

NSTX Weekly Report (Apr. 30, 2010)

FY 2010 NSTX plasma operations

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

Completed: Base - 0.99 run week and 157 plasma shots

Completed: ARRA - 1.01 run week and 171 plasma shots

Gary Taylor visited ASIPP in Hefei, China on April 7-9. During his visit he presented a talk on recent advances in HHFW research on NSTX and discussed the status and plans for the ECE diagnostics and ICRF heating on EAST. The 20-channel ECE grating polychromator (GPC) provided by PPPL is now operating routinely on EAST. The signal-to-noise of the data from the GPC is much improved compared to last year, after installation of new pre-amps and a low loss transmission line. Later this year improvements will be made in the diagnostic front end optics to allow an in situ absolute calibration of the instrument and better radial resolution in the plasma. On April 12-15, G. Taylor attended the 16th Joint Workshop on ECE and ECRH in Sanya, China and presented a summary talk on recent developments in ECE diagnostics and measurements. (G. Taylor)

Ken Hill visited ASIPP in Hefei, China on April 16-24. During his visit he talked with Liquan Hu, who is in charge of the germanium Pulse Height Analyzer (PHA) x-ray detector array which PPPL sent to EAST. He spent some time with the EAST neutron/hard x-ray diagnostician on the PHA hardware and the related documentations. (K. Hill)

Stan Kaye participated in the DIII-D Program Advisory Committee meeting, held at General Atomics on April 27-29, 2010. (S. Kaye)

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

The extended NSTX maintenance period to address an OH coil lead water leak continued this week with detailed inspections of the problem area once it was exposed, a characterization of the leak itself, mock-ups of proposed repairs, and the completion of a design to further support the coil lead. Also this week, the NSTX vessel was briefly vented with argon to replace the Bay K LITER torus isolation valve.

Access to the NSTX test cell will be available this coming week during this extended maintenance period.

Research Operations (M. Bell)

Boundary Physics Operations (H. Kugel)

- Liquid Lithium Divertor (LLD)
 - Preparations continued for testing gas heating of a LLD plate.
- Lithium Evaporators (LITERs)
 - Work was started on equipment for outgassing freshly loaded LITERs off-line before installation on the vessel.