NCSX Monthly Progress Assessment

Description:	RLM:	Initials	Period:
NCSX Construction	**Larry Dudek**	Lawrence E. Dudek	**Nov-2007**

Scope (jobs):	Job Manager	Initials	Scope (jobs):	Job Manager	Initials
Mod Coil Fab Jobs 1408/1451/1459	JC		Fueling & Vacuum WBS 21 & 22	BB	
Cryo Systems WBS 62	GG		Diagnostics WBS 3	BS	
Assy Tooling design/fab Job 1803	TB		Water/Utilities WBS 61/63	LD	
Field Period Assy Jobs 1802/1810/1815	MV		Bakeout Systems WBS 64	MK	
Final Machine Assy WBS 75	EP				

Highlights and Progress:

WBS14: Station 4- [B6] Completed all casting preparation and installation of chill plates. Presently installing groundwarp insulation & lacing/ Station 3- [C6] Completed winding coil turns and bundle adjustments & measurements. Nearly complete with final groundwrap insulation./ Station 2- [B5] Completed winding coil turns and bundle adjustments & measurements. In process of securing lacing that holds the turns in position./ Station 1b- [A5] Completed all post VPI and electrical tests; removed coil from support ring./ Station 1a- [A6] Mounted the A6 coil into the support ring. Ready for next available work station. This is the last of the [18] coils that needs to be fabricated./ Progress is being made on the Punch list items including installation of thermocouples and insulation.
Reground shims were delivered from Zenex and were sent to White engineering for alumina flame spray. The station 3 assy fixture is near completion and set to ship on Dec 13th.

WBS 3: (1) All of the Co Wound loop assemblies for the Modular Coils have been fabricated. That is 36 total. The ones not yet installed are in the possession of Larry Gutadora and delivered to the Modular Coil fabrication effort as needed. (2) 11 of the 18 Co Wound loop assemblies required have been fabricated. 9 have been delivered to the TF Coil cognizant engineer. It is planned to complete the fabrication before mid Jan 2008. (3) A test jig is being constructed to check the continuity of the External Flux L
WBS 18: A3 and B3 and C5 premeasurements were completed
Began A-B assy
A1 on wedge locked in
B1 trial placed on wedge with no observed deflection will perform hardware trials but nothing further can be done until alumina shims arrive
VVSA
Continuing on bringing heater and thermocouple work (termination) forward

Issues (not currently impacting technical, cost, or schedule but being watched):

WBS 3: (1) The High Temperature Rogowski Coils are planned to be fabricated at PPPL and installed on VV1, 2 and 3 early in CY 2008. It was intended to restart the effort in Nov 2007 but it will be started in Jan 2008. (2) Complete the as built drawings including field information and file on the PPPL drafting web site.

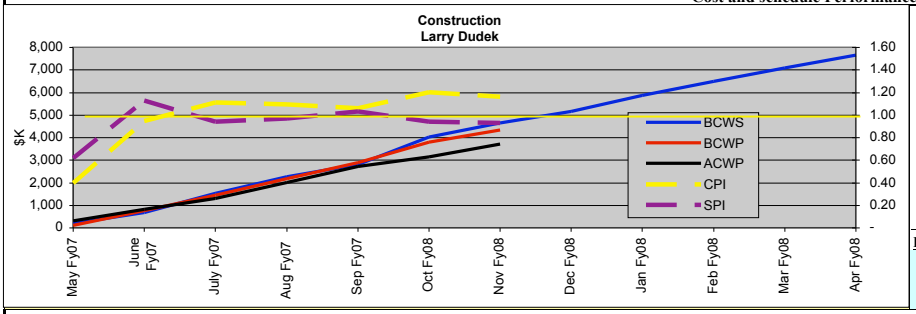
Problems and work around plans :

WBS 14: In comparing the projected needs for shims to what is on hand it appears that we are short about 9 shims. Replacements are being fabricated inhouse on an expedited schedule to ship to White for flame spraying.

Schedule

Milestones (near term look ahead)	Job	Job Mgr	Baseline plan	Current Forecast	DOE Commitment	Float (work days)
Shims required for 1st 3 pack MC assy -(task S21-5.04X	**1431**	**LD**	**20-Sep-07**	**11-Jan-08**	**Dec-07**	**-39**
Final Scan of VVSA #3 Station 1 complete -(task R1810-1329	1810	MV	06-Feb-08	21-Jan-08		302
Station 5 FDR -(task 1803-5.6	1803	TB	21-Nov-07	19-Feb-08		69
Complete 1st MCHP Assy (Sta 2) -(task S21-11.07M	**1810**	**MV**	**09-May-08**	**23-May-08**	**Sep-08**	**-39**
Remove from stand Move A2-B2-C2 to holding area -(task S22	1810	MV	19-Jun-08	23-May-08		-29
Station 6 FDR -(task 1803-6.6	1803	TB	04-Jun-08	04-Jun-08		69
COMPLETE VPI OF 18th MOD COIL -(task P3-171VM	**1451**	**JC**	**15-Jul-08**	**30-Jun-08**	**Nov-08**	**44**

Cost and schedule Performance



	From May 1,2007	Current Month
BCWS =	$4,659	$642
BCWP =	$4,334	$539
ACWP =	$3,727	$572
CV =	$607	
SV =	-$326	
CPI =	1.16	0.94
SPI =	0.93	0.84
BAC =	$45,219	
EAC =	$46,852	
Projected cost variance =	-$1,633	

EAC Variance Explanation

Analysis

Cost Variance (Cause, Impact, and Corrective Action) (>5% and >$50k)

Job 1803/1805: The station 3 lifting fixture was not covered in the original estimate. This work accounts for the $111K cost variance.
Job 1459: Cost variance due to added scope and the lifts which were not estimated in the original estimate.

Schedule Variance (Cause, Impact, and Corrective Action) (>5% and >$50k)

Job 1803/1805: Schedule impacted by station 3 lifiting fixture which was not in the original estimate.
JOB 1810 & 1431: Delays in MC interface design are causing schedule delays in FPA and MC interface procurements. Outboard shims were delivered with an out of tolerance permeability and had to be annealed & reground which delayed delivery about 8 weeks. Future shims will be annealed as part of the fabrication process to eliminate the delay.

Changes/Additions to the risk registry

Description	Likelihood of Occurrence	Cost and schedule impact