

DOE-NCSX Monthly Teleconference, October 31,2000

On the teleconference were Warren Marton (DOE-OFES), Greg Pitonak (DOE-PG), Jim Lyon (ORNL), John Schmidt (PPPL), Hutch Neilson (PPPL), and Bob Simmons (PPPL)

OFES Report (Warren)

Warren reported on his views on the new DOE Project Management Order 413.3 (signed Oct 13th) and his discussions in OFES and the approaches he is pursuing. He had already talked to Lehman's people concerning when his people want to get involved. Lehman indicated that he would hold a full blown Validation Review/Lehman Review at the time that the Project was ready to "baseline" its cost and schedule (input to CD-2 under the new Order). This will be in the May, 2002 time frame (to support a FY2004 budget submittal) in order to permit "physical" construction to start in FY2004.

Warren's view is that an approved Mission Need document (Warren reiterated that he has all he needs for the Mission Need Document),, a successful PVR in the March-April time frame, and a low-profile Project Validation meeting in May 2001 will provide a sufficient basis for PED. funding in 2002, including Title I design and prototyping if we have the money to do it. He thinks we could start Title I early in FY2002. In FY2003, we would do Title II, long-lead procurement, and continued R&D. As with all projects, Conceptual design, Title I, and Title II could all overlap.

A discussion followed on several points: It is PPPL's understanding (based on discussions at the recent OEMC Workshop on Project Management) that OFES (or perhaps even at the Science level), a line item needs to be included in the FY2002 to permit expenditure of PED funds. Such a line item is not in the current version of the budget, so something has to be done to include this. Warren thought that a Construction Project Data Sheet (CPDS) would be needed for NCSX in order to get PED funds. Greg's experience (based on DOD experience which seems to be the template for the new DOE Order) is that a CPDS would not be required. Warren indicated that he would clarify this point with Jeff Auchmoody. He will also discuss this with Jim Carney of Lehman's shop that was a key member of the DOE team that developed the order.

Cost Range - the DOE order would seem to indicate that a cost range is needed for the Mission Need Document and for the PVR. Greg suggested that perhaps only identifying NCSX as being in the DOE Project range of \$20M-\$100M (sets up certain approval/review requirements) might suffice. Warren seemed to

resonate with this approach and would discuss it further in OFES.

It was agreed that a rough plan showing the major milestones/critical decisions (CDs) would be most helpful. A first draft of this plan is attached. In addition, I have included a page from the draft Project Management Manual that provides additional detail to the newly approved order to show the sequence of design, CDs, major milestones, and key documentation needed. Hopefully, these two documents will prove useful in future discussions and planning.

APS Feedback (Hutch and Jim)

Both Hutch and Jim reported on positive feedback from APS on both NCSX and QOS. Most discussions revolved around poster sessions, so there was a lively interchange of ideas. It was most encouraging to have folks "volunteer" to get involved in the project on their own funds. NCSX Status and Plans (Hutch) Hutch summarized the recent status of the design progress and the reasons for moving the PVR to the March/April time frame. Work is proceeding on the engineering design of the modular coils and physics is continuing to work on the physics of both the modular and saddle coils to develop a reasonable comparison position. Currently, the physics of the modular coils is better developed, but work is proceeding on bringing up the physics design of the saddle coils. In engineering, the saddle coil design is more mature, and the focus is currently on the modular coils. It is anticipated that a coil configuration selection based on both physics and engineering assessments will be made in the December time frame. QOS Status (Jim)

Jim indicated that QOS selected a reference coil and plasma configuration in September and is proceeding to develop the design of this reference configuration. With the NCSX PVR being moved, the QOS review is now planned in April. His discussions with John Willis indicate that it will probably be a combined PVR/DCSR. The FWP, Sherwood Meeting, and ORNL Theory Meeting scheduled in late March - April, present a challenge for scheduling both the NCSX and QOS reviews.

Needs for PVR and Project Validation Review (Warren and Bob) Because the PVR has been moved and additional discussions concerning how to implement getting PED funds in FY2002 are required, it was agreed that this topic would be deferred.

Review of Past Action Items (Bob)

All the actions items from the past telecon in September were completed. However, the Mission Need Document has still not been approved, so this action should remain open (Marton/OFES).

Next NCSX Project Meeting will be held November 13-14 at PPPL. As with previous meetings, the meeting will be held

electronically with presentations on the web and use of teleconferencing using the PPPL bridge.

If you have any corrections to these minutes, please get back to me.

Summary by:
Bob Simmons