

DIII-D FY2006 Level 1 Target:

Inject 2MW of neutral beam power in the counter direction on DIII-D and begin physics experiments

Third Quarter Milestone:

Complete Beamline Hardware System Checkout. Reinstall Ion Sources and Prepare the Modified Beam System for Operation. (June 30, 2006)

This quarterly milestone was completed on May 5, 2006

After the 210° neutral beam components were reinstalled in the DIII-D machine hall in their new rotated position, considerable work has been completed to prepare the neutral beam for operations. In particular, the many control and power cables required to operate the beam were reconnected, cooling water circuits were reconnected and tested, and all the systems and associated interlocks were tested including the pole shield thermocouple array and the bending magnet power supplies. The two ion sources, which had been kept under vacuum during the whole LTOA period, were quickly reconditioned up to their full operating voltages and power levels. On May 5, 2006 the first beam blips were fired into the DIII-D vessel demonstrating the rotated beam line with both ion sources was ready for operation. Initial experiments using these rotated beams have begun.



The 210 neutral beamline water manifold and local control station