

NSTX Weekly Report (Feb. 12, 2009)

FY 2010 NSTX plasma operations

Planned: Total - 15 run weeks (Base - 14 run weeks, ARRA - 1 run week)

Completed: 0 run week and 0 plasma shot

NSTX PAC Meeting (J. Menard)

The 27th NSTX Program Advisory Committee meeting was held at PPPL from February 3-5, 2010. The PAC was chaired by Michael Mauel (Columbia), and the other committee members participating were Jim Van Dam (UT-Austin), Riccardo Betti (Rochester), Paul Bonoli (MIT), Jeffrey Brooks (Purdue), Ronald Cohen (LLNL), Takaaki Fujita (JAEA), Xavier Garbet (CEA-Cadarache), Don Hillis (ORNL), Bruce Lipschultz (MIT), Hendrik Meyer (Culham-UK), John Sarff (UW-Madison), Mickey Wade (GA), Randy Wilson (PPPL), and Steve Eckstrand and Nirmol Podder (OFES, ex-officio). The PAC was asked to provide advice on: 1) whether the research plan optimally supports preparation for the implementation and exploitation of the NSTX Upgrade Project, and 2) whether the NSTX research plan provides proper balance and focus relative to the 5 ReNeW theme areas (ITER, HPSS, PMI, FNS, configuration optimization). Presentations summarizing the FY2009 results, program and facility/ diagnostic/Upgrade plan overviews, the FY2010 run plan, and topical science group results and plans were presented on February 3 and 4th and are archived at: http://nstx.pppl.gov/nstx_pac27_agenda.html. The panel provided the NSTX research team with an initial debriefing on Friday afternoon and will provide a written report in the near future.

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

The NSTX start-up activities continued during this work week shortened by the snow emergency. Integrated system testing of the Liquid Lithium Divertor (LLD) system is complete and the new Lyman Alpha Detector diagnostic was installed. The neutral beam helium refrigerator has been cooled to cryogenic temperatures, and the neutral beam-line is back under high vacuum.

Access to the NSTX test cell will be restricted after the start of vessel bake-out operations next week.

Research Operations (M. Bell)

Boundary Physics Operations (H. Kugel)

- Liquid Lithium Divertor (LLD)
 - Three LLD plates were operated successfully at 250°C to test reliability and operating characteristics.
- LLD Diagnostics
 - Fifty 30m long fiberoptics were received for the Divertor Spectrometer system.

Diagnostic Operations (R. Kaita)

- A new Lyman-alpha Diode Array (LADA) was installed in collaboration with the Lawrence Livermore National Laboratory. The LADA is intended for recycling measurements in the vicinity of the Liquid Lithium Divertor (LLD), since the shorter wavelengths it detects are less sensitive to reflections from the LLD surface than visible light.