

NCSX-DOE Monthly Meeting for July 11, 2000

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

OFES Report (Warren Marton) - Warren reported that the House report on Fusion seemed to support the philosophy of the new DOE Project Management Order that delays "baselining" of the cost and schedule until well into the Title I (Preliminary Design) phase. While this is an encouraging sign and could open the window for Title I to start in FY2002 vs. FY2003, the Senate version still needs to be seen. Greg pointed out that this new DOE order follows the model of DOD and will require DOE to set aside "design funds" for new projects. Warren opined that this would probably be done at the program level initially, but that no plans were under development yet.

Validation Report Status (Warren Marton) - Warren reported that OFES signed off on the NCSX validation report last Friday and that Lehman's office has the report for distribution. Greg will follow up with Lowell Ely to get a copy for PG and the project.

Mission Need Documentation (Hutch Neilson, Jim Lyon, and Warren Marton) - A general discussion on the status of the development of the Mission Need Justification documentation (needed for CD-0 approval) ensued. All concurred that the FESAC report of last year served as the "external review" needed for CD-0. A question came up on whether two separate Mission Need Justifications (one for NCSX and one for QOS) would be needed or whether a combined "Compact Stellarator Program" Mission Need would suffice. Chuck indicated that the Auburn CTH was in the process of being funded over the next 2-3/4 years at an approximate annual funding level of \$500K. Warren was of the opinion that two separate documents would be needed, but that each should contain a section that clearly lays out the logic and synergism of NCSX, QOS, and the Auburn CTH in the overall national compact stellarator program. Hutch reminded folks that the idea of multiple machines follows the logic endorsed by FESAC as the way an alternate program should be developed. It was agreed that NCSX will plan on submitting a draft for comment in about a month and then for DOE approval in September to meet the dates in the NCSX Validation Report.

LLNL Participation in the Compact Stellarator Program (Hutch Neilson) - Hutch indicated that LLNL had recently indicated interest in participating in the compact stellarator program, especially in the area of divertor physics. NCSX is supportive

of this initiative. LLNL is attempting to obtain some internal LLNL funds to support this effort in FY2001 and is expected to contact OFES in the near future to explore DOE funding starting in FY2002.

Review of Action Items (Bob Simmons) - Bob reviewed the action items and only two remained unresolved. Both were answered by Jim Lyon: Stellarator Reactor Studies - Jim had contacted Bill Dove (DOE-OFES) to lay the groundwork for the compact stellarator team to develop a configuration for a stellarator reactor that could be used by the ARIES team. While Bill was supportive in principle of this idea, the problem is one of funding availability. If ARIES is constrained to the "base" budget, then there will not be sufficient funds to accommodate this in FY2001. However, should incremental funding become available, Bill would explore this further. Review of QOS - Rob Goldston (PPPL) and Bill Madia (ORNL) have sent a letter to Anne Davies which lays out a logic for incorporation of reviews of QOS. In the NCSX PVR in December, mention would be made of QOS and how it fits into the overall compact stellarator program, but it would not be reviewed at that time. The current plans are to hold a QOS review several months later (February-March time frame) and before the NCSX conceptual design status review planned later in the spring to support the FY2003 validation process.

NCSX Meetings - the next NCSX Project Meeting will be held this week (July 12th -13th) and the NCSX PAC meeting will be held at PPPL on August 1st and 2nd.

Summary by:
Bob Simmons