

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

SUMMARY DESCRIPTION

WBS Number: 12	Title: Vacuum Vessel Systems
Originator: Paul Goranson	
<u>Description</u>	
<p>The vacuum vessel provides a vacuum boundary around the plasma chamber suitable for high vacuum conditions; structural support for all internal hardware and access for Auxiliary Systems (WBS□) and Diagnostics (WBS□).</p> <p>This WBS element consists of all the following sub-elements:</p> <ul style="list-style-type: none">• Vacuum Vessel Assembly (WBS 121);• Vacuum Vessel Thermal Insulation (WBS 122);• Vacuum Vessel Heating and Cooling Distribution Systems (WBS 123);• Vacuum Vessel Supports (WBS 124); and• Vacuum Vessel Local I&C (WBS 125).	
<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>	