

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

**SUMMARY DESCRIPTION**

<b>WBS Number: 187</b>	<b>Title: Measurement Systems</b>
<b>Originator: Jim Chrzanowski</b>	
<p><u>Description:</u> This WBS element consists of those efforts required to design, procure and fabricate fixtures &amp; tooling to be used for position measurement during pre-assembly of the field periods in the TFTR Test Cell. This fixturing will be used in conjunction with PPPL owned measurement systems, including the FARO Mechanical Measuring arms and Leica Laser measurement devices.</p>	
<p><u>Description of Existing Equipment/Facilities to be Reused:</u> <b>None</b></p>	
<p><u>Description of Major Modifications Required to Existing Equipment/Facilities:</u> <b>None</b></p>	