

PART I - DESCRIPTION

WBS Number: 421	Title: C-Site AC/DC Converters	
Originator: C Neumeyer		
<u>Description</u>		
<u>General Description of Work to be Performed:</u>		
<p>Existing Robicon rectifiers in the ESAT building at C-site will be used to power the NCSX trim coils. These are designated the T-1, -2, -3, -4 units which are rated 5kA/300V. They need to be reactivated and brought to an operating condition. This includes various preliminary tests such as hipot, controls check out, water system check out, trip settings, and dummy load test. Some modifications to the controls may be required to interface with the NCSX real time control system.</p>		
<u>Description of Existing Equipment/Facilities to be Reused:</u>		
<p>These power supplies were originally purchased for PBX-M duty. They were manufactured by the Robicon Corporation and were first put in service in 1987. They consist of 6-pulse bridges connected in parallel with an interphase transformer. The ratings are summarized as follows:</p>		
Parameter	Value	Units
No Load Avg. DC Voltage	300.0	volt
Nominal DC Current	5.0	kA
Nominal Pulse ESW	1.5	sec
Nominal Pulse Repetition Period	80.0	sec
Maximum Continuous DC Current	1.25	kA
<u>Description of Major Modifications Required to Existing Equipment/Facilities:</u>		
<p>Possible minor modification to control interface.</p>		