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LUNA 'ENEHANA

STATE OF HAWAIʻI | *KA MOKUʻĀINA O HAWAIʻI*
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES | *KA ʻOIHANA LOIHELU A LAWELAWE LAULĀ*

OFFICE OF ENTERPRISE TECHNOLOGY SERVICES | *KEʻENA HOʻOLANA ʻENEHANA*

P.O. BOX 119, HONOLULU, HAWAII 96810-0119

January 6, 2026

The Honorable Ronald D. Kouchi
President of the Senate
and Members of the Senate
Thirty-Third State Legislature
State Capitol, Room 409
Honolulu, Hawaiʻi 96813

The Honorable Nadine K. Nakamura
Speaker and Members of the
House of Representatives
Thirty-Third State Legislature
State Capitol, Room 431
Honolulu, Hawaiʻi 96813

Aloha Senate President Kouchi, Speaker Nakamura, and Members of the Legislature:

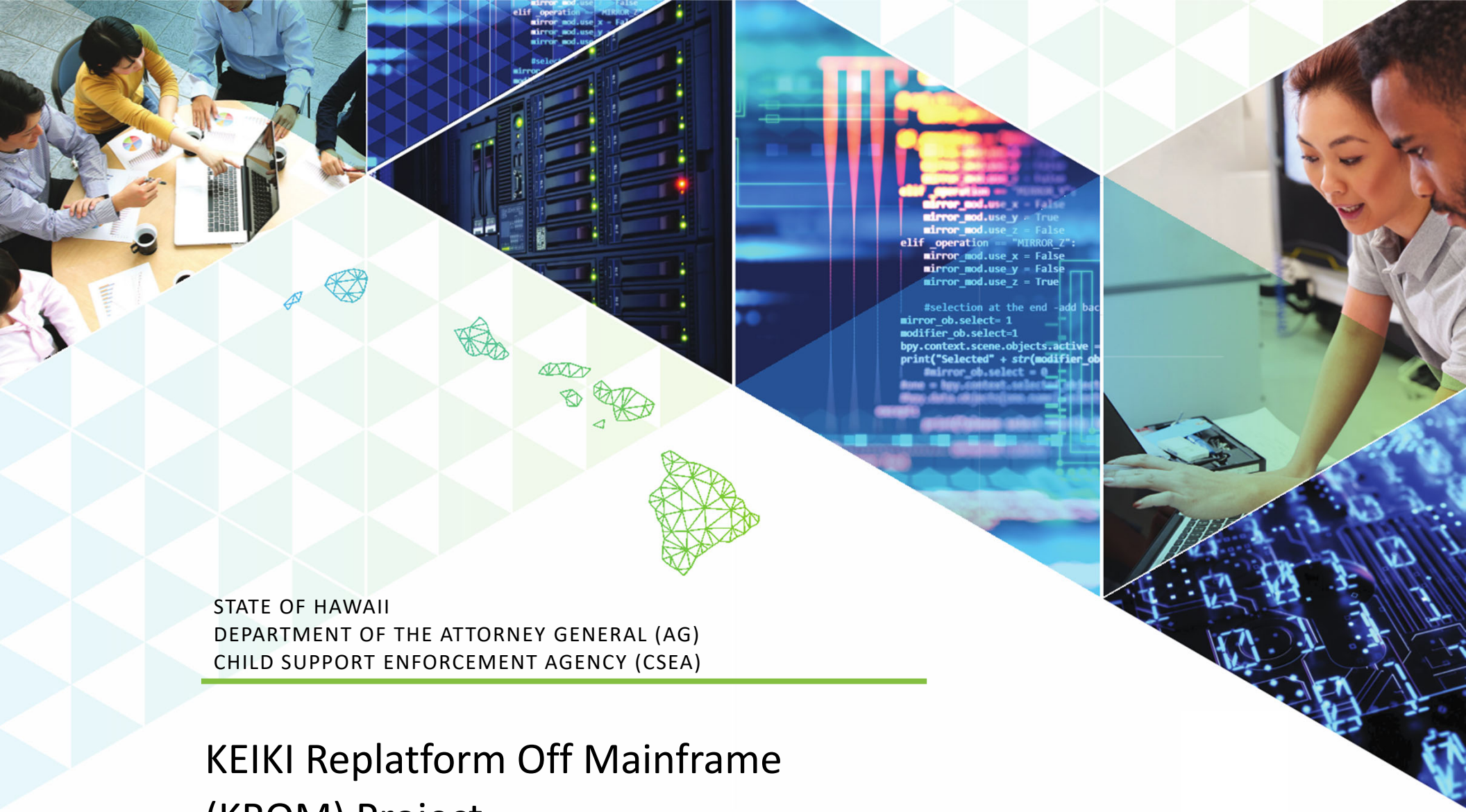
Pursuant to HRS section 27-43.6, which requires the Chief Information Officer to submit applicable independent verification and validation (IV&V) reports to the Legislature within 10 days of receiving the report, please find attached the report the Office of Enterprise Technology Services received for the State of Hawaiʻi, Department of Attorney General (AG), Child Enforcement Agency (CSEA).

In accordance with HRS section 93-16, this report may be viewed electronically at http://ets.hawaii.gov (see "Reports").

Sincerely,

Christine M. Sakuda
Chief Information Officer
State of Hawaiʻi

Attachments (2)



STATE OF HAWAII
DEPARTMENT OF THE ATTORNEY GENERAL (AG)
CHILD SUPPORT ENFORCEMENT AGENCY (CSEA)

KEIKI Replatform Off Mainframe (KROM) Project

MONTHLY IV&V REVIEW REPORT

November 30, 2025 | Version 1.0

ACCUITY

Table of Contents

Document History

DATE	DESCRIPTION	AUTHOR	VERSION
12/10/25	Monthly IV&V Review Report Draft created.	Michelle Muraoka and Dawn Rose	0.0
1/5/25	The draft report was updated and finalized. Updates and responses are documented in the Comment Log (Appendix D), with corresponding revisions incorporated into the report as noted.	Michelle Muraoka and Dawn Rose	1.0

BACKGROUND

The State of Hawaii (State), Department of Attorney General (AG), Child Support Enforcement Agency (CSEA) contracted Protech Solutions, Inc. (Protech) on October 2, 2023, to replatform the KEIKI System and provide ongoing operations support. Protech has subcontracted One Advanced and DataHouse to perform specific project tasks related to code migration, replatforming services, and testing. The agreement with DataHouse was terminated in February 2025. The Department of AG contracted Accuity LLP (Accuity) to provide Independent Verification and Validation (IV&V) services for the project. In November 2025, Accuity joined the Crete Professional Alliance (Crete). "Accuity" now operates under two entities Accuity LLP – a licensed CPA firm providing attest services and Accuity Advisors – offering tax and business consulting (not a CPA firm). Both work together under the Accuity brand in an alternative practice structure, following AICPA standards and applicable laws.

Our initial assessment of project health was provided in the first Monthly IV&V Review Report as of October 31, 2023. Monthly IV&V review reports will be issued through February 2026 and build upon the initial report to continually update and evaluate project progress and performance.

Our IV&V Assessment Areas include People, Process, and Technology. The IV&V Dashboard and IV&V Summary provide a quick visual and narrative snapshot of both the project status and project assessment as of November 30, 2025. Ratings are provided monthly for each IV&V Assessment Area (refer to Appendix A: IV&V Criticality and Severity Ratings). The overall rating is assigned based on the criticality ratings of the IV&V Assessment Categories and the severity ratings of the underlying observations.

SUCCESS

"Success is the sum of small efforts, *repeated* day-in and **day-out**."

Robert Collier

PROJECT ASSESSMENT

November 2025

SUMMARY RATINGS

OVERALL RATING

Y

Deficiencies were observed that merit attention. Remediation or risk mitigation should be performed in a timely manner.

PEOPLE Y

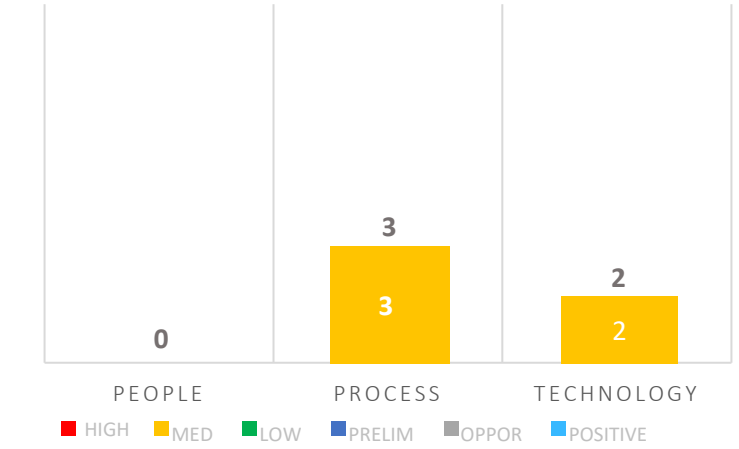
PROCESS Y

TECHNOLOGY Y

CRITICALITY RATINGS

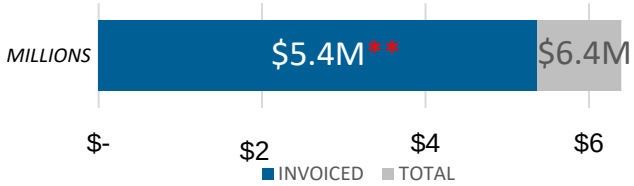
R	Y	G	NA
HIGH	MEDIUM	LOW	N/A

IV&V OBSERVATIONS



0	5	4	9
NEW OBSERVATIONS THIS MONTH	OPEN OBSERVATIONS TOTAL	CLOSED OBSERVATIONS THIS MONTH	OPEN RECOMMENDATIONS TOTAL

PROJECT BUDGET *

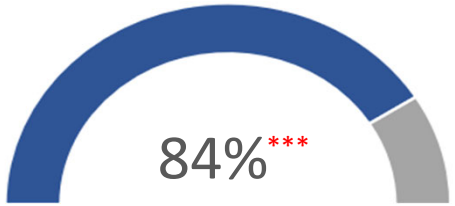


* Only includes contracts. IV&V is unable to validate total budget.

** The November invoice was not received at the time of report generation.

PROJECT PROGRESS

(Percent of the weighted duration of total tasks)



ACTUAL ACTIVITY PROGRESS (based upon the 10/29/25 Project Schedule)

*** IV&V is unable to validate the progress percentage of the schedule as it does not include all project activities.

KEY PROGRESS & RISKS

Key Progress:

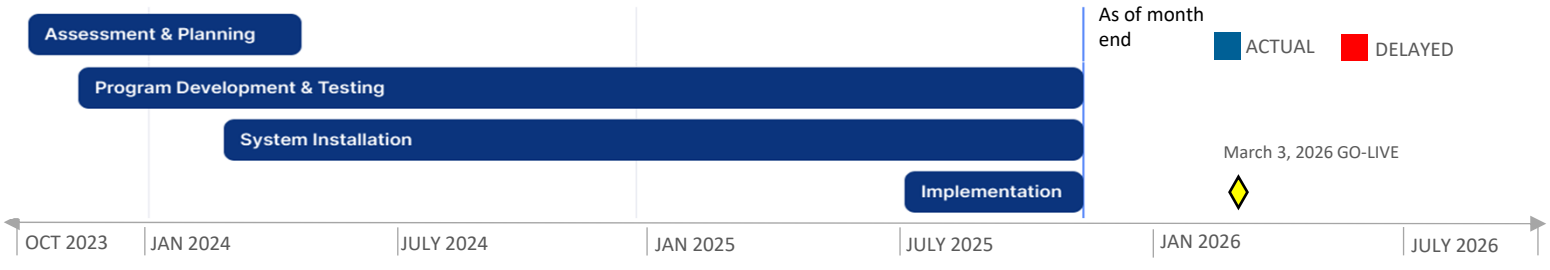
- Project overall is at 84% complete, batch testing is 93% complete, and system installation phase is at 96%.
- Acceptance Testing phase is at 80%, Acceptance Test execution is at 60%, and 70% of the total test scripts successfully passed or passed with exceptions.
- 52 defects have been corrected and returned for UAT validation. 6 SIT defects were closed.
- A formalized process for deliverables acceptance was implemented.
- OCSS datasets were transmitted via Cyberfusion from KROM to SFTP1 and returned to mainframe successfully.
- Mainframe JCL updates were completed and are ready for validation and end-to-end testing.

Key Risks:

- System Integration Testing is ongoing and at 93% complete.
- 28 batch jobs remain untested.
- MOU deliverables: several items are pending formal acceptance by CSEA, with some past due.
- Deliverable #9- Disaster Recovery Plan 98% complete, October due date.
- Deliverable #14- Implementation Plan 89% complete, October due date.

PROJECT SCHEDULE – Current Progress

(See next page for the current agreement and schedule history)



KROM PROJECT SCHEDULE HISTORY

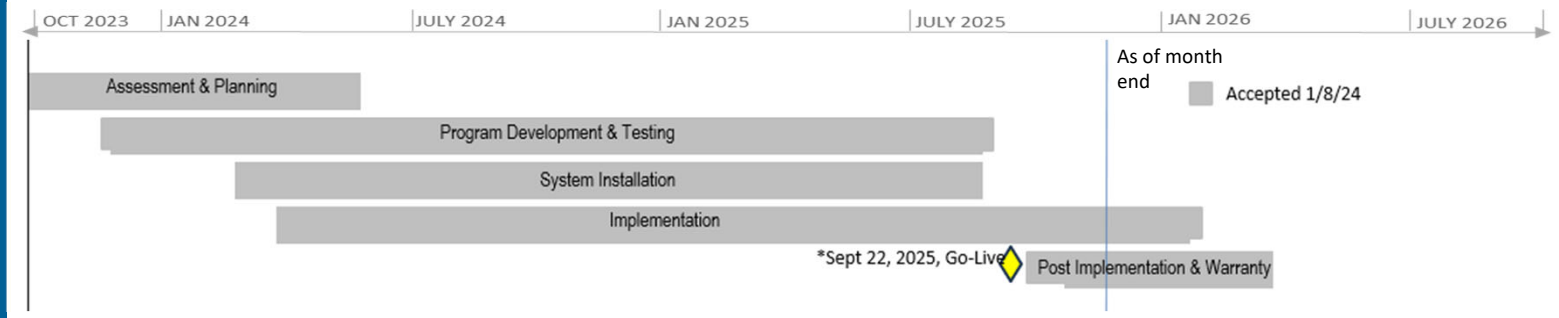
A historical perspective of the three project timelines for the KROM project post kick-off.

1. Project schedule as of DDI Project Management Plan, Deliverable 2 approval on January 8, 2024.

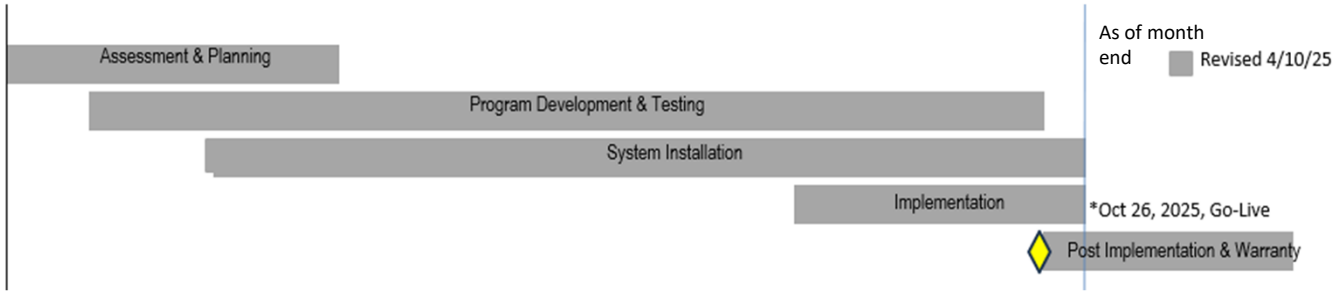
2. Project schedule based on the April 10, 2025, no-cost change request.

3. Project schedule based upon the August 29, 2025, change request PCR-8.

PROJECT SCHEDULE – Approved January 8, 2024, Deliverable 2



PROJECT SCHEDULE – Revised April 10, 2025, Signed Agreement



PROJECT SCHEDULE - Revised August 29, 2025, Change Request PCR-8

NOVEMBER 2025 . KROM PROJECT

SEPT	OCT	NOV	IV&V ASSESSMENT AREA	IV&V SUMMARY
Y	Y	Y	Overall	

Project Schedule:

As of the latest schedule report dated November 19, 2025, the KROM project is **84% complete** with **system installation phase is at 96% completion**. The **November 19, 2025** report serves as the primary reference for the project update unless otherwise noted. Weekly status update meetings are typically held on Fridays; however, the meeting scheduled for November 28, which would have been the final Friday meeting of the month, was canceled. User Acceptance Testing (UAT) in week **15 of a 20-week** schedule showing **60% Acceptance Testing** completion based on time elapsed. However, this metric is time-based and may not fully reflect actual testing outcomes.

Based on CSEA's November 28th UAT Test Scripts dashboard, **70%,** or **1,220 test scripts** of the approximately **1,744 total test scripts** passed or passed with exceptions. Overall, actual UAT progress is tracking closely to the time remaining.

There is currently a **3-day variance in the schedule** which is due primarily to delays in the System Installation Phase.

Several deliverables are outstanding-

Deliverable	Complete %	Due Date	Comments and Status
Del #9- Disaster Recovery Plan	98%	October 2025	Plan was submitted. The walk thru meeting was completed. Disaster recovery testing is in progress. CSEA awaiting resubmittal updates.
Del #14- Implementation Plan	89%	October 2025	The deliverable was submitted. The walk thru meeting was completed. CSEA awaiting resubmittal updates.
Del #15- User Guide	64%	October 2025	Deliverable was submitted to CSEA. CSEA currently reviewing for comments.

Project Costs:

For this reporting period, the October invoice was received, while the November invoice was outstanding. As a result, project costs reflect invoices through October. Based on the October invoice, project costs are within the approved budget and aligned with financial projections for that period.

SEPT	OCT	NOV	IV&V ASSESSMENT AREA	IV&V SUMMARY
Y	Y	Y	Overall cont.	**Quality:** For November there are **16 open non-critical SIT defects** and **100 UAT defects.** Based on CSEA's November 28th UAT Test Scripts dashboard the **total number of test scripts** is approximately **1,744** and is expected to remain stable as reported by CSEA. Interface testing and end-to-end test scripts have been developed. The new observation opened in October regarding how to strengthen the UAT Validation Process has been addressed. CSEA and ProTech have updated defect handling procedures and developed a formal process for approving requirements and MOU activities. These new processes provide CSEA greater control over validation activities, allow ProTech more time to focus on resolving defects efficiently, and ensures that CSEA has accepted the completed requirements and MOU activities, resulting in improved quality and reduced turnaround times. **Project Success:** The **system installation phase** is currently at **96%**, and **batch performance testing** has reached **93% completion**. According to the project schedule, UAT is 60% complete. CSEA has made significant progress in UAT this month, based on CSEA's November 28th UAT Test Scripts dashboard **1,220 test scripts** successfully tested and passed or passed with exceptions, compared to 749 in the previous month. A kickoff for the mainframe JCL rollout occurred earlier this month. **6 SIT defects** were closed and **52 UAT defects were closed**. **28 untested batch jobs** remain out of the total of 75. Due to the combined efforts of the team and focus on improved reporting, formalized requirements approval process, defects management, transparency, and overall processes **four observations** were satisfied and closed which included **10 recommendations**. The project is currently rated **yellow** reflecting continued risk due to unresolved System Integration Testing (SIT) defects, untested batch jobs, delayed deliverables, and delayed MOU activities.

SEPT	OCT	NOV	IV&V ASSESSMENT AREA	IV&V SUMMARY
G	Y	Y	People Team, Stakeholders, & Culture	In November the teams worked on a wide range of testing and implementation activities. These included reviewing and updating deliverables, processing defects, performing database replication, conducting regression testing, and managing JCL and Windows printing. Additional efforts involved initiating mainframe JCLs, running previously untested batch jobs, and developing and executing new defect and validation processes. With three phases being implemented concurrently, cooperation, collaboration, and flexibility were essential to coordinate all work streams. Alongside the regular meeting cadence, additional meetings were scheduled to address critical issues as they arose. **Team:** Both CSEA and ProTech continued to commit substantial resources and time while continuing to refine and improve processes. Two key process enhancement were introduced in November. First, CSEA assumed responsibility for Jira defect management. CSEA now manages, reviews, and approves defect closures, a joint decision enabling ProTech to focus on core tasks. The transition was smooth, reflecting the strong collaboration. Second, CSEA implemented a structured process for requirements approvals with ProTech supporting and adopting the approach to ensure alignment and acceptance. Additionally, Observation 2025.10.001, opened in October, emphasizes transparency in UAT validation to confirm CSEA's review and acceptance of solutions, has been addressed and closed. Thus, highlighting the collaborative efforts across the project. **Stakeholders:** Two external dependencies identified in October remain in focus. The first involves a five-thread parallel processing solution designed to address SIT performance defects. IBM continues testing, with final results expected mid-December. In November, the teams evaluated different job execution intervals such as—daily, weekly, monthly, quarterly, and bi-annual, etc.—to determine which programs already meet runtime requirements in the current state and which include a multi-thread solution. For those programs that include a multi-thread solution, the cumulative runtime of the accepted jobs is calculated to determine the remaining time within the run-time limit, and the likelihood completing execution in that window is assessed. Preliminary analysis suggests overall impact may be less severe than initially anticipated. The team awaits final run-time results. Secondly, Precisely is a software vendor that is used to validate, standardize, correct and cleanse addresses using global postal standards. An issue was identified whereby Precisely's software misclassifies addresses with "BOX " as PO Boxes unless entered on a single line. For this this month, Precisely provided a solution that addresses this issue. However, a secondary non-critical issue has since emerged, and the team is actively collaborating with Precisely to address and resolve it.

NOVEMBER 2025 . KROM PROJECT

SEPT	OCT	NOV	IV&V ASSESSMENT AREA	IV&V SUMMARY
G	Y	Y	People Team, Stakeholders, & Culture Cont.	**Culture:** The project team members continue to collaborate, communicate, and meet regularly often several times a day to address and resolve issues and stay aligned. The people dimension is **yellow** trending up. Although the impact of other dependent stakeholders has lessened, until the outstanding issues are fully resolved and formally accepted by CSEA, the risk level will remain unchanged.

SEPT	OCT	NOV	IV&V ASSESSMENT AREA	IV&V SUMMARY
Y	Y	Y	Process Approach & Execution	**Process:** The project continues to be in **User Acceptance Testing (UAT)** while also running in parallel with **System Integration Testing (SIT)** phases**.** There were two new processes that were introduced in November to support these phases: • **Defect Handling Process-** Previously the CSEA test team used a centralized Excel-based test script log with a dashboard that provided real-time visibility into test status and outcomes as team members input updates. Defects are tracked separately in an Excel spreadsheet jointly maintained and updated by CSEA and ProTech. ProTech's primary tracking system is Jira where all issues and defects are managed. After retrieving new defects from the Excel defects spreadsheet, ProTech transferred the information into Jira for resolution and then manually entered the status into the Excel spreadsheet. • **Requirements Validation Process-** Previously, ProTech provided weekly updates on tasks marked as "completed." However, these tasks often lacked proper review and formal acceptance by CSEA. Additionally, varying interpretations of "complete" created challenges—CSEA was sometimes unable to test the 'ready to test' solutions because of the dependency of having to wait for the next scheduled code release. **Approach:** • **Defect Handling Process-** The project transitioned from a ProTech-led defect management approach to a CSEA-led execution and validation process. Under the new process, each morning CSEA runs a query for completed defects. CSEA's project team reviews it, and if acceptable, CSEA will sign off on it. CSEA is responsible for managing, monitoring, validating and approving completed defects, and updating the Jira information into the defects spreadsheet. A custom Jira dashboard was created for CSEA to be able to monitor and manage the open defects. • **Requirements Validation Process-** A formalized requirements and MOU activities validation process was implemented to strengthen accountability and traceability. ProTech's project manager prepares an email cover letter which includes a description, the supporting evidence that the task was completed. CSEA reviews the emailed form, and if acceptable signs it. The approved requirement is converted into a pdf format, cataloged into the Project Library, and becomes a project artifact.

NOVEMBER 2025 . KROM PROJECT

SEPT	OCT	NOV	IV&V ASSESSMENT AREA	IV&V SUMMARY
Y	Y	Y	Process Approach & Execution	**Execution:** **Defect Handling Process-** CSEA has successfully taken over Jira management. CSEA is actively executing control over the defect review, validation, and approval process, ensuring streamlined oversight and faster turnaround during this critical phase. This operational shift enables ProTech to concentrate on clearing bottlenecked issues and resolving defects without the added burden of managing the process. By jointly implementing this solution, both teams gain efficiency: CSEA secures early visibility into the defect pipeline, allowing proactive resource planning for testing once fixes are delivered, while ProTech is able to accelerate resolution efforts on fixing defects and completing other important tasks. This execution-driven approach strengthens collaboration and optimizes performance across both organizations. **Requirements Validation Process-** This documented approach ensures clarity, reduces ambiguity, and creates an auditable trail for compliance. IV&V will continue to monitor how effectively this new process is being implemented and whether it achieves its intended objectives and outcomes in reducing confusion and thereby reducing risk. ProTech continues to lead weekly update meetings and provides the defects and MOU activities updates. CSEA now provides a UAT testing status update based upon their UAT Test Scripts spreadsheet. The risk rating for the process dimension is **yellow** trending up. This rating recognizes the new processes that support not only visibility and traceability but also helps to address bottlenecks, reallocates resources to critical tasks, that will ultimately help the project become more efficient and effective.

NOVEMBER 2025 . KROM PROJECT

SEPT	OCT	NOV	IV&V ASSESSMENT AREA	IV&V SUMMARY
Y	Y	Y	Technology System, Data, & Security	As of the end of November 2025, the overall status of technical activity milestones were reported as follows:

KEIKI Technical Milestone Variance & Dependency Summary - November 2025

Technical Activity / Milestone	Baseline Finish	Current Finish	Variance (Days)	% Complete	Dependency Impact
System Installation Phase	12/11/2025	12/5/2025	–6	96%	Dependent on DR Plan approval; cannot close without DR confirmation.
Disaster Recovery Plan (D-9)	10/8/2025	11/25/2025	48	98%	Required for installation readiness, replication validation, and failover planning.
Program Development & Testing Phase	2/27/2026	2/27/2026	0	91%	Must complete to support Acceptance Test Results (D-13).
System Test (D-7)	1/22/2026	1/22/2026	0	94%	Required before System Test Results (D-21) can be produced.
System Testing Execution	12/10/2025	12/10/2025	0	93%	Must complete to support D-21 and Acceptance Test integration.
Interface File Transfer Process	12/23/2025	12/23/2025	0	74%	Dependent on DHS/DLIR file exchange testing via HOSTG/FTP1.
OCSS Testing	12/23/2025	12/23/2025	0	43%	Required before ID 623 "File Transfer Process Complete" can close.
Acceptance Test Phase (D-11)	2/27/2026	2/27/2026	0	80%	Must finish before beginning D-13 (System Acceptance Results).
Acceptance Test Execution	2/27/2026	2/27/2026	0	60%	Required for State Acceptance Test Results and Final Cycle.
State Acceptance Groups (2–7)	12/30–12/31/25	12/30–12/31/25	0	65%	Must complete before Final Acceptance Cycle (ID 778).
Final Acceptance Test Cycle	1/30/2026	1/30/2026	0	0%	Cannot start until all State Groups complete.
System Acceptance Test Results (D-13)	2/27/2026	2/27/2026	0	0%	Requires completion of Final Cycle and State review (ID 789).
Implementation Phase	3/18/2026	3/6/2026	–12	52%	Depends on Implementation Plan approval and completion of Acceptance Results.
Implementation Planning (D-14)	10/14/2025	11/28/2025	* 45	89%	Required before full Implementation Tasks (ID 890) proceed.
Documentation Revisions (D-15/16/17)	12/16/25–1/14/26	12/16/25–1/14/26	0	56–64%	Documentation must be complete before training and transition review.
Training (D-12)	2/11/2026	2/11/2026	0	28%	Depends on updated documentation and SME availability.
Go-Live Activities	3/6/2026	3/6/2026	0	0%	Dependent on successful completion of all Implementation Tasks and D-18 readiness.
Go/No-Go – Deliverable #18	3/6/2026	3/6/2026	0	0%	Requires full validation of production environment readiness.

* The Implementation Phase currently reflects a negative 12-day variance, IV&V reported in October that the two-week post-Go-Live monitoring period was reclassified from the Implementation Phase to the Post-Implementation Phase. This adjustment confirms that the actual variance for Go-Live and the monitoring period is three days.

SEPT	OCT	NOV	IV&V ASSESSMENT AREA	IV&V SUMMARY
Y	Y	Y	Technology System, Data, & Security Cont.	**System:** Batch performance testing (overall) is still in progress and last reported in November at 93% completion. Interface File Transfer (74%) and OCSS Testing (43%) are the system-level batch dependencies scheduled through December 23. FTP1 configuration and mainframe partner testing (DHS, DLIR, OCSS) remain in progress and were scheduled to be completed as of November 19th. The System Test Results Report (D-21) due Dec 31 requires completeness of all batch components. The 20-week UAT script execution officially began on August 18th, and according to the KEIKI project schedule and Weekly status report, execution activities continued across all UAT groups (Establishment, Locate/Interfaces, Financials, Assistance/Reporting), each showing 65% progress within their respective testing areas. This is up from 57% as reported in October. The November 19th and October 29th status reports demonstrate the variance in SIT and UAT defects over the last two months.

SIT / UAT Defect Variance

Defect Type	October	November	Change
SIT – Functional	5	1	-4
SIT – Performance	17	15	-2
UAT – Functional	90	100	10
Total Defects	**112**	**116**	**4**

Documented total defects rose from 112 to 116 (+4), reflecting continued discovery of UAT functional issues while SIT defects continued trending downward, closing 6 SIT defects in November.

The Precisely PO Box issue remains under review in November, pending CSEA's dispute on Precisely's latest response regarding how box entries are handled in Code 1 Plus.

UAT Drop code #41 was scheduled for 11/20/25 to deliver CSEA-reported UAT defect fixes and updates required to continue UAT execution and also serves as the build used for any remaining SIT retesting.

Interface testing is partially complete, with the overall Interface File Transfer Process at 74% and OCSS Testing at 43%. DHS and DLIR partner interface testing cannot proceed due to pending FTP1 setup, which is explicitly identified as a blocker. Mainframe JCL updates have been completed but require execution and validation to complete end-to-end testing. All interface tasks remain scheduled to complete by December 23, 2025, but dependencies on FTP1 configuration and JCL execution remain open.

Overall, system readiness continues to advance, but completion of interface testing, batch defect resolution, and remaining UAT validation activities remain essential to confirming full system stability prior to acceptance.

NOVEMBER 2025 . KROM PROJECT

SEPT	OCT	NOV	IV&V ASSESSMENT AREA	IV&V SUMMARY
Y	Y	Y	Technology System, Data, & Security Cont.	**Data:** *November updates-* • ***Data Extracts and Validation*:** The November 12 data extract occurred as scheduled, and Protech is validating the returned datasets. All prior validations, including NSD.DHS.OBLIGAT and NSD.DHS.DISBURSE, remain closed with no new issues reported. FTP cataloging and SFTP transfers continue to operate successfully, and extract activities remain stable under the Hybrid Data Extract Approach. • ***Mainframe Data Exchange and CyberFusion:*** Mainframe-to-SFTP transfers continue to function through HOSTF following resolution of earlier connectivity issues. GET and PUT JCL transmission tests were successfully completed, confirming reliable exchange with the UAT server. Full end-to-end DHS file testing awaits CSEAFTP1 setup, while OCSS CyberFusion testing is pending DHS access configuration; no technical blockers are reported aside from these prerequisites. • ***Data Performance and Replication***: TestSystDB01 replication was targeted for completion on November 7, but the November 19 report provides no confirmation of completion, and no new replication or performance defects were identified. Threaded batch job performance testing continues with Protech and IBM meeting regularly to review outstanding items. • ***Data Readiness and Ongoing Tasks:*** Batch job testing continues with outstanding jobs progressing through execution and validation. Daily Task Process automation remains underway, and CSEA and Protech are finalizing requirements for PowerShell macro conversions based on updated documentation shared in early November. **Security:** Project security remains stable with no new issues reported. SFTP transmissions continue to function correctly, with validated HOSTF “get” and “put” operations. CyberFusion readiness is progressing, pending CSEAFTP1 configuration and DHS access setup required for end-to-end validation. Security-related operational documentation remains in progress, with no documented changes to existing controls. The technical portion of the project remains in **Yellow** status because key activities, including batch defect resolution, interface testing dependencies (CSEAFTP1 and DHS access), replication validation, and outstanding deliverables, are still in progress and must be completed to confirm full system readiness.

OPEN OBSERVATIONS- Current Month Updates

OBSERVATION #: 2025.09.001	STATUS: OPEN	TYPE: RISK	SEVERITY: Moderate

TITLE: **PROJECT MANAGEMENT SCHEDULE REPORTING**

Observation: Project Management Schedule Reporting: Currently the project is in the User Acceptance Testing (UAT) phase. A MOU was signed in August 29, 2025 outlining the remaining System Integration Testing activities that are outstanding and expected completion dates. In addition, other issues such as critical severity defects have been identified and must be resolved prior to go-live. These SIT activities and defects are not clearly visible in the project schedule.

Industry Standards and Best Practices: PMBOK® 7th Edition Section 2.4.7 states changes should follow a change control process, reprioritizing the backlog, or rebaselining the project.

Section 2.4.9 Alignment sates that there should be an integrated project management plan.

Analysis: Tracking of important dates and deadlines should be centralized and reflected in the project schedule for maintenance, tracking, and visibility purposes. These dates and deadlines could be missed or issues remain unresolved.

Recommendation(s): To mitigate these risks the following are recommended:

2025.09.001.R1- Add MOU Activities to the Project Schedule or Other Presented Project Documents

- Add PCR-9's MOU activities to the Project Schedule or any of the presented project documents. Where feasible, activities may be aggregated and reported as a percentage complete. Use clear, descriptive labels (i.e. SIT defect, MOU 2.2, etc.) to ensure easy identification and traceability.

2025.09.001.R2- Assess Critical Path Impact of MOU Activities

- The MOU specifies activities that are due by December 18th, confirm if any of the activities are on the critical path especially since UAT ends on January 2, 2026. Update the Project Schedule, as necessary.

2025.09.001.R3-Tracking of Critical Defects

- Add critical defects and related timelines to the Project Schedule or related presented project documents. Include the defect number for tracking purposes. And include any staff or team members that are assigned to the defects or activities.

2025.09.001.R4- Defects Reporting for Parent-Child Rollups

- For UAT defects, enhance Jira reporting to include parent-child rollups defect counts (to show root cause across multiple test scripts). Also add if currently maintained and feasible, estimated resolution date or time, defect discovery date, and linkage to schedule impacts for critical severity, highest priority, "show-stopper" defects. Add or include this Jira report to any of the regularly presented project documents as part of the defect management process.

OBSERVATION #: 2025.09.001	STATUS: OPEN	TYPE: RISK	SEVERITY: Moderate

TITLE: **PROJECT MANAGEMENT SCHEDULE REPORTING CONT.**

Status Update: 11/30/25

2025.09.001.R1- Add MOU Activities to the Project Schedule or Other Presented Project Documents **Status**: **CLOSED**

The MOU activities are now included in weekly Project Schedule Overview meetings and reported in the Weekly Status Report using a similar format as the original MOU list. Updates and status are clearly visible and easily digestible. This recommendation has been satisfied.

2025.09.001.R2- Assess Critical Path Impact of MOU Activities **Status**: Remains open

The MOU activities are expected to be completed in December and are part of System Testing phase which is currently 93% complete. IV&V will continue to monitor progress and assess their impact if any, on the overall project schedule.

2025.09.001.R3- Tracking of Critical Defects **Status**: Remains open

CSEA has assumed management of Jira for defect tracking. This provides direct visibility into defect progress, assignments, and work performed, enabling better communication and oversight. IV&V will continue to monitor how effectively Jira management contributes to the timely resolution of critical defects.

2025.09.001.R4- Defects Reporting for Parent-Child Rollups **Status**: **CLOSED**

UAT defects reporting has been refined. Global defect considerations have been applied to reduce redundant rollups. This allows ProTech to focus on a primary root cause which can be applied to similarly affected test cases ensuring efficient resolution. The total number of defects compared to test scripts has decreased significantly confirming improved defect management. This recommendation has been addressed.

OBSERVATION #: 2025.08.001	STATUS: OPEN	TYPE: RISK	SEVERITY: Moderate

TITLE: **IMPLEMENTATION PHASE GATING**

Observation: Implementation Phase Gating: System Installation Testing (SIT) should be completed with no open defects prior to entering UAT. PCR-9 allows for the project to enter the Implementation Phase prior to completing SIT activities including unresolved defects and untested batch jobs.

Industry Standards and Best Practices: SWEBOK v3.0 Chapter 5 recommends that System testing is performed before acceptance testing to ensure that the system meets its specified requirements.

ISO/IEC 27001 Annex A.14.2.9 states that System acceptance testing procedures must be completed and reviewed to ensure all functional and security requirements are met before user acceptance tests are conducted.

Analysis: Initiating UAT while system testing is still underway introduces risk. Although ProTech has assured CSEA that there would be no conflicts with UAT, higher priority or severity defects may be uncovered during UAT that may interfere with completing the SIT defects on schedule. This dual focus strains resources, as teams are forced to juggle defect resolution and UAT execution simultaneously and it may result in the inefficient use of personnel and delays.

Recommendation(s): To mitigate these risks the following are recommended:

2025.08.001.R1-Define Plans and Set Up Checkpoints to Monitor Progress

- As deadlines have been assigned, ensure that there are defined plans and set up checkpoints to ensure the assignees have a road map and progress can be monitored.

2025.08.001 R2- Track Defects and Prioritize Solutions

- Track defects rigorously, prioritizing resolution to stabilize the system as quickly as possible

2025.08.001 R3- Prepare to Deploy Staffing Upon SIT Completion

- Adjust the UAT schedule and staffing to ensure resources are deployed effectively once the system is ready.

2025.08.001.R4-Prepare UAT Documentation and SIT Contingency Plan(s)

- Prepare test teams with updated documentation, defect status reports, and contingency plans to resume UAT efficiently once the system testing is complete.

OBSERVATION #: 2025.08.001	STATUS: OPEN	TYPE: RISK	SEVERITY: Moderate

TITLE: **IMPLEMENTATION PHASE GATING CONT.**

Status Update: 11/30/25

2025.08.001.R1- Define Plans and Set Up Checkpoints to Monitor Progress **Status**: Remains open

The primary tools for checking and monitoring progress include CSEA's direct use of Jira, daily team meetings, the Project Schedule Overview meeting and the Weekly Status Meetings. A significant amount of outstanding work, however, remains. IV&V will continue to monitor to ensure the schedule stays on track.

2025.08.001.R2- Track Defects and Prioritize Solutions **Status**: **CLOSED**

In November, the defect tracking process improved under CSEA's management of Jira. The new process provides CSEA updated defect status and completion in real time. CSEA is also able to monitor SIT and critical defects progress and can respond more quickly depending on the situation to ensure timely escalation and resolution. This recommendation has been closed.

2025.08.001.R3- Prepare to Deploy Staffing Upon SIT Completion **Status**: **CLOSED**

CSEA's ability to track defect readiness in Jira enables dynamic resource planning. As defects move toward retesting, CSEA can adjust staffing to ensure UAT resources are deployed effectively. This recommendation has been closed.

2025.08.001.R4- Prepare UAT Documentation and SIT Contingency Plan(s) **Status**: Remains open

Test teams now have access to and the most current defect status updates through Jira, managed by CSEA. As SIT and UAT remain open and the go-live date approaches, IV&V will continue to monitor progress and confirm if contingency plans have been developed and are ready to be activated should the need arise.

OBSERVATION #: 2024.12.003	STATUS: CLOSED	TYPE: RISK	SEVERITY: Moderate

TITLE: **REVISE TASK PRIORITIZATION**

Observation: Non-critical tasks are being tracked alongside critical ones, diluting focus and potentially straining resources. Financial Test Deck (FTD) testing is blocked by unresolved defects, stalling progress on 92% of pending cases.

Industry Standards and Best Practices: SPM (The Standard for Project Management) defines prioritization as essential for maintaining project alignment with strategic objectives.

Analysis: Tracking non-critical tasks alongside critical ones is straining resources and delaying progress on essential activities like Financial Test Deck (FTD) testing, which is stalled by unresolved defects impacting 92% of cases. Refocusing on critical path tasks and resolving key defects, as emphasized by SPM, will prevent cascading delays and enable progress in blocked testing areas.

Recommendation(s): To mitigate these risks the following are recommended:

2024.12.004.R1- Focus on critical path tasks, prioritize defect resolution in functional test design and interface batch jobs, and deprioritize non-critical deliverables. Prioritizing critical deliverables ensures that delays do not propagate through the project timeline and unlocks progress for blocked testing activities.

Status Update: 11/30/25

2024.12.004.R1-There are approximately 5 weeks remaining in UAT. All critical defects, outstanding SIT defects, and other blockers are currently being worked on by the team. CSEA has assumed management of Jira for defect tracking which provides direct visibility into defect progress, assignments and work performed. This shift also allows ProTech to focus on fixing defects and to work on critical tasks.

Furthermore, to maintain alignment, CSEA and ProTech hold frequent touchpoint meetings, schedule meetings, and targeted issue-resolution sessions to ensure progress on critical items. The concern that critical tasks were not receiving the necessary attention and urgency has been addressed, thus, this observation is **CLOSED**.

OBSERVATION #: 2024.12.005	STATUS: CLOSED	TYPE: RISK	SEVERITY: Moderate

TITLE: ESTABLISH PROGRESS MONITORING AND REPORTING

Observation: Testing metrics from weekly reports show varying levels of progress, with areas like enforcement batch validation at only 21% coverage.
The risk log shows Issue #47: Data extraction delays highlight the need for improved progress tracking and reporting.

Industry Standards and Best Practices: IEEE 1012-2016 recommends verification and validation checkpoints for effective oversight.

Analysis: Inconsistent progress metrics, such as only 21% coverage in enforcement batch validation, indicate gaps in tracking and reporting that hinder effective oversight. Implementing a real-time dashboard, as recommended by IEEE 1012-2016, will provide actionable insights to prioritize resources and address delays efficiently.

Recommendation(s): To mitigate these risks the following are recommended:

2024.12.06.R1- Establish Progress Monitoring and Reporting:

- Implement a real-time dashboard to monitor test execution rates, defect closure, and coverage metrics. This provides actionable insights for targeting resources and resolving delays more efficiently.

Status Update: 11/30/25
2024.12.06.R1 -In November CSEA has assumed management of Jira from ProTech. Jira is ProTech's issues and defects and tracking system. Jira can generate on demand reports and real-time dashboards. In addition, CSEA also has and maintains their own test scripts spreadsheet which includes a real-time dashboard for test scripts status. With these two systems in place, CSEA has direct knowledge of progress, status, and can address delays and resources more efficiently. This observation is **CLOSED.**

OBSERVATION #: 2024.12.006	STATUS: OPEN	TYPE: RISK	SEVERITY: Moderate

TITLE: **REQUEST EXTENSION FOR NON-CRITICAL DELIVERABLES**

Observation: Some lower-priority testing, such as reporting subsystem batch jobs, reflects 0% progress.

Industry Standards and Best Practices: : PMBOK® v7 encourages scope and schedule flexibility in adaptive project environments.

Analysis: Delays in non-critical tasks, such as reporting subsystem batch jobs with 0% progress, highlight the need to reallocate resources to critical testing activities. By deprioritizing these areas and requesting extensions, as supported by PMBOK® v7, the project can focus on achieving timely completion of high-priority deliverables such as KMS Go Live.

Recommendation(s): To mitigate these risks the following are recommended:

2024.12.07.R1- Request Extension for Non-Critical Deliverables: Deprioritize non-critical testing areas and request extensions for their delivery to reallocate focus to critical testing. To ensure timely completion of high-priority deliverables such as KMS Go Live.

Status Update: 11/30/25

2024.12.07.R1- The project is nearing the end of testing and implementation phases. There are still numerous tasks, defects, MOU activities, and deliverables to address. Also, with 100 UAT defects remaining, the concern is the ability to complete all outstanding work of differing priority levels within the remaining timeframe. IV&V will keep this observation open until it is evident that the project can complete all outstanding tasks as scheduled.

OBSERVATION #: 2024.12.007	STATUS: CLOSED	TYPE: RISK	SEVERITY: Moderate

TITLE: RISK MITIAGATION PLAN FOR DEFECT-PRONE AREAS

Observation: Risks related to dependencies, resource availability, and stakeholder approvals are not explicitly mitigated in the schedule. Weekly reports highlight an increasing trend in defects, with 480 defects logged as of December 18, 2024.

Industry Standards and Best Practices: : ISO/IEC 16085:2021 highlights risk management as a critical process for life cycle projects.

Analysis: The increasing trend in logged defects (480 as of December 18, 2024) and unmitigated risks related to dependencies and resource availability emphasize critical gaps in risk management. Enhancing the risk mitigation plan, as recommended by ISO/IEC 16085:2021, will address recurring issues in defect-prone areas like financials and interfaces, reducing the likelihood of further delays.

Recommendation(s): To mitigate these risks the following are recommended:

2024.12.08.R1- Further enhance the risk mitigation plan targeting defect-prone areas such as financials and enforcement systems, proactively reducing the likelihood of additional delays caused by recurring issues.

Status Update: 11/30/25

2024.12.08.R1- Issues are being managed collaboratively by ProTech and CSEA as they arise. A formal risk assessment has been applied to SIT performance defects, particularly the multi-threading solution, and is currently being extended to address the secondary Precisely issue. Additionally, ProTech incorporated a 20-day schedule buffer as a primary risk mitigation measure to absorb potential delays. These actions demonstrate proactive risk management aligned with ISO/IEC 16085:2021 principles. While risks remain dynamic, the mitigation strategies in place—joint issue resolution, targeted risk assessments, and schedule buffering—are effectively addressing the concerns raised. Based on current progress and controls, the issue has been adequately addressed**.** This observation is **CLOSED**

OBSERVATION #: 2023.10.002	STATUS: CLOSED	TYPE: RISK	SEVERITY: Moderate

TITLE: **UNTIMELY PROJECT MANAGEMENT RESPONSIBILITIES**

Observation: Project management responsibilities may impact effective project execution.

The review of prior findings confirms that several closed issues correlate with ongoing challenges in data validation, resource management, interface dependencies, and testing progress. To ensure project success and minimize cutover risks, reopening these findings and implementing corrective actions are advised.

Dependencies such as task 593 for "KMS: Acceptance Test Scripts Development Complete" remain unfulfilled. Weekly reports identify unresolved data file dependencies and incorrect file formats (e.g., GDG issues in batch jobs), further delaying progress.

Linear task sequencing contributes to delays where tasks could feasibly run in parallel (e.g., compliance and database migration). Financials have 0% validation coverage in the refined UI, highlighting the backlog.

REOPENED - May 2025
The May 2025 project schedule continues to show a 54-day variance from the baseline, with no formal rebaseline in place to reflect ongoing challenges. This delay is primarily driven by unresolved critical system testing defects, persistent data extract discrepancies, and performance tuning issues in key batch jobs. The lack of a formal schedule rebaseline or update further elevates the risk of downstream impacts on UAT readiness and stakeholder confidence.

The CSEA Project Manager has temporarily exited the project with CSEA Project Leadership providing interim coverage. The project at the end of May was experiencing a 54-day variance with zero float in the critical path. Related RAID Log Action Items have not been reassigned to interim coverage owners.

Industry Standards and Best Practices: : PMBOK® v7 emphasizes resource optimization as part of the "Resource Management" domain. Aligning resource capacity with demand ensures timely task completion.

Performance Domain: Stakeholder – emphasizes maintaining active engagement and accountability during governance transitions to ensure continued project alignment and stakeholder confidence.

Performance Domain: Planning – requires integrated schedules that reflect realistic milestone targets and incorporate decision-making frameworks, ensuring that governance and planning activities are fully synchronized for project success.

ISO/IEC 16085:2021 recommends proactive risk management to identify areas where concurrent task execution mitigates schedule risks.

Analysis: CSEA's KEIKI system currently relies on a legacy cyberfusion system running on the State's mainframe for system file and data exchanges with multiple State of Hawaii agencies. The timing of multiple agencies moving off the mainframe at different times will result in the need to modify KEIKI system interfaces after the system has been deployed. Until other State modernization projects are completed, the KEIKI project cannot perform server-based data exchanges and will need to continue to interface via the mainframe.

OBSERVATION #: 2023.10.002	STATUS: CLOSED	TYPE: RISK	SEVERITY: Moderate

TITLE: **UNTIMELY PROJECT MANAGEMENT RESPONSIBILITIES CONT.**

Analysis (continued): In addition, as the KEIKI project involves integrating a modernized child support system with existing legacy systems, there may be other technological and architectural gaps that arise. These gaps can include differences in technology stacks, such as programming languages, database systems, and operating environments, as well as the absence of modern application programming interfaces (APIs) in the legacy systems. Based on the timing of concurrent State of Hawaii modernization projects and upgrades, the end-to-end testing of the KEIKI system may necessitate the undertaking of supplementary tasks, allocation of additional resources, and coordination efforts.

REOPENED-May 2025

Schedule Variance: This delay is primarily driven by unresolved critical system testing defects, persistent data extract discrepancies, and performance tuning issues in key batch jobs. The lack of a formal schedule rebaseline or update further elevates the risk of downstream impacts on UAT readiness and stakeholder confidence.

Project Management Interim Coverage: The departure of the CSEA Project Manager in May has introduced an immediate need for documented interim project management coverage to maintain project governance continuity. While CSEA project leads have assumed responsibility in the short term, the lack of a formalized approach leaves potential gaps in accountability, risk tracking, and decision-making. Ensuring that interim coverage roles are clearly defined and integrated into overall project governance will reduce risks of miscommunication and schedule misalignment. The details of these governance alignments and assignments should be clearly communicated to stakeholders and reflected in project documentation.

Recommendation(s): To mitigate these risks the following are recommended:

REOPENED: 2023.10.002.R1 – Improve the Project Schedule to Address Schedule Concerns

- Develop a detailed plan with assigned resources to complete project tasks.
- Provide the appropriate detail of tasks, durations, due dates, milestones, and key work products for various parties. CSEA assigned tasks should also be clearly reflected in the project schedule.
- Obtain agreement on the baseline schedule and then hold parties accountable for tasks and deadlines.

REOPENED: 2023.10.002.R2 – Determine the Root Causes of Delays and Develop Plans to Address Them

- Perform a root cause analysis including defining the problem, brainstorming possible causes, and developing a plan to address the root cause of the problem such as resource constraints, dependencies, and undefined tasks. Assess potential opportunities for parallelizing workstreams and efforts.

OBSERVATION #: 2023.10.002	STATUS: CLOSED	TYPE: RISK	SEVERITY: Moderate

TITLE: **UNTIMELY PROJECT MANAGEMENT RESPONSIBILITIES CONT.**

Recommendation(s) (continued): Based on the experience of the last two months, create a realistic schedule based on the time and resources needed to perform tasks.

CLOSED: 2023.10.002.R3 – Assess the need for additional Protech resources for project management support.

CLOSED: 2023.10.002.R4 – Have the CSEA and Protech Project Managers Adopt a More Joint, Collaborative Approach.

- Have the interim PMs clearly define their roles and responsibilities in project management responsibilities.
- Actively plan, share and execute project responsibilities.

Status Update: 11/30/25

2023.10.002.R1- Improve the Project Schedule to Address Schedule Concerns **Status**: **CLOSED**

CSEA's project manager returned, the project schedule was rebaselined in August 2025 and has been enhanced with the reporting of the MOU outstanding activities and the UAT Test Scripts dashboard update this month. The concern that the project schedule needed to be further developed and agreement was needed on the baseline schedule has been addressed.

2023.10.002.R2- Determine the Root Causes of Delays and Develop Plans to Address Them **Status**: **CLOSED**

IV&V confirmed that root cause analysis is being performed on both defects as well as broader *project issues*. Additionally, a Memorandum of Understanding (MOU) was established to define, plan, and schedule the remaining System Integration Testing (SIT) phase work. Revisions to the project schedule have been implemented. CSEA and ProTech are actively meeting, communicating, managing, and addressing issues as they arise. These actions address the previously identified delays and governance gaps, and the recommendation is now considered closed.

OBSERVATION #: 2024.06.001	STATUS: OPEN	TYPE: RISK	SEVERITY: Moderate

TITLE: **DATA EXTRACTION AND MIGRATION**

Observation: There is a risk for delays in the data extraction process, which is critical for the cutover activities, due to reliance on shared mainframe resources, inefficiencies in data extraction programs, and long download/upload times. This could impact the project by increasing costs, compromising the quality of the overall solution, and causing operational downtime of 4 to 5 days during the cutover weekend, thereby extending the project timeline.

Industry Standards and Best Practices: : IEEE 1012-2016 Emphasis: Verification ensures that the system is built correctly according to its specifications.

IEEE 1012-2016 Emphasis: Validation ensures that the system meets its intended use and satisfies user needs.

IEEE 1012-2016 Emphasis: Risk management is integrated into the IV&V process to identify potential risks and implement mitigation strategies.

IEEE 1012-2016 Emphasis: Resource management is crucial for the successful execution of project activities.

Analysis: The data extraction process is critical for the cutover activities and current projections show potential for significant delays. This issue results from reliance on shared mainframe resources, inefficiencies in data extraction programs, and long download/upload times. Each time new data is needed for testing, the entire database must be extracted, which is time-consuming. CSEA is evaluating a SQL replication strategy to replace the current process and has assigned two dedicated resources to identify and test this approach. Daily meetings with DDI and CSEA have been established to collaborate on this issue. The target for validating this approach is July 31st.

The static data collected from the data extract process projects a worst-case scenario of 12 to 36 days to fully extract ADABAS data to the 374 flat files, including downloading and uploading the files. This arises due to: 1) CSEA uses a shared mainframe, 2) inefficiencies of data extraction programs, 3) download/upload times. The data extract process is central to the cutover activities completing over Fri/Sat/Sun. If not improved, CSEA may face 4/5 days operational downtime for cutover weekend.

Recommendation(s): To mitigate these risks the following are recommended:

2024.08.001.R1 - Verification of Data Extraction and Conversion Processes

- Implement a thorough verification process for all data extraction and conversion methods, particularly the Ascii to BCP script conversions. Establish checkpoints where the file counts and conversion accuracy are verified before moving to subsequent phases of the project to avoid potential issues in later stages.

2024.08.001.R2 - Validation of Extracted Data Consistency

- Conduct end-to-end validation of the extracted data, ensuring that the SQL-to-SQL comparisons are consistent and match across systems (Protech and CSEA). Given the noted discrepancies, a validation step should be introduced after each major extraction and conversion task (e.g., Task 18). This will confirm that the extracted data matches the expected output and is usable for further processing.

OBSERVATION #: 2024.06.001	STATUS: OPEN	TYPE: RISK	SEVERITY: Moderate

TITLE: **DATA EXTRACTION AND MIGRATION CONT.**

Recommendation(s) (continued):

2024.08.001.R3 - Risk Management for Binary and Ascii File Handling

- Assess the risks associated with the conversion and handling of binary and Ascii files. Discrepancies in binary file counts and the use of converters for 27 files were discussed. It is recommended to perform risk analysis on these conversions, ensuring that any potential data corruption or loss during conversion is identified and mitigated. Consider implementing additional testing and validation for these specific files.

2024.08.001.R4 - Resource Management and Space Availability

- The observation regarding potential space risks should be taken seriously. Conduct a resource assessment to ensure that there is sufficient storage and computing resources to handle the extraction, conversion, and processing of data. This should be done before the extraction process begins, with contingency plans in place in case of resource shortages.

Status Update: 11/30/25

2024.06.001.R1 / R2 - Verification & Validation of Data Extraction and Exchange Processes **Status**: Remains open

Although the November 12 data extract executed successfully and SFTP/FTP processes remain stable, full end-to-end validation has not occurred. TestSystDB01 replication has no documented completion, and FTP1 setup and DHS access continue to block mainframe JCL and CyberFusion testing. These dependencies prevent confirmation that extraction and exchange processes function under production equivalent conditions.

2024.08.001.R3 - Risk Management for Binary and ASCII File Handling **Status:** Remains open

No new issues were reported with file conversions; however, full validation across all binary and ASCII files has not been completed. Pending FTP1 configuration, mainframe JCL execution, and the lack of file-level reconciliation continue to prevent closure of this recommendation.

2024.08.001.R4 - Resource Management and Space Availability **Status: CLOSED**

Space availability has been addressed. Resource management related to space availability is no longer applicable. This recommendation related to the underlying concern has been addressed.

OBSERVATION #: 2024.03.001	STATUS: OPEN	TYPE: RISK	SEVERITY: Moderate

TITLE: **INTERFACE PLANNING AND FLEXIBILITY CONT.**

Observation: The timing of other State of Hawaii modernization projects impacts the ability to properly design KEIKI system interfaces and will necessitate the need for interface modifications after its deployment, which can lead to additional costs, delays, and disruption to the system.

Industry Standards and Best Practices: N/A

Analysis: CSEA's KEIKI system currently relies on a legacy cyberfusion system running on the State's mainframe for system file and data exchanges with multiple State of Hawaii agencies. The timing of multiple agencies moving off the mainframe at different times will result in the need to modify KEIKI system interfaces after the system has been deployed. Until other State modernization projects are completed, the KEIKI project cannot perform server-based data exchanges and will need to continue to interface via the mainframe.

In addition, as the KEIKI project involves integrating a modernized child support system with existing legacy systems, there may be other technological and architectural gaps that arise. These gaps can include differences in technology stacks, such as programming languages, database systems, and operating environments, as well as the absence of modern application programming interfaces (APIs) in the legacy systems. Based on the timing of concurrent State of Hawaii modernization projects and upgrades, the end-to-end testing of the KEIKI system may necessitate the undertaking of supplementary tasks, allocation of additional resources, and coordination efforts.

Recommendation(s): To mitigate these risks the following are recommended:

CLOSED: 2024.07.001.R1 – It was recommended that CSEA meet with the new Chief Data Officer. And also to meet with the EFS team to identify any potential impacts to CSEA and align with IT policies.

CLOSED: 2024.03.001.R1 – CSEA should coordinate regular meetings with impacted State of Hawaii agencies.

- Roles, responsibilities, expectations and interface requirements should be clearly defined to ensure information and project status is proactively communicated for the various modernization efforts.

OBSERVATION #: 2024.03.001	STATUS: OPEN	TYPE: RISK	SEVERITY: Moderate

TITLE: **INTERFACE PLANNING AND FLEXIBILITY**

Recommendation(s) cont.:

2024.03.001.R2 – The projects should properly plan for interfaces so that they are flexible enough to accommodate future changes and are compatible with other agencies.

- Clearly identify all the interfaces that the system will interact with and how they will communicate.
- Develop interfaces and data structure that are flexible enough to accommodate changes to the interfaces.
- Detailed testing will be required as the various departments upgrade their systems to ensure compatibility.

Status Update: 11/30/25

2024.03.001.R2- Although KEIKI interfaces continue to function within the current HOSTF-based mainframe environment, full interoperability across DHS, DLIR, and OCSS has not been validated. The November 19 Weekly Status Report confirms that FTP transmission tests between HOSTF and the KROM UAT server were successful, demonstrating readiness on the KEIKI side. However, end-to-end DHS and DLIR file exchanges cannot proceed until FTP1 configuration is completed, and OCSS testing remains pending DHS server access. These dependencies prevent execution of complete cross-agency interface testing. Because partner modernization timelines continue to require reliance on the mainframe CyberFusion pathway, interface flexibility and future modification needs remain unchanged, and closure of this recommendation is not yet supported.

Appendix A: IV&V Criticality and Severity Ratings

IV&V CRITICALITY AND SEVERITY RATINGS

Criticality and severity ratings provide insight on where significant deficiencies are observed, and immediate remediation or risk mitigation is required. Criticality ratings are assigned to the overall project as well as each IV&V Assessment Area. Severity ratings are assigned to each risk or issue identified.

TERMS

RISK
An event that has not happened yet.

ISSUE
An event that is already occurring or has already happened.

Criticality Rating

The criticality ratings are assessed based on consideration of the severity ratings of each related risk and issue within the respective IV&V Assessment Area, the overall impact of the related observations to the success of the project, and the urgency of and length of time to implement remediation or risk mitigation strategies. Arrows indicate trends in the project assessment from the prior report and take into consideration areas of increasing risk and approaching timeline. Up arrows indicate adequate improvements or progress made. Down arrows indicate a decline, inadequate progress, or incomplete resolution of previously identified observations. No arrow indicates there was neither improving nor declining progress from the prior report.

A **RED**, high criticality rating is assigned when significant severe deficiencies were observed, and immediate remediation or risk mitigation is required.

A **YELLOW**, medium criticality rating is assigned when deficiencies were observed that merit attention. Remediation or risk mitigation should be performed in a timely manner.

A **GREEN**, low criticality rating is assigned when the activity is on track and minimal deficiencies were observed. Some oversight may be needed to ensure the risk stays low and the activity remains on track.

A **GRAY** rating is assigned when the category being assessed has incomplete information available for a conclusive observation and recommendation or is not applicable at the time of the IV&V review.

TERMS

POSITIVE
Celebrates high performance or project successes.

PRELIMINARY CONCERN
Potential risk requiring further analysis.

Severity Rating

Once risks are identified and characterized, Accuity will examine project conditions to determine the probability of the risk being identified and the impact to the project, if the risk is realized. We know that a risk is in the future, so we must provide the probability and impact to determine if the risk has a Risk Severity, such as Severity 1 (High), Severity 2 (Moderate), or Severity 3 (Low).

While a risk is an event that has not happened yet, an issue is something that is already occurring or has already happened. Accuity will examine project conditions and business impact to determine if the issue has an Issue Severity, such as Severity 1 (High/Critical Impact/System Down), Severity 2 (Moderate/ Significant Impact), or Severity 3 (Low/Normal/Minor Impact/ Informational).

Observations that are positive, preliminary concerns, or opportunities are not assigned a severity rating.

SEVERITY 1: High/Critical level

SEVERITY 2: Moderate level

SEVERITY 3: Low level

Appendix B: Industry Standards and Best Practices

STANDARD	DESCRIPTION
ADA	Americans with Disabilities Act
ADKAR®	Prosci ADKAR: Awareness, Desire, Knowledge, Ability, and Reinforcement
BABOK® v3	Business Analyst Body of Knowledge
CMMI-DEV v2.0	CCMI ® - Integrated performance solution framework
DAMA-DMBOK® v2	DAMA International's Guide to the Data Management Body of Knowledge
PMBOK® v7	Project Management Institute (PMI) Project Management Body of Knowledge
SPM	PMI The Standard for Project Management
PROSCI ADKAR®	Leading organization providing research, methodology, and tools on change management practices
SWEBOK v3	Guide to the Software Engineering Body of Knowledge
IEEE 828-2012	Institute of Electrical and Electronics Engineers (IEEE) Standard for Configuration Management in Systems and Software Engineering
IEEE 929-2012	Institute of Electrical and Electronics Engineers (IEEE) Standard for Software and System Test Documentation
IEEE 1062-2015	IEEE Recommended Practice for Software Acquisition
IEEE 1012-2016	IEEE Standard for System, Software, and Hardware Verification and Validation
IEEE 730-2014	IEEE Standard for Software Quality Assurance Processes
ISO 9001:2015	International Organization for Standardization (ISO) Quality Management Systems – Requirements
ISO/IEC 25010:2011	ISO/International Electrotechnical Commission (IEC) Systems and Software Engineering – Systems and Software Quality Requirements and Evaluation (SQuaRE) – System and Software Quality Models
ISO/IEC 16085:2021	ISO/IEC Systems and Software Engineering – Life Cycle Processes – Risk Management
IEEE 16326-2019	ISO/IEC/IEEE International Standard – Systems and Software Engineering – Life Cycle Processes – Project Management
IEEE 29148-2018	ISO/IEC/IEEE International Standard – Systems and Software Engineering – Life Cycle Processes – Requirements Engineering

STANDARD	DESCRIPTION
IEEE 15288-2023	ISO/IEC/IEEE International Standard – Systems and Software Engineering – System Life Cycle Processes
IEEE 12207-2017	ISO/IEC/IEEE International Standard – Systems and Software Engineering – Software Life Cycle Processes
IEEE 24748-1-2018	ISO/IEC/IEEE International Standard – Systems and Software Engineering – Life Cycle Management – Part 1: Guidelines for Life Cycle Management
IEEE 24748-2-2018	ISO/IEC/IEEE International Standard – Systems and Software Engineering – Life Cycle Management – Part 2: Guidelines for the Application of ISO/IEC/IEEE 15288 (System Life Cycle Processes)
IEEE 24748-3-2020	IEEE Guide: Adoption of ISO/IEC TR 24748-3:2011, Systems and Software Engineering – Life Cycle Management – Part 3: Guide to the Application of ISO/IEC 12207 (Software Life Cycle Processes)
IEEE 14764-2021	ISO/IEC/IEEE International Standard for Software Engineering – Software Life Cycle Processes – Maintenance
IEEE 15289-2019	ISO/IEC/IEEE International Standard – Systems and Software Engineering – Content of Life Cycle Information Items (Documentation)
IEEE 24765-2017	ISO/IEC/IEEE International Standard – Systems and Software Engineering – Vocabulary
IEEE 26511-2018	ISO/IEC/IEEE International Standard – Systems and Software Engineering – Requirements for Managers of Information for Users of Systems, Software, and Services
IEEE 23026-2015	ISO/IEC/IEEE International Standard – Systems and Software Engineering – Engineering and Management of Websites for Systems, Software, and Services Information
IEEE 29119-1-2021	ISO/IEC/IEEE International Standard – Software and Systems Engineering – Software Testing – Part 1: Concepts and Definitions
IEEE 29119-2-2021	ISO/IEC/IEEE International Standard – Software and Systems Engineering – Software Testing – Part 2: Test Processes
IEEE 29119-3-2021	ISO/IEC/IEEE International Standard – Software and Systems Engineering – Software Testing – Part 3: Test Documentation
IEEE 29119-4-2021	ISO/IEC/IEEE International Standard – Software and Systems Engineering – Software Testing – Part 4: Test Techniques
IEEE 1484.13.1-2012	IEEE Standard for Learning Technology – Conceptual Model for Resource Aggregation for Learning, Education, and Training
ISO/IEC TR 20000-11:2021	ISO/IEC Information Technology – Service Management – Part 11: Guidance on the Relationship Between ISO/IEC 20000-1:2011 and Service Management Frameworks: ITIL®
ISO/IEC 27002:2022	Information Technology – Security Techniques – Code of Practice for Information Security Controls
ITIL v4	PeopleCert- ITIL ® Foundation – IT governance and service management

STANDARD	DESCRIPTION
FIPS 199	Federal Information Processing Standard (FIPS) Publication 199, Standards for Security Categorization of Federal Information and Information Systems
FIPS 200	FIPS Publication 200, Minimum Security Requirements for Federal Information and Information Systems
NIST 800-53 Rev 5	National Institute of Standards and Technology (NIST) Security and Privacy Controls for Federal Information Systems and Organizations
NIST Cybersecurity Framework v1.1	NIST Framework for Improving Critical Infrastructure Cybersecurity
LSS	Lean Six Sigma

Appendix C: Comment Log on Draft Report

Comment Log on Draft Report

KROM Project: IV&V Document Comment Log				
ID #	**Page #**	**Comment**	**Commenter's Organization**	**Accuity Resolution**
1	14	In the "Mainframe Data Exchange and CyberFusion" section – 1. "HOSTG" should be replaced with "HOSTF" 2. "FTP1" should be replaced with "cseasftp1."	CSEA	IV&V has made the updates as noted and related reference to HOSTG on page 29 was updated accordingly.
2	14	In the "Security" section - 1. "Secure FTP" can be removed since it is SFTP. 2. "HOSTG" should be replaced with "HOSTF." 3. "FTP1" should be replaced with "cseasftp1." (2x)	CSEA	IV&V has made the updates as noted and related reference to HOST G on page 29 was updated accordingly.
3	27	2024.08.001.R4 – 1. Please clarify if "Space Availability" is still an outstanding observation.	CSEA	IV&V confirms recommendation 2024.08.001 R4 titled 'Resource Management *and* Space Availability' that the s*pace availability* has been addressed. The Resource Management readiness as it relates to space availability is no longer applicable. Thus, this recommendation will be closed-and the IV&V Observation Summary Chart (page 4) and total closed recommendations referenced on page 7 have been updated accordingly.
4	26	2023.10.002.R2 – Recommend this sub-observation be closed. 1. Root causes of the delays being encountered have been identified and plans have been established for addressing them. a. The delays stem back to an assessment that was only partially complete, resulting in a partially formulated System Requirements Definition. b. Plans to address the above include revisions to the project schedule, the MOU requiring the DDI to complete unfinished items by agreed-upon due dates, and increased participation by CSEA's Information Technology Office in the development and testing process.	CSEA	IV&V confirms recommendation 2023.10.002.R2 to define root causes for schedule delays and implement corrective plans has been addressed. The governance gaps noted in the May 2025 reopened observation have been satisfied. Furthermore, CSEA will complete the project once all defects are resolved to their satisfaction, supported by a formalized MOU that defines responsibilities, timelines, and remaining SIT work. This recommendation is now considered closed- the IV&V Observation Summary Chart (page 4) and total closed observations and recommendations referenced on page 7 have been updated accordingly.

Comment Log on Draft Report

KROM Project: IV&V Document Comment Log *(continued)*				
ID #	**Page #**	**Comment**	**Commenter's Organization**	**Accuity Resolution**
5	36-53	The updated presentation format for reporting the current month's open observations and recommendations has been accepted by CSEA.	IV&V	Appendix C which previously contained 'Archived Observations and Recommendations' has been removed. Going forward, IV&V will provide updates only for the current month's open observations, and these will be reflected in the 'Open Observation(s) Current Month Updates' report section.

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