Minutes of the IPT Meeting of Mar 24, 2004

Attendees:

DOE-PAO G. Pitonak, L. Stegena

DOE HQ G. Nardella, S. Barish, K. Chao

ORNL J. Lyon

PPPL H. Neilson, W. Reiersen, J. Levine, J. Schmidt, R. Templon, J.Malsbury, R. Strykowsky, R. Hawryluk

1. DOE news (Gene/Sam) FY06 budget process underway. FESAC meeting next week. Briefing for OFES this afternoon on EVMS status thru Feb.

- 2. Safety Management (Hutch) Moving autoclave this week from RESA to TFTR test cell. Coil winding trials continue in basement. Facility Readiness Reviews scheduled in the near future for winding facility and coil test facility. Need to define requirements for lab safety board actions related to startup of these facilities. (Action: Jerry Levine)
- 3. Planning for CD-3 (All) IPT reviewed Hutch's summaries (attached) of planned review activities related to upcoming sequence leading to CD3. IPT agreed that logic was appropriate and later confirmed with OFES management that it was acceptable with them. Need Lehman's confirmation. (action: Gene and/or Greg)
- 4. Lehman review charge (Hutch) Discussed as part of item 3 above. Need to confirm the approach and draft agenda with Lehman as noted above.
- 5. Project performance thru February & PARS issues (Ron) PARS reporting will begin this month with entry of cumulative April 03 to Feb 04 data. CPI=0.96 and SPI=0.98. Main cause for variance is MCWF design activities being underestimated. Much additional effort required in materials analysis and geometry reconciliation. Additional resources added to maintain FDR schedule and work is on track. Total design ~35% complete. Joule milestones 1 & 2 met and Joule 3 is expected ahead of the June 2004 date. Level 3 milestones identified for additional control indicators.
- 6. ECP status and history (Greg)

ECP-04-004 approved by OFES in early March and ECP-04-005 approved locally in mid March. No other ECP's in the mill at this time.

7. Management reserve status & planning (Hutch/Ron)

At present \$2.2M of management reserve is available in FY2004 and the project is preparing a plan to most efficiently use it to accomplish non-CP work. All CP activities are staffed and ramping up. We need to analyze other remaining work for opportunities to advance schedules and distance as much as possible from critical path. Project recommendation expected by 4/2/04.

8. Project technical progress/issues (Hutch/Wayne)

Design activities continue in support of the May FDR's. Three areas of focus are continuing: - modular coils require extensive materials property testing and analysis due to composite configuration. - finalization of vessel and port geometries is near, but also involved extensive

effort and analysis - large volume of preparation and paperwork required for upcoming reviews and

CD3 activities.

Materials properties testing has started. A dedicated weekly meeting series has been started to review results and interpretation. Composite material + complex geometry makes conductor deflections difficult to predict.

Final winding pack configuration and conductor spec established in recent peer review. Planned twisted racetrack coil will provide the practical tests needed to definitively determine achievable tolerances.

Vacuum vessel port configuration established through intense activity by stellarator core engineering, diagnostics, and physics teams, and confirmed by peer review on March 12. Addresses key PDR recommendation which noted that diagnostics interfaces needed more work. The number of ports increased in number and complexity to meet established requirements. The cost impacts are being analyzed.

EIO casting looks good so far. Has undergone heat treatment, dimensional, and radiographic inspection. Twisted racetrack casting is ready to ship to machine shop. JPP finished flow solidification analysis and are starting to fabricate the mold.

Major Tool vacuum vessel prototype fabrication finished, but have experienced delays in leak checking. Rohwedder is forming panels. Both VV prototypes expected to be delivered by mid-April. VV and MCWF procurement evaluation boards are meeting and developing selection criteria.

We are about to start building the winding facility in the test cell this week. Coil test facility construction is coming along.

Schedule of peer reviews from now to FDR has been developed. Technical deliverables have been defined by Wayne & Brad. Main issue: good plan, adequate resources, but tight schedule to produce a large volume of deliverables.

- 9. OMB 300 requirements (Gene) We need to complete section 1.H.4 regarding performance indicators. A formal call for OMB300's is expected soon with new guidance possible. Recommend that we put this effort on hold until new guidance is released.
- 10. Next meeting Tuesday April 13, 2004 at 11AM.

PPPL participants will meet in the DOE conference room.

Call-in number for 4/13/04 is 301-903-6489.

Thanks for your participation.

Greg