

NCSX Work Approval Form (WAF)

WBS Number: 131

WBS Title: Toroidal Field coils

Job Number: 1361

Job Title: TF Coil Fabrication

Job Manager: Mike Kalish

Description:

This WBS element consists of the manufacturing design, procurement, and fabrication of the TF conductor and assembly of the TF winding packs including interface elements for connections to power and cooling supply at the coils.

Schedule:

See Attached

Approvals:

Job Manager

Date

Responsible Line Manager

Date

Project Manager

Date

Engineering Department Head

Date

NCSX June 2007 ETC
TABLE III - Fabrication/Assembly Installation

WBS Number: 131															
WBS Title: Toroidal Field coils															
Job Number: 1361															
Job Title: TF Coil Fabrication															
Job Manager: Mike Kalish															
In-house Fabrication and Assembly and Installation															
Description: Incl in M&S Table II															

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

WBS Number: 131
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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				Coils in fabrication - design is complete
Design Complexity		X		-10%/+15%	While conventional cross-section with solid Cu, some potential difficulty in maintain precise geometry and tolerances

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>Job</u>	<u>Risk Description</u>	<u>Likelihood of Occurring</u>	<u>Mitigation Plan</u>	<u>Basis of estimate</u>	<u>Cost Impact</u>		<u>Schedule Impact</u>	
					<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>
1361 TF vendor produces a non-compliant coil requiring fabrication of an additional coil		VU	Conductor for extra coil already procured. Ample float in schedule to avoid critical path impact.	Increase PPPL Title III by ~1 man-month	+\$15	+\$35	+ 0.00	+ 0.00

Notes:

- [1] Low cost and schedule impacts are considered the minimum (0-percentile) impacts should the event occur. High cost and schedule impacts are considered the maximum (100-percentile) impacts should the event occur
- [2] Cost impacts should be entered as man-hours (by demographic) and M&S direct cost under basis of estimate. Cost impacts should NOT include standing army costs which are separately calculated from the schedule impact Project control is responsible for quantifying the low and high cost impacts based on the labor hours and M&S identified
- [3] The schedule impacts should be entered as the min and max impacts on the critical path. If there is no critical path impact then the schedule entries should be zero.
- [4] Likelihood of occurrence should be entered consistent with our risk classification methodology, i.e. VL= Very Likely (P>80%), L=Likely (80%>P>40%), U=Unlikely (40%>P>10%), VU=Very Unlikely (P<10%), NC=Non-credible (P<1%)