

NCSX Summary Overview

NOVEMBER 2007

Cost Performance	BCWS	BCWP	ACWP
Cumulative from May 1st, 2007 =	\$8,925	\$8,089	\$7,235
Cost Through April 2007 =			<u>\$67,178</u>
Cost to date =			\$74,413
BCWR (work to go) =		\$42,764	
Contingency =		\$14,380	
Total TEC =		\$132,411	

CPI = 1.12 1.15 last month	Cost Variance =	854	Major Cost Variances	
SPI = 0.91 .91 last month	Schedule Variance =	-836	Mod Coil Punch List	CPI = .76 -87 (.5 last month)
			FP Assy tooling (job 1803)	CPI = .38 -111 (.44 last month)
			Systems Analysis (job 8204)	CPI = .72 -88 (.76 last month)
			Allocations (job 8998)	CPI = .69 -95 (.78 last month)

EAC +\$7.36M = \$139.77M EAC	
\$5,309 scope add-back and 40% contingency	\$906 re-estimate and 28.3% contingency
\$1,701 Trim coils incl coil services & instl	\$500 WBS 82 project engineering management
\$985 VPS (incl NB ducts, pumps, instl, water systems)	\$106 Plant Design
\$189 Injectors	\$100 Field Period Assembly
\$35 Diagnostics	\$200 contingency @28.3%
\$882 I&C	\$505 stretchout cost
\$1,517 Contingency	\$640 Other ETC increase projects
	\$438 Systems analysis
	\$398 Project management
	-\$708 Stellarator core mgt
	\$245 mc punch list
	\$267 other
Cost and schedule risks	
Field period assy	
Trim coil and PF coil fabrication schedule from vendors	
MCI hardware (cosrf variance, ETC cost, and schedule delivery)	
Opportunities	
G&A/Burden rates ~\$1M	

Critical path assessment
#1 Issue MC shim and puck drawings, fab shims and pucks by 1/10/08, start station 2 assy
Current critical path = -53 days (-2.5 months) as measured against preliminary assembly schedule (undergoing revision-action Viola/Strykowski)
The schedule impact has increased from -1.9 mos last month to -2.5 mo. due to recent revision in station 2 task durations.
#2 Trim coil design, fabrication required for assembly in station 5.
First trim coils req'd end January 2009
zero float

Level II milestone status (near term)				
<u>Design Reviews</u>	<u>Baseline</u>	<u>Forecast</u>	<u>DOE Committr</u>	<u>Float (mos.)</u>
PF Coils - PDR	11-Dec-07	14-Dec-07		2.1
Coil Support Structures - FDR	21-Sep-07	14-Dec-07		4.6
Prepare Type-ABC closeout FDR	14-Jan-08	30-Jan-08		1.2
PF Coils - FDR	24-Mar-08	5-Feb-08		1.7
Base support - PDR	26-Nov-07	7-Feb-08		1.5
Station 5 FDR	21-Nov-07	19-Feb-08		3.0
Base Support Structure FDR	4-Feb-08	13-Mar-08	May-08	1.5
LN2 manifolds&piping- PDR	2-Apr-08	2-Apr-08		4.3
** Trim Coil PDR **		16-Apr-08		-0.1
** Trim Coil + Structure FDR **		3-Jun-08		-0.1
<u>Fabrication/Assembly</u>				
Shims required for 1st 3 pack MC assy	20-Sep-07	11-Jan-08	Dec-07	-2.0
PF Coils Awarded	27-May-08	25-Apr-08	Sep-08	1.7
Complete 1st MCHP Assy (Sta 2)	9-May-08	3-Jun-08	Sep-08	-2.0
Remove from stand Move A2-B2-C2 to holding area	19-Jun-08	1-Jul-08		-2.5
COMPLETE VPI OF 18th MOD COIL	15-Jul-08	30-Jun-08	Nov-08	1.6

Contingency	BCWR		
Planned =	14,380	50,853	28%
Drawdown to date =	0		
EAC (overrun)/underrun =	-1546		
Cost Variance (overrun)/underrun =	854		
Schedule Slip (@\$202k/mo.) =	-505		
	13,183	42,764	31%
Current free balance contingency on remaining scope =		31%	

Risks (from updated risk registry)
No Changes to risk registry during the period

ISSUES
1) Uncertainty in the component fabrication schedules requires urgency in meeting upcoming design review dates for the Trim Coils, PF coils, Base support structure, and Coil support structure
2) The coil services lead design and fabrication schedule should be accelerated into FY08 to ensure supporting the field period assembly schedule. (requires add'l \$231k in FY08)
Additional candidates for acceleration include the cryogenic systems and cryostat design. (Requires add'l \$405k in FY08)