

NSTX Weekly Report (Jan. 5, 2007)

FY 2007 NSTX plasma operations

Planned: TBD

Completed: 0 weeks

- David Mikkelsen visited General Atomics to work with Jeff Candy on simulations of ETG-scale turbulence in NSTX using the GYRO code. The initial simulations have ~ 1 MW of electron heat transport with 2 MW of input power in L-mode; the corresponding ITG/TEM simulations have no turbulent transport because ExB shear fully quenches the longer scale modes. (S. Kaye)

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

The NSTX outage is drawing to a close with the completion of vacuum vessel leak checking, and preparations to begin individual field coil power testing this coming week. All power bus-work to and on the machine has been re-installed, and end-to-end continuity and electrical insulation tests (HiPots) are scheduled for this Monday. Test cell safety interlock testing is in progress, and machine area scrubs were performed over the weekend. Also this past week, pre-operational testing of the ECH and LPI systems was performed, and preparations for the upcoming vacuum vessel bake continued.

Access to the NSTX test cell will be restricted during field coil power testing over most of the coming week.

Research Operations (M. Bell)

Boundary Physics Operations (H. Kugel)

A Peer Review was held for the lithium evaporator LITER-1d design and operation.