



Department of Energy
Office of Science
Washington, DC 20585

Dr. Michael Witherell
Director
Lawrence Berkeley National Laboratory
1 Cyclotron Road
Berkeley, California 94720

Dear Dr. Witherell:

It is a pleasure to inform you that the University of California at the Department of Energy (DOE) Lawrence Berkeley National Laboratory (UC-LBNL) has successfully completed the DOE Earned Value Management System (EVMS) Acceptance Review process. As a result of the independent surveillance review conducted and the corrective actions taken by UC-LBNL, it has been determined that the EVMS continues to meet the requirements of the Electrical Industries Alliance (EIA)-748.

To verify EVMS compliance, a virtual independent surveillance/EVMS acceptance review was conducted with LBNL during the week of May 27-29, 2020, to determine if the UC-LBNL EVMS met the EIA requirements.

Two projects were selected for participation at this surveillance review: the Advanced Light Source Upgrade (ALS-U) project is a light source capability upgrade with a preliminary Total Project Cost (TPC) of \$410 million. For this review, only the scope associated with CD-3a was subject to the earned value requirements. This scope has a TPC of \$60 million and constitutes the early installation and commissioning of the accumulator ring and the booster to accumulator transfer line.

The second project, the National Energy Research Scientific Computing 9 (NERSC-9) project is an \$86 million effort to acquire and deploy a high-power computing system. Project scope includes upgrading the facility to support the system, as well as installing, integrating, and accepting the new NERSC-9 system.

During the review, the surveillance committee identified no Corrective Action Requests (CARs), one Corrective Improvement Opportunities with asterisk (CIOs*) and eight CIO:

Continuous Improvement Opportunities (CIO and COI)*

- CIO*-01 Guideline (GL) 3: Correct the single instance on page 3 of the Earned Value Management System Description (EVM-SD) citing applicability of EVM requirements for projects with a cost threshold >\$50 million but also for projects with a cost threshold >\$20 million.
- CIO-02 GL 10: Develop a process to identify all cost-loaded activities that exceed 60-day durations in both the baseline and current schedule. Ensure that these activities have supporting quantifiable backup data (QBD). Consider a revision to the EVM-SD to annotate that the QBD requirement applies to both the baseline and current schedules. (This finding was previously identified in the 2017 review as CAR-01 and in 2019 as CIO-02.)
- CIO-03 GL 10: Consider adding the “Units Complete” earned value technique (EVT) to the EVM-SD.
- CIO-04 GL 21: Consider developing and deploying additional Control Account Manager (CAM) training surrounding the accrual process including the importance of accurate Actual Cost of Work Performed (ACWP) and its impact on variance analysis. (Findings related to the accrual process were previously identified in the 2017 review as CIO*-04 and CIO*-05.)
- CIO-05 GL 25: Either update each project’s Project Execution Plan (PEP) or Project Management Plan (PMP) with variance thresholds as required by the EVM-SD, or consider revising the requirements outlined in the EVM-SD to allow for formal documentation outside of a project’s PEP/PMP.
- CIO-06 GL 27: Provide additional training to ensure CAMs have a more complete understanding of the Estimate at Complete (EAC) process.
- CIO-07 GL 27: For the NERSC-9 project, incorporate the ability for CAMs to communicate the need to make an EAC adjustment into the variance analysis process.
- CIO-08 GL 30: For the NERSC-9 project, prevent retroactive changes from occurring.
- CIO-09 GL 32: Ensure documentation for Baseline Change Proposals (BCPs) is consistent, accurate, thorough, and clear. Consider updating the JIRA BCP form to include the same elements as used for NERSC-9. Update the project ALS-U project documentation to include all applicable change thresholds. Update the tailoring strategy document to state that all other EVM control accounts following the tailored approach.

*CIOs are not strict requirements but would improve the EVMS system and require a corrective action plan.

UC-LBNL provided a Corrective Action Plan dated September 29, 2020, to address the CIOs/CIOs*. The actions proposed and undertaken by UC-LBNL in the Corrective Action Plan are acceptable.

OPA urges you to continue to maintain the high level of compliance that your staff demonstrated to the EVMS surveillance committee during the on-site review process to ensure continuing EIA-748 compliance and valid EVMS certification.

Sincerely,

Kurt W. Fisher
Director
Office of Project Assessment

cc:

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