

**NCSX Monthly Progress Assessment**

<b>Description:</b>			<b>RLM:</b>	<i>Initials</i>	<b>Period:</b>
<b>NCSX Construction</b>			<b>Larry Dudek</b>		<b>July-2007</b>
<b>Scope (jobs):</b>	<b>Job Manager</b>	<i>Initials</i>	<b>Scope (jobs):</b>	<b>Job Manager</b>	<i>Initials</i>
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:**

Rogowski coil FDR held 8-9-07. Installation of vacuum vessel flux loops on all three VVSAs is complete and leads have been run to boxes on number 12 ports. Termination has been started. Completed the VPI of Modular Coil B4 / A5: Final bundle adjustments were completed as well as completion of the lacing, groundwrap and installation of the chill plates / Coils B5 and C6 have been mounted to support ring assemblies. / B5 All welding operations have been completed/ C6 welding has just begun/ B3 - structural shell and bag mold have been removed after VPI./ C1: Successfully completed final Megger electrical tests at the full 7.5 kv/ Grinding and nut clearance work has been completed on coils B1 and B2/ A1 in RESA building have nut clearance holes improved. By 7/31: Station 1 (Vacuum Vessel assembly)

- FP#1 & 2: Lead termination is in progress. The main task is feeding the diagnostic loop leads through feedthroughs in the cryostat interface flange. The leads have to go through a membrane which forms a seal between the cryostat atmosphere and the outside world. We have completed feedthroughs on FP#1 Moving to FP#2
- FP#3: installation of magnetic flux loops was completed.

Station 2 (Modular coil half-period assembly)

- Performed Grossfit of A1, B1, and C1 - Discovered a few potential interferences that require further investigation in CAD space.
- Performed Premeasurements of B1 - was able to obtain satisfactory lockin and scan
- Received the Ultrasonic MiniMax bolt gage for measuring tension in bolts up to 8 feet long.
- Weld test using Type A-B flange mockup and shims was completed. Magnetic permeability was measured, and appears not to be an issue. Small deflections were observed with dial indicators during welding. More detailed post-welding measure
- Contract for evaluation of welds is being negotiated with Edison Welding Institute.
- A6 and B6 winding forms were pre-assembled for gross fit-up check in preparation for welding test. Fit-up went well; two areas need grinding. Outboard shim are complete. Bushing installation trials are generally going well, but some holes have

Station 3 - Received the 3 legged actuator system for Station 3 activity.

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

The nut clearance hole work being performed in RESA. Manpower may be a problem to complete these activities on schedule. Nose Weld trials ongoing

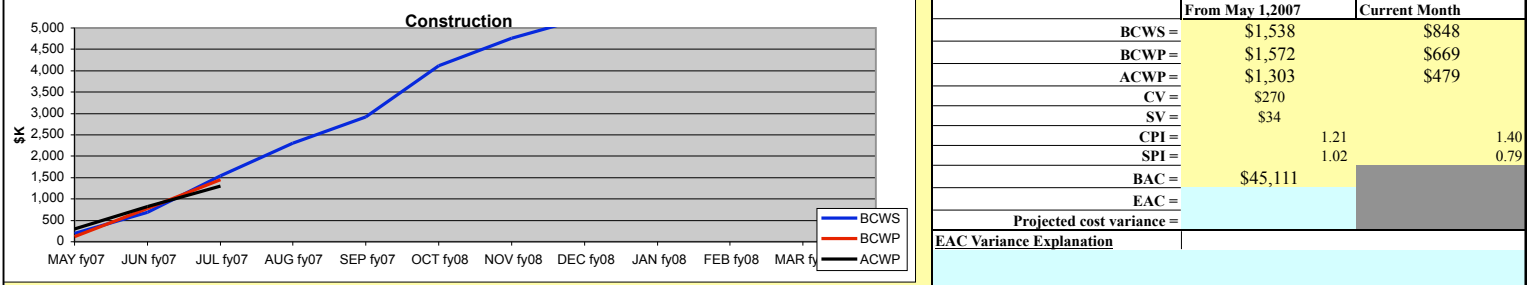
**Problems and work around plans :**

Manpower required to cut nut clearances is exceeding expectations. We have received a T&M quotation from an outside machine shop to provide a machinist and/or tools to supplement that effort. Need full time rigger assigned to staff LOE effort in budget. Personnel requisition issued and interviews will occur in August.  
Need specification and drawings for Station 2 activity in order to revise the MIT/QA and write procedures in time for Station 2 activity assuming a successful weld trial.  
Need Alumina shims to evaluate fitup and tolerance issues for Station 2. May also be a long lead item for actually beginning Station 2 activity.

**Schedule**

Milestones (6 month look ahead)	Job	Job Mgr	Baseline plan	Current Forecast	DOE Commitment	Level
Stage 3 support FDR	1803	TB	14-Jul-07	17JUL07A		3
FDR - ROWGOSKI COIL	3101	BS	7-Sep-07	10-Aug-07		3
<b>Shims required for 1st 3 pack MC assy</b>	<b>1431</b>	<b>LD</b>	<b>21-Sep-07</b>	<b>25-Sep-07</b>	<b>Jan-08</b>	<b>2</b>
Station 5 FDR	1803	TB	22-Nov-07	22-Nov-07		3
Final Scan	1810	MV	7-Feb-07	7-Feb-08		3

**Cost and schedule Performance**



**Analysis**

<b>Cost Variance (Cause, Impact, and Corrective Action) (&gt;5% and &gt;\$50k)</b>	<b>Schedule Variance (Cause, Impact, and Corrective Action) (&gt;5% and &gt;\$50k)</b>
1459 Mixing of work between MC Winding and Punchlist items; Punchlist work is requiring more effort since the A1 casting (worst) requires ~14 holes to be reworked vs planned 4, 1431 Stud kit parts more expensive than planned (FPA was ordered vs planned 3 pack)	1431 Procurements of MC interface parts were held up for drawings

**Changes/Additions to the risk registry**

Description	Likelihood of Occurrence	Cost and schedule impact
Possibility of pocket grinding work stretching out due to increased effort	U	CI + 5-20K, SI + 25-1 mos.