

FY 2021 Q3

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

| No. | Contract/Project Management Performance Metrics | FY 2021 Target | FY 2021 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 92% | Based on 3-year rolling period (FY19 to FY21). TPC is Total Project Cost. |

| No. | Contract/Project Management Performance Metrics | FY 2021 Target | FY 2021 Q3 Actual | Comment |
|-----|---|----------------|-------------------|---|
| 2 | Certified EVM Systems: Post CD-3, greater than \$100 million. | 95% | 100% | 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% | 94% | 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% | 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% | 92% | 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% | FY19-FY21: 7 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% | 75% | FY19-FY21: 4 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 2021 Q3 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 | 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 | 168,000,000 | Active | 2021 | Yes (F) | TBD | TBD |
| SC | 929 | Mid-Scale Dark Energy Spectroscopic Instrument (DESI) | LBNL | 56,328,000 | 54,418,000 | Completed and Closed | 2020 | Yes | NA | Yes |
| SC | 1007 | Photon Science Laboratory Building (PSLB) | SLAC | 57,000,000 | 56,959,000 | Completed | 2019 | Yes | Yes | NA |
| SC | 1008 | Integrative Genomics Building (IGB) Project | LBNL | 91,500,000 | 91,500,000 | Completed | 2020 | 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 |
| 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 | 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 | 53,590,000 | Completed and Closed | 2020 | Yes | NA | Yes |
| NA | 1085 | UPF Substation Subproject | Y-12 | 60,000,000 | 43,622,000 | Completed | 2020 | Yes | Yes | NA |
| NA | 1111 | Exascale Class Computer Cooling Equipment | LANL | 55,800,000 | 35,800,000 | Completed | 2020 | 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 | 12 | 7 | 4 |
| # Success | 11 | 7 | 3 |
| % Success | 92% | 100% | 75% |

FY 2021 Q3 Project Management Performance Metrics
Metric #2) Certified Contractor EVM Systems: 100% (27 of 27). Exceptions:

| Program | Project Name | Site Code | Current CD | Current TPC (\$K) | CD-3 Is EVMS Certified? | Comments |
|---------|--------------|-----------|------------|-------------------|-------------------------|----------|
| - | None | - | - | - | - | - |

Metric #3) Percentage of Projects With CD-1 and a Certified FPD: 94% (33 of 35). 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% (26 of 39). 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 | Calcliner Project | Y-12 | CD3 | \$ 107,800 | No | FPD is not certified |
| NA | Exascale Computing Facility Modernization Project | LLNL | CD3 | \$ 111,200 | No | FPD is not certified at the proper level |
| SC | Core Facility Revitalization (CFR) Project | BNL | CD3 | \$ 74,850 | No | FPD is not certified at the proper level |
| SC | Gamma-Ray Energy Tracking Array (GRETA) | LBNL | CD3 | \$ 58,303 | No | FPD is not certified |
| 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 |
| 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 |