

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

								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	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)	<u>CD-3</u> 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)	<u>CD-1</u> 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)	<u>CD-3</u> 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 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.