NSTX Weekly Report (Feb. 24, 2006)

FY2006 weeks of research operations
Planned: 11 weeks
Completed: 0 weeks

• There will be no NSTX Physics Meeting on Monday, 2/27. (S. Kaye)

• The 19th meeting of the NSTX Program Advisory Committee was held at PPPL on Feb. 22 – 24, 2006. We thank the NSTX PAC members for talking their time to participate in this important meeting.

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

Preparations for the upcoming NSTX run were completed this past week with an additional four days of vessel bake, bringing the vessel base pressure down to 2.4E-8 Torr after cool-down. A test cell area "scrub" will be performed over the weekend in preparation for the resumption of plasma operations on Monday. The final sealing welds for the new lithium evaporator (LITER 1) oven were completed this week, as well as the initial testing of the system heaters and thermocouples. Full thermal testing/characterization will be performed this weekend before lithium is loaded into the system.

The test cell will be locked-up until 5 PM each day this week during plasma operations. Access to the test cell will be available from 5PM to 9PM each evening this week. (A. von Halle)

Research Operations (M. Bell)

Diagnostic Operations (R. Kaita)

• Diagnostic operations activities focused on restoring capabilities that were disabled for bake-out and final installations in preparation of plasma operations next week. These included the reinstallation of electronics for the Johns Hopkins University ultra-soft X-ray arrays and the mounting of fast cameras for “dust” imaging.

Boundary Physics Operations (H. Kugel)

• The LITER-1 connection of the oven to the probe was completed. The oven heaters were tested at guard vacuum pressures while the outer shroud was at atmosphere. The heaters were found to perform as designed, the oven was operated to about 280 °C, and final welding of the last vacuum seal was performed. LITER-1 was then installed on the test chamber. A Safety Inspection was performed on the test facility, and it was found to be satisfactory. Final electrical characterization of Liter-1 was started. In the NSTX Test Cell, the interface panel between the controls rack and LIter-1 was installed and its cabling was started.

• The IR cameras were calibrated during the machine bake. (R.Maingi, ORNL)