NSTX-U Weekly Report (August 16, 2013)

NSTX-U is in the Upgrade Project outage in FY 2013

Prof. Yong-Seok Hwang of Center for Advanced Research in Fusion Reactor Engineering, Seoul National University (Korea) visited NSTX-U/PPPL. He discussed on-going collaboration activities on the VEST device experiments, the superconducting ST reactor design, and the high harmonic fast wave current drive modeling on the K-DEMO with NSTX-U/PPPL researchers. Future collaboration between NSTX-U and his group was also discussed. (M. Ono, PPPL)

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

NSTX Upgrade construction activities continued with the ongoing preparations of the 4 inner TF quadrants for fit-up in the full mold for the upcoming vacuum impregnation with epoxy. Two of the quadrants are nearing completion and are expected to be ready to move into the taping area early next week. In the test cell, the welding of the in-vessel J-K stiffeners and the S-flip diagnostic reinforcements continues, as does the grinding of the vessel to accommodate the tFIDA diagnostic.

Preparations of non-upgrade equipment for plasma operations in the NSTX-U configuration also continued with the ongoing maintenance of the power supply and distribution equipment for the neutral beams. All Fast Vacuum Interrupters required for 2 beam operation have undergone full maintenance and are now ready for pre-operational power testing. The retro-fitting of the new firing generators in their final positions in the field coil power conversion (FCPC) system rectifiers is in progress. A first of three prototypes to test various aspects of the planned stand alone digitizers for use by NSTX diagnostics has been assembled, and is being tested in preparation for a preliminary design review scheduled for late September.

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