

**NCSX Conceptual Design Cost Estimate Summary Form  
(Attachment 1a)**

**SUMMARY DESCRIPTION**

<b>WBS Number: 453</b>	<b>Title: Systems Testing (PTPs)</b>
<b>Originator: Raki Ramakrishnan</b>	
<b><u>Description</u></b>	
<p>This WBS element consists of the effort to conduct all systems-related preoperational testing, including:</p> <ul style="list-style-type: none"><li>• DC circuit hipots and impedance measurements</li><li>• Electrical interlocks</li><li>• Overall systems testing, including:<ul style="list-style-type: none"><li>○ kirk key interlock testing,</li><li>○ instrumentation test &amp; calibration,</li><li>○ real time control system testing,</li><li>○ coil protection system testing,</li><li>○ ground fault monitor testing, coil power supply dummy load testing, and</li><li>○ trim coil power supply dummy load testing</li></ul></li></ul>	
<p><u>Description of Existing Equipment/Facilities to be Reused:</u> None.</p>	
<p><u>Description of Major Modifications Required to Existing Equipment/Facilities:</u> None.</p>	

**Date: 9/15/03**