LA-UR-12-20648
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Title:	Los Alamos National Laboratory and Lawrence Livermore National Laboratory Plutonium Sustainment Monthly Program Report September 2012
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Intended for:	Report

Los Alamos National Laboratory and Lawrence Livermore National Laboratory

Plutonium Sustainment Monthly Program Report

September 2012

Executive Summary

In September of 2012 the Plutonium Sustainment program at LANL completed or addressed the following high-level activities:

1) Completed assembly, inspection, packing, and approvals for Pollux. Completed shipment to DAF in early October in accordance with the Gemini Core Team's schedule.
2) Delivered the draft Program Implementation Plan and revised repeatedly.
3) Met with Kansas City Plant staff to "kick-off" the non-nuclear pit-component production mission.

All MRT L2 Milestones 4195-4198 or the relevant PBIs associated with Plutonium Sustainment have been met and evidence packages submitted.

The year-end budget/performance indices were 0.96 (S.P.I.) and 1.00 (C.P.I.). Table 1 identifies all Baseline Change Requests (BCRs) that were initiated, in process, or completed during the month.

The earned value metrics overall for LANL are within acceptable thresholds, so no high-level recovery plan is required. Note that the planned (budget) and earned value for September includes planned carryover holdbacks (no allocation) with no associated FY12 costs. This has a minor (positive) impact on S.P.I. and a significant (positive) impact on the C.P.I. (see Earned Value Metrics below). For Pu Sustainment overall, the C.P.I. in September neglecting the $10.75M holdback is 0.90. Likewise, the C.P.I. for FY12 is 1.004. With the facility infrastructure element removed, the C.P.I. in September becomes 0.92. Likewise, the C.P.I. for FY12 is 0.992.

Again neglecting the holdback, the S.P.I. numbers for Pu Sustainment overall are 0.94 (Sept) and 0.96 (FY12) and with the facility infrastructure element removed 0.95 (Sept) and 0.95 (FY12)

Each of the 5 major LANL WBS elements is discussed in detail below with a section at the end that is provided by LLNL.

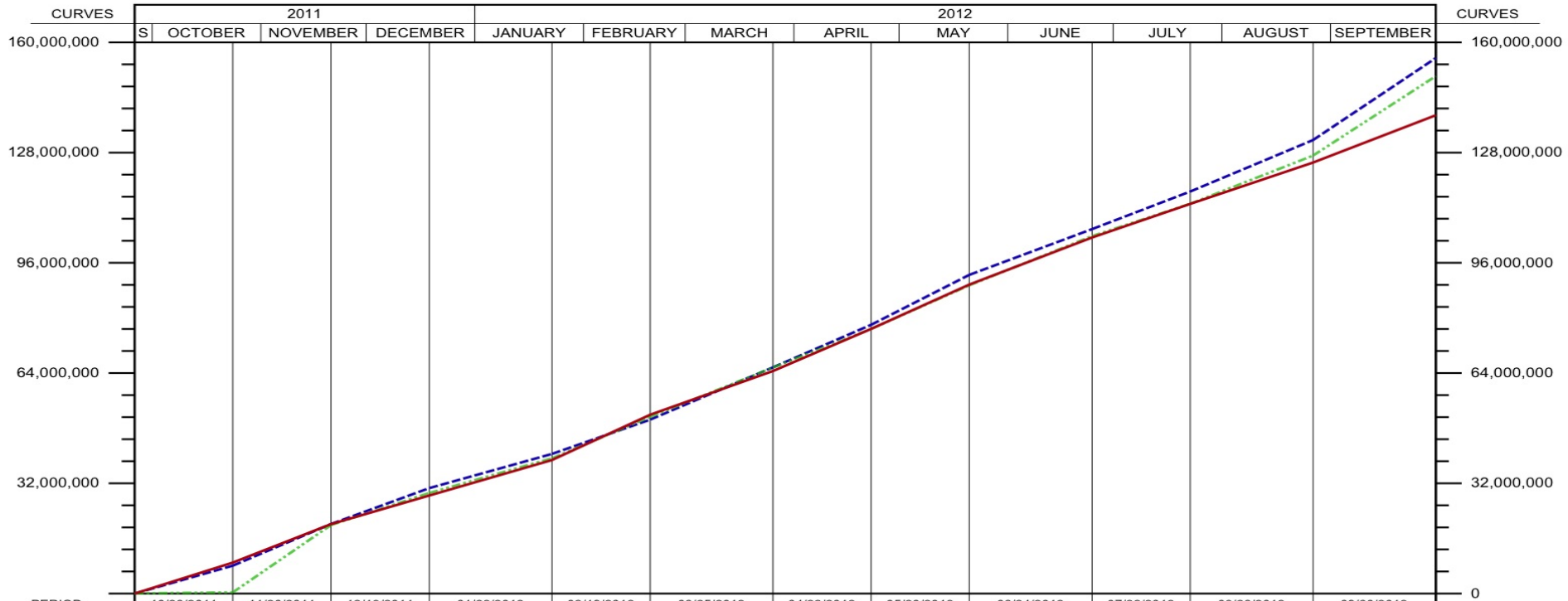
Table 1: September Baseline Change Requests

WBS	BCR #	BCR Description	Date Assigned	Date Approved	Impact	Cost Impact	Change Level
Power Supply	PSM-12-056	Additional Asphalt & Rooftop Chillers	9/17/12	9/19/12	Cost/Scope	$83k	3
Power Supply	PSM-12-057	Punch list Items and CD-4 Approval	9/17/12	9/21/12	Cost/Scope	$96k	3
Power Supply	PSM-12-058	Conduct MSA	9/17/12	Working	Cost/Scope	$94k	
Power Supply	PSM-12-059	Purchase of Argon Tank and A/C Units	9/17/12	9/21/12	Cost/Scope	$87k	3

Earned Value Metrics

PERFORMANCE S-CURVE

Pu Sustainment



PERIOD	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	8,070,670	12,125,702	10,399,503	9,929,338	9,949,288	15,167,901	12,364,682	14,491,658	13,282,291	10,904,276	14,953,938	23,792,740
EARNED	343,671	19,541,095	9,314,312	10,060,835	12,012,310	14,318,742	11,225,494	12,654,253	14,285,447	9,398,929	13,968,849	23,047,637
ACTUAL	8,984,363	11,170,656	8,308,089	10,281,850	13,152,891	12,692,521	12,251,002	12,834,246	13,670,888	9,744,405	12,029,529	13,733,460
S.P.I.	0.04	1.61	0.90	1.01	1.21	0.94	0.91	0.87	1.08	0.86	0.93	0.97
C.P.I.	0.04	1.75	1.12	0.98	0.91	1.13	0.92	0.99	1.04	0.96	1.16	1.68
TO DATE	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	8,070,670	20,196,372	30,595,875	40,525,213	50,474,502	65,642,402	78,007,084	92,498,742	105,781,033	116,685,309	131,639,247	155,431,987
EARNED	343,671	19,884,766	29,199,078	39,259,913	51,272,224	65,590,966	76,816,460	89,470,713	103,756,159	113,155,089	127,123,938	150,171,575
ACTUAL	8,984,363	20,155,019	28,463,108	38,744,958	51,897,850	64,590,370	76,841,372	89,675,618	103,346,507	113,090,912	125,120,441	138,853,901
S.P.I.	0.04	0.98	0.95	0.97	1.02	1.00	0.98	0.97	0.98	0.97	0.97	0.97
C.P.I.	0.04	0.99	1.03	1.01	0.99	1.02	1.00	1.00	1.00	1.00	1.02	1.08

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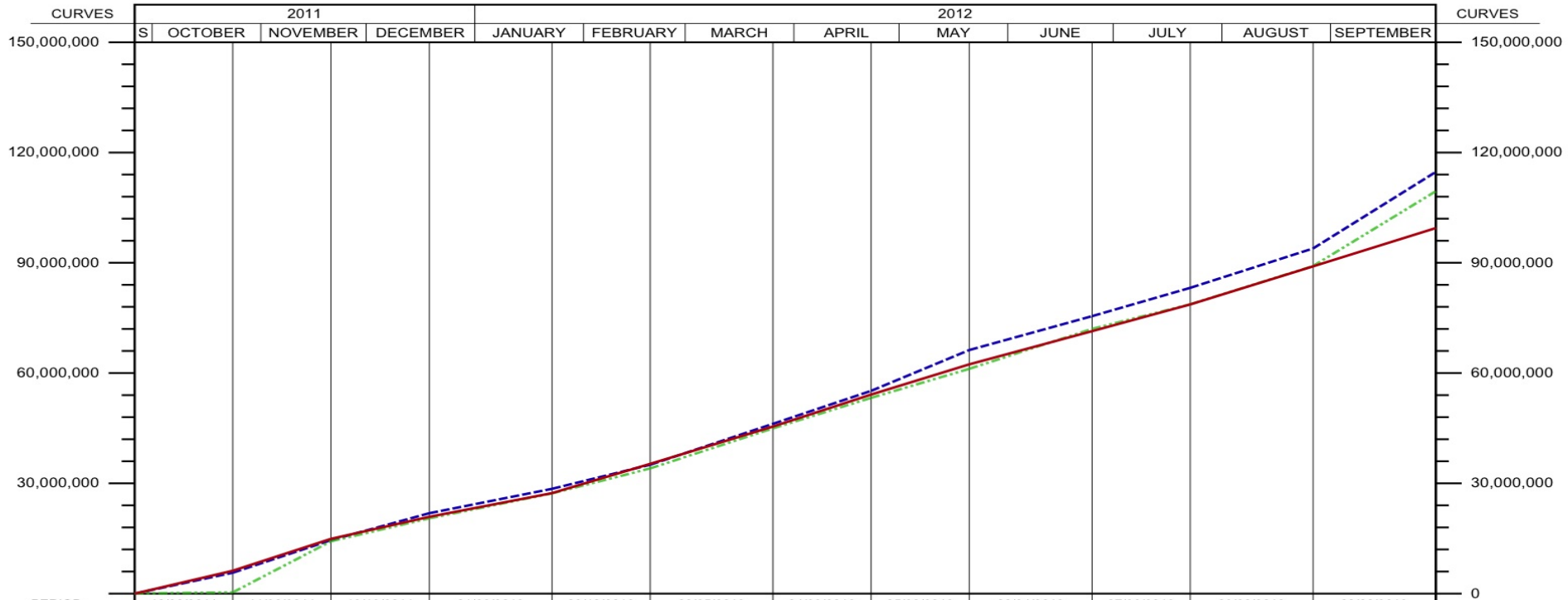
COST IN $ LANL, operated by Los Alamos National Security, LLC PRISM-D10101D7-10/10/2012-14:12:46 PAGE 1 OF 1

PERFORMANCE S-CURVE

Pu Sustainment W/O Facility Infrastructure



PERIOD	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	5,671,770	8,870,052	7,315,203	6,643,191	6,565,770	11,107,679	8,981,163	11,108,140	9,222,069	7,689,934	10,724,536	20,808,480
EARNED	343,671	13,886,545	6,230,012	6,772,489	6,823,566	10,895,182	8,305,916	7,898,237	10,863,887	6,686,286	10,403,109	20,338,676
ACTUAL	6,208,169	8,674,142	5,985,285	6,458,322	7,976,399	10,136,938	8,713,170	8,224,915	9,018,147	7,264,034	10,371,025	10,428,287
S.P.I.	0.06	1.57	0.85	1.02	1.04	0.98	0.92	0.71	1.18	0.87	0.97	0.98
C.P.I.	0.06	1.60	1.04	1.05	0.86	1.07	0.95	0.96	1.20	0.92	1.00	1.95
TO DATE	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	5,671,770	14,541,822	21,857,025	28,500,216	35,065,986	46,173,665	55,154,828	66,262,968	75,485,037	83,174,971	93,899,507	114,707,987
EARNED	343,671	14,230,216	20,460,228	27,232,717	34,056,283	44,951,465	53,257,381	61,155,618	72,019,504	78,705,790	89,108,899	109,447,575
ACTUAL	6,208,169	14,882,311	20,867,596	27,325,919	35,302,318	45,439,256	54,152,426	62,377,341	71,395,489	78,659,522	89,030,547	99,458,835
S.P.I.	0.06	0.98	0.94	0.96	0.97	0.97	0.97	0.92	0.95	0.95	0.95	0.95
C.P.I.	0.06	0.96	0.98	1.00	0.96	0.99	0.98	0.98	1.01	1.00	1.00	1.10

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1.0 LANL - Pit Development

MRT 4196	BLUE	*Perform Activities to Sustain Base Pit Material Processing and Fabrication Capability*

1. Complete FY12 LANL tasks per PEP and W87 Legacy IPT necessary to support FY2013 delivery of 1 pit EDU
2. Continue installation and upgrade to pit capability equipment per PEP
3. Continue supporting W87 IPT and deliver Production Strategy and TRL/MRL assessment by September 30, 2012

L3 Milestone	Baseline Date	Status/Comments	Completion Date	RGYB
Non-nuclear components necessary for an EDU build are available for use.	July 13, 2012		June 13, 2012	BLUE
Suitable nuclear material is available as ER	September 21, 2012		May 14, 2012	BLUE
Laser Welding documentation approved • Technical Specifications & Requirements • Functional & Operations Requirements • Cold System Test Plan	September 21, 2012	TS&R Approved by PMB/WB F&OR Approved by PMB/WB Cold System Test Plan Approved by PMB/WB	June 27, 2012 June 27, 2012 August 23, 2012	BLUE
Electron Beam Welder Corrective Maintenance Complete	June 29, 2012	Corrective Maintenance completed. Weld performed	June 28, 2012	BLUE
Preparation Unit Installed	August 14, 2012	Post installation operation demonstrated on part	June 26, 2012	BLUE
Production Strategy and TRL/MRL assessment	September 30, 2012		September 4, 2012	BLUE

1.1 Technical Progress

- Completed casting of the forth and fifthW87 hemi shells.
- Completed waste banding on the five W87 castings.
- Machined the fourth W87 inner and outer contour on T-Base 2.
- Completed the W87 MC4597 Pit Production Strategy and Product Development Plan (LA-CP-12-01100 - September 4, 2012).
- Completed all critical-path procedures for an EDU build.
- Received all critical-path tooling from KCP.
- All FY12 milestones completed.
- Evidence package for MRT4196 submitted.

1.2 Equipment

- Laser Welder
  - All FY12 milestones completed.
  - Last FY12 milestone completed August 23, 2012.
  - Evidence package for MRT4196 submitted.

- Electron Beam Welder
  - All project milestones completed.
  - Last project milestone completed June 28, 2012.
  - Evidence package for MRT4196 submitted.

- Surface Preparation
  - All project milestones completed.
  - Last project milestone completed June 26, 2012.
  - Evidence package for MRT4196 submitted.

1.3 Issues

- None

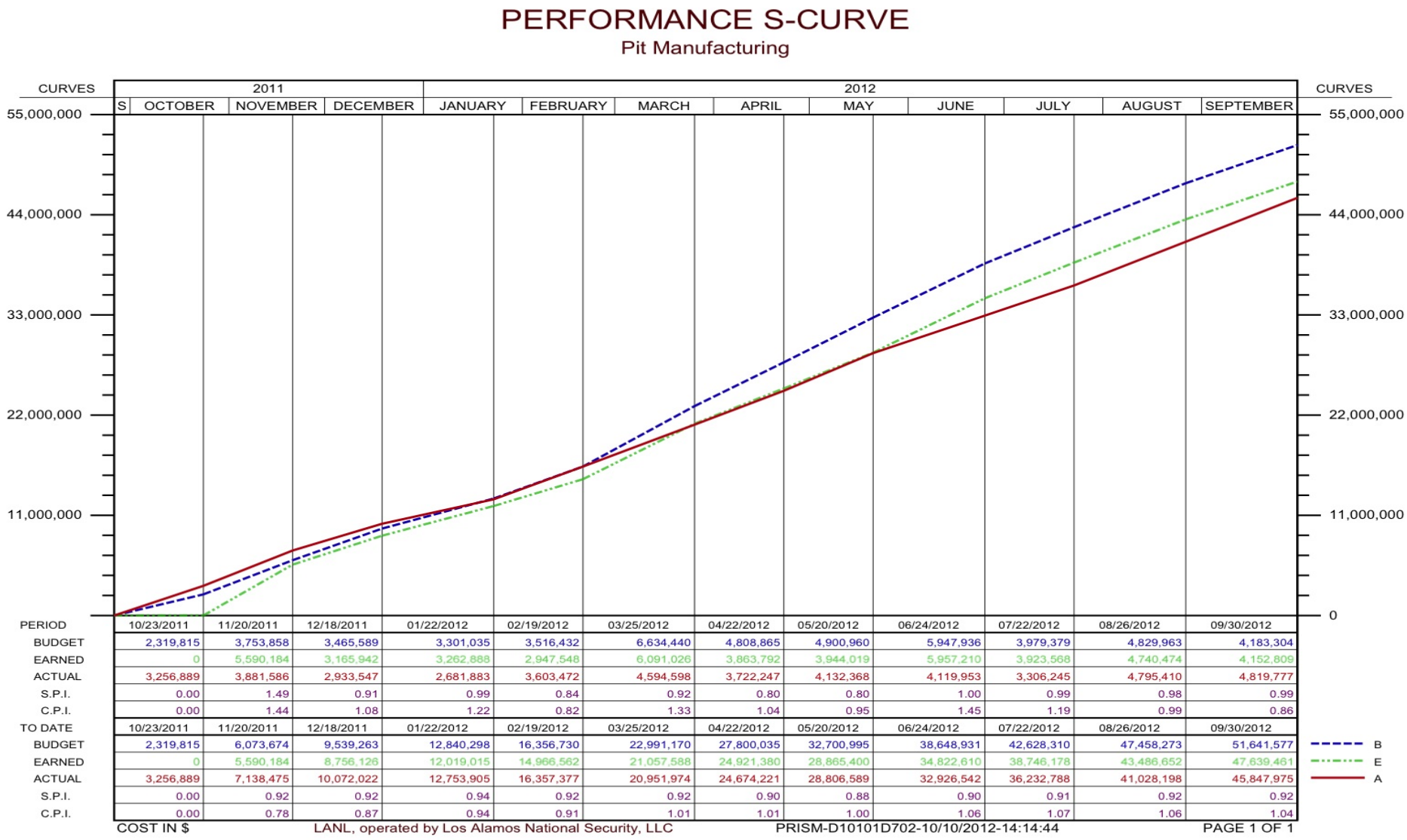
1.4 Variance Analysis and Recovery Plan

- None

1.5 BCRs

- None

1.6 Earned Value Metrics



PERIOD	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	2,319,815	3,753,858	3,465,589	3,301,035	3,516,432	6,634,440	4,808,865	4,900,960	5,947,936	3,979,379	4,829,963	4,183,304
EARNED	0	5,590,184	3,165,942	3,262,888	2,947,548	6,091,026	3,863,792	3,944,019	5,957,210	3,923,568	4,740,474	4,152,809
ACTUAL	3,256,889	3,881,586	2,933,547	2,681,883	3,603,472	4,594,598	3,722,247	4,132,368	4,119,953	3,306,245	4,795,410	4,819,777
S.P.I.	0.00	1.49	0.91	0.99	0.84	0.92	0.80	0.80	1.00	0.99	0.98	0.99
C.P.I.	0.00	1.44	1.08	1.22	0.82	1.33	1.04	0.95	1.45	1.19	0.99	0.86
TO DATE	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	2,319,815	6,073,674	9,539,263	12,840,298	16,356,730	22,991,170	27,800,035	32,700,995	38,648,931	42,628,310	47,458,273	51,641,577
EARNED	0	5,590,184	8,756,126	12,019,015	14,966,562	21,057,588	24,921,380	28,865,400	34,822,610	38,746,178	43,486,652	47,639,461
ACTUAL	3,256,889	7,138,475	10,072,022	12,753,905	16,357,377	20,951,974	24,674,221	28,806,589	32,926,542	36,232,788	41,028,198	45,847,975
S.P.I.	0.00	0.92	0.92	0.94	0.92	0.92	0.90	0.88	0.90	0.91	0.92	0.92
C.P.I.	0.00	0.78	0.87	0.94	0.91	1.01	1.01	1.00	1.06	1.07	1.06	1.04

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2.0 LANL – Experimental Component

4198	BLUE	***Perform activities to sustain base pit material processing and fabrication capability through Experimental Component Fabrication***

1. Experimental Component Fabrication and Shipment of Gemini/Pollux in accordance with PEP but no later than October 31, 2012 (revised date from Sept 30, 2012)

L3 Milestone	Baseline Date	Status/Comments	Completion Date	RGYB
Start Cold Machining	January 10, 2012		Nov 18, 2011	BLUE
Start Hot Machining	February 21, 2012		March 23, 2012	BLUE
Casting Complete	February 27, 2012		February 27, 2012	BLUE
Complete Castor Sub-Assembly	May 3, 2012		May 31, 2012	BLUE
Start Hot Development Assembly	May 7, 2012	First assembly chosen as a shipping fixture test in lieu of hot assembly.	May 14, 2012	BLUE
Complete Machining Lot 1 – DEV	June 14, 2012	MET-2 has elected not to perform a hot DEV build		BLACK
Complete Machining Lot 2 – Pollux	August 1, 2012		August 13, 2012	BLUE
Start Pollux Assembly	August 13, 2012		September 4, 2012	BLUE
Pollux Complete	September 6, 2012		October 9, 2012	BLUE

2.1 Technical Progress

- Completed Pollux assembly and inspection.
- Completed final DA acceptance of assembly.
- Plan to ship Pollux from LANL TA-55 and receive it at NNSS DAF in October.

2.2 Equipment

- none

2.3 Issues

- none

2.4 Variance Analysis and Recovery Plan

- SPI – Project complete – 3% variance due to dropped risk mitigation scope.
- CPI – Final negative variance of 16%. The cost variance is largely due to several factors
    - New hardware capabilities and upgrades
        - Quindos 7 CMM upgrade – required to provide greater precision
        - LUNA optical fiber analysis system – for post assembly surface inspection
        - On-machine gauging probes for the Precitech precision lathes – allowed compensated cutting to correct for tool wear, etc.
    - Troubleshooting and development of these new capabilities
        - Troubleshooting/training for Quindos 7
        - Difficult tie-in with classified LAN system for LUNA system
        - Extensive “in-house” software development for on-machine gauging

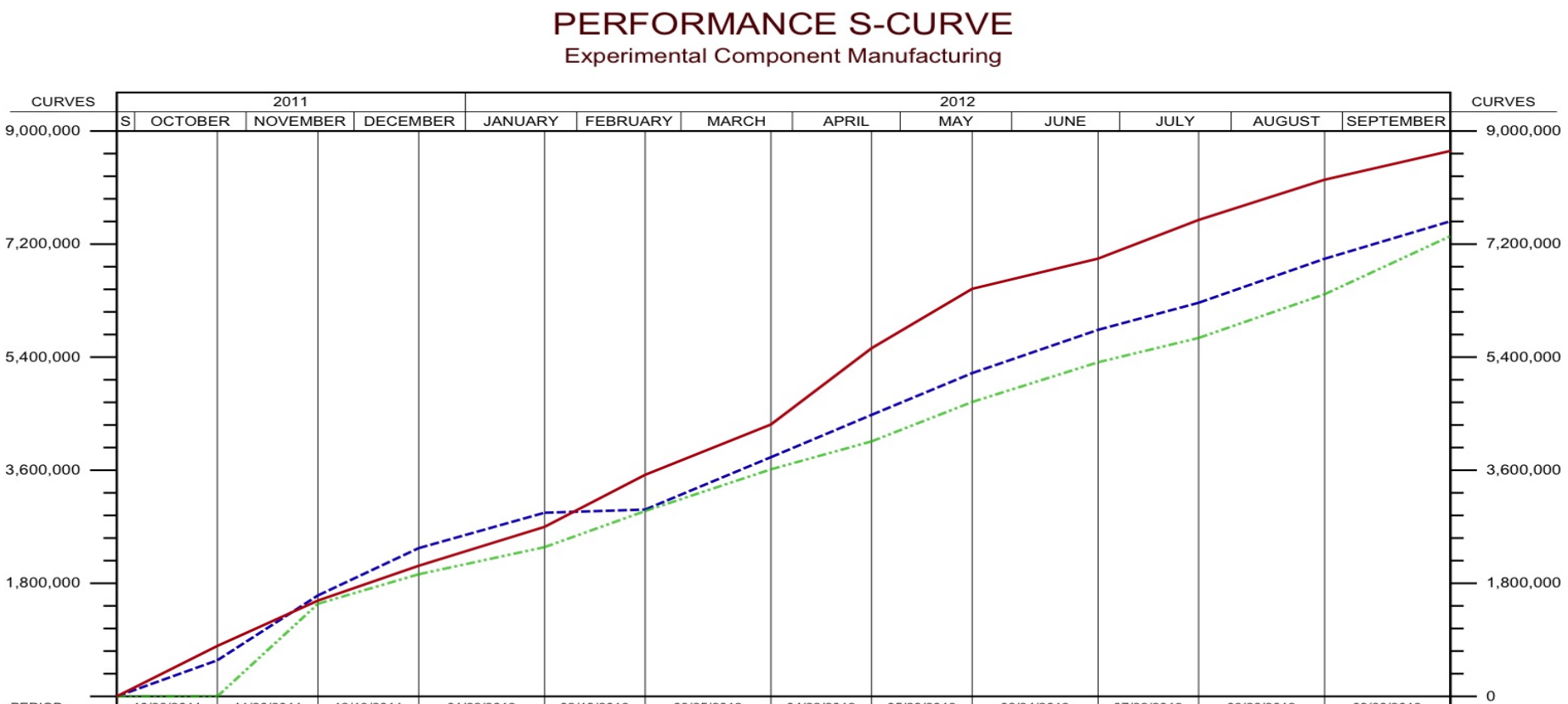
- Overtime due to late Gemini project integration milestones
  - The Gemini/Pollux design was not finalized until mid-second quarter – several months later than scheduled
  - The non-nuclear parts and assembly fixtures were 3-8 weeks late causing a delay in the Pollux build schedule and no opportunity for a second build attempt to recover should the first build attempt fail without a significant schedule slip.
  - No non-nuclear parts and assembly fixtures were provided for a developmental build as a risk mitigation.
- Aggressive budget allocations assuming a success oriented planning basis
  - No additional budget was provided for unanticipated scope (see bullets 1 and 2 above)
  - No additional budget was provided to cover overtime (see bullet 3 above)
  - No additional budget was provided to cover VSP impact

- The final Pu Sustainment cost for Pollux was $12M in FY11/12. This is significantly less than the original estimate of $21M and the start of the project.

2.5 BCRs

- None

2.6 Earned Value Metrics



PERIOD	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	573,154	1,034,273	752,586	562,427	50,982	834,222	673,677	664,664	688,802	431,207	699,650	597,173
EARNED	0	1,474,274	469,099	431,228	574,898	664,472	445,231	627,506	631,496	387,681	694,579	925,658
ACTUAL	803,041	722,562	552,968	618,997	829,153	801,035	1,214,865	944,702	481,004	615,739	639,968	458,766
S.P.I.	0.00	1.43	0.62	0.77	11.28	0.80	0.66	0.94	0.92	0.90	0.99	1.55
C.P.I.	0.00	2.04	0.85	0.70	0.69	0.83	0.37	0.66	1.31	0.63	1.09	2.02
TO DATE	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	573,154	1,607,427	2,360,014	2,922,441	2,973,423	3,807,645	4,481,321	5,145,985	5,834,788	6,265,995	6,965,645	7,562,818
EARNED	0	1,474,274	1,943,373	2,374,601	2,949,499	3,613,971	4,059,202	4,686,707	5,318,203	5,705,884	6,400,463	7,326,121
ACTUAL	803,041	1,525,603	2,078,571	2,697,568	3,526,721	4,327,756	5,542,621	6,487,324	6,968,327	7,584,066	8,224,034	8,682,801
S.P.I.	0.00	0.92	0.82	0.81	0.99	0.95	0.91	0.91	0.91	0.91	0.92	0.97
C.P.I.	0.00	0.97	0.93	0.88	0.84	0.84	0.73	0.72	0.76	0.75	0.78	0.84

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3.0 LANL - Power Supply

4195	BLUE	*Install the Power Supply Assembly Area Equipment and Upgrades per the FY2012 Power Supply PEP*

1. Begin construction on the PSAA by March 31, 2012.
2. Start installation of the Analytical Chemistry GBs by June 30, 2012.
3. Start installation of the low voltage E-Beam Welder by June 30, 2012.

L3 Milestone	Baseline Date	Status/Comments	Completion Date	RGYB
Start Construction – Capital (PSAA)	December 15, 2011		Dec 7, 2011	BLUE
Start Construction – Facility (PSAA)	December 15, 2011		Dec 7, 2011	BLUE
GB-1240 - Construction Field Start (Pu Assay)	March 1, 2012		May 7, 2012	BLUE
GB-1241 - Construction Field Start (Radiochemistry)	March 9, 2012		May 7, 2012	BLUE
Mobilize and Field Start (LVEBW)	June 14, 2012		April 30, 2012	BLUE

4197	BLUE	*Complete FY 2012 Power Supply material recovery activities IAW the Plutonium Sustainment PEP*

1. Dismantle lesser of 480 units or 95% of the Pantex items received by June 30, 2012
2. Recover and store the oxide by Sept 30, 2012

L3 Milestone	Baseline Date	Status/Comments	Completion Date	RGYB
Material Recovery Complete Shipment #1	October 18, 2011		Oct 18, 2012	BLUE
Material Recovery Complete Shipment #2	January 4, 2012		Dec 22, 2011	BLUE
Material Recovery Complete Shipment #3	March 8, 2012		Feb 15, 2012	BLUE
Material Recovery Complete Shipment #4	April 25, 2012		Mar 15, 2012	BLUE
Material Recovery Complete Shipment #5	June 27, 2012		June 21, 2012	BLUE

3.1 Technical Progress

- Material Recovery
  - Received FY 13 Shipment #1 and #2 (received in July and August, respectively).
    - All units from both shipments are dismantled.
    - Completed fuel recovery and storage of Shipment #1 (1 of 5 FSOs failed radiography – weld to be redone)
    - Completed recovery of Shipment #2 with fuel stored in FSIs ready for FSOs.
- RTG Process Development
  - Welding platforms are being established in SM39 to continue the development of the liner (GTA), strength member (LVEB), and clad (LVEB) welds.
  - Power to all the platforms has been established.

- Significant work has occurred to develop constitutive equations for the Haynes-25 material. The methods for dealing with the complex metals have now been established and the ability to provide direct input to the SNL impact models has been established.
- RTG assembly fixturing has been designed and incorporated into the 6kW laser workstations. It has been tested at the vendor site and meets the design criteria.

3.2 Equipment

- Power Supply Assembly Area (PSAA)
  - Construction continues and is on track.
  - Continued finishing of gypsum wallboard.
  - Continued installation of new sheetrock walls;
  - Placed concrete in exterior equipment pad.
  - Placed concrete for vibration blower pad.
  - Completed rebar installation and placed concrete for the transformer pad.
  - Completed concrete placement of curb and gutter.
  - Started installation of jib crane.
  - Started installation of process chilled water piping.
  - Started installation of electrical raceways for Red Net and fire alarm.
  - Moved new AC unit into the elevator equipment room.
  - Completed installation of new primary electrical conductors and energized new PSAA transformer on Sat Oct 6, 2012.
  - Drafted and signed BCP 008: Incorporate Burden Adjustments Required by the Institutional Voluntary Separation Plan.
- The Low Voltage Electron Beam (LVEB) Welder
  - Continued installation (vendor at LANL to work with LANL SMEs).
- Analytical Chemistry glove boxes (Pu Assay and Radiochemistry)
  - Moved glove boxes into PF-4.
- SM-39 Development Laboratory
  - Started electricity installation for process equipment.

3.3 Issues

- None

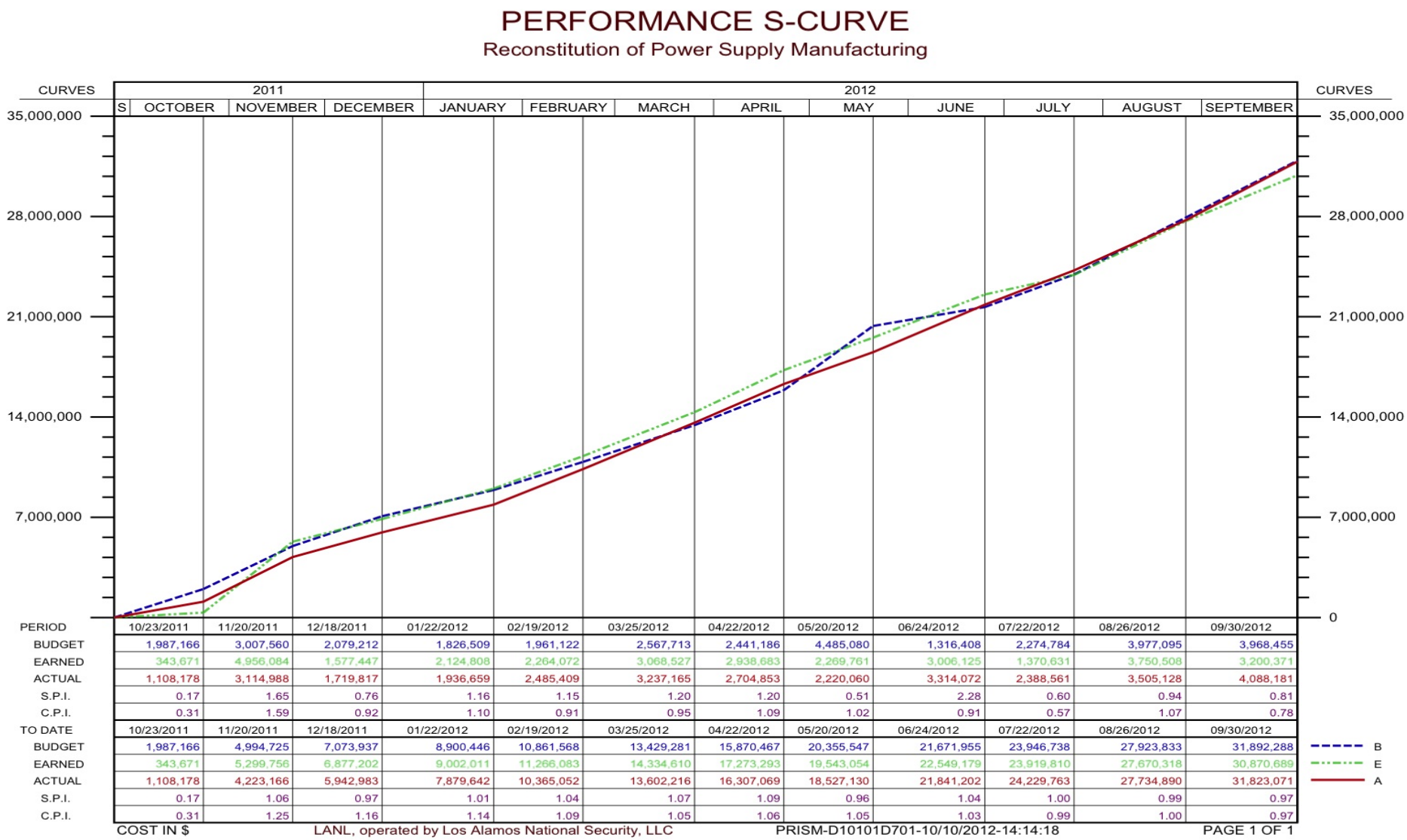
3.4 Variance Analysis and Recovery Plan

- None

3.5 BCRs

- None

3.6 Earned Value Metrics



PERIOD	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	1,987,166	3,007,560	2,079,212	1,826,509	1,961,122	2,567,713	2,441,186	4,485,080	1,316,408	2,274,784	3,977,095	3,968,455
EARNED	343,671	4,956,084	1,577,447	2,124,808	2,264,072	3,068,527	2,938,683	2,269,761	3,006,125	1,370,631	3,750,508	3,200,371
ACTUAL	1,108,178	3,114,988	1,719,817	1,936,659	2,485,409	3,237,165	2,704,853	2,220,060	3,314,072	2,388,561	3,505,128	4,088,181
S.P.I.	0.17	1.65	0.76	1.16	1.15	1.20	1.20	0.51	2.28	0.60	0.94	0.81
C.P.I.	0.31	1.59	0.92	1.10	0.91	0.95	1.09	1.02	0.91	0.57	1.07	0.78
TO DATE	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	1,987,166	4,994,725	7,073,937	8,900,446	10,861,568	13,429,281	15,870,467	20,355,547	21,671,955	23,946,738	27,923,833	31,892,288
EARNED	343,671	5,299,756	6,877,202	9,002,011	11,266,083	14,334,610	17,273,293	19,543,054	22,549,179	23,919,810	27,670,318	30,870,689
ACTUAL	1,108,178	4,223,166	5,942,983	7,879,642	10,365,052	13,602,216	16,307,069	18,527,130	21,841,202	24,229,763	27,734,890	31,823,071
S.P.I.	0.17	1.06	0.97	1.01	1.04	1.07	1.09	0.96	1.04	1.00	0.99	0.97
C.P.I.	0.31	1.25	1.16	1.14	1.09	1.05	1.06	1.05	1.03	0.99	1.00	0.97

COST IN $ LANL, operated by Los Alamos National Security, LLC PRISM-D10101D701-10/10/2012-14:14:18 PAGE 1 OF 1

4.0 Program Management and Support

4.1 Technical Progress

- Documented completion of all LANL FY12 Plutonium Sustainment Level 2 milestones
- Submitted draft Program Implementation Plan for FY13.
- Evidence packages for MRT4195, MRT4196, MRT4197, and MRT4198 submitted

4.2 Equipment

- None

4.3 Issues

- None

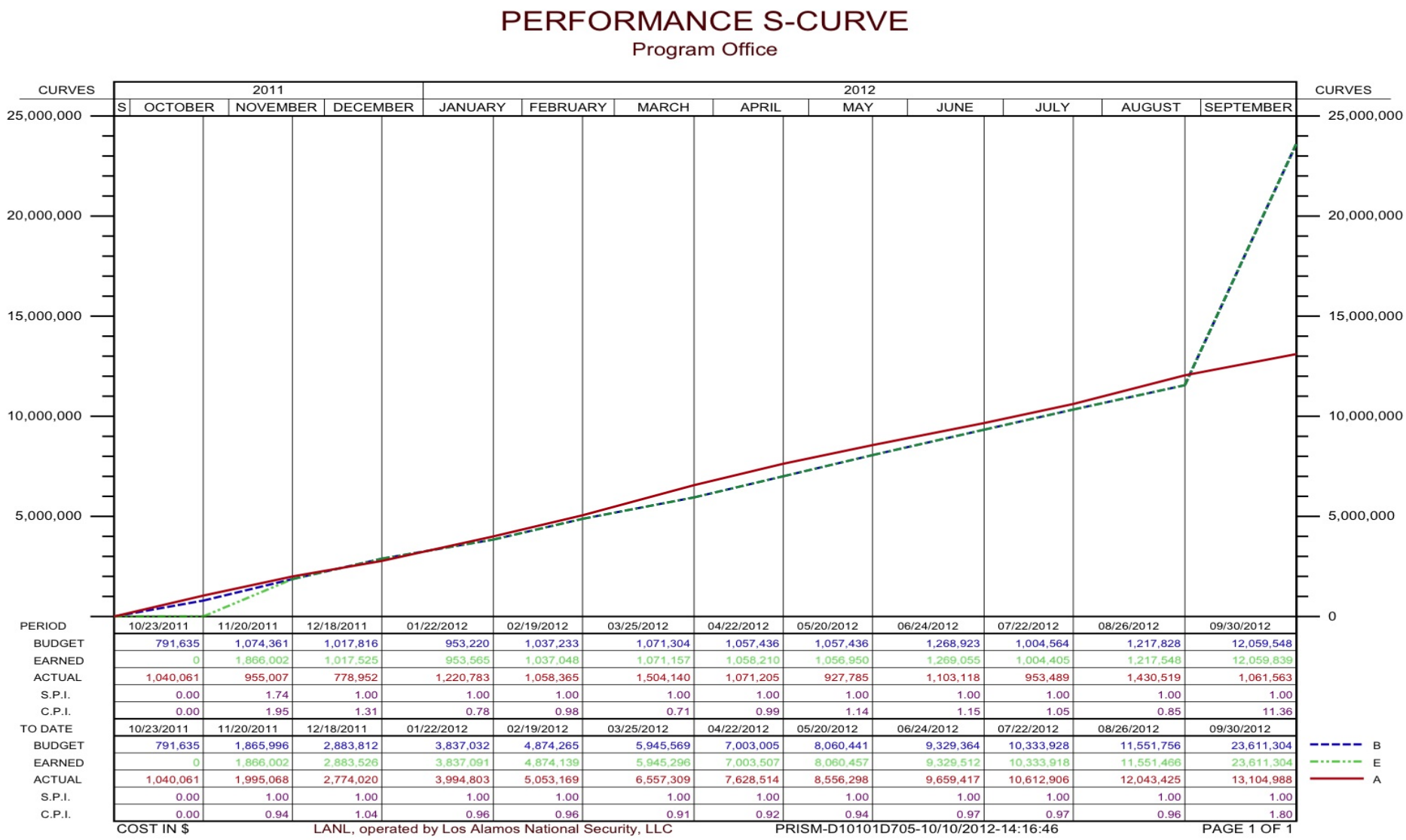
4.4 Variance Analysis and Recovery Plan

- Note that the planned (budget) and earned value for September includes planned carryover holdbacks (no allocation) with no associated FY12 costs. This has a significant (positive) impact on the C.P.I. (see section 4.6). The C.P.I. for September neglecting the $10.75M holdback is 1.23. Likewise, the C.P.I. for FY12 is 0.98.

4.5 BCRs

- None

4.6 Earned Value Metrics



PERIOD	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	791,635	1,074,361	1,017,816	953,220	1,037,233	1,071,304	1,057,436	1,057,436	1,268,923	1,004,564	1,217,828	12,059,548
EARNED	0	1,866,002	1,017,525	953,565	1,037,048	1,071,157	1,058,210	1,056,950	1,269,055	1,004,405	1,217,548	12,059,839
ACTUAL	1,040,061	955,007	778,952	1,220,783	1,058,365	1,504,140	1,071,205	927,785	1,103,118	953,489	1,430,519	1,061,563
S.P.I.	0.00	1.74	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C.P.I.	0.00	1.95	1.31	0.78	0.98	0.71	0.99	1.14	1.15	1.05	0.85	11.36
TO DATE	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	791,635	1,865,996	2,883,812	3,837,032	4,874,265	5,945,569	7,003,005	8,060,441	9,329,364	10,333,928	11,551,756	23,611,304
EARNED	0	1,866,002	2,883,526	3,837,091	4,874,139	5,945,296	7,003,507	8,060,457	9,329,512	10,333,918	11,551,466	23,611,304
ACTUAL	1,040,061	1,995,068	2,774,020	3,994,803	5,053,169	6,557,309	7,628,514	8,556,298	9,659,417	10,612,906	12,043,425	13,104,988
S.P.I.	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C.P.I.	0.00	0.94	1.04	0.96	0.96	0.91	0.92	0.94	0.97	0.97	0.96	1.80

5.0 Facilities, Waste and Institutional Support

5.1 Technical Progress

- PF-4 Facility Availability: September 85.14%
  - 100 Area: 83.71%
  - 200 Area: 74.29%
  - 300 Area: 99.79%
  - 400 Area: 82.79%

5.2 Equipment

- None

5.3 Issues

- Rad-Con, Caustic Waste Line leak, and Dryer

5.4 Variance Analysis and Recovery Plan

- None

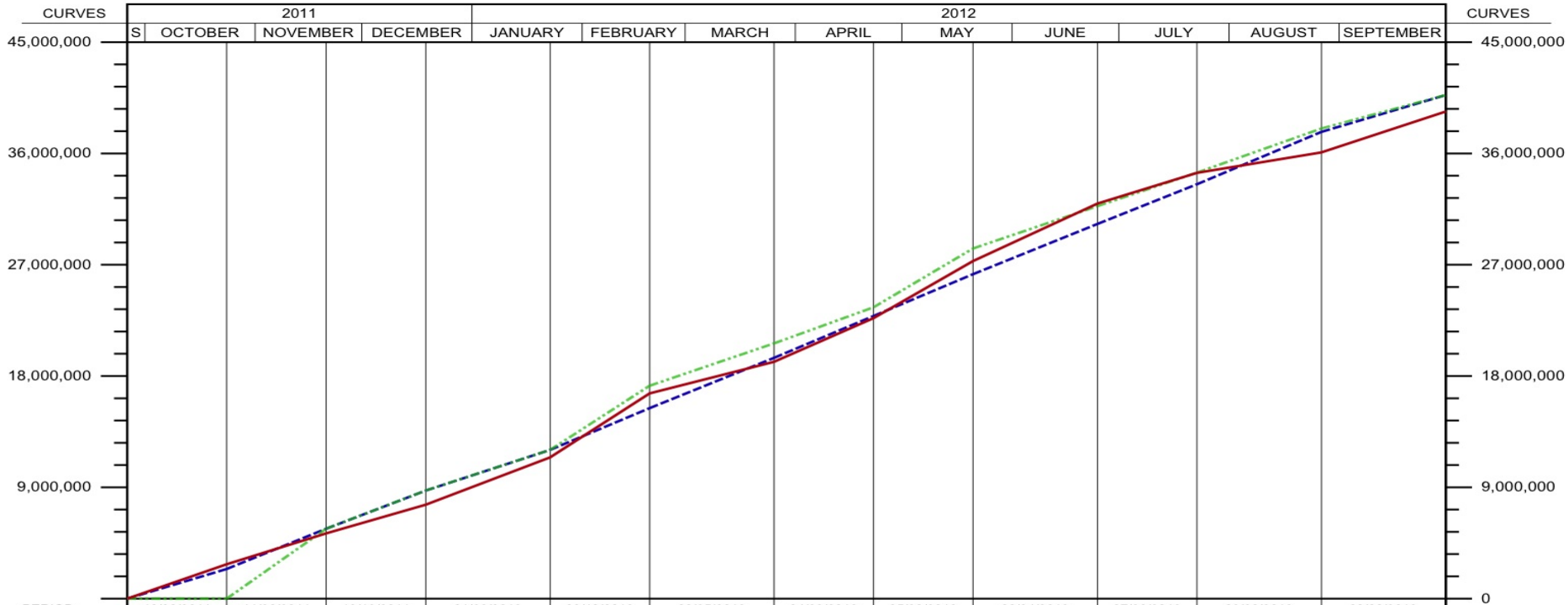
5.5 BCRs

- None

5.6 Earned Value Metrics

PERFORMANCE S-CURVE

Facility Infrastructure



PERIOD	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	2,398,900	3,255,650	3,084,300	3,286,147	3,383,519	4,060,222	3,383,519	3,383,518	4,060,222	3,214,343	4,229,402	2,984,260
EARNED	0	5,654,550	3,084,300	3,288,347	5,188,744	3,423,560	2,919,578	4,756,016	3,421,560	2,712,644	3,565,740	2,708,961
ACTUAL	2,776,194	2,496,514	2,322,804	3,823,528	5,176,492	2,555,583	3,537,832	4,609,331	4,652,741	2,480,371	1,658,504	3,305,172
S.P.I.	0.00	1.74	1.00	1.00	1.53	0.84	0.86	1.41	0.84	0.84	0.84	0.91
C.P.I.	0.00	2.26	1.33	0.86	1.00	1.34	0.83	1.03	0.74	1.09	2.15	0.82
TO DATE	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	2,398,900	5,654,550	8,738,850	12,024,997	15,408,516	19,468,737	22,852,256	26,235,774	30,295,996	33,510,338	37,739,740	40,724,000
EARNED	0	5,654,550	8,738,850	12,027,197	17,215,941	20,639,501	23,559,079	28,315,095	31,736,655	34,449,298	38,015,039	40,724,000
ACTUAL	2,776,194	5,272,708	7,595,512	11,419,039	16,595,532	19,151,115	22,688,946	27,298,277	31,951,018	34,431,389	36,089,894	39,395,066
S.P.I.	0.00	1.00	1.00	1.00	1.12	1.06	1.03	1.08	1.05	1.03	1.01	1.00
C.P.I.	0.00	1.07	1.15	1.05	1.04	1.08	1.04	1.04	0.99	1.00	1.05	1.03

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6.0 LLNL

MRT 4196	BLUE	*Perform Activities to Sustain Base Pit Material Processing and Fabrication Capability*

1. Complete FY12 LLNL tasks per PEP and W87 Legacy IPT necessary to support FY2013 delivery of 1 pit EDU
2. Perform initial cold testing of modern foundry
3. Evaluate selected Pit Manufacturing Processes for initial phase of "W87 -Like" fabrication by Sept 30, 2012
4. No later then June 30, 2012, Package and Ship Pu metal to LANL

L3 Milestone	Baseline Date	Status/Comments	Completion Date	RGYB
LLNL Tasks to supports FY2013 EDU	9/30/2013	EDU Criteria and CMM Qualification Requirements Documents issued	9/30/2012	BLUE
Initial cold testing of modern foundry	9/30/2012	Several systems have been cold tested and report issued	9/30/2012	BLUE
Evaluate selected Pit Manufacturing Processes for initial phase of "W87 -Like" fabrication	9/30/2012	Machining In-Progress	9/14/2012	BLUE
Package and Ship Pu metal to LANL	6/30/2012	Shipments completed	6/28/2012	BLUE

6.1 Technical Progress

- The pit production IPT issued EDU Criteria Memo CODT-2012-1320 and CMM Qualification Memo CODT-2012-1321.
- Troubleshooting of the Moore T-base 1 lathe in progress after erratic performance of machine while machining second part outer surface.
- "Sheffield Gage Transition and Operations Plan," LLNL-AR-586172 issued September 21, 2012

6.2 Equipment

- Modern Foundry: Completed initial cold testing of the Modern Foundry Equipment and issued the Milestone Report titled, “Modern Foundry Initial “Cold” Testing FY12” LLNL-AR-585652 on September 30, 2012.

6.3 Issues

- None

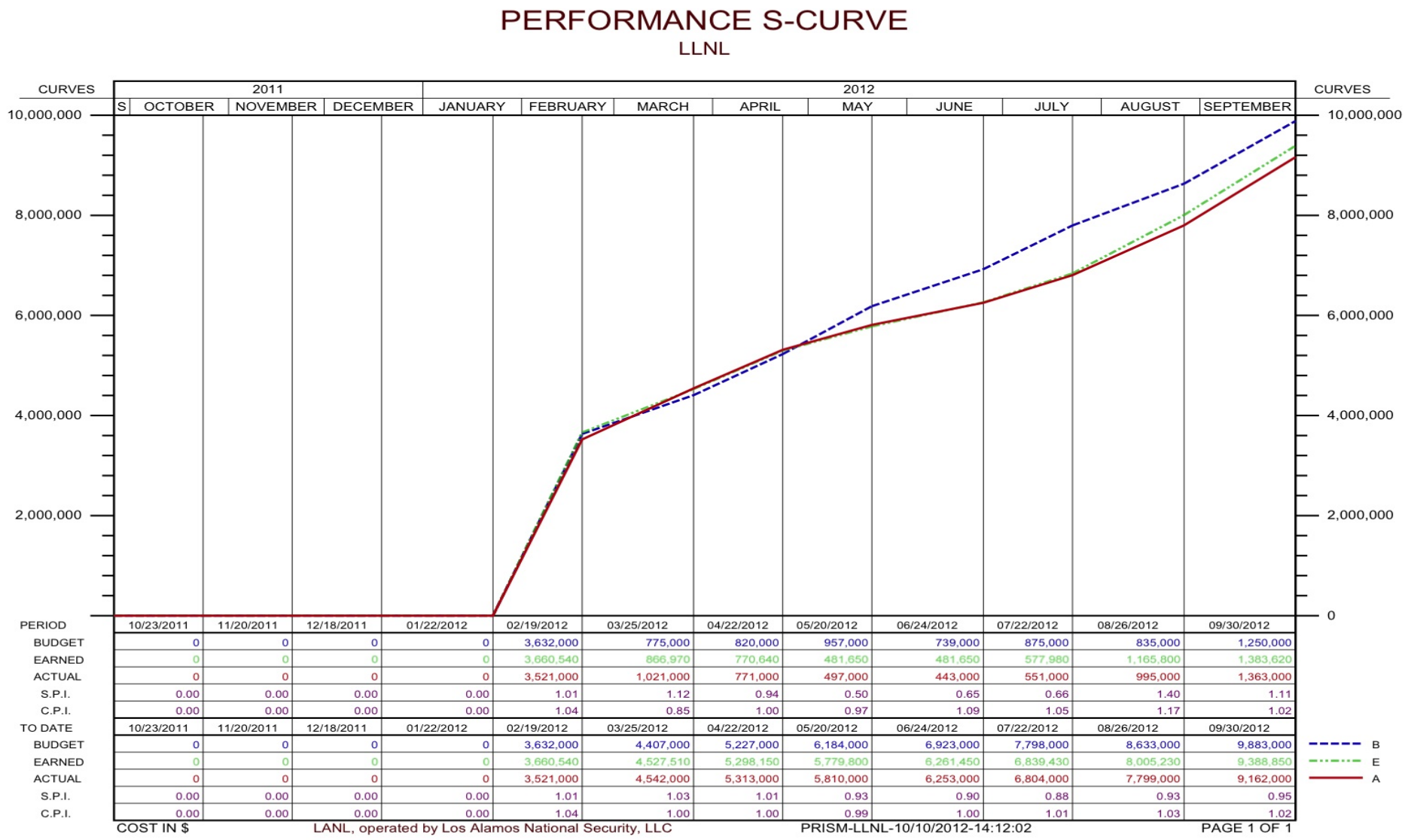
6.4 Variance Analysis and Recovery Plan

- CPI and SPI - Spending and Progress was back on target with additional staff to work at LANL in September.
- Recovery Plan – Continue staffing level to meet plan.

6.5 BCRs

- None

6.6 Earned Value Metrics



PERIOD	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	0	0	0	0	3,632,000	775,000	820,000	957,000	739,000	875,000	835,000	1,250,000
EARNED	0	0	0	0	3,660,540	866,970	770,640	481,650	481,650	577,980	1,165,800	1,383,620
ACTUAL	0	0	0	0	3,521,000	1,021,000	771,000	497,000	443,000	551,000	995,000	1,363,000
S.P.I.	0.00	0.00	0.00	0.00	1.01	1.12	0.94	0.50	0.65	0.66	1.40	1.11
C.P.I.	0.00	0.00	0.00	0.00	1.04	0.85	1.00	0.97	1.09	1.05	1.17	1.02

TO DATE	10/23/2011	11/20/2011	12/18/2011	01/22/2012	02/19/2012	03/25/2012	04/22/2012	05/20/2012	06/24/2012	07/22/2012	08/26/2012	09/30/2012
BUDGET	0	0	0	0	3,632,000	4,407,000	5,227,000	6,184,000	6,923,000	7,798,000	8,633,000	9,883,000
EARNED	0	0	0	0	3,660,540	4,527,510	5,298,150	5,779,800	6,261,450	6,839,430	8,005,230	9,388,850
ACTUAL	0	0	0	0	3,521,000	4,542,000	5,313,000	5,810,000	6,253,000	6,804,000	7,799,000	9,162,000
S.P.I.	0.00	0.00	0.00	0.00	1.01	1.03	1.01	0.93	0.90	0.88	0.93	0.95
C.P.I.	0.00	0.00	0.00	0.00	1.04	1.00	1.00	0.99	1.00	1.01	1.03	1.02

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