

NCSX Project Meeting July 9, 2008

Background: This is a report of the Project Meeting held Wednesday, July 9th.

The focus of this meeting was to review the proposed revised NCSX Project closeout activities and to discuss the overall closeout plans.

Meeting Minutes:

Safety Briefing – Bob Ellis provided a safety minute on hearing protection. He noted that as we age, we lose some hearing capabilities, primarily in the upper frequency ranges. Inner ear damage is irreversible. He noted that work area noise can also cause hearing loss – should always wear hearing protection in high noise areas – ear plugs or safety ear muffs.

Project Status – Don Rej updated the Project on the current status and plans for providing an “orderly shutdown” on NCSX. There was a weekly teleconference with OFES on Monday, July 7th to discuss our proposed MIE scope and the five major areas for R&D. Although NCSX was discussed, there were no obvious concerns expressed by OFES. The next day, Ray Fonck had his quarterly briefing with Ray Orbach. Expect some feedback/additional questions later this week.

Ron Strykowski then went through the latest three week look-ahead schedule. It was noted that a significant amount of work is being completed and that jobs are being closed as the work is completed.

Action Items from this Meeting:

- Don will share the update Table of Contents for the Closeout Report with the RLMs later this week.
- Action items from last week:
 - Following the meeting, the management team reviewed the costs to date – it was noted that we will need to carefully track the archiving/closeout costs in Job 8221. Ron has provided a suggested way to do this. (Closed)
 - There needs to be resolution on whether the cryostat used for modular coil testing in the TFTR basement should be retained or disposed of. Don, Phil, and Larry will discuss with Mike Williams next week. Until this is resolved, Erik will not proceed with disposition. Note: as of July 9th, no resolution has been set, however, it all depends on what OFES authorizes for the follow-on R&D. If only limited to one coil vs. a three pack, then perhaps the existing facility can be used. (*Action – await OFES guidance*)

**NCSX Project Meeting
July 9, 2008**

Attachments

- **Meeting Minutesi**
- **Close Out Update – Don Rej**
- **Three Week Look-Ahead Schedule – Ron Strykowski**

NCSX Project Team Meeting: July 9, 2008



- Safety Minute
- Interactions with DOE
- 3-week look-ahead



NCSX - Project Status



- Our current resource-loaded closeout plan was officially submitted to DOE on schedule last week.
- NCSX was one of several topics of PPPL conference call with OFES Director on 7/7/08
- NCSX was one of several topics of OFES Director meeting with DOE Under Secretary for Science on 7/8
- Anticipate feedback later this week

Activity ID	Activity Description	Forecast Start	Forecast Finish	% cmlpt	ETC	FY08					FY09					FY10				
						J	J	A	S	O	N	D	J	F	M	A	M	J	J	A
Included Closeout Scope																				
Brown																				
Job: 1803/1805- FPA Tooling/Constr-BROWN																				
Station 3-Modular Coil to VVSA Assembly																				
1803S3-4	Generate laser screen trace drawings (1/2 period)	17JUL08	06AUG08		10,688.40															
1803S3-6	Station 3 simulation detail model	02JUN08A	01AUG08	75	5,676.00															
1803S3-9	Oversite, cost and schedules, reviews	31JAN08A	30SEP08	LOE	2,649.42															
1805S3-207	Misc assembly Cost	31JAN08A	30SEP08		3,763.26															
Job: 8203 - Design Integration-BROWN																				
8203FY08-4	General integration activities	01FEB08A	30SEP08	LOE	10,521.38															
Brooks																				
Job: 8204 - Systems Analysis-BROOKS																				
8204-FY08Z	Syst Analysis, studies & tech assurance FY08 etc	02JUN08A	30SEP08	LOE	31,624.75															
Chrzanowski																				
Job: 1352 - PF Coil Procurement-CHRZANOWSKI																				
PF Coil Fabrication																				
141-038.1	PF Conductor cancellation cost	21FEB08A	18JUL08	C	93,150.00															
Job: 1408 - MC Winding Supplies-CHRZANOWSKI																				
1408-3	Misc and safety supplies (\$7k/mo.)	23MAY07A	31JUL08	LOE	149.04															
1408-6	VPI clean manifold contract	23MAY07A	31JUL08	80	2,484.00															
1408-8	Cutting hardware for flange bolts	23MAY07A	31JUL08	LOE	273.24															
1408-7	Misc tech shop support	23MAY07A	31JUL08	80	10,108.16															
Job: 1451 - Mod Coil Winding-CHRZANOWSKI																				
Station 3-Casting Prep & Winding																				
P1-170	Instl Chill Plates,Tubing,Bag A6	02JUN08A	09JUL08		43,117.62															
Station 5-VPI																				
P1-171V	VPI (Station 5) A6	10JUL08	15JUL08		47,514.31															
P3-171VM	COMPLETE VPI OF 18th MOD COIL		15JUL08		0.00															
Station 1 Post VPI																				
P2-171C	Final Clamps & Warm Test (Station1) B6	02JUN08A	23JUL08	5	22,806.54															
P1-171C	Final Clamps & Warm Test (Station1) A6	24JUL08	14AUG08		24,006.88															
LOE Oversight & Supervision																				
145XSPRV-3	Winding Engineering oversight and supervision	01MAY07A	30SEP08	LOE	31,832.46															
145XSPRV-A	Winding Engineering oversight and supervision	01NOV07A	29AUG08	LOE	56,904.69															
Job: 1459 - Mod Coil Fabr.Punch List-CHRZANOWSKI																				
Punchlist Tech shop/RESA																				
PLTS-C5	Grinding & Drill Holes -C5	01MAY08A	30JUL08	83	3,221.98															
PLTS-A5	Grinding -A5	01MAY08A	30JUL08	0	6,949.36															
PLTS-B5	Grinding -B5	01MAY08A	30JUL08	0	9,476.40															
PLTS-A6	Grinding -A6	01MAY08A	29AUG08	20	3,095.62															
PLTS-B6	Grinding -B6	01MAY08A	29AUG08	0	9,476.40															
PLTS-C6	Grinding & Drill Holes -C6	01MAY08A	29AUG08	23	14,593.66															

Activity ID	Activity Description	Forecast Start	Forecast Finish	% cmplt	ETC	FY08				FY09				FY10										
						J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Punchlist- Coil Technicians																								
PLCT-A6	Insul,measure,TC,SG other punch list-A6	01OCT07A	31JUL08	36	10,411.40																			
PLCT-B6	Insul,measure,TC,SG other punch list-B6	01OCT07A	31JUL08	36	10,411.40																			
Cole																								
Job: 1416 - Mod Coil Type AB Fnl Dsn-COLE																								
Analysis and closeout documentation																								
1416-601	Prepare EM and structural analysis of leads	31JAN08A	09JUL08	70	9,966.00																			
1416-650	Prepare cooling analysis of lead area	01JUL08	30JUL08		3,020.00																			
1416-651	2D cooling analysis for mod colis	01JUL08*	09JUL08	95	604.00																			
Job: 1421 - Mod Coil Interface Design-COLE																								
Inboard Interface-CC																								
1421-3155	Resolve C-C shim FDR comments	01JUL08*	09JUL08	80	3,624.00																			
1421-9000	Perform shear test	01JUL08*	07JUL08	75	7,927.50																			
Job: 1901 - Stellarator Core Mngtt&Integr-COLE																								
191 - Stellarator Core Management & Oversight																								
1901-08	WBS 191 FY08	01OCT07A	29SEP08	LOE	24,323.08																			
1901-9000	Update drawing tree	01OCT07A	29SEP08	LOE	24,160.00																			
192 - Stellarator Core Integr & Global Analysis																								
1902-08	WBS 192 FY08	01OCT07A	29SEP08	LOE	57,388.46																			
Job: 1806 - FP Assembly specs and drawings-COLE																								
Station 3-Modular Coil to VVSA Assembly																								
1803-301	Station 3 Assembly Specification	02JUL07A	15JUL08	80	7,248.00																			
1803-305	Station 3 Assembly Drawings	02JUL07A	15JUL08	80	4,832.00																			
Dahlgren																								
Job: 1501 - Coil Structures Design-DAHLGREN																								
1501-533	Detail CAD Drawings,BOM	01JUN07A	11JUL08	95	4,263.86																			
1501-533F	Integrated Stress Analysis	01OCT07A	11JUL08	95	6,021.40																			
1501-536	Issue dwgs for review		11JUL08*		0.00																			
1501-549	Update C.S.Support Attacgmt Design	01MAY08A	11JUL08	95	407.34																			
1501-562	Prepare Specs for Coil Structure & CSS h/w	07JUL08	11JUL08		3,542.00																			
1501-537	FDR Prep	07JUL08	11JUL08		12,370.68																			
1501-541	Coil Support Structures - FDR		11JUL08		0.00																			
Dudek																								
Job: 1431 - Mod. Coil Interface Hardware-DUDEK																								
Shims-Inboard																								
1431-110	Complete PE007677 with white engr incl rework	01JUL08	29JUL08		12,705.66																			
Ellis																								
Job: 8205 - Dimensional Control Coordin-ELLIS																								
Station 3-Modular Coil to VVSA Assembly																								
METFY08R	Support FPA Station 2	01FEB08A	30SEP08	LOE	11,196.98																			
STAT3 PREP	Station 3 preparations	30JUN08A	02SEP08	10	12,751.20																			
Harris																								
Job: 8102 - NCSX MIE Management ORNL-HARRIS																								
810.105XX	Project Management Office ORNL FY08 (LOE)	01FEB08A	29SEP08	LOE	75,467.11																			
810.105Z	Project Management Office ORNL FY09 (LOE)	01OCT08*	31MAR09	LOE	35,930.73																			

Activity ID	Activity Description	Forecast Start	Forecast Finish	% cmplt	ETC	FY08				FY09				FY10					
						J	J	A	S	O	N	D	J	F	M	A	M	J	J
Heitzenroeder																			
Job: 8202 - Engr Mgmt & Sys Eng Sprt-HEITZENROED																			
Closeout Documentation																			
8205DC	document control & admin support	01FEB08A	31MAR09	LOE	21,307.22	SUCH etc =142hr ; TYRELL etc =21													
8205FY08.2	Engr mgt & systems engr FY08	01FEB08A	30SEP08	LOE	136,471.75	HEITZENROED etc =445hr ; SIMMONS etc =00 REIERSEN etc =89hr ; DUDEK etc =474 VONHALLE etc =89hr ;													
8205FY09	Engr mgt & systems engr FY09	01OCT08*	31MAR09	LOE	157,899.44	HEITZENROED etc =315hr REIERSEN etc =126hr ; VONHALLE etc =126hr ; SIMMONS etc =00 DUDEK etc =333													
Job: 8221 -Documentation Closeout-HEITZENROEDER																			
Closeout Documentation																			
8221-100	Technical data collection	01JUL08*	31OCT08		626,239.87	SIMMONS =160hr BLANCHARD =40 BROOKS =100hr BROWN =375 CHRZANOWSKI =168hr COLE =80 DAHLGREN =40hr DODSON =40h DUDEK =32hr ELLIS =40 GORANSON =80hr Fogarty= 80 Phil =160; Kalish =56; labik =40; langish =24 freudenberg =120 Perry =16; Raftopoulos =220; Raki =16 rushinski =335 mike morris=20 sichta =80; smith = 14; strykowsky =160; upcavage =215 viola = 158 williamson =80 Moon=10 Nelson=10; Harris= 20; Jun=100; Gentile=20; Lew Morris=335													
8221-251	Tech presentation/paper collection	01JUL08	29SEP08		9,902.00	HAMPTON etc =100hr ; TYRELL etc =10													
8221-301	Guidance to collect data	02JUN08A	29SEP08		39,847.50	SIMMONS etc =300hr ;													
8221-305	Organizing and posting data	30SEP08	27MAR09		56,203.18	SIMMONS etc =300hr ;													
8221-401	Finalizing and archiving key analyses/reports	01JUL08	29SEP08		137,504.00	FREUDENBERG etc =160hr ; DAHLGREN etc =16 FAN etc =160hr ; AVASARALA etc =16 ZHANG etc =160hr ;													
8221-501	dell server, software, setup (non project cost)	01JUL08	29SEP08		0.00	CARROL etc =200hr ; 41etc =18\$K ;													
8221-555	Comp. div support of web (non project cost)	01JUL08	29SEP08		0.00	CARROL etc =160hr ;													
8221-575	Archiving doc & files in ops center	01JUL08	26MAR09		18,078.02	SUCH etc =200hr ;													
8221-700	As-built Drawing Updates	01JUL08*	23DEC08		232,562.06	EA/SB Designers etc =1995hr ;													
Kalish																			
Job: 1361 - TF Fabrication-KALISH																			
TF Title III and Fabrication Oversight																			
131-033C	Title III engr,inspection, support	02JAN08A	18SEP08	LOE	28,562.95	KALISH etc =71hr ; 35etc =02\$K ; 41etc =00\$K ; EM/TB etc =00hr ; MEIGHAN etc =173hr ;													
TF Fabrication Contract																			
1361C-115	Fab, Test & Deliver Coil #15	17JUL08*	17JUL08		47,220.00	49etc =47 ;													
1361C-116	Fab, Test & Deliver Coil #16	08AUG08*	08AUG08		47,220.00	49etc =47 ;													
1361C-117	Fab, Test & Deliver Coil #17	02SEP08*	02SEP08		47,220.00	49etc =47 ;													
1361C-118	Fab, Test & Deliver Coil #18	24SEP08*	24SEP08		47,220.00	49etc =47 ;													
1351-195X	ALL TF COILS DELIVERED		24SEP08		0.00														
Job: 1354 - Trim Coil Design &Procurement-KALISH																			
Trim Coil **Updated estimate**																			
TRIM-170	Complete Trim Coil Detailed Drawings	25MAR08A	11JUL08	95	7,025.84	KALISH etc =14hr ; RUSHINSKI etc =10h CRUIKSHANK etc =80hr ;													
TRIM-200	Assy drawings & parts list	01APR08A	11JUL08	95	9,988.86	KALISH etc =04hr ; RUSHINSKI etc =10h CRUIKSHANK etc =80hr ;													
Neilson																			
Job: 8222 - Manuscripts and Papers - NEILSON																			
Prepare Closeout report																			
8222-900	Manuscripts, journal & papers (40 papers @40hrs)	02SEP08*	31MAR09		299,600.15	ea/em=800,em/em=400;r///rm=40 travel=15													
Perry																			
Job: 8220 - Equipt Save & Facility Restora-PERRY																			
Safe and store NCSX hardware assets																			
8220-201	Coordination and oversight	01JUL08	30JAN09		60,636.94	PERRY etc =382hr ;													

Activity ID	Activity Description	Forecast Start	Forecast Finish	% cmplt	ETC	FY08				FY09				FY10							
						J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Job: 8221 -Documentation Closeout-HEITZENROEDER																					
Prepare Closeout report																					
8221-602	Draft table of contents out for review		14JUL08*		0.00																
8221-604	DOE concurrence on table of contents		21JUL08*		0.00																
8221-606	Final Table of contents issued		28JUL08*		0.00																
8221-608	Chapter & Appendices writers assigned		28JUL08*		0.00																
8221-610	Writer guidance prepared & communicated		28JUL08*		0.00																
8221-612	Chapter outlines finalized		29AUG08*		0.00																
8221-614	Chapter Draftes complete		30SEP08*		0.00																
8221-616	Chapter Draft reviews complete		15OCT08*		0.00																
8221-618	Chapters Complete		17NOV08*		0.00																
8221-636	Executive summary complete		05DEC08*		0.00																
8221-639	Draft Report complete		05JAN09*		0.00																
8221-642	Report Reviews Complete		02FEB09*		0.00																
8221-646	DOE Concurrence		02MAR09*		0.00																
8221-649	Final Report Issued		31MAR09*		0.00																
Strykowski																					
Job: 8998 - Allocations-STRYKOWSKY																					
99.08	PPPL Allocations FY08	LOE	01OCT07A	29SEP08	LOE	106,859.48															
99.09C	PPPL Allocations FY09	LOE	01OCT08*	31MAR09	LOE	59,465.00															
Viola																					
Job: 1802 - FP Assy Oversight&Support-VIOLA																					
Oversight and Supervision																					
1802ORN02	ORNL Title III field period assy station 2/3		02JUN08A	30SEP08	LOE	10,436.58															
R1802-003	Metrology Engr Super FY08		01OCT07A	30SEP08	LOE	33,974.62															
R1802-007	FPA Management FY08		01OCT07A	30SEP08	LOE	64,563.00															
R1802-009	PU Title III support		02JUN08A	30SEP08	LOE	47,244.29															
R1802-010	Drexel co-op student support		02JUN08A	31JUL08	LOE	1,290.30															
R1802-015	HP Coverage in the TFTR TC LOE FY08		01OCT07A	30SEP08	LOE	40,024.41															
R1802-016	HP Coverage in the TFTR TC LOE FY09		01OCT08*	23DEC08	LOE	36,276.45															
1802MISC	Misc materials,tools, GSA vehicle,rigging		01FEB08A	30SEP08	LOE	42,029.28															
Station 3 procedures,JHA,ACC,Training,Prep																					
R1802-309	JHA completed		16JUL08	23JUL08		0.00															
R1802-315	Pre-job brief completed		24JUL08	31JUL08		0.00															
R1802-320	Update FPA cost estimate for FPA station 2&3		15SEP08	19SEP08		0.00															
Job: 1810 - Field Period AssyStation 1,2,3 VIOLA																					
General Assy Support																					
R1810-003	LOE Crane support, fixture setupfor FY08		01OCT07A	30SEP08	LOE	41,868.31															
R1810-025	Crane & Rigging inspections		01FEB08A	30SEP08	LOE	2,969.27															
R1810-007	LOE Field Supervision for FY08		01OCT07A	30SEP08	LOE	59,509.70															
R1810-2001	Misc Hardware and hardware rework (1/2 fte loe)		01FEB08A	30SEP08	LOE	17,815.63															
S21-4.02	Perform routine metrology set-up and checks (loe)		01FEB08A	30SEP08	LOE	45,942.88															
Setup																					
R1810-2034	Misc Tool and Hardware		02JUN08A	30SEP08	LOE	14,022.18															
Pre-Measuring and fitup checks																					
Pre measurement of MCHP A2,B2,C2 flanges																					
2-2-2.99	Drill Stacyast fill holes C2		01JUL08*	03JUL08		9,476.40															
Station 2 MC subassy A1B1C1																					
AB-C MC Assembly																					
2-1-7.35	After tightening hardware, meas position of monu		02JUL08*	02JUL08		3,351.46															
2-1-7.36	Weld B / C nose region solenoid side		03JUL08	08JUL08		5,685.84															

