

NCSX June 2007 ETC
TABLE IV - Uncertainty of Estimate and Residual Risk Assessment

WBS Number: 142
WBS Title: Windings and Assembly
Job Number: 1421
Job Title: Design of Modular Coil Interfaces
Job Manager: David Williamson

Uncertainty of the Estimate

	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>Uncertainty Range (%)</u>	<u>Comments/Other Considerations</u>
Design Maturity			x	-10 to +50	Major issue is continuous iteration of design Major uncertainty is C-C access for bolting at machine assembly
Design Complexity		x			

Note: High/Medium/Low uncertainty assessment from Job Manager. Uncertainty range based on ACEI recommended practice 18R-97 as amended for NCSX.

Residual Impacts

<u>Risk</u>	<u>Likelihood of Occurring (%)</u>	<u>Mitigation Strategies</u>	<u>Consequence if Occurs</u>	
			<u>Cost</u>	<u>Schedule</u>
1 weld distortion found in R&D exceeds allowable assume double welding time	20%	add distortion control methods to welding procedure development, such as clamping bolts, peening, and alternate weld methods	\$70k+sched hit	6 wks
2 C-C access insufficient for bolts redesign and re-analyze alternate solution at CC	20%	Prepare mockups and check access directly	\$250k	