

NSTX-U Weekly Report (September 9, 2016)

FY 2016 NSTX plasma operations completed **Completed: 10.06 run weeks and 1066 plasma shots**

Brian Wirth (UT-K/ORNL) and Zhehui Wang (LANL) visited PPPL to discuss ongoing collaborations on both the NSTX-U and EAST devices. (R. Maingi, PPPL)

Engineering Operations (A. von Halle, P. Titus)

Preparations for an NSTX-U vacuum vessel entry continued this past week. Lockout and tagout of hazardous energy sources is about 90% complete, and the initial vessel entry for photographs and inspections could be as early as later next week. Neutral Beam (NB) pumps/purges are nearing completion, and the removal of the NB#1 to torus duct should begin early next week. Also, both NB calorimeters will be removed for maintenance. Radiography of the failed PF1aU coil has been completed, and analysis of the results continue. The PF1aU coil will be returned to PPPL next week for dissection and boroscope inspections as part of the ongoing forensics. The first of two orders for the copper conductor for a new PF1aU coil has been placed, and the set-up of the coil winding facility continues. A preliminary plan and schedule for the removal of the NSTX-U center column to allow the replacement of both the PF1a Upper and Lower coils has been developed and is under review. Also this week, analysis of the data taken during the in-situ post-run verifications of the TF coil system electrical joints was completed, and all measurements were found to be consistent with pre-op tests. Field Coil Power Conversion (FCPC) systems are being set-up for a power test of ITER Magnetic Diagnostics scheduled for next week. This FCPC test stand will be used later this year for power testing of the new PF1a coil.

Access to the NSTX-U Test Cell is expected to be available for approved work this coming week.