

	C	D	E	F	G	H	I	K	L	M	N	O	P	Q	R	S	T	U				
1	<b>NSTX Upgrade Project Risk &amp; Opportunity Registry, rev 24 1/8/2014</b>										R22 Revisions shown in pink. 9/18/2013		VL= 90%	L= 60%	U= 25%	VU= 5%						
2											R23 Revisions shown in yellow. 10/16/2013		87								Project Manager's	
3											R24 Revisions shown in green. 1/8/2014											
4																						
5	Number	Affected Job	Job Title	Risk Description	Mitigation Plan	Corrective Action if Risk Occurs (task id if appl)	Deadline to Retire Risk or Absorb Impact	Owner	Current Status	Likelihood of Occurrence	Consequences	Risk Ranking	Basis of Estimate	Cost Impact (\$K)	Critical Path Schedule Impact (weeks)	Cost and Schedule Impact Calculation Basis	Cost considered	Weighted Cost included in contingency				
6																Retired=	\$ 2,898					
7																Open=	\$ 3,288	\$ 585				
8	1001c	1001	Centerstack Plasma Facing Components	Tiles require unforeseen machining	If schedule critical, and in-house machining will not suffice, seek external machining sources. Additional machining time added to WAF	1302-1500	Jun-2014	Tresemmer	open	L	Negligible	Low	prior experience on NSTX	15 to 60	1 to 4	3 machinists for 1 to 4 weeks	\$ 60	\$ 36				
9	1000a	1000	Centerstack Analytical Support	Analysis indicates a significant component needs upgrade that previously hasn't been identified	Maintain upgrades of the model and keep ahead of the scenario changes		Jun-2014	Titus	open	VU	Negligible	vu	manager's experience	10 to 40	0	manager's estimate	\$ 40	\$ 2				
10	1000b	1000	Centerstack Analytical Support	Analysis indicates a minor component needs upgrade that previously hasn't been identified - weld details, details that are inconsistent with the Pro-E model	Identify these areas early with site surveys and as-builts		Jun-2014	Titus	open	VU	Negligible	Low	manager's experience	10 to 40	0	manager's estimate	\$ 40	\$ 2				
11	7100	7100	injury prompted stand down	serious injury causes 2-4 week stand down	continued focus and diligence on safety at the daily WCC mtg, 8:30 meetings, staff meeting etc.		CD-4	strykowsky	open	u	Significant	Moderate			2 to 4		\$ 188	\$ 47				
12		7100		Generic late vendor delivery	Award contracts early ASAP, followup vendor calls, timely receipt inspection		Apr-2014	strykowsky	open	VU					4	\$130/k/mo.	\$ 130	\$ 7				
13	7100	7100	core competencies critical staff	critical skills lost (due to illness, VSP, retirement etc)	Cross train and develop backup staff	reduced likely hood	CD-4	strykowsky	open	u	Significant	Moderate	schedule impact of 3 weeks on critical path		3		\$ 88	\$ 22				
14	7700a	7700	HP Allocations	Volatility of overhead rates	Increase as required		Apr-2014	Strykowsky	open	L	Negligible	Low	Project Manager's estimate	65	0	3% variation	\$ 65	\$ 39				
15	7700b	7700		Volatility of base estimates for the allocated cost centers	Increase as required		Apr-2014	Strykowsky	open	L	Negligible	Low	Project Manager's estimate	65	0	3% variation	\$ 65	\$ 39				
16	7710a	7710	Direct Allocations	Volatility of head rates	Increase as required		Apr-2014	Strykowsky	open	L	Negligible	Low	Project Manager's estimate	65	0		\$ 43	\$ 26				
17	7710b	7710		Volatility of base estimates for the allocated cost centers	Increase as required		Apr-2014	Strykowsky	open	L	Negligible	Low	Project Manager's estimate	65	0		\$ 43	\$ 26				
18	7100b	7100		FY2014 overhead rates	Continue to ensure that outyear rates are conservative		Apr-2014	Strykowsky	open	L			Project Manager's estimate	-1000	0		\$ (1,000)	\$ (600)				
19	6100e	6100	Additional work scope	NSTX operations does not fund work scope as listed in WBS6100 PDR	Continued diligence to assure the program office funds req'd infrastructure improvements. Additional work scope for upgrade		Sep-2014	Sichta	open	L	Negligible	Low	Manager's estimate	100	0		\$ 100	\$ 100				
20	6100d	6100	Loss of key personnel	Loss of key personnel	hire replacement and assess schedule impact		Sep-2014	Sichta	open	U	Significant	Low	Manager's estimate	10 to 50	9		\$ 50	\$ 13				
21	6100c	6100	Data Acquisition rate	Data acquisition takes too long	Upgrade additional data acq systems and/or networks, revise software		Sep-2014	Sichta	open	VU	Marginal	Low	Manager's estimate	5 to 25	0		\$ 25	\$ 1				

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22	8250b	8250		Flex bus require more than two fit-ups / reworks prior to final installation	Repeat "remove, rework, re-install"		Sep-2014	Perry	open	U	Marginal	Low	Construction Manager's estimate	63 to 189	2 to 6	Same work previous done on NSTX	\$ 189	\$ 47				
23	2490a	2490	Relocations to Support NB2 Installation	SPRED re-design and re-installation may require more effort than estimated due to the physical constraints in the area of bay L	Start design work immediately so potential schedule impact can be accommodated if necessary.		Apr-2014	Perry	open	U	Marginal	Low	manager's estimate	98 to 147	0	Past experience designing and installing this diagnostic on NSTX	\$ 147	\$ 37				
24	2490b	2490		LOWEUS re-design and re-installation may require more effort than estimated due to the physical constraints in the area of bay L	Start design work immediately so potential schedule impact can be accommodated if necessary.		Apr-2014	Perry	open	U	Marginal	Low	manager's estimate	98 to 147	0	Past experience designing and installing this diagnostic on NSTX	\$ 147	\$ 37				
25	8250a	8250	Centerstack Removal and Re-installation / Pumpdown / Bakeout	Vacuum seals don't pass leakcheck	Lift centerstack out, rework seals, re-install centerstack		Sep-2014	Perry	open	VU	Negligible	Low	Construction Manager's estimate	28 to 56	1 to 2	Same work previous done on NSTX	\$ 56	\$ 3				
26	8250c	8250		Umbrella lids require more than two fit-ups / reworks prior to final installation	Repeat "remove, rework, re-install"		Sep-2014	Perry	open	U	Negligible	Low	Construction Manager's estimate	14 to 42	1 to 2	Same work previous done on NSTX	\$ 42	\$ 11				
27	1305		Damage to components	Inadvertent damage to centerstack assembly during movement or rigging	rigging and lifting procedures, safety discussions with staff	repair damage	Aug-2014	Chrzanowski/Strykowski	open	U			PM's estimate 4 people one month plus oversight	209	4		\$ 209	\$ 52				
28	1305f	1305		OH bundle - poor VPI impregnation	Engineering of the fill locations and vents will be performed as part of developing the fabrication procedure.	Evaluate condition of coil - Local dry areas could be repaired, but larger failure would require cutting OH coil from TF and rebuilding	Apr-2014	Chrzanowski	open	U	Significant	Moderate	cost to rewind per primavera	1279	5 month schedule impact		\$ 1,279	\$ 320				
29	1305g	1305		OH coil fails electrical tests	Include tests (meggar, hydro and hi-pot) at several points in the fabrication process so non-conformances can be identified and corrected as they occur.	If fault can not be repaired, Coil must be cut off and rebuilt	Apr-2014	Chrzanowski	open	U	Significant	Moderate	cost to rewind per primavera	1279	5 month schedule impact		\$ 1,279	\$ 320				
30	1302a	1302	Centerstack Assembly	Components do not arrive when required	If schedule is critical, OT or second shift would be required to regain schedule	1302-1500	Jun-2014	Chrzanowski	open	U	Negligible	Low		0	0		\$ -	\$ -				
31	1305h	1305		Unable to completely remove temporary spacer between OH and TF after completion of fabrication	Administrative controls during operation requiring OH and TF to be powered together	1305-8700	Mar-2014	Chrzanowski	open	U	Marginal	Low		0	1		\$ 3	\$ 1				
32	1307a	1307	Centerstack Casing Assembly Design and Fabrication	Components arrive late	OT required to recover schedule	1307-2030	Apr-2014	Chrzanowski	open	U	Negligible	Low		0	0		\$ -	\$ -				
33	3400a	3400	Gas Delivery system mods for Centerstack upgrade	Fueling lines do not adequately deliver gas because of occlusions or leaks	Replace gas delivery line. Minor fix if req'd	3400-0052	Sep-2014	Blanchard	Retired	VU	Negligible	Low	Project manager's estimate	10	0	Similar installation on NSTX	\$ 10	\$ 1				