

NSTX-U Weekly Report (Dec. 14, 2012)

NSTX-U is in the Upgrade Project outage in FY 2013

Stanley Kaye (PPPL) participated in the ITPA Coordinating Committee/IEA Joint Experiment meeting which was held in Cadarache, France on Dec. 10-12. In attendance were ITPA chairs, ITER IO representatives and representatives from the experimental projects participating in ITPA Joint Experiments and Activities. During the meeting, there were reports on the status of ITER construction from Motojima, and an update on the ITER R&D needs from Campbell. ITPA chair presented results of the Joint Experiments/Activities from 2012, and the plans for these for 2013. These were discussed by the group, and each project representative committed the level of involvement of the project to each JEX. There were also targeted discussions on the ITPA groups' assessment of whether installing the tungsten divertor from Day 1 presented any risk (and the answer was not enough of one to warrant a change in this plan), and there was a special report from Loarte on the cross-Task Particle Transport Working Group. (S. Kaye)

Engineering Operations (A. von Halle, C. Neumeyer)

NSTX Upgrade construction activities continued with the successful load testing of the Bay J-K Cap lift beam after modifications to reduce torsional deflections. Trial fit-ups of the J-K Cap on the vessel are now being performed in preparation for the installation of alignment strips and the subsequent welding of the cap in place. All of the upper umbrella legs have now been installed, and the bake-out piping is being replaced on the upper dome. Lower umbrella legs are now being welded in place, and only one these remains to be removed and replaced. The last of the new PF2/3 Coil hardware has arrived and has been installed. Electrical insulation tests (HiPots) of new TF cabling installed on FCPC rectifiers for the NSTX-U configuration were successfully completed, and cable terminations are in progress.

Preparations of non-upgrade equipment for plasma operations in the NSTX-U configuration also continued with a successful review of the final design for the TF coil outer leg repairs. The rebuild of the 2600 kW standby diesel generator is done, and run-up/power testing was completed this week.

Access to the NSTX test cell will be available only through previous arrangement with the Upgrade Work Control Center.