	9-ID-1		

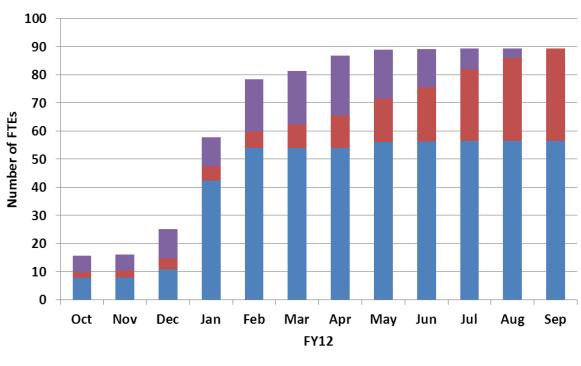
NB: It is desirable for HSI to move from 32-ID



5. Budget and Effort

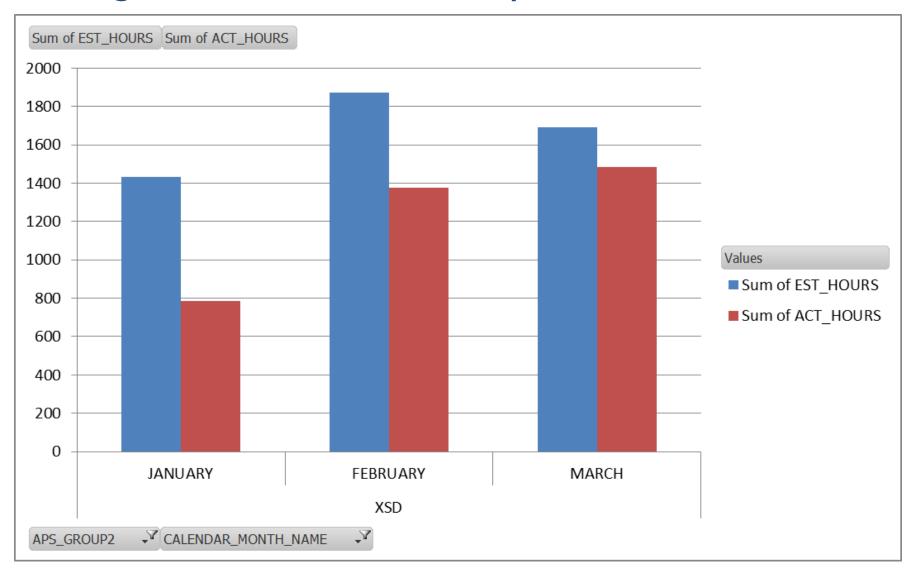
FY-10	FY-11	FY-12	FY-13	FY-14	FY-15	FY-16	FY-17	FY-18	Total
\$1M	\$7.5M	\$20M	\$20M	\$38M	\$69.5M	\$103M	\$99M	\$33M	\$391M

APS Upgrade FTEs





Budget and Effort: Example





Advanced Photon Source Upgrade (APS-U) project

Summary

- Project Team adequately staffed
 - Excellent mix of talents
 - Looking for a Finance person
- Busily preparing for upcoming reviews
 - Status Review: June 13
 - Director's Review: September 11-13
 - CD-2 review: December 4-6
- Roadmap scenarios converged
- Project is picking up steam