

Charge to the NSLS-II Project Advisory Committee February 8-9, 2011

During the year 2010, the NSLS-II project made an excellent progress on construction of the Conventional Facilities and production of components for the Accelerator Systems. Three DOE Lehman reviews were held in 2010 and all concluded satisfactory assessments for the Project's performance. The Preliminary Design of the six project beamlines was completed and reviewed and an Accelerator Systems Advisory Committee meeting and a Conventional Facilities Advisory Committee meeting were also held in October 2010.

The Project will be over 45% complete while maintaining the baseline parameters with reasonable cost and schedule contingencies available. The project has continued to analyze remaining risks and update plans to add scope beyond the baseline to maximize the scientific productivity of the facility.

The planning for beamlines and user capabilities for the entire facility is very important for achieving the maximum scientific productivity as soon after project completion as possible, and for ensuring a smooth transition from NSLS to NSLS-II. The Photon Sciences Directorate, a sponsoring directorate for the NSLS-II Project, executed a comprehensive user community engagement and peer review process to identify, evaluate, and select beamlines (beyond the project scope) to populate the facility. In addition, the Directorate implemented a new organizational structure which enable more cost effective resource planning and improve workforce planning.

The primary goals for 2011 are to continue to keep the Project on schedule and on budget while ensuring safety, to execute assembly and installation of the accelerator systems, and to finalize plans to successfully transition from construction to operations. In this context, the PAC is kindly requested to evaluate and make recommendations on the following topics:

1. **Technical Progress:** Review the overall technical progress and assess the appropriateness of the project execution plans for meeting performance, cost, and schedule goals.
2. **Safety Management:** Review adequacy of the safety program and whether it is being fully integrated and effectively managed.

3. Production, Installation, Start-up and Commissioning: Assess the plans for production, assembly, and installation of the accelerator systems and 6 project beamlines and plans for startup and commissioning.
4. Risks and contingency spend plan: Are the Project's risks being managed effectively and the contingency adequate for the remaining risks?
5. Photon Sciences Directorate Portfolio and Planning: Assess the appropriateness of the contingency spend plan and facility transition plan in order to ensure the maximum scientific productivity upon project completion.

A review report is requested to be sent to the BNL Laboratory Director by March 11, 2011.