

FY 2020 First Quarter Report

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

| No. | Contract/Project Management Performance Metrics | FY 2020 Target | FY 2020 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 89% | Based on 3-year rolling period (FY18 to FY20). TPC is Total Project Cost. |

| No. | Contract/Project Management Performance Metrics | FY 2020 Target | FY 2020 1st Qtr Actual | Comment |
|-----|---|----------------|------------------------|--|
| 2 | Certified EVM Systems: Post CD-3, greater than \$100 million. | 95% | 95% | 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% | 97% | 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 <u>at the appropriate level</u> assigned to projects no later than CD-3. | 90% | 78% | |
| 5 | Certified Contracting Staff: By the end of FY 2011, 85% of the 1102 contracting series will be certified. | 85% | 96% | 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% | 100% | FY18-FY20: 14 completions through 1st 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% | NA | FY18-FY20: 0 completions through 1st 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 2020 First 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 | 389 | Salt Waste Processing Facility (SWPF) | SRS | 900,000,000 | 2,322,000,000 | Active | 2020 | No Cost (F) | TBD | TBD |
| 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 | 87,974,630 | Completed and Closed | 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 | 400 | Mixed Oxide Fuel Fabrication Facility (MOX) | SRS | 4,814,329,000 | | Cancelled - Post CD-2 | 2018 | No Scope | NA | 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 | 1085 | UPF Substation Subproject | Y-12 | 60,000,000 | 47,000,000 | Completed | 2020 | Yes | Yes | 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 | 736 | Materials Design Laboratory (MDL) | ANL | 96,000,000 | 96,000,000 | Completed | 2020 | 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 | 1008 | Integrative Genomics Building (IGB) Project | LBNL | 91,500,000 | 91,500,000 | Active | 2020 | Yes (F) | TBD | TBD |
| SC | 1023 | LUX-Zeplin Dark Matter Experiment (LZ) | LBNL | 55,500,000 | 55,500,000 | Active | 2020 | Yes (F) | TBD | TBD |
| SC | 1009 | Infrastructure and Operational Improvements (IOI) Project | PPPL | 26,000,000 | 25,669,000 | Completed and Closed | 2019 | Yes | Yes | NA |
| SC | 1007 | Photon Science Laboratory Building (PSLB) | SLAC | 57,000,000 | 56,959,000 | Completed | 2019 | Yes | Yes | NA |
| SC | 694 | Utilities Infrastructure Modernization (UIM) | TJNAF | 29,900,000 | 29,892,000 | Other | 2018 | Yes | Yes | NA |

Notes:

NA: Not Applicable

(F): (Forecast)

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

| Summary | Project Success | Schedule Success < 5 Years | Schedule Success > 5 Years |
|------------|-----------------|----------------------------|----------------------------|
| # Projects | 18 | 14 | 0 |
| # Success | 16 | 14 | 0 |
| % Success | 89% | 100% | NA |

FY 2020 First Quarter Project Management Performance Metrics
Metric #2) Certified Contractor EVM Systems: 95% (18 of 19)

| Program | Project Name | Site Code | Current CD | Current TPC (\$K) | CD-3 Is EVMS Certified? | Comments |
|---------|--|------------|------------|-------------------|-------------------------|----------------------------|
| 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: 97% (56 of 58). Exceptions:

| Program | Project Name | Site Code | Current CD | Current TPC (\$K) | CD-1 Is FPD Certified? | Comments |
|---------|---|-----------|------------|-------------------|------------------------|----------------------|
| NA | NNSA Albuquerque Complex Project - II | KAFB | CD3 | \$ 174,700 | No | FPD is not certified |
| NA | Exascale Computing Facility Modernization Project | LLNL | CD3 | \$ 111,200 | No | FPD is not certified |

Metric #4) Percentage of Projects With CD-3 and a Properly Certified FPD: 78% (21 of 27). Exceptions:

| Program | Project Name | Site Code | Current CD | Current TPC (\$K) | CD-3 Is FPD Properly Certified? | Comments |
|---------|---|-----------|------------|-------------------|---------------------------------|-------------------------------|
| EM-L | Safety Significant Confinement Ventilation System | Carlsbad | CD3 | \$ 288,000 | No | FPD is Level 1, needs Level 3 |
| EM-L | Utility Shaft Project | Carlsbad | CD3 | \$ 196,985 | No | FPD is Level 1, 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 |
| NA | Exascale Computing Facility Modernization Project | LLNL | CD3 | \$ 111,200 | No | FPD is not certified |
| SC | Advanced Photon Source Upgrade | ANL | CD3 | \$ 815,000 | No | FPD is Level 3, needs Level 4 |

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). On January 25, 2019, the Project received an extension until September 27, 2019, from the Under Secretary. On November 5, 2019, the Project received a second extension until March 31, 2020 from the Under Secretary. 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 March 31, 2020 if no significant issues are identified.