

## **NSTX Weekly Report (January 16 2004)**

FY 2004 weeks of operation planned: - 18 weeks, Completed: - 0 weeks

### **Department, Project, Program (M. Ono, M. Peng, Mike Williams, Ed Synakowski)**

- 15th NSTX Program Advisory Committee Meeting was held at PPPL on January 12-14, 2004. We thank the PAC members for taking their time to participate in the meeting and for providing us with valuable advices for NSTX.
- Dave Gates will be the featured speaker for the NSTX Physics Meeting on January 19 -- details to follow in January. (C. K. Phillips)

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

- The NSTX outage is coming to an end with the completion of the connection and preliminary (non-power) testing of the TF bundle assembly. The Kirk-key tests of the safety interlock system have been completed and all E-stop buttons in the NSTX test cell have been tested. All pre-operational testing, including HiPots and continuity checks of the entire coil system as measured from the field coil power conversion building have been completed, and integrated system power testing is in progress.
- Heat runs of the RF sources for the HHFW system are in progress and RF leakage tests of the transmission lines were successfully completed. Conditioning of the neutral beam ion sources is in progress.
- The test cell will be in restricted access during 1st shift testing activities, with test cell access available from the end of 1st shift to approximately 10:00PM each evening of the week. (A. von Halle)

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

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

- Mounting studs for the Lithium Pellet Injector (LPI) were installed on the Bay-K port. Preparations and testing for installation of the LPI continued. Drafts of a Procedure for Low-Z Pellet Fabrication, and revisions to the NSTX Safety Assessment Document (SAD), the Hazards Analysis (HA), and the Failure Modes & Effects Analysis (FMEA) for a Low-Z Pellet Injector were completed and submitted for review.
- A Requisition was submitted for optical interference filters needed for planned lithium, boron, and, carbon pellet experiments.
- A meeting was held to discuss a candidate bellows probe for the providing the Supersonic Gas Injector/ Edge Magnetic Field Sensors with remote controlled radial motion.
- The In vessel Illumination Source was used to provide a source for MPTS tests to calibrate a Bay F window transmission. In these tests, the Illumination source was powered by the GDC AC filament power system. Based on the successful results, a DC power supply will be installed to provided a stable dedicated remotely controllable filament power source. An installed spare GDC filament cable has been located and will be used to facilitate connecting this dedicated power supply.
- A meeting was held to discuss using I/O from the recently installed TF sensor system to measure possible vessel toroidal, radial, and leg-slide motion.