

## NSTX-U Weekly Report (October 10, 2014)

### **NSTX-U is in the Upgrade Project outage in FY 2014**

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

NSTX Upgrade activities continued with the mounting of the completed TF/OH centerstack assembly in the South High bay adjacent to the NSTX Test Cell, the installation of the upper PF1A coil on the centerstack, and the start of the installation of the centerstack casing over the top of the centerstack. The centerstack pedestal has been installed under the NSTX-U vessel and is ready to accept the entire assembly when ready. In the NSTX-U Test Cell, the NB2 turbo-pump has been installed and vacuum line connections are in progress. The three High Voltage Enclosures (HVE's) that provide the power supply and telemetry connections to the NB2 ion sources are complete and ready for pump-down.

The Digital Coil Protection System (DCPS) and the Power Supply Real Time Control (PSRTC) development efforts are working towards a mid November start of Field Coil Power Conversion System dummy load testing. A draft pre-operational test procedure of the combined DCPS Computer and hardware interconnection systems has been distributed for review.

Preparations of non-upgrade equipment for plasma operations in the NSTX-U configuration also continued. Recommissioning of the Motor Generator Set (D-MG#1) is making good progress with the completion of the replacement of the stator cooling water isolation valves and the resumption of the chemical cleaning of the stator heat exchangers. The manufacturer of the new deuterated trimethylboron (dTMB) injection system has released mechanical drawings for the gas controls cabinet, and required vacuum pumps for the dTMB system are on order. The Final Design Review of the Stand Alone Digitizers (SAD2) will be held this coming week.

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