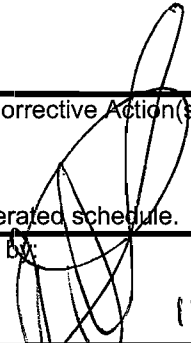
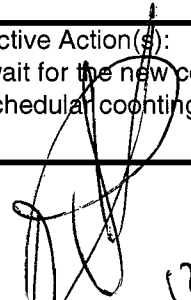
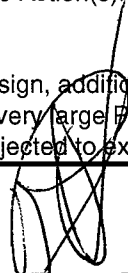

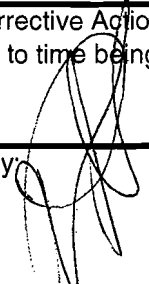


CONTRACT PERFORMANCE REPORT								FORM APPROVED	
FORMAT 5 - EXPLANATIONS AND PROBLEM ANALYSES								OMB No. 0704-0188	
1. CONTRACTOR		2. CONTRACT		3. PROGRAM		4. REPORT PERIOD			
a. NAME Princeton University-Plasma Phys		a. NAME DOE-SC-OFES-NSTX Upgrade		a. NAME NSTX Upgrade Project		a. FROM (YYYYMMDD) 2011/11/01			
b. LOCATION (Address and ZIP) Princeton, New Jersey		b. NUMBER DE-AC02-09CH11466		b. PHASE CD-2		b. TO (YYYYMMDD) 2011/11/30			
c. TYPE M&O		d. SHARE RATIO		c. EVMS ACCEPTANCE (YYYYMMDD) NO X YES					
<b>2475 2nd NBI Controls (Cropper)</b>									
	BCWS	BCWP	ACWP	SV in \$	SV in %	CV in \$	CV %	SPI	CPI
Cumulative:	248	494	472	246	99%	23	5%	1.99	1.05
<b>Thresholds Exceeded: Cumulative Schedule</b>									
Explanation of Variance/Description of Problem:									
Variance due to accelerated schedule. Tasks started ahead of baseline schedule.									
Impact:									
Job will complete ahead of baseline schedule.									
Corrective Action:									
none.									
Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):									
Variance will be corrected as the baseline schedule catches up to accelerated schedule.									
Prepared by:				Date:		Approved by:		Date:	
Mark B. Cropper								12/20/2011	
<small>Digitally signed by Mark B. Cropper                      DN: cn=Mark B. Cropper, o=Princeton Plasma Physics Lab,                      ou=NSTX Neutral Beam, email=mcropper@pppl.gov, c=US                      Date: 2011.12.16 12:29:52 -05'00'</small>									

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c. TYPE M&O		d. SHARE RATIO		c. EVMS ACCEPTANCE (YYYYMMDD) NO X YES					
<b>2490 NTC Equipment Relocations (Perry)</b>									
	BCWS	BCWP	ACWP	SV in \$	SV in %	CV in \$	CV %	SPI	CPI
Cumulative:	397	915	691	518	131%	224	24%	2.31	1.32
<b>Thresholds Exceeded: Cumulative Schedule</b>									
Explanation of Variance/Description of Problem: Removals are being performed at an accelerated rate while the field crews wait for the new coil supports to be designed and fabricated.									
Impact: Increased schedule contingency for field work.									
Corrective Action: None required.									
Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s): Removals are being performed at an accelerated rate while the field crews wait for the new coil supports to be designed and fabricated. No corrective action is required since this will just increase the schedule contingency for the field work.									
Prepared by: Erik Perry				Date: 12/19/2011		Approved by: 		Date: 12/20/2011	

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c. TYPE M&O		d. SHARE RATIO		c. EVMS ACCEPTANCE (YYYYMMDD) NO X YES					
<b>4500 MPTS VV Modification (Labik)</b>									
	BCWS	BCWP	ACWP	SV in \$	SV in %	CV in \$	CV %	SPI	CPI
Cumulative:	659	555	742	-104	-16%	-187	-34%	0.84	0.75
<b>Thresholds Exceeded: Cumulative Cost</b>									
Explanation of Variance/Description of Problem:									
<p>[1]The MPTS upgrade results in a highly constrained design and inclusion of displaced diagnostics into the cap design for bay L added to the constraint and general complexity. [2] The global stress analysis model was incomplete when the MPTS upgrade was in the early design stage requiring a mature input to the project FDR so additional time was spent on putting together a workable model which permitted solving stress issues for MPTS and the entire vessel. The extra work was substantial. [3] There are continuing issues with the computer Pro E models. The MPTS is a large system requiring very large models exacerbated by the introduction of Windchill product data management (PDM) system . This is requiring rewriting the modeling stream commands which increases the time needed to complete the design.</p>									
Impact:									
There is a cost over run but I do not anticipate impacting the project schedule. The VV interfaces FDR was successfully completed on 2 dec 2011.									
Corrective Action:									
An additional designer has been assigned to the MPTS CSU so that there is a parallel effort of the VV interfaces and the Ex Vessel components required to complete the changes. The is no way to correct the cost over run.									
Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):									
There is a cost over run due to the design complexity of a highly constrained design, additional time required to develop the stress models which included a Maxwell interface to Ansys, and problems in handling very large ProE models. There is no impact anticipated to the overall project completion schedule. The cost variance is projected to exceed the baseline estimate by \$187 K.									
Prepared by:			Date:		Approved by:		Date:		
G Labik			12/19/2011				12/20/2011		

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		c. TYPE M&O	d. SHARE RATIO	c. EVMS ACCEPTANCE (YYYYMMDD) NO X YES					
<b>8200 CS &amp; Coil Supt Struct Install (Perry)</b>									
	BCWS	BCWP	ACWP	SV in \$	SV in %	CV in \$	CV %	SPI	CPI
Cumulative:	467	625	464	158	34%	161	26%	1.34	1.35
<b>Thresholds Exceeded: Cumulative Schedule, Cumulative Cost</b>									
Explanation of Variance/Description of Problem: Removal procedures being combined (fewer to prepare and review) and field removals being completed more quickly than estimated.									
Impact: None									
Corrective Action: None required									
Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s): Removal procedures being combined (fewer to prepare and review) and field removals being completed more quickly than estimated.									
Prepared by: Erik Perry		Date: 12/19/2011		Approved by: 		Date: 12/20/2011			

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c. TYPE M&O		d. SHARE RATIO		c. EVMS ACCEPTANCE (YYYYMMDD) NO X YES					
<b>8210 Field Supervision &amp; Oversight (Perry)</b>									
	BCWS	BCWP	ACWP	SV in \$	SV in %	CV in \$	CV %	SPI	CPI
Cumulative:	170	170	26	0	0%	144	85%	1.00	6.59
<b>Thresholds Exceeded: Cumulative Cost</b>									
Explanation of Variance/Description of Problem: Work planning not costing as much as anticipated during first months due to time being spent on procedure preparation.									
Impact: None									
Corrective Action: None required.									
Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s): Work planning not costing as much as anticipated during first months due to time being spent on procedure preparation.									
Prepared by: Erik Perry		Date: 12/19/2011		Approved by: 		Date: 12/20/2011			