

FY 2019 Third Quarter Report

Overall Root Cause Analysis (RCA)/Corrective Action Plan (CAP) Performance Metrics

| No. | Contract/Project Management Performance Metrics | FY 2019 Target | FY 2019 Forecast | Comment |
|-----|---|----------------|------------------|--|
| 1 | Capital Asset Project Success: Complete 90% of capital asset projects at original scope and within 110% of CD-2 TPC. | 90% | Construction 90% | Based on 3-year rolling period (FY17 to FY19). TPC is Total Project Cost. |

| No. | Contract/Project Management Performance Metrics | FY 2019 Target | FY 2019 3rd Qtr Actual | Comment |
|-----|---|----------------|------------------------|--|
| 2 | Certified EVM Systems: Post CD-3, greater than \$100 million. | 95% | 94% | EVM: Earned Value Management. CD-3: Critical Decision-3, Approve Start of Construction/Execution. |
| 3 | Certified FPD's at CD-1: Projects have certified FPDs no later than CD-1. | 95% | 96% | FPD: Federal Project Director CD-1: Critical Decision-1, Approve Alternative Selection and Cost Range. |
| 4 | Certified FPD's at CD-3: Projects have FPDs certified at the appropriate level assigned to projects no later than CD-3. | 90% | 85% | |
| 5 | Certified Contracting Staff: By the end of FY 2011, 85% of the 1102 contracting series will be certified. | 85% | 97% | Certified 1102s verified against DOE Human Resources GS-1102 job series |
| 6 | Schedule Compliance, Projects Less Than 5 Years Duration: Projects will meet the project schedule metric that follows: from CD-3 to CD-4, projects less than five years duration will be completed within 12 months of the original CD-3/4 duration. | 90% | 94% | FY17-FY19: 16 completions through 3rd Qtr. CD-4: Critical Decision-4, Approve Start of Operations/Project Completion. |
| 7 | Schedule Compliance, Projects Greater Than 5 Years Duration: Projects will meet the project schedule metric that follows: from CD-3 to CD-4, projects greater than five years duration will be completed within 20% of the original CD-3/4 duration. | 90% | 50% | FY17-FY19: 2 completions through 3rd Qtr. |

Note: Projects \$50M or less that have achieved Critical Decision (CD)-2/3 prior to the applicability threshold change to DOE Order 413.3B (Change 5) are included in the project management success metrics.



FY 2019 Third Quarter Project Management Performance Metrics *
Supporting Detail for Overall Project and Schedule Success

| | | | | | | | | Success Metric | | |
|---------|--------------------|---|-----------|---------------|-------------|-----------------------|--------------|-----------------|----------------------------|----------------------------|
| | | | | | | | | #1 | #6 | #7 |
| Program | PARS II Project ID | Project Name | Site Code | CD-2 TPC | Latest TPC | Project Status | FY Completed | Project Success | Schedule Success < 5 Years | Schedule Success > 5 Years |
| EM-L | 1014 | Fort St. Vrain Facility Improvements Project | INL | 11,400,000 | 11,400,000 | Other | 2018 | Yes | Yes | NA |
| EM-L | 538 | Saltstone Disposal Unit #6 (SDU6) | SRS | 143,166,420 | 121,700,000 | Completed | 2017 | Yes | NA | Yes |
| NA | 444 | TRU Waste Facilities, Phase B, Staging and Characterization Facility | LANL | 99,165,000 | 97,500,000 | Completed | 2017 | Yes | Yes | NA |
| NA | 754 | TA-55 Infrastructure Reinvestment, Phase II, Phase C | LANL | 92,696,000 | 93,616,154 | Completed and Closed | 2018 | Yes | Yes | NA |
| NA | 1013 | Radioactive Liquid Waste Treatment Facility Upgrade Project Low Level Waste | LANL | 82,694,000 | 87,900,000 | Completed | 2019 | Yes | Yes | NA |
| NA | 1107 | Device Assembly Facility (DAF) Perimeter Protection | NNSS | 19,200,000 | 13,300,000 | Other | 2018 | Yes | Yes | NA |
| NA | 1037 | Uranium Processing Facility Site Infrastructure and Services | Y-12 | 78,500,000 | 60,503,000 | Completed and Closed | 2018 | Yes | Yes | NA |
| NA | 400 | Mixed Oxide Fuel Fabrication Facility (MOX) | SRS | 4,814,329,000 | | Cancelled - Post CD-2 | 2018 | No Scope | NA | NA |
| NA | 394 | High Explosive Pressing Facility (HEPF) | Pantex | 80,578,000 | 117,008,000 | Completed | 2017 | No Cost | No | NA |
| NE | 564 | Remote-Handled Low-Level Waste Disposal | INL | 77,576,000 | 72,824,000 | Completed and Closed | 2018 | Yes | Yes | NA |
| NE | 1130 | CPP-603 Large Cask Adaptation Project | INL | 14,357,385 | 11,907,047 | Other | 2018 | Yes | Yes | NA |
| SC | 1008 | Integrative Genomics Building (IGB) Project | LBNL | 91,500,000 | 91,500,000 | Active | 2019 | Yes (F) | TBD | TBD |
| SC | 692 | NLS II Experimental Tools (NEXT) | BNL | 90,000,000 | 89,303,000 | Completed | 2017 | Yes | Yes | NA |
| SC | 693 | Utilities Upgrade (UU) | FNAL | 36,000,000 | 35,559,000 | Other | 2018 | Yes | Yes | NA |
| SC | 925 | Muon g-2 Project at Fermi National Accelerator Laboratory (FNAL) | FNAL | 46,400,000 | 46,205,000 | Completed and Closed | 2018 | Yes | Yes | NA |
| SC | 1009 | Infrastructure and Operational Improvements (IOI) Project | PPPL | 26,000,000 | 25,669,000 | Completed and Closed | 2019 | Yes | Yes | NA |
| SC | 742 | Science and User Support Building (SUSB) | SLAC | 65,000,000 | 64,602,000 | Completed and Closed | 2017 | Yes | Yes | NA |
| SC | 1007 | Photon Science Laboratory Building (PSLB) | SLAC | 57,000,000 | 56,959,000 | Completed | 2019 | Yes | Yes | NA |
| SC | 482 | 12 GeV Continuous Electron Beam Accelerator Facility (CEBAF) Upgrade | TJNAF | 310,000,000 | 336,600,000 | Completed | 2017 | Yes | NA | No |
| SC | 694 | Utilities Infrastructure Modernization (UIM) | TJNAF | 29,900,000 | 29,892,000 | Other | 2018 | Yes | Yes | NA |

| Summary | Project Success | Schedule Success < 5 Years | Schedule Success > 5 Years |
|------------|-----------------|----------------------------|----------------------------|
| # Projects | 20 | 16 | 2 |
| # Success | 18 | 15 | 1 |
| % Success | 90% | 94% | 50% |

Notes:

NA: Not Applicable

(F): (Forecast)

TBD: Result will be determined when Critical Decision-4 Project Completion is approved.

* Metrics updated to reflect the date of MOX cancellation as the date of the Secretary's certification to Congress. The date of cancellation in PARS changed from October 10, 2018 (FY19) to May 10, 2018 (FY18).

FY 2019 Third Quarter Project Management Performance Metrics
Metric #2) Certified Contractor EVM Systems: 94% (17 of 18)

| Program | Project Name | Site Code | Current CD | Current TPC (\$K) | CD-3 Is EVMS Certified? | Contractor |
|---------|--|------------|------------|-------------------|-------------------------|----------------------------|
| EM-L | On-Site Waste Disposal Facility - Initial Infrastructure & Cells 1, 4 & 5 Liner Construction | Portsmouth | CD3 | \$ 285,000 | No | Not certified (see Note 1) |

Metric #3) Percentage of Projects With CD-1 and a Certified FPD: 96% (52 of 54). Exceptions:

| Program | Project Name | Site Code | Current CD | Current TPC (\$K) | CD-1 Is FPD Certified? | Contractor |
|---------|---|-----------|------------|-------------------|------------------------|----------------------|
| NA | NNSA Albuquerque Complex Project - II | KAFB | CD3 | \$ 174,700 | No | FPD is not certified |
| NA | Exascale Computing Facility Modernization Project | LLNL | CD1/3A | \$ 125,000 | No | FPD is not certified |

Metric #4) Percentage of Projects With CD-3 and a Properly Certified FPD: 85% (23 of 27). Exceptions:

| Program | Project Name | Site Code | Current CD | Current TPC (\$K) | CD-3 Is FPD Properly Certified? | Contractor |
|---------|---|-----------|------------|-------------------|---------------------------------|-------------------------------|
| EM-L | Safety Significant Confinement Ventilation System | Carlsbad | CD3 | \$ 288,000 | No | FPD is Level 2, needs Level 3 |
| EM-L | Utility Shaft Project | Carlsbad | CD3 | \$ 196,985 | No | FPD is Level 2, needs Level 3 |
| NA | Electrorefining Project | Y-12 | CD3 | \$ 101,000 | No | FPD is Level 2, needs Level 3 |
| NA | NNSA Albuquerque Complex Project - II | KAFB | CD3 | \$ 174,700 | No | FPD is not certified |

Note 1: On February 2, 2018, the Under Secretary for Science approved an exemption through December 31, 2018 enabling EM to proceed to Critical Decision-3, Approve Start of Construction, prior to the contractor achieving certification on their Earned Value Management System (EVMS). In the interim period between CD-3 approval and the Office of Project Management (PM) certification of the EVMS, alternate project controls would be used. Certification of the Portsmouth EVMS is targeted for completion by CY2019 if no significant issues are identified. Project received an extension until September 27, 2019, from the Under Secretary.