

NCSX IPT Meeting Minutes

The minutes from the NCSX IPT meeting of Tuesday, July 31, 2007 at 11:30pm are as follows:

Attendees: DOE-PSO: J. Makiel, G. Pitonak, A. Indelicato

DOE HQ: B. Sullivan, K. Chao

ORNL: J. Lyon

PPPL: R. Templon, H. Neilson, J. Malsbury, J. Levine, R. Hawryluk
J. Anderson

1. DOE News (Barry/ /Kin)

- a) HQ is in the process of drafting a charge letter for the Physics (Stellarator) Review that will follow the SC Project Review. The Physics Review will take place in September or perhaps later.

2. Safety Management (Jerry)

- a) There were no new NCSX related safety incidents.

3. SC Project Review (Jeff/Barry/Hutch/Greg/Kin)

- a) The Review is on for Aug 15th-17th. The Project will post materials on the NCSX website by August 3rd.

4. Project technical progress (Hutch)

The following provides a brief status on the major components:

MC Winding

Thirteen modular coils have been potted (vacuum pressure impregnated-VPI) to date. Winding operations are proceeding well. There has been a reduction in overtime to 'free-up' budget to support other tasks since winding is no longer critical path. Technician resources are being shared among modular coil winding and field period assembly work.

Field Period Assembly

The Field Period (FP) Assembly effort continues as follows:

Station #1 (VV prep - diagnostics, h/c tubes)

- a) Proceeding well with no noted issues.

Station #2 (mating modular coils together)

- a) The design for the inboard region of the modular coil interface within a field period will be a welded joint. A developmental weld trial occurred. Permeability was acceptable. Preparations are in progress to perform a trial weld using two actual winding forms, to check distortion.
- b) The outboard (or remaining) areas of the modular coil flange will be bolted as per original design. An FDR was successfully accomplished;
- b) A PDR on the C to C interface is scheduled in about a week.

TF Coils

- a) Corrective actions addressing the resin-rich areas of epoxy were made. The first TF coil will be delivered in about 1 week;
- b) Corrective actions addressing the delaminating of the wedge casting from the coil were made to the second TF coil. The addition of "pusher" bolts will aid in the removal of the remaining coils from the potting mold.

Design Reviews

Several design reviews as noted above have been successfully completed or continue to occur in the near future.

5. Procurement (Rod)

- a) Approximately \$56K of assembly parts are in the procurement process;
- b) The Project and Control Office is purchasing more software seats of Primavera;
- c) Drop this. **The issue was favorably resolved**

6. Review of critical issues (Jeff)

The Project has now deployed the use of a Risk Registry to track issues. The most notable issues impacting critical path as noted in the last IPT are updated as follows:

- a) Modular coil interface regarding the inboard region of 'within field period' flange interface. FDR was performed and developmental weld trials occurred

- b) Modular coil interface regarding the inboard region of C to C flange interface. A PDR is schedule in about 1 week.

7. Planning for the next 6 months (Jeff/Hutch)

With the upcoming project re-baseline, planning for the next 6 months is undergoing development. However the following activities will continue:

- Modular Coil winding;
- Field Period Assembly Stage #1, and Stage #2 including developmental trials for regarding interface design;
- Off-site fabrication of TF coils;
- Prepare a bottoms-up estimate for remaining work and documentation to support re-baseline activities.

Upcoming Level II milestones are as follows:

- A new schedule of level I and II milestones are proposed for the Project as part of the re-baseline package.

8. Project performance through April (Jeff)

Costs (end of June) = \$68,874K. July costs are not available yet.

The project continues to be been graded “Red” because the Project’s baseline is no longer deemed credible. It was determined that the Project should continue to formally track against the existing baseline, as per ECP53, at least until the SC Project Review in August or until the end of the fiscal year. A determination will be made thereafter as whether to continue with the existing baseline, or track against the proposed baseline. In the interim, the Project will informally track against the proposed baseline as well as the current approved baseline.

9. ECP status (Jeff)

The following are current and anticipated Engineering Change Proposals (ECPs) that require DOE approval:

- a) There are currently no ECPs pending DOE approval. An ECP will be developed to support the project’s re-baseline in late summer/early fall. A draft ECP will be examined at the upcoming SC Project Review on August 15th.

10. Planned IPT meetings (and other events) are as follows:

Aug 15th - 17th Next NCSX SC Project Review
Aug 28th Next IPT Meeting at 1:00pm (**note new time**)
TBD Physics (Stellarator) Program Review
TBD OECM Re-Baseline Review