

**NSLS-II Experimental Tools (NEXT) Project
Monthly Report – April 2012**

DATE: submitted on May 17, 2012

1. Project Schedule

CD-0 (Mission Need):	Planned: 3Q10	Actual: May 27, 2010
CD-1 (Alternative Selection):	Planned: 4Q11	Actual: Dec. 19, 2011
CD-2 (Performance Baseline):	Planned: 1Q13	Previous: 4Q12
CD-3 (Start Construction):	Planned: 4Q13	Previous*: 2Q13
Early Project Completion:	Planned: 4Q16	Previous*: 4Q15
CD-4 (Project Completion):	Planned: 4Q17	Previous*: 3Q16

Short term schedule

• DOE CD-1 review	Planned: Aug. 30–Sept. 1	Actual: Aug. 31–Sept. 1, 2011
• CD-1 approval	Planned: Oct. 2011	Actual: Dec. 19, 2011
• ALD's CD-2 (PDR) review	Planned: Aug. 7-9, 2012	Previous*: Apr. 4-5, 2012
• DOE CD-2 review	Planned: Sep. 11-13, 2012	Previous*: Jun. 5-7, 2012

*Re-planned and re-scheduled to accommodate new funding profile

2. Technical Objectives: 6 beamlines installed and commissioned without X-ray beam

Planned NEXT beamlines

ESM -- Electron Spectro-Microscopy
 FXI -- Full-field X-ray Imaging
 ISS -- Inner Shell Spectroscopy
 ISR -- Integrated In-Situ & Resonant X-Ray Studies
 SIX -- Soft Inelastic X-ray Scattering
 SMI -- Soft Matter Interfaces

3. Assumed Funding Profile

(\$M)	FY11	FY12	FY13	FY14	FY15	FY16	Total (\$M)
OPC (CDR)	\$3						\$3
TEC (Design)		\$3	\$2				\$5
TEC (Fabrication)		\$9	\$10	\$25.9	\$21.6	\$15.5	\$82
Total Project Cost (\$M)	\$3	\$12	\$12	\$25.9	\$21.6	\$15.5	\$90

4. Progress:

- Preliminary design: effort continues, including preparation of the required documents for CD-2.
- Project scope and schedule: revised based on the latest funding profile guidance. The overall project completion date will be delayed by one year. In order to allocate sufficient level of contingency, three changes to the cost estimate have been made:
 - one of the two branches of the ESM beamline has been removed from the current plan
 - the M&S for one of beamlines, FXI, has been moved to scope contingency

- commitments from Partner User groups have been identified to provide up to \$1.5-2.5M of project scope via Partner User arrangements and are in the process of being formalized.
- **Staffing**
 - **Group Leaders:** All 6 permanent beamline Level 2 Manager positions have been filled and are in place.
 - **Beamline scientists:** 6 positions will be posted in spring 2013, with the goal of filling them early in FY14.
 - **Mechanical Engineers:** Four mechanical engineering positions are in place as described previously. Interviews will continue for the fifth, and final mechanical engineering position.

5. Issues and Risks:

- MOUs between the Photon Sciences directorate and identified Partner User groups need to be finalized prior to CD-2 review.

6. Action Items and Decisions:

- Finalize the proposed baseline cost and schedule by the end of May 2012 and begin EVMS tracking.
- **Staffing**
 - Fill the remaining mechanical engineering position by the end of FY12.
- Generate and sign MOUs between the Photon Sciences directorate and identified Partner User groups prior to CD-2 review.