

## **NSTX Weekly Report (Oct. 29, 2004)**

FY2005 Planned Operations: 14 weeks  
Completed: 0 weeks producing 0 plasmas

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

The NSTX outage continued this past week with the installation and successful insulation tests (Hipots) of the last of the RWM error field coils. The installation of the cabling to the new Switching Power Amplifier (SPA) system which will power the RWM coils is in progress. Winding of the new PF1A coil continues in the PPPL coil shop, and the old PF1a lower coil has been removed from its stand. A redesign of the PF1a and 1b lower coil supports, intended to allow full combined operation of these two coils, is near completion. The final design review of the proposed modification to provide lower divertor ECH and gas injection ports was held, and that work is now scheduled for the week of November 8th.

There are no NSTX test cell access restrictions this coming week. (A. von Halle)

### **Research Operations (M. Bell)**

#### Boundary Physics Operations (H. Kugel)

- Fabrication of the Bay-K poloidal sample coupon array was completed and cleaning for vacuum service is in progress.
- An analysis report was received from W. R. Wampler (Sandia) on Ion Beam measurements performed on NSTX FY04 coupon samples.
- The Joint CDX-U/NSTX Lithium Evaporator development lab successfully completed a recent safety review. Work is in final preparation for initiating the testing of Prototype-2. (D. Mansfield)
- A Peer Review for a moveable GDC anode system was held, and the Review was found to be successful pending resolution of the Chits.
- As requested at the last Cryo-pump / Li Module Discussion Meeting (R.Kaita), a subgroup with TFTR lithium experience met to discuss a possible NSTX lithium conditioning XP.

#### Diagnostic Operations (R. Kaita)

- The alignment spheres that are used as references for the FARO calibration arm were recalibrated. A spatial calibration of the Johns Hopkins University

ultrasoft (USXR) arrays was also performed.