Abstract Submitted for the DPP09 Meeting of The American Physical Society

High Power Neutral Beam Injection on the MST¹ GENNADY FIK-SEL, J.K. ANDERSON, B.E. CHAPMAN, S. LIMBACH, M. NORNBERG, S.P. OLIVA, J.S. SARFF, J. WAKSMAN, University of Wisconsin-Madison, G.F. AB-DRASHITOV, V.P. BELOV, V.I. DAVYDENKO, P.P. DEICHULI, A.A. IVANOV, V.A. KAPITONOV, V.V. KOLMOGOROV, A.N. SELIVANOV, A.V. SOROKIN, N.V. STUPISHIN, R.V. VOSKOBOINIKOV, Budker Institute of Nuclear Physics, Novosibirsk, Russia — A high power neutral beam injection system has been installed on the MST RFP. The hydrogen beam is designed for a power of 1 MW, an energy of 25 keV, and a duration of 20 ms. The goals for the system include investigation of the beam energy and momentum deposition into the plasma, studying the dependence of MHD stability on the plasma pressure, and investigation of fast particles effects on tearing and kinetic instabilities in the MST. First tests of this system on MST are expected shortly.

¹This work is supported by the USDOE.

Gennady Fiksel University of Wisconsin-Madison

Date submitted: 03 Sep 2009

Electronic form version 1.4