

SLAC Memorandum

To: Eric Colby, E-163 Spokesman
Marc Ross, NLCTA Operations Manager

From: Tor Raubenheimer, ILC Department Head

Date: 4/27/2005

Re: NLCTA Gun Replacement

In response to your memo dated 1/25/2005, I approve of the replacement of the presently installed NLCTA thermionic electron gun with the new laser-driven rf gun with the following three caveats:

- 1) The ARDB department will support the laser system required for the rf gun and will provide operational support for the rf gun as needed for the NLCTA program.
- 2) If the bunch charge is significantly lower than the design value of 1 nC, the beam line instrumentation will be upgraded as necessary to obtain adequate performance for planned NLCTA experiments; this may require adding pre-amps to the BPM processors, higher sensitivity cameras for the profile monitors, etc.
- 3) The new rf gun will be integrated into the NLCTA PPS and safety systems and will be operated according to the NLCTA Operations Directives.