

NCSX PRELIMINARY DEIGN PART I - DESCRIPTION

WBS Number: 612	Title: NB Water
Originator: L. Dudek	
Description: Provide cooling water supply for two (2) Neutral Beams	
<p>This WBS element consists of the effort to provide cooling water capability for the neutral beams in the Fabrication Project. This job includes the design for four (4) neutral beams but the fabrication and installation for only two (2) neutral beams. Electrical connections to motorized valves are provided by the Neutral Beam WBS. Initially, this WBS will provide a 375 gpm cooling water capability for the NCSX neutral beams for day one operations.</p> <p>The NB Accel Rectifiers will require cooling water (they are located in the MG room). The old cooling system for the rectifiers was a closed one with it's own chiller and demineralizer. In FY 03 this system was inspected, filled with water and leak tested. An inspection of the controls was also performed. From this inspection it was determined that the system will need to have tank level controller and temperature controller replaced as part of the recommissioning work in this WBS.</p> <p><u>Description of Existing Equipment/Facilities to be Reused:</u></p> <p>The Aux Power Supplies in the table room require cooling water. The Decel Power Supplies in the CS Basement and the associated chiller, tank and controls.</p> <p>The NB modulators are also water cooled. They are currently connected to the B system water pumps currently used by RF.</p> <p><u>Description of Major Modifications Required to Existing Equipment/Facilities:</u></p> <p>As stated above, by inspection it was determined that the system will need to have the tank level controller and temperature controller replaced as part of the recommissioning work in this WBS to provide necessary cooling.</p>	