

## **NSTX Weekly Report (January 20, 2012)**

### **NSTX is in the Upgrade Project outage in FY 2012**

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

NSTX Upgrade construction activities continued this week with the ongoing removal of in-vessel diagnostics in bays J and K, and the removal and disposal of the lower umbrella lid. The platform at the NW corner of the NTC has been cleared of all equipment, and the requisition with all engineering information for the procurement of the new bay K cap to accommodate the 2nd neutral beam duct has been approved. In-vessel measurements needed for the fabrication of new neutral beam armor have been completed. The 13" flanges have been removed from the top of the machine to provide access for welders to complete inspections of the areas for the welding of additional ribs and new coil supports on the vessel. Also this week, the dissection of the old OH coil was completed, and pieces are being machined for further analysis. A report on internal conditions after a decade of operations will be generated. A peer review of the ongoing effort to replace the field coil power conversion rectifier firing generators and fault detectors was held, and included the plans to replace the aging fault system electromagnetic relays with a PLC based system with the I/O capability for real-time diagnosis of individual supplies.

Access to the NSTX test cell will be available only through previous arrangement with the Upgrade Work Control Center.