

NCSX Work Approval Form (WAF)

WBS Number: 39

WBS Title: Diagnostics Integration & Oversight

Job Number: 3901

Job Title: Diagnostics Integration & Oversight

Job Manager: Brent Stratton

Description:

This WBS element consists of the physics support to provide diagnostic input through the detailed design phase of the machine. As the design of the core machine continues, it is important to continue the integration of diagnostics into the device and the NCSX facility with higher levels of definition.

Schedule:

See Attached

Approvals:

Job Manager

Date

Responsible Line Manager

Date

Project Manager

Date

Engineering Department Head

Date

**NCSX June 2007 ETC
TABLE I - DESIGN LABOR**

WBS Number: 39													
WBS Title: Diagnostics Integration & Oversight													
Job Number: 3901													
Job Title: Diagnostics Integration & Oversight													
Job Manager: Brent Stratton													
Description: This is a LOE effort for design intergration, interface definition, and oversight of diagnostic systems design, fabrication, and installation													
		\$		Labor Hours							Basis of Estimate		
Task Description		M&S	Travel	EMEM	EMSM	EMTB	EEEM	EETB	EADM	ECEM	RM2		
Design integration and oversight													
	FY2007											86 Assumes 1/2 year @ 10% - based on past experience on NCSX	
	FY2008											173 Assumes 1 year @ 10% - based on experience on NCSX	
	FY2009											173 Assumes 1 year @ 10% - based on experience on NCSX	
	FY2010											345 Assumes 1 year @ 20% - based on experience on NCSX	
TOTAL		\$0	\$0	0	0	0	0	0	0	0	0	777	

NCSX June 2007 ETC
TABLE III - Fabrication/Assembly Installation

WBS Number: 39													
WBS Title: Diagnostics Integration & Oversight													
Job Number: 3901													
Job Title: Diagnostics Integration & Oversight													
Job Manager: Brent Stratton													
In-house Fabrication and Assembly and Installation													
Included in Table I													

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

WBS Number: 39
WBS Title: Diagnostics Integration & Oversight
Job Number: 3901
Job Title: Diagnostics Integration & Oversight
Job Manager: Brent Stratton

Uncertainty of the Estimate

	<u>High</u>	<u>Medium</u>	<u>Low</u>	<u>Uncertainty of Estimate (%)</u>	<u>Comments/Other Considerations</u>
Design Maturity	X				Estimates based on actual NCSX experience over past several years
Design Complexity			X	-5%/+10%	Estimates based on actual NCSX experience over past several years

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>
NONE								

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=Unlikley (40%>P>10%), VU=Very Unlikely (P<10%), NC=Non-credible (P<1%)

Activity ID	MILEstones (level 2 & 3)	Activity Description	Duration (work days)	Baseline Start	Baseline Finish	Shifts	Total Float	% cmplt	Proposed Budgeted							
										FY07	FY08	FY09	FY10	FY11	FY12	
39 - Diagnostics Integration																
Job: 3901 - Diagnostics sys Integration-STRATTON																
390-03		LOE Support FY07	106*	01MAY07	28SEP07		1,249	LOE	11,359.44							
390-04		LOE Support FY08	249*	01OCT07*	29SEP08		1,000	LOE	29,228.35							
390-05		LOE Support FY09	247*	01OCT08*	28SEP09		752	LOE	30,084.70							
390-06		LOE Support FY10	246*	01OCT09*	28SEP10		504	LOE	62,037.90							
Subtotal			851	01MAY07	28SEP10		504	LOE	132,710.39							

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