

NSTX-U Weekly Report (August 1, 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 post VPI (vacuum impregnation with epoxy) clean-up and sanding of the completed TF/OH coil assembly. The removal of the temporary mandrel material between the TF and OH coils (Aquapour) is in progress. Trial fit-ups of the center column PF coils continues on both the NSTX-U vessel and the centerstack casing. Refurbished neutral beam ion sources will be brought into the test cell and installed on NB#2 next week.

Development of the new Digital Coil Protection System (DCPS) continued with the ongoing testing of system software and user interfaces, and the design/fabrication of hardware and I/O layouts.

Preparations for plasma operations in the NSTX-U configuration also continued with the ongoing reassembly of the Motor Generator after the successful completion of the rotor weld repairs. The generation and exercise of pre-operational test procedures for the Neutral Beam (NBPC) and Field Coil (FCPC) power conversion systems continues. Pre-operational testing of the neutral beam arc and filament power supplies for NB#2 has been completed, and testing of the NB#2 suppressor grid power supplies is in progress. Preparations are underway for open circuit testing of the field coil power conversion system rectifiers.

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