

Appendix F

Engineering Change Proposal (ECP) log

ECP No.	Impacted WBS Elements	Control Accounts	ECP Title	Approval Date	Change Level	Contingency Draw K	Contingency Cum K	CBB K	Contingency Remaining K	ECP Status
1	1.7	7700	Combine CA 770 and 7710 into one CA (7710) Direct Allocations	4/25/2011	3 Project Manager			\$77,317	\$16,992	Approved
2	1.6	6100	Move the baseline start date for task 6100-0041 to 12 April 2012	6/8/2011	3 Project Manager			\$77,317	\$16,992	Approved
3	1.6	6100	Reduce man-hours on task 6100-001. Add this budget as M&S on task 6100-0049D.	9/10/2011	3 Project Manager			\$77,317	\$16,992	Approved
4	1.1 1.2 1.8	1304 8200 8210 2420 2490	1- CA 1304 change to TF procurement (cost/schedule) 2- CA 8200 re-structured and split into two CA's (8200/8210) 3- Remove four tasks from NB Source CA 2420 4- Task acceleration	11/10/2011	2 Federal Project Director	963	963	\$78,280	\$16,029	Approved
5	1.5	5501 5200 5000	Update the Work Breakdown Structure/Dictionary in the Project Execution Plan to ensure that a single Control Account does not occur at more than one WBS element	10/6/2011	3 Project Manager		963	\$78,280	\$16,029	Approved
6	1.7 1.8	7100 8200 8250	Various changes to Control Accounts 7100 (move labor), 8200/8250 (delete WPs and convert to PPs)	11/21/2011	3 Project Manager	-3	960	\$78,277	\$16,032	Approved
7	1.5	5000	Convert task 531-005 held in Planning Package to discrete tasks	11/30/2011	3 Project Manager		960	\$78,277	\$16,032	Approved
8	1.8	8200 8210	Move budget/task (8200-0017A) for purchase of two welding machines from oversight job (8210) to field work job (8200). Change EVT to % Complete.	12/2/2011	3 Project Manager		960	\$78,277	\$16,032	Approved
9	1.3	3300	Control Account 3300: Convert WP 3300-125 EVT from Planning Package to % complete.	12/13/2011	3 Project Manager		960	\$78,277	\$16,032	Approved
10	1.5	5000	Convert EVT for activity 531-013 to % complete	1/13/2012	3 Project Manager		960	\$78,277	\$16,032	Approved
11	1.1	1002	Control Account 1002. Add scope (cost/schedule) as shown on attached WAF to support reinforcement of passive plates. Change CA 1002 CAM to Neway Atnafu.	1/23/2012	2 Federal Project Director	178	1138	\$78,455	\$15,854	Approved
12	1.1 1.2	1304 1305 2480	Delete several unnecessary activities from CA 1304 Inner TF Bundle. Add several activities (cost/schedule) to CA 1305 to accommodate sandblast and prime of OH conductor. Reduce budget on task 2480-0057.	2/7/2012	2 Federal Project Director	-11	1127	\$78,444	\$15,865	Approved
13	1.8	8200 8210	Move task 8200-0017 from Control Account 8210 to Control Account 8200.	12/19/2011	3 Project Manager		1127	\$78,444	\$15,865	Approved
14	1.2	2485	Change the EVT for task 2485-0044A to C (% complete)	1/9/2012	3 Project Manager		1127	\$78,444	\$15,865	Approved
15	1.1	1305	Add activities (cost/schedule) to accomplish Aquapour test recommended at FDR	2/22/2012	2 Federal Project Director	31	1158	\$78,475	\$15,834	Approved
16	1.2	2300	Engineering and Analysis work to support adding compliance to the HHFW antennas. New CAM = Bob Ellis		2 Federal Project Director		1158	\$78,475	\$15,834	OPS Scope
17	1.2	2425	Neway Atnafu will replace Martin Denault as the Control Account Manager for Control Account 2425 BL Relocation.	1/24/2012	3 Project Manager		1158	\$78,475	\$15,834	Approved

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18	1.2	2450	Resource change for several activities in Control Account 2450, and a change to the start dates for several LOE tasks.	1/26/2012	3 Project Manager	-10	1148	\$78,465	\$15,844	Approved
19	1.1 1.8	1301 8200	Move tasks for drilling additional holes in outer TF flags (tasks 1301-0300 and 1301-0310) from Control Account 1301 to Control Account 8200	2/21/2012	3 Project Manager		1148	\$78,465	\$15,844	Approved
20	1.2	2425	Change the start and finish dates for the three LOE tasks.	2/21/2012	3 Project Manager	-6	1142	\$78,459	\$15,850	Approved
21	1.2	2425	Replanning of work scope in Control Account 2425 to better fit project timing. Should equate to a slight budget reduction.	3/12/2012	3 Project Manager	-51	1091	\$78,408	\$15,901	Approved
22	1.5	5200	Re-planning of Control Account 5200 for Digital Coil Protection	5/1/2012	2 Federal Project Director	27	1118	\$78,435	\$15,874	Approved
23	1.2	2440	Transfer responsibility of Control Account Manager (CAM) from Martin Denault to Mark Cropper for Control Account 2440 2nd NBI Beamline	2/24/2012	3 Project Manager		1118	\$78,435	\$15,874	Approved
24	1.1	1307	Replace task 1307-2030 Fabricate CS Casing with five (5) new tasks consistent with contract award	3/28/2012	2 Federal Project Director	409	1527	\$78,844	\$15,465	Approved
25	1.2 1.8	2475 8200	In Control Account 2475 add steps to the schedule for EPICS timing and Control Interface. In Control Account 8200: Delete task 8200-0102C	4/2/2012	2 Federal Project Director	122	1649	\$78,966	\$15,343	Approved
26	1.1 1.7 1.8	1001 7100 8250	Change M&S budget on tasks 1001-0066 and 1001-0066F in Control Account 1001. Also this ECP increases FY2012 resources for Control Account 7100 (Project Management & Integration). Delete redundant tasks from Control Acct. 8250.	3/21/2012	2 Federal Project Director	210	1859	\$79,176	\$15,133	Approved
27	1.1 1.8	5000 1302 1304 1305 1307 8200	Update (replanning) of Control Accounts 1302, 1304, 1305, 1307 including additional tasks and updated resources. Delete Planning Package 8200-PP01A; work not required.	5/1/2012	2 Federal Project Director	22	1881	\$79,198	\$15,111	Approved
28	1.7	7300	In Control Account 7300 - Delete task 7300-13 Support of OPA Review	3/27/2012	3 Project Manager	-86	1795	\$79,112	\$15,197	Approved
29	Milestone PEP		In PEP: Re-define Level II milestone change ref "Friction stir weld coil leads..." In Project Schedule: Re-define activity 1070 to read:RECEIVE FIRST DELIVERY MACHINED INNER TF CONDUCTOR - 30 JUN 2012	4/3/2012	2 Federal Project Director		1795	\$79,112	\$15,197	Approved
30	1.7	7300	In Control Account 7300 (NB2 Management) delete activity 7300-22.	5/2/2012	2 Federal Project Director	-86	1709	\$79,026	\$15,283	Approved
31	1.2 1.1	2490 1002 2440	CA: 1002 Add drafting support CA: 2440 Delete tasks for exit spool piece CA: 2490 Add drafting support and tasks for locating TMP rack on 119' platform	5/23/2012	2 Federal Project Director	-165	1544	\$78,861	\$15,448	Approved

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32			Not used				1544	\$78,861	\$15,448	
33	1.1 1.7	1000 7710	In Control Account 1000 increase the Title III Analysis Support task (LOE) to 900 man hours/FY. This equates to 75 hrs/mo from June 2012 through September 2014. Reduce FY12 and FY13 HP Allocation task in Control Account 7710.	6/14/2012	2 Federal Project Director	258	1803	\$79,120	\$15,189	Approved
34	1.1	1304	Change the EVT for several tasks in CA 1304 from 0-100 to % complete. The thought was that milestone payments would be made; however, accruals have been taken based on completion of work and we want to ensure we earn the appropriate value.	6/8/2012	3 Project Manager		1803	\$79,120	\$15,189	Approved
35	1.1	1305	In Control Account 1305 task 1304-1510 had baseline dates of 20Oct12 through 19Sept13. With the early start of fabrication this task requires date changes to Start: 1May2012 through Finish: 31Aug2012.	6/21/2012	2 Federal Project Director	-2	1801	\$79,118	\$15,191	Approved
36	1.1	1304	In Control Account 1304 Subcontract S011001 was amended to have Major Tool straighten some of the conductors. This task added an additional \$66,260.00 to the contract. This change will add this additional cost in task 1304-1000.	6/21/2012	2 Federal Project Director	66	1867	\$79,184	\$15,125	Approved
37	1.1	1001	Protective measures for the PF-1C coil canister.	7/20/2012	2 Federal Project Director	464	2332	\$79,649	\$14,660	Approved
38			Not Used		3 Project Manager		2332	\$79,649	\$14,660	Not yet submitted for Approval
39	1.1	1300 1301 1305 4100	Additional budget to jobs in CA's 1300, 1301 and 1305. Resources are needed for these tasks that were not previously budgeted.	6/26/2012	2 Federal Project Director	689	3021	\$80,338	\$13,971	Approved
40	1.4	6100	Physics (Stefan) identified new workscope for Diagnostics. This ECP represents the portion of that which Central I&C can service.				3021	\$80,338	\$13,971	OPS Scope
41	1.5	5000	PF1 feed changes		2 Federal Project Director		3021	\$80,338	\$13,971	OPS Scope
42	1.8	8210	Reschedule and re-budget task 8200-0012D "Reinstallation Oversight".	7/3/2012	2 Federal Project Director	159	3180	\$80,497	\$13,812	Approved
43	1.8 1.2	8200 2490	Additional tasks for Control Accounts 8200 and 2490. Delete 3 tasks from CA 2490.	7/30/2012	2 Federal Project Director	178	3358	\$80,675	\$13,634	Approved
44	1.2	2425	The HVAC duct over the door between the TFTR and NSTX Test Cells was removed to allow the move of the second neutral beam into the NTC. When this duct is permanently re-installed it should be mounted higher on the wall so it will not interfere with future use of this doorway.	7/16/2012	2 Federal Project Director		3358	\$80,675	\$13,634	Not yet submitted for Approval

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45	1.1	1300 1301 1302 1304 1305 1306 1307	Re-estimating of remaining Center Stack Work	8/15/2012	2 Federal Project Director	1466	4824	\$82,141	\$12,168	Approved
46	1.1	1001	Delete tasks 1001-0078 and 1001-0082 in Control Account 1001. These two tasks are redundant.	7/24/2012	2 Federal Project Director	-43	4782	\$82,099	\$12,210	Approved
47	1.1 1.2 1.3	2450 2480 3200	Change Control Account Manager (CAM) for several jobs: 2450: from Denault to Neway Atnafu 2480: from Denault to Bill Blanchard 3200: from Denault to Neway Atnafu	8/8/2012	3 Project Manager		4782	\$82,099	\$12,210	Approved
48	1.1	1200	Updated estimated costs are more than original budget for several tasks. Request additional budget.	8/20/2012	2 Federal Project Director	169	4951	\$82,268	\$12,041	Approved
49	1.5	5501 1200	Additional scope (cost/schedule) for Control Account 5501 analysis tasks and additional oversight/documentation time for Control Account 1200	10/5/2012	2 Federal Project Director	497	5448	\$82,765	\$11,544	Approved
50	1.6	6100	Add additional budget to oversight task 6100-0000	9/4/2012	2 Federal Project Director	38	5486	\$82,803	\$11,506	Approved
51	1.1	1305	Add activity 1305-0003 to re-design and manufacture flanges for the TF Quadrant Mold that will allow for complete closure and sealing of the mold	7/19/2012	2 Federal Project Director	10	5496	\$82,813	\$11,496	Approved
52	1.2	2480	Convert Planning Package 2480-0076 to discrete activities	8/28/2012	3 Project Manager		5496	\$82,813	\$11,496	Approved
53	1.2	2440	Delete tasks 2440-0014 and 2440-0024 from Control Account 2440	9/19/2012	2 Federal Project Director	-125	5371	\$82,688	\$11,621	Approved
54	1.2	2490	Delete tasks 24910470 and 24910480 from Control Account 2490	9/24/2012	2 Federal Project Director	-36	5335	\$82,652	\$11,657	Approved
55	1.4	4500	Add scope for analysis/design/fabrication/installation of tFIDA	12/4/2012	2 Federal Project Director	192	5527	\$82,844	\$11,465	Approved
56	1.2	2440 2475	Delete unnecessary task from Control Account 2440. In Control Account 2475 add steps to the schedule for LCC & Low Voltage Power Supply refurbishment. In Control Account 2475 add steps to the schedule for Display Software up-grade.	10/19/2012	2 Federal Project Director	59	5586	\$82,903	\$11,406	Approved
57	1.8	8200	Install 6 small ports on NSTX Vacuum Vessel	12/4/2012	2 Federal Project Director	97	5683	\$83,000	\$11,309	Approved
58	1.2 1.1	2460 1001	For Control Account 1001 the contract for the machining for Batch 1 of the PFCs came in under budget by ~\$90K. For Control Account 2460 there is an increase in job scope	12/4/2012	2 Federal Project Director	-31	5651	\$82,968	\$11,341	Approved

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59	1.1	1001	Move BL start date for task 1001-0066F to 12/3/2012 while task is being re-planned.	11/12/2012	3 Project Manager		5651	\$82,968	\$11,341	Approved
60	1.2	2450	The baseline budget for Control Account 2450 is not sufficient to perform the remaining work scope. This ECP will be used to cover the difference between the cost estimate for the remaining work and the original budget.	1/24/2013	2 Federal Project Director	221	5872	\$83,189	\$11,120	Approved
61	1.1	1305 1304	Add tasks to cover additional work on TF quadrant mold and to perform an in-line braze test (OH). Change BL dates on two other tasks.	12/17/2012	2 Federal Project Director	14	5886	\$83,203	\$11,106	Approved
62	1.8 1.7	8200 8210 7300 7200	For Control Account 8200/8210 - add rework of parts received from other WBS elements. Delete two tasks from Management Job 7300 and one task from Management Job 7200.	12/20/2012	2 Federal Project Director	240	6126	\$83,443	\$10,866	Approved
63	1.5	5200	Change BL start and finish dates on the Water PLC portion of the DCPS (5200) job.	12/10/2012	2 Federal Project Director	2	6128	\$83,445	\$10,864	Approved
64	1.5	5501	Control Account 5501 has been assigned to a new CAM. The CAM has overhauled the schedule which requires additional budget. All tasks that are currently "in-progress" will be stopped as of the end of February 2013 and the new schedule will be used moving forward.	3/29/2013	2 Federal Project Director	319	6448	\$83,765	\$10,544	Not yet submitted for Approval
65	1.5	5501	Change Control Account Manager (CAM) on Control Account 5501 Coil Bus Runs to Neway Atafu	12/20/2012	3 Project Manager		6448	\$83,765	\$10,544	Approved
66	1.1	1002	Passive plate re-inforcement	1/24/2013	2 Federal Project Director	197	6644	\$83,961	\$10,348	Approved
67	1.2	2490	Remove several activities from Control Account 2490 which are no longer required since the SPRED diagnostic will not be re-installed	1/31/2013	2 Federal Project Director	-60	6584	\$83,901	\$10,408	Approved
68	1.1	1302 1305 1306	Correct baseline dates for various future Critical Path activities to make them consistent with the baseline schedule and milestones. Also, replan activity 1306-5050 for the PF coil procurement.	1/17/2013	2 Federal Project Director	18	6602	\$83,919	\$10,390	Approved
69	1.1	1001	Reduce total budget on task 1001-0066F to \$142,000 (a reduction of \$146,064.80)	1/17/2013	2 Federal Project Director	-146	6456	\$83,773	\$10,536	Approved
70	1.1	1305	Move baseline dates for task 1305-2620 "Fab and deliver OH Mold" (this is a zero cost change)	1/28/2013	3 Project Manager		6456	\$83,773	\$10,536	Approved
71	1.7	7400 7710	Reduction of 10% in remaining HP support activities and HP direct allocations due to reduced need	1/31/2013	2 Federal Project Director	-133	6322	\$83,639	\$10,670	Approved
72	1.2	2450	Control Account Manager restructuring of job post CAM change. No increase in budget.	3/5/2013	2 Federal Project Director	0	6322	\$83,639	\$10,670	Approved

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73		1304	NOT USED				6322	\$83,639	\$10,670	
74	1.2	2480	S-FLIP Port Installation and Reinforcement	3/1/2013	2 Federal Project Director	165	6487	\$83,804	\$10,505	Approved
75	1.1	1200	NOT USED				6487	\$83,804	\$10,505	
76	1.1	1001	Adjust the baseline dates of various future tasks in job 1001 CS Plasma Facing Components (small cost increase due to tasks pushed into FY14)	3/21/2013	2 Federal Project Director	3	6490	\$83,807	\$10,502	Approved
77	1.8	8200	In Control Account 8200 add additional scope for installation of umbrella arch reinforcements which is not included in the existing estimate.	3/19/2013	2 Federal Project Director	74	6564	\$83,881	\$10,428	Approved
78	1.1	1300 1305	Updated resources added for Control Account 1305 to cover the VPI's through the full TF. Added resources for Commissioning of the OH Winding Station. Additional resources added to the LOE job 1300 to cover Engineering Support and Drafting/Title III support.	3/22/2013	2 Federal Project Director	476	7040	\$84,357	\$9,952	Approved
79	1.1	1200	In Control Account 1200. The bolted connection between the lower lid and the pedestal require re-design and analysis.	4/19/2013	2 Federal Project Director	8	7048	\$84,365	\$9,944	Approved
80	1.8	8250	Delete Planning Package 8250-PP01A "CS Analysis Update". This scope is not needed in this Control Account.	4/25/2013	2 Federal Project Director	-49	6999	\$84,316	\$9,993	Approved
81	1.1	1306	Delete current task 1306-5050A for the PF Coil Procurement and replace with new task 1306-5050B which shows the current contract price/schedule.	4/26/2013	2 Federal Project Director	-19	6980	\$84,297	\$10,012	Approved
82	1.1	1300	Budgeted time required for Control Account 1300 task 1300-0012 Engineering Support needs to be increased 300 hrs. per month through Sept. 2013.	5/9/2013	2 Federal Project Director	388	7368	\$84,685	\$9,624	Approved
83			NOT USED				21	7389	\$84,706	\$9,603
84	1.2	2450	The winning bid for the NBI Pipeline construction contract was \$668,210. This is more than the \$500,000 originally estimated by \$168,210. Plus, due to safety concern for this complex construction activity, 1 PPPL personnel is decided to monitor and assist the contractor activities at all times, in addition to the supervision by Technical Rep, QC and ES&H.	5/15/2013	2 Federal Project Director	223	7612	\$84,929	\$9,380	Approved
85	1.8 1.2 1.1	1302 2490 8200 8250	Additional tasks required in Control Account 8250 required for the re-assembly of the Centerstack and Installation into NSTX. These tasks are off-set by several tasks being deleted in Control Accounts 1302, 2490 and 8200.	6/3/2013	2 Federal Project Director	1	7614	\$84,931	\$9,378	Approved
86	1.5	5200	This ECP is a re-planning of the remaining tasks for Control Account 5200. The remaining tasks represent a reduction in cost to complete the DCPS work scope.	5/30/2013	2 Federal Project Director	-162	7452	\$84,769	\$9,540	Approved
87	1.2	2480	Delete unnecessary tasks from Control Account 2480. Add new steps for the fabrication, testing, and assembly of the Transition Duct.	6/3/2013	2 Federal Project Director	-23	7429	\$84,746	\$9,563	Approved

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88	1.1	1200	In Control Account 1200: Require high strength hardware for all Umbrella Upper/Lower Lid Connections requiring and increase in M&S for these tasks.	6/18/2013	2 Federal Project Director		7429	\$84,746	\$9,563	Approved
89	1.1	1305	In job 1305 add two additional tasks. 1) Additional OH conductor 2) Provide dehumidifier for CS HiBay	6/18/2013	2 Federal Project Director	31	7460	\$84,777	\$9,532	Approved
90	1.7	7200	Additional additional task to Control Account 7200 to cover the estimated costs of attending the SOFE Conference	6/26/2013	2 Federal Project Director	142	7602	\$84,919	\$9,390	Approved
91	1.3	3300	Control Account 3300: Purchase additional bakeout system power supplies/accessories	9/13/2013	2 Federal Project Director	81	7683	\$85,000	\$9,309	Approved
92	1.5	5200	Control Account 5200 requires additional scope to support: 1) Computer Division Support Activities, 2) Additional Computer Division project oversight, 3) Evaluation of additional scope requirements, and 4) Additional software design.	7/31/2013	2 Federal Project Director	45	7728	\$85,045	\$9,264	Approved
93	1.2	2425 2450	Change the Control Account Manager for Control Accounts 2425 and 2450 from Neway Atafu to Mark Cropper	7/23/2013	3 Project Manager		7728	\$85,045	\$9,264	Approved
94	1.5	5501	Increased budget need on several activities in Control Account 5501 as a result of a bottom up estimate. The estimate was completed after the design maturity has increased which has given a clearer picture of the man-power and procurement needs for the Control Account future activities.	8/21/2013	2 Federal Project Director	146	7874	\$85,191	\$9,118	Approved
95	1.1	1002	PCHERS passive plate design/fabrication	9/3/2013	2 Federal Project Director	357	8231	\$85,548	\$8,761	Approved
96	1.2	2470	For Control Account 2470 a budget increase is necessary due to sub-contract quotes being more than budgeted cost for activity 247000750 "Installation of 2nd NBI Raceway".	8/21/2013	2 Federal Project Director	157	8388	\$85,705	\$8,604	Approved
97	1.1	1300	Add additional budget to Control Account 1300 to extend LOE Engineering Support	9/30/2013	2 Federal Project Director	264	8652	\$85,969	\$8,340	Approved
98			NOT USED				8652	\$85,969	\$8,340	
99	1.1	1305	The results of a bottom-up estimate and job review for Control Account 1305 added additional scope/budget per attached .pdf.	9/30/2013	2 Federal Project Director	187	8840	\$86,157	\$8,152	Approved
100	1.4	4501	Fabricate, install, and test a two turn RWM coil encompassing Bays A & L.	11/22/2013	1 Director Office of Science	154	8994	\$86,311	\$7,998	Approved
101	1.8	8250	Additional scope required in Control Account 8250 to prepare/install spacers for the Outer TF flex joints. This work will require the fabrication of 72 unique spacers to connect the OTF flex joints.	11/4/2013	2 Federal Project Director	263	9256	\$86,573	\$7,736	Approved
102	1.6	6100	In control account 6100 add an additional \$13,050 to activity 6100-0049D for an upgraded LEMOPANEL to resource 41 (M&S).	11/14/2013	2 Federal Project Director	17	9274	\$86,591	\$7,718	Approved

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103	1.1	1305	Add additional task in Control Account 1305 for three (3) additional five gallon kits of CTD 425 are expected to be needed for the VPI of the OH coil	12/2/2013	2 Federal Project Director	31	9304	\$86,621	\$7,688	Approved
104	1.1	1300	Control Account 1300 requires additional Engineering support through May 2014. This ECP adds additional Engineering/Design Support through May 2014.	12/18/2013	2 Federal Project Director	152	9456	\$86,773	\$7,536	Approved
105	1.1	1305	In Control Account 1305 add tasks previously identified to baseline. These are tasks identified by the CAM that occur after the OH VPI. They have been shown in the current schedule and EAC for some time.	12/18/2013	2 Federal Project Director	47	9503	\$86,820	\$7,489	Approved
106	1.1	1200	Control Account 1200 requires additional labor to complete documentation.	1/2/2014	2 Federal Project Director	15	9518	\$86,835	\$7,474	Approved
107	1.6	6100	In Control Account 6100 it appears as though an error was made when entering information into Primavera from the WAF and the second digit of the budgeted hours was clipped for activity 6100-0073A. A spreadsheet and screenshot from WAF is attached. This ECP corrects the budgeted hours (increased cost).	1/2/2014	2 Federal Project Director	20	9538	\$86,855	\$7,454	Approved
108			NOT USED				9538	\$86,855	\$7,454	
109	1.5	5200	DCPS (Control Account 5200) additional scope: Prepare/Install DCPS computer, Halmar Signal Conditioner interface box, Temp. conn. panel, RTC interface chasis, IT and Management Support.	3/11/2014	2 Federal Project Director	286	9824	\$87,141	\$7,168	Approved
110	1.3	3200	A review of Control Account 3200 (Cooling Water) indicated a budget need. The current unstarted activities will be deleted and replaced by the activities shown on the attached WAF.	3/31/2014	2 Federal Project Director	174	9998	\$87,315	\$6,994	Approved
111	1.8	8200	In Control Account 8200 delete activity 8200-0110 "Adjust PF Coils". Due to the nature of how work was performed this activity is no longer required to be performed. Add an additional task to Control Account 8200 to remove gaps around the TFOL AI block interface using epoxy. Increase cost due to man hours for this field work.	4/7/2014	2 Federal Project Director	8	10006	\$87,323	\$6,986	Approved
112	1.2 1.7	2490 7100	Move the baseline start and finish dates for several tasks. In 7100 for ORA Support, and in 2490 move the installation tasks for the reinstall of the IR Camera(s), LOWEUS, and Transmission Grating Spectrometer due unclear path forward.	4/4/2014	3 Project Manager		10006	\$87,323	\$6,986	Approved
113	1.1	1304	In Control Account 1304 delete activity 1304-1154 "Fab/Deliver supports for OTF jumpers" and replace with new activity capturing the updated cost/schedule for the fabrication and delivery of these parts.	4/7/2014	2 Federal Project Director	212	10218	\$87,535	\$6,774	Approved

Appendix F (continued)
Engineering Change Proposal (ECP) log

ECP No.	Impacted WBS Elements	Control Accounts	ECP Title	Approval Date	Change Level	Contingency Draw K	Contingency Cum K	CBB K	Contingency Remaining K	ECP Status
114	Milestone		Revise PEP Level II milestone "Complete fab & test inner TF/OH coil assembly" from JUNE 2014 TO JULY 2014.	4/30/2014	2 Federal Project Director		10218	\$87,535	\$6,774	Approved
115	1.1	1300	In Control Account 1300 add additional EA/EM oversight resources for overseeing of the Centerstack fabrication through July 2014.	5/2/2014	2 Federal Project Director	189	10407	\$87,724	\$6,585	Approved
116	1.1	1306	In Control Account 1306 the subcontract for the fabrication of the three (3) sets of PF coils has been changed to provide and additional \$40K (equitable adjustment) plus an additional \$20K for the on-time completion of the remaining four (4) coils.	5/8/2014	2 Federal Project Director	120	10527	\$87,844	\$6,465	Approved
117	1.1	1304 8250	In control Account 1304 Purchase Order PE013500 has been issued for another set of outer TF connectors (lead extensions). In Control Account 8250 tasks 8250-157, 8250-161, 8250-165, and 8250-169 have been replaced by the shorter bakeout activity 8250-165A.	6/11/2014	2 Federal Project Director	124	10651	\$87,968	\$6,341	Approved
118	1.1	1300	Add new activity in Control Account 1300 to provide Engineering Support through Sept 30, 2014 to support the CS fabrication activities	7/21/2014	2 Federal Project Director	110	10761	\$88,078	\$6,231	Approved
119	1.6	6100	The current work now includes additional M&S for a genuine real-time control computer, new higher-performance input/output boards, and a complete restructuring of the software architecture to achieve better reliability, improved performance, lower maintenance and future enhancement costs, and integration of DCPS. In addition, it includes a consultant to help recover from the loss of our experienced power supply engineer, who was fluent in both power engineering and specifying software requirements.	9/2/2014	2 Federal Project Director	260	11021	\$88,338	\$5,971	Approved
120			NOT USED		2 Federal Project Director		11021	\$88,338	\$5,971	Not yet submitted for Approval
121	1.8	8210 8250 8200	In Control Account 8200 delete activity 8200-0124 "Re-install RF pipes". Crane availability and space availability precludes completion before CD-4. Add Misc. M&S activity to support field work. In Control Account 8250 add activity 8250-1371A "Install OTF flag supports". These activities were not identified in BL. In Control Account 8210 add activity 8210-0013A Installation oversight extends LOE through January for oversight.	8/26/2014	2 Federal Project Director	29	11050	\$88,367	\$5,942	Approved
122	1.7	7900	In Control Account 7900 delete activity 7900-110 Prepare NBI2 & CS ISTP Test Procedures. Existing procedures being used or modified. This activity is unnecessary.	8/26/2014	2 Federal Project Director	-22	11028	\$88,345	\$5,964	Approved

Appendix F (continued)
Engineering Change Proposal (ECP) log

ECP No.	Impacted WBS Elements	Control Accounts	ECP Title	Approval Date	Change Level	Contingency Draw K	Contingency Draw Cum K	CBB K	Contingency Remaining K	ECP Status
123	1.7	7100	In Control Account 7100 move BL start/finish dates for activity CS7000052 "ORA Support" to Start: 12/8/2014 Finish 12/12/2014.	8/26/2014	3 Project Manager		11028	\$88,345	\$5,964	Approved
124	1.1	1002	In Control Account 1002 delete activities associated with preparing/installing new Passive Plates in machine. Installation will cause negative impact on first plasma and will not be required during the first year of operations.	9/5/2014	2 Federal Project Director	-71	10957	\$88,274	\$6,035	Approved
125			NOT USED				10957	\$88,274	\$6,035	
126	1.2 1.8	2490 8200	All remaining scope in CA 9417-****-2490 and 8200 that are not required to support the CD-4 KPP's shall be charged to CA 1150-****-X890. The following exceptions are required for CD-4: Restore Gas Inj. system, Pressure Gauges, Shutter/TIV Actuators, TF/OH/PF3/PF5 Rogowski Coils, ECH Preionization System	9/5/2014	2 Federal Project Director	-334	10623	\$87,940	\$6,369	Approved
127	1.7	7200	In Control Account 7200 CSU Management add LOE task for oversight through January 2015.	9/12/2014	2 Federal Project Director	37	10660	\$87,977	\$6,332	Approved
128	1.7	7300	In Control Account 7300 NB2 Management add LOE task for oversight through December 2014.		3 Project Manager	31	10691	\$88,008	\$6,301	Not yet submitted for Approval
129	1.7	7100	In Control Account 7100 delete activity CS7000052 "ORA support". This activity will not be required.	8/26/2014	2 Federal Project Director	-111	10580	\$87,897	\$6,412	Approved
130	1.1	1302 1305	Move activities: 1305-8800A, 1305-8800B, 1305-8800G, 1305-8800H from Control Account 1305 to 1302. These activities are for the U/L crown installs and the bulkhead fittings which were put in the wrong Control Account in a previous ECP.	9/5/2014	3 Project Manager		10580	\$87,897	\$6,412	Approved
131	1.7	7100	In Control Account 7100 add LOE hours to support Project Management activities through February 2015.	9/15/2014	2 Federal Project Director	403	10982	\$88,299	\$6,010	Approved
132	1.1	1302	In Control Account 1302 delete activity 1302-1600 "Tear down assembly area". This activity to be performed by NSTXU Operations. Job 1302 may be closed as a result.	11/6/2014	2 Federal Project Director	-55	10928	\$88,245	\$6,064	Approved
133	1.8	8250	Add the following activities in 8250: 1. Re-machining of TF lead extensions per request of Engineering 2. Health Physics coverage for 8250 tasks	11/6/2014	2 Federal Project Director	344	11272	\$88,589	\$5,720	Approved
134	1.6	6100	The cancellation of the (WBS5) FCPC Fault Detector project has cancelled (WBS6) planned CAMAC retirement, so this ECP will supplement the remaining CAMAC memory.	11/24/2014	2 Federal Project Director	28	11299	\$88,616	\$5,693	Approved
135	1.2	2475	Delete the following activities that are not required for NSTXU CD-4 2475-0170D Update Display Software \$55,651.20 2475-0136 Protective Plate Interlocks (I/P Pryometer/Cam) \$37,033.20 2475-0138 NBOS Station - Installation \$29,931.20	3/30/2015	2 Federal Project Director	-123	11177	\$88,494	\$5,815	Approved
136	1.7 1.8	8250 7100	Add planning packages to cover scope required to recover from NSTXU arc event. A planning package of \$100K for Control Account 7100 and \$500K for Control Account 8250.	5/28/2015	2 Federal Project Director	600	11777	\$89,094	\$5,215	Approved