

NSTX Weekly Report (Sept. 4, 2009)

FY 2009 NSTX plasma operations completed on August 14, 2009

Planned: Total - 16 run weeks (Base - 11 run weeks, ARRA - 5 run weeks)

**Completed: Total - 16.84 run weeks with 2,748 plasma shots
(Base - 10.95 run weeks with 1,705 plasma shots
ARRA - 5.89 run weeks with 1,043 plasma shots)**

- The annual NSTX Results/Theory Review will be held on Sept. 15 and 16 in LSB 318 at PPPL. Remote participation will be available. (S. Kaye, R. Raman)
- Following the Results Review, on the morning of Sept. 17, the Run Assessment will be held in the NSTX Control Room Annex. (A. von Halle)
- The NSTX Team Meeting will be held on Sept 8 at 1:30 in LSB 318 at PPPL. Remote participation will be available.

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

NSTX post run activities continued this past week with the evaporation of the remaining inventory of lithium from the LITER probes, and the use of the bay C lithium dropper to deposit a small amount of lithium on the lower divertor as a test of possible methods of loading the new liquid lithium divertor (LLD) trays. The NSTX vacuum vessel was vented this week after a final calibration of the supersonic gas injector.

The NSTX test cell will be in free (card reader) access this coming week.

Research Operations (M. Bell)

Boundary Physics Operations (H. Kugel)

- Liquid Lithium Divertor (LLD)
 - The fabrication of the heater extension cables was finished.
 - The fabrication of the thermocouple extension cables was started.
 - The nickel coating of the vertical copper edges on each plate was completed for all 4 plates.
 - It was established that the heater holes in the copper plates are true to the specifications but are in need of smoothing/burnishing. The required tools for this were made and tested.
- Lithium Evaporator (LITER2009)
 - The two LITER units were removed from the vessel and are stored under vacuum on Test Cell support stands.
 - The LITER port covers on the vessel were removed and the shutter region inspected and photographed.

- Lithium Evaporator (LITER2010)

- A requisition was submitted for two spare LITER probe drives.
- A 3rd LITER support stand was completed.

- In-vessel Inspection

- A vessel inspection plan was completed.
- Personnel preparations and training for in-vessel entry started.