

NSTX Weekly Report (June 24, 2011)

FY 2011 NSTX plasma operations started on October 4, 2010

FY 2011 NSTX Outage started on October 25, 2010

Planned Run Weeks: TBD

Run Weeks Completed: 4.21 run weeks and 839 plasma shots

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

Preparations for upcoming NSTX operations continued this week with the ongoing bake of the vacuum vessel. The vessel bake was interrupted over the weekend due to a failure in the main contactor of the center stack bake-out supply. A replacement part was rushed in from the supply manufacturer, and the bake resumed early Wednesday. The new neutral beam ion source in the "A" position completed low voltage (plasma arc chamber) conditioning this week, and high voltage (accelerator) conditioning of all three sources is ready to start. Also this week, testing of the emergency-stop functions in the Field Coil Power Conversion and Neutral Beam Buildings was completed, and the final design review for the proposed Lithium Granular Injector was held.

Access to the NSTX test cell will be restricted this coming week during the vessel bake and neutral beam ion source conditioning.

Research Operations (M. Bell)

Boundary Physics Operations (H. Kugel)

- PFC thermocouples
 - The newly installed thermocouples on the refurbished LLD and the molybdenum inner divertor tiles are functioning satisfactorily during the vessel bakeout now in progress.
- Lithium Evaporators (LITERs)
 - The installation of the final reservoir and snout heater insulation and associated radiation shielding on all four 2011 units was completed. Work started on the remaining transition shielding on the first of the 4 units.
- Materials Analysis Particle Probe (MAPP)
 - The design of the probe head was completed by the Purdue collaborators (J P Allain et al.) and the drawings were transferred to the PPPL system.
 - Assembly and testing of the probe instrumentation rack is in progress at Purdue for shipment to NSTX the week of 7/5-7/9.
- Lithium Centrifugal Granule Injector for ELM Pacing
 - The Final Design Review of the Lithium Granule Centrifugal Injector was held and declared a success pending resolution of cost and schedule.