**CLASSIFICATION (When Filled In)**

**CONTRACT PERFORMANCE REPORT**
**FORMAT 5 - Explanations and Problem Analysis**

**FORM APPROVED**
**OMB No. 0704-0188**

| 1. CONTRACTOR | 2. CONTRACT | | 3. PROGRAM | 4. REPORT PERIOD |
|---|---|---|---|---|
| a. NAME<br>Princeton University-Plasma Physics Lab | a. NAME<br>DOE-SC-OFES-NSTX Upgrade | | a. NAME<br>NSTX Upgrade Project | a. FROM (YYYYMMDD)<br>2013 / 06 / 01 |
| b. LOCATION (Address and ZIP Code)<br>Princeton, New Jersey | b. NUMBER<br>DE-AC02-09CH11466 | | b. PHASE<br>CD-3 | b. TO (YYYYMMDD)<br>2013 / 06 / 30 |
| | c. TYPE<br>M&O | d. SHARE RATIO | c. EVMS ACCEPTANCE<br>No X Yes (YYYYMMDD 2011 / 12 / 20 | |

**5. Evaluation**

**1.1 / 1306 Inner PF Coils**

| | Budget | Earned | Actuals | SV in $ | SV in % | CV in $ | CV in % | SPI | CPI |
|---|---|---|---|---|---|---|---|---|---|
| Current: | 65 | 25 | 36 | -41 | -62% | -11 | -47% | 0.38 | 0.68 |
| Cumulative: | 539 | 380 | 534 | -159 | -29% | -154 | -40% | 0.71 | 0.71 |
| | BAC | EAC | VAC in $ | VAC in % | TCPI to BAC | TCPI to EAC | | | |
| At Complete: | 824 | 978 | -154 | -19% | 1.53 | 1.00 | | | |

**Explanation of Variance/Description of Problem:**
Past Cost and schedule over runs are due to significant redesign of all (3) PF coil structures based on the latest analyais reports. This required additional CAD Design time and additional Analysis time. Addtional costs for copper conductor were also accrued because it was determined that more conductor than budgeted would be required for the job. Recent schedule variances are a result of Everson Tesla (the Vendor fabricating the Inner PF coils) who is having delays due to problems at their fabrication Subcontractor (Val-Fab). The schedule will be impacted by several weeks.

**Impact:**
Increased project costs from the design phase. The delivery of the first Inner PF coil (and possibly the remaining inner PF coils) may be delayed by several weeks due to the Vendor delays. There is enough schedule float in the overall CS assembly to accommodate this delay.

**Corrective Action:**
The cost variance cannot be corrected. Everson-Tesla is communicating with Val-Fab and trying to minimize schedule delays. PPPL will push Everson-Tesla to make up the delay if possible. Vendor visit is planned for 7/16/2013 to assess situation.

**Monthly Summary (to include technical causes of VARs, Impacts) and Corrective Action(s):**
Re-design of all 3 PF coil structures and additional copper costs have led to a cost variance in this Control Account. The designs have been completed, and the coils and structures are in fabrication. Issues with the sub-contractor are resulting in a minimun 4 week schedule delay.

**Prepared by:** Steve Raftopoulos — Digitally signed by Steve Raftopoulos DN: cn=Steve Raftopoulos, o, ou, email=sraftopo@pppl.gov, c=US Date: 2013.07.23 09:27:25 -04'00'

**Date:**

**Approved by:** Ron Strykowsky — Digitally signed by Ron Strykowsky DN: cn=Ron Strykowsky, o, ou=PPPL, email=rstrykow@pppl.gov, c=US Date: 2013.07.25 11:45:19 -04'00'

**Date:**