

NSTX Weekly Report (Dec. 22, 2011)

NSTX is in the Upgrade Project outage in FY 2012

On Dec. 19, 2011, we received official approval from the Department of Energy to begin construction of the NSTX-Upgrade (NSTX-U). This approval, known as Critical Decision-3, is based on extensive review of all aspects of the upgrade: engineering design, technical plans, schedule, cost, safety, and project management. This approval is wonderful for the U.S. fusion program and for PPPL. In 2.5 years we will begin operation of NSTX-U — the newest fusion facility in the U.S. It is a privilege to initiate a new experiment in these difficult economic times. Approval of the upgrade reflects the key importance of NSTX-U to U.S. fusion strategy and the value of the physics discoveries to come. (S. Prager, PPPL Director)

<http://www.pppl.gov/pdf/PPPL.%20WEEKLY.12.19.11.pdf>

Michael Bell (PPPL) attended a meeting, held in San Diego on December 19-21, of the FESAC panel charged to assess the opportunities for international collaborations in fusion and plasma research in the next several years. (M. Bell)

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

NSTX Upgrade construction activities continued this week with the removals of the torus vacuum pumping system piping and pump duct from the test cell. Cable and cable tray removals continued with progress being made on the liquid lithium divertor system controls. Field measurements were made for the relocation of the TIV/shutter boxes and for the design changes to the PF5 coil supports, and engineers were sent in-vessel for an inspection of the neutral beam armor. Also this week, dissection of the removed OH coil to analyze the condition of insulation/conductor/leads continued.

Access to the NSTX test cell will not be available during the holiday break. Test Cell construction activities will resume on January 3rd, 2012.

The photo of the test cell below was taken on Dec. 22, 2012. Note the old NSTX pumping duct has been removed. The 2nd NBI will be installed in the lower right side area depicted in the picture.

