

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

SUMMARY DESCRIPTION

WBS Number: 34	Title: MHD Diagnostics
Originator: Dave Johnson	
<u>Description</u>	
<p>This WBS element consists of all MHD diagnostics (excluding low frequency Mirnov coils which are part of WBS 31 which are also used for plasma control) required to characterize MHD activity, magnetic island locations and widths, and disruptions. A variety of diagnostic techniques will be used. This WBS is responsible for the vacuum interface, including windows, shutters, valves or electrical feed-thrus. Responsibility also includes sensors, mounting structures and sensor cabling near the vacuum vessel. Sensor electronics and racks are also included. Other WBS units are responsible for field cabling, rack terminal blocks, rack AC power and grounding, and data acquisition hardware.</p> <p>For Phases 1 and 2, there are no diagnostics planned in this category.</p>	
<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