RF Power Source Development at the RTA Test Facility*, S. CHATTOPADHYAY, W. CHENG, E. HENESTROZA, L. REGINATO, A. SESSLER, D. VANECEK, S. YU, Lawrence Berkeley Laboratory, Berkeley, CA 94720; F. DEADRICK, T. HOUCK, G. WESTENSKOW, Lawrence Livermore National Laboratory, Livermore, CA 94550; S. LIDIA, Univ. of California, Davis, CA 95616; G. GIORDANO, Univ. of Milano, Milano, Italy - The RTA Test Facility is being constructed at LBL to demonstrate key concepts related to both physics and technical issues of a proposed 1.5-GeV c.m. upgrade of the NLC collider design (TBNLC). A prototype two-beam accelerator rf power source will be constructed at the RTA Test Facility which will allow testing of the major components of the TBNLC. The proposed test facility and its current status will be described. Performance of the induction accelerator pulsed power system, including the induction cores, is a key issue affecting both cost and efficiency of the rf source. Recent test results on the RTA pulsed power system will be presented.

^{*} The work was supported by the U.S. Department of Energy.