

FY 2022 Q2

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

| No. | Contract/Project Management Performance Metrics | FY 2022 Target | FY 2022 Forecast | Comment |
|-----|--|----------------|------------------|--|
| 1 | Capital Asset Project Management Success: Complete 90% of capital asset projects at original scope and within 110% of CD-2 TPC. | 90% | Construction 94% | Based on 3-year rolling period (FY20 to FY22). TPC is Total Project Cost. |

| No. | Contract/Project Management Performance Metrics | FY 2022 Target | FY 2022 Q2 Actual | Comment |
|-----|---|----------------|-------------------|---|
| 2 | Certified EVM Systems: Post CD-3, greater than \$100 million. | 95% | 90% | 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% | 95% | 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% | 67% | FPD: Federal Project Director CD-3: Critical Decision-3, Approve Start of Construction/Execution. |
| 5 | Certified Contracting Staff: By the end of FY 2011, 85% of the 1102 contracting series will be certified. | 85% | 94% | 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% | FY20-FY22: 5 completions through 2nd 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% | 83% | FY20-FY22: 5 completions through 2nd Qtr. |

Capital Asset Project Management Success: 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.

Schedule Compliance: In the case of CD-3, for actions that have been tailored (i.e., CD-3A, CD-3B, etc.), the duration clock starts at the first increment (i.e., CD-3A). This metric will be based on a three-year rolling timeline of projects reaching CD-4. The FY 2008 target is based on projects reaching CD-4 in the FY 2006 – 2008 timeframe.

FY 2022 Q2 Project Management Performance Metrics

Supporting Detail for Overall Project and Schedule Success

| Program | PARS II Project ID | Project Name | Site Code | CD-2 TPC | Latest TPC | Project Status | FY Completed | Success Metric | | |
|---------|--------------------|--|------------|-------------|---------------|----------------------|--------------|----------------------------|----------------------------|-----|
| | | | | | | | | #1 | #6 | #7 |
| | | | | | | | | Schedule Success < 5 Years | Schedule Success > 5 Years | |
| EM-L | 389 | Salt Waste Processing Facility (SWPF) | SRS | 900,000,000 | 2,260,000,000 | Completed | 2020 | No-Cost | NA | No |
| SC | 736 | Materials Design Laboratory (MDL) | ANL | 96,000,000 | 96,000,000 | Completed and Closed | 2020 | Yes | Yes | NA |
| SC | 844 | LSST Camera | SLAC | 168,000,000 | 165,280,000 | Completed and Closed | 2021 | Yes | NA | Yes |
| SC | 929 | Mid-Scale Dark Energy Spectroscopic Instrument (DESI) | LBNL | 56,328,000 | 54,418,000 | Completed and Closed | 2020 | Yes | NA | Yes |
| SC | 1008 | Integrative Genomics Building (IGB) Project | LBNL | 91,500,000 | 91,500,000 | Completed | 2020 | Yes | Yes | NA |
| NA | 1019 | CMRR RLUOB Equipment Installation, Phase 2 | LANL | 633,300,000 | 509,300,000 | Completed | 2022 | Yes | NA | Yes |
| NA | 1020 | CMRR PF-4 Equipment Installation, Phase 1 | LANL | 394,000,000 | 284,000,000 | Completed | 2021 | Yes | NA | Yes |
| SC | 1023 | LUX-Zeplin Dark Matter Experiment (LZ) | LBNL | 55,500,000 | 55,500,000 | Completed and Closed | 2020 | Yes | NA | Yes |
| EM-L | 1047 | On-Site Waste Disposal Facility - Initial Infrastructure & Cells 1, 4 & 5 Liner Construction | Portsmouth | 285,000,000 | 285,000,000 | Active | 2022 | Yes (F) | TBD | TBD |
| EM-L | 1068 | Saltstone Disposal Unit #7 (SDU7) | SRS | 159,000,000 | 127,000,000 | Completed | 2021 | Yes | Yes | NA |
| NA | 1081 | NNSA Albuquerque Complex Project - II | KAFB | 174,700,000 | 174,700,000 | Active | 2022 | Yes (F) | TBD | TBD |
| NA | 1084 | UPF Mechanical Electrical Building Subproject | Y-12 | 284,000,000 | 310,000,000 | Active | 2022 | Yes (F) | TBD | TBD |
| NA | 1085 | UPF Substation Subproject | Y-12 | 60,000,000 | 43,622,000 | Completed and Closed | 2020 | Yes | Yes | NA |
| NA | 1111 | Exascale Class Computer Cooling Equipment | LANL | 55,800,000 | 35,800,000 | Completed | 2020 | Yes | Yes | NA |
| NA | 1124 | Exascale Computing Facility Modernization Project | LLNL | 111,200,000 | 111,200,000 | Active | 2022 | Yes (F) | TBD | TBD |
| EM-L | 1178 | Tank-Side Cesium Removal System Demonstration Subproject | ORP | 164,000,000 | 164,000,000 | Active | 2022 | Yes (F) | TBD | TBD |

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 | 16 | 5 | 6 |
| # Success | 15 | 5 | 5 |
| % Success | 94% | 100% | 83% |

FY 2022 Q2 Project Management Performance Metrics

Metric #2) Certified Contractor EVM Systems: 89% (25 of 28). Exceptions:

| Program | Project Name | Site Code | Current CD | Current TPC (\$K) | CD-3 Is EVMS Certified? | Comments |
|---------|-----------------------|-----------|------------|-------------------|----------------------------|------------------------------------|
| FE | SPR-LE2-Big Hill | SPR | CD3 | \$ 457,000 | No | FFPO is not certified (see Note 1) |
| FE | SPR-LE2-Bryan Mound | SPR | CD3 | \$ 315,000 | No | FFPO is not certified (see Note 1) |
| FE | SPR-LE2-Bayou Choctaw | SPR | CD3 | \$ 355,000 | No | FFPO is not certified (see Note 1) |

Metric #3) Percentage of Projects With CD-1 and a Certified FPD: 95% (42 of 44). Exceptions:

| Program | Project Name | Site Code | Current CD | Current TPC (\$K) | CD-1 Is FPD Certified? | Comments |
|---------|---|-----------|------------|-------------------|---------------------------|----------------------|
| SC | Princeton Plasma Innovation Center (PPIC) | PPPL | CD1 | \$ 98,500 | No | FPD is not certified |
| SC | Critical Infrastructure Recovery and Renewal (CIRR) | PPPL | CD1 | \$ 97,900 | No | FPD is not certified |

Metric #4) Percentage of Projects With CD-3 and a Properly Certified FPD: 67% (29 of 43). Exceptions:

| Program | Project Name | Site Code | Current CD | Current TPC (\$K) | CD-3 Is FPD Properly Certified? | Comments |
|---------|--|-----------|------------|-------------------|------------------------------------|--|
| NE | Sample Preparation Laboratory (SPL) | INL | CD3 | \$ 166,000 | No | FPD is not certified at the proper level |
| NA | Calciner Project | Y-12 | CD3 | \$ 107,800 | No | FPD is not certified at the proper level |
| SC | Science User Support Center (SUSC) | BNL | CD3 | \$ 86,200 | No | FPD is not certified at the proper level |
| SC | HL-LHC Accelerator Upgrade (HL-LHC-AUP) | FNAL | CD3 | \$ 242,720 | No | FPD is not certified at the proper level |
| SC | Translational Research Capability (TRC) | ORNL | CD3 | \$ 95,000 | No | FPD is not certified at the proper level |
| EM-L | Tank-Side Cesium Removal System Demonstration Subproject | ORP | CD3 | \$ 164,000 | No | FPD is not certified at the proper level |
| OE | Grid Storage Launchpad | PNNL | CD3 | \$ 77,000 | No | FPD is not certified at the proper level |
| NA | West End Protected Area Reduction Project | Y-12 | CD3 | \$ 159,850 | No | FPD is not certified at the proper level |
| NA | Los Alamos Plutonium Pit Production Project (LAP4) | LANL | CD3 | \$ 529,000 | No | FPD is not certified at the proper level |
| EM-L | Safety Significant Confinement Ventilation System | Carlsbad | CD3 | \$ 494,000 | No | FPD is not certified at the proper level |
| SC | Electrical Capacity and Distribution Capability (ECDC) | ANL | CD3 | \$ 60,925 | No | FPD is not certified at the proper level |
| FE | SPR-LE2-Big Hill | SPR | CD3 | \$ 457,000 | No | FPD is not certified at the proper level |
| FE | SPR-LE2-Bryan Mound | SPR | CD3 | \$ 315,000 | No | FPD is not certified at the proper level |
| FE | SPR-LE2-Bayou Choctaw | SPR | CD3 | \$ 355,000 | No | FPD is not certified at the proper level |

Note 1: On December 16, 2021, the Under Secretary for Science and Energy extended the original May 2021 approval for exemption that enabled FE to proceed to Critical Decision-3, Approve Start of Construction, prior to the contractor achieving certification on their Earned Value Management System (EVMS). The exemption is now approved to through June 30, 2022. 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 FFPO EVMS is targeted for completion in FY2022 if no significant issues are identified.