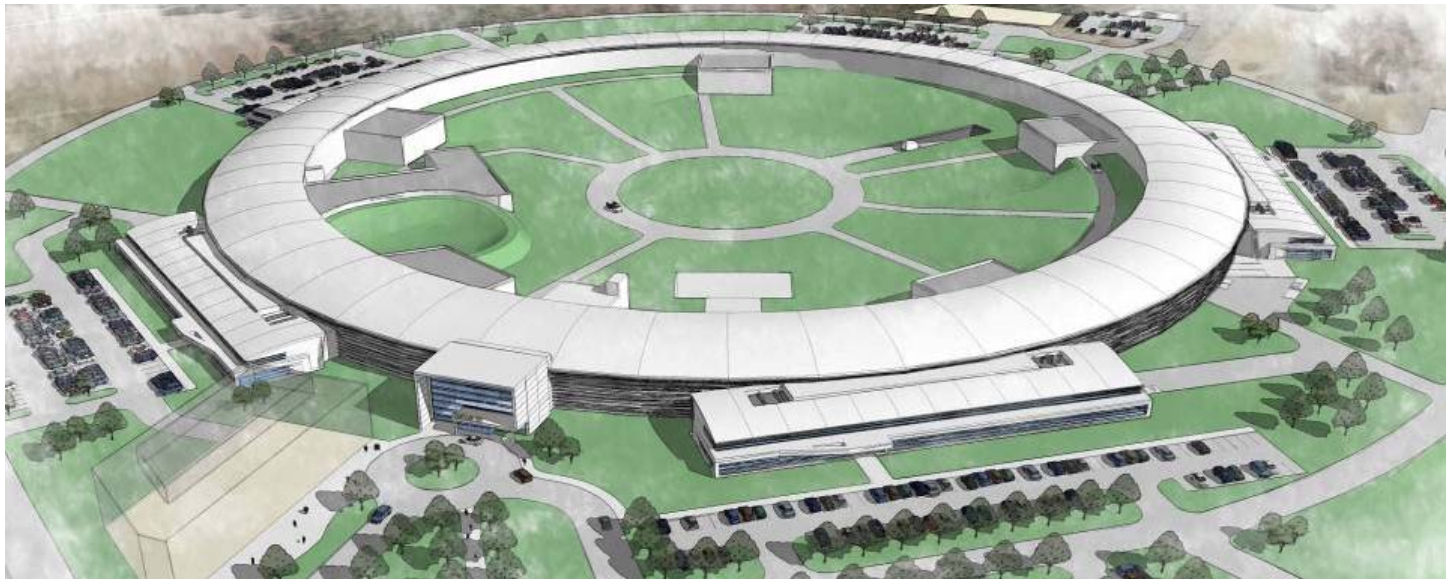
Response to May 2007 EFAC report



J. Hill, Division Director
EFAC October 4th 2007

Issues Tracking

- The project has hired a Quality Assurance Manager, Chris Porretto who has responsibility for tracking all issues raised by the advisory committees.
- For each recommendation there is an opening date, an assigned owner for the action item, and a response. The issue is tracked until it is closed.
- The resulting report from the May 2007 EFAC meeting is available to you on the EFAC web page for that meeting.

  http://www.bnl.gov/nsls2/committees/EFAC/meetings/051007.asp

- This is being done for all major reviews and Advisory Committees.

Item	Response	Status
Covered walkway	Not currently in the base scope. Will be added if cost performance and contingency allow. Can be added at any time.	OPEN
Office space for NSLS-II mgmt	A third floor to the Ops building is being retained as an option in the contract.	CLOSED
LOB programming, parking	Straight layout of LOB is current design. Parking has been increased to 100 spaces. Double doors provide access to expt. floor. Programming of lab vs office space is flexible in given LOB. One LOB is left as a shell.	CLOSED
Extra-long straight sections	The potential for 3 extra-long straights (up to 18m) has been retained. Implementing these will come at t he expense of the neighboring straights and will maintain a constant circumference. Details will be studied following CD-2 review.	OPEN

Item	Response	Status
Canted wigglers	Canted wigglers are being considered in the design. Impact on the emittance is expected to be less than 15%. Technical difficulties associated with the large fan are being studied. Fine tuning of the canting angle is still being performed.	CLOSED
Stability of long beamlines, Spring-8 collaboration	A study was made of vibration issues at the 1 km BL at Spring-8. Analysis is ongoing to understand and correlate the motions. A follow up visit is being tentatively discussed.	CLOSED
PX beamlines and Life Sciences	Seriously considering opening a position of Deputy Director for Life Sciences. Responsibilities would include strategic plan, and interaction with users and funding agencies	OPEN

Item	Response	Status
BATs: consider awarding them with beamtime	Considered this carefully and had many discussions with DOE, existing users and other facilities. Decision is not to award preferential access beyond the commissioning of BL. BAT members can become Partner Users if they make additional contributions.	CLOSED
NSLS-NSLS-II transfer	Job description for transition mgr is presently being written, to be filled as soon as possible. Discussions have been held with existing users, e.g at July workshop and individually. Transition plan is being developed. BATs will be required for all BLs (Kao).	OPEN
Fund FEs from project	There is no room in the project to fund FEs for transferred beamlines. Actively working to provide operating funds as early as possible.	CLOSED
Meet with PRTs	Discussions have been held with a number of PRTs and are ongoing.	CLOSED

Item	Response	Status
Radiation damage to IDs	Studies in this regard are already underway. Features of vacuum chamber at other facilities that aggravate this problem have been identified and will not be duplicated. Beam loss monitor is envisaged to aid in diagnostics.	CLOSED
R+D on IDs and beam stability	There are plans for a magnetic measurement lab. Impact of realistic IDs with realistic errors on dynamic aperture and beam lifetime are ongoing studies.	CLOSED
Impedance calculations on IR mirror	These are planned as part of the project scope. They will be done at the appropriate time.	CLOSED
Heat load issue with slotted mirrors	Slotted mirrors are a standard technique. In-vacuum cooling should be avoided. This issue needs to be looked into further.	CLOSED
Revisit slotted mirror to allow for UV extraction	Current activity is focused on the impedance calculations, which is most relevant to acc. design. Details of slot are deferred til later in project.	OPEN

Item	Response	Status
IR Mirror blackening	Mirror blackening as an issue has receded as ring vacuum and mirror quality has improved. Retractable design allows for non-standard orbits. Thermal sensors will prevent beam hitting the mirrors (dumping the beam with excessive temperature rise).	OPEN
Interference between IR and 3PW	Presently no interference is anticipated. Detailed FE designs are currently being developed.	CLOSED
Crossing of IR with x-ray BL	We will develop a design for this, once the adjacent FEs are reasonably well defined.	OPEN
Consider several IR locations around the ring	There is now provision to extract mid-IR from any dipole.	CLOSED

Item	Response	Status
Detector R+D should be in project scope	There is a major BNL-based proposal for basic detector R+D. NSLS-II fully supports this and anticipates taking advantage of it. (Siddons, talk).	CLOSED
MLL milestones	This is a legitimate concern. Milestones are being developed. Hanfei Yan has been hired. He will present tomorrow	OPEN
R+D needs for APS access	Preliminary discussions have begun for arrangements with the APS in this regard.	CLOSED
EFAC requests presentations 1 day prior	Well, I tried….	