

Caltrain Modernization Program Peninsula Corridor Electrification Project (PCEP)



Executive Monthly Progress Report

January 31, 2023

This page is intentionally blank.

TABLE OF CONTENTS

1.0	Execu	tive Summary	1-1
	1.1	Introduction	1-1
	1.2	Program Cost and Budget	1-1
	1.3	Program Progress and Schedule	1-1
	1.4	Change Management Board (CMB)	1-1
	1.5	This Month's Accomplishments	1-2
	1.6	Upcoming work	1-2
	1.7	Critical Items	1-3
2.0	Safety	/	2-1
3.0	IMS P	rogram Schedule	3-1
	3.1	Introduction	3-1
	3.2	Critical Path	3-1
	3.3	Schedule Contract Milestone Analysis	3-1
4.0	Cost a	and Budget	4-1
	4.1	Introduction	4-1
	4.2	Program Budget and Cost	4-1
	4.3	Program Shared Risk Pool and Contingency	4-2
	4.4	Electrification Design Builder Contract Incentives	4-3
	4.5	Program Cash Flow and Funding	4-3
	4.6	Issues	4-4
5.0	Chang	ge Management	5-1
	5.1	Introduction	5-1
	5.2	Change Orders	5-1
	5.3	Issues	5-2

i

This page is intentionally blank.

1.0 EXECUTIVE SUMMARY

1.1 Introduction

The Peninsula Corridor Electrification Project (PCEP) will upgrade 51 miles of diesel service to electrified service from San Francisco to San Jose (Tamien Station). The PCEP scope of work includes design and construction of an overhead contact system, traction power facilities, modification of the existing signaling and grade crossing protection system to make it compatible with the electrified railroad, substation improvements at Pacific Gas and Electric (PG&E) substations, and modifications at existing tunnels and Caltrain's maintenance facility. It also includes the design, manufacturing, assembly, testing, and delivery of the Electric Multiple Units (EMUs).

Caltrain completed a thorough assessment of all aspects of the program including cost, schedule, risks and organization after the global settlement in 2021. Caltrain rebaselined the program budget and schedule in December of 2021. Caltrain is performing a schedule reforecast effort and is committed to deliver PCEP and achieve revenue service in September of 2024.

1.2 **Program Cost and Budget**

On December 6, 2021, the JPB adopted a new PCEP program budget of \$2,442,690,697. On January 31, 2023 Caltrain received a \$367 million funding award from California's Transit and Intercity Rail Capital Program's (TIRCP) Cycle 6 Existing Project Reserve, representing the remaining funding needed to complete the project. The project is now fully funded in the amount of \$2,442,690,697. As of January 2023, the project is on budget:

- The current project total cost at completion (EAC) is the same as Board adopted budget of \$2.44 billion.
- As of January 2023, a total of \$3.44M has been drawn down from the Shared Risk Pool of \$50 million. In January 2023, \$0.24M was drawn from the Shared Risk Pool.
- As of January 2023, a total of \$3.52M has been drawn from the project contingency of \$40 million. In January 2023, \$0.04M was drawn from project contingency.
- As of January 2023, no new awards have been made from the Project incentive pool of \$18.5 million.
- As of January 2023, no incentive was issued from the milestone incentive pool of \$15 million.

1.3 **Program Progress and Schedule**

As of January 31, 2023, the overall project completion is 80.77%. The current program schedule is projecting a PCEP substantial completion date of April 2024 and Revenue Service by September 2024. Staff has finalized a 2023 path to completion and service impact plan that will include system integration testing, signal cutovers, and proactive OCS construction productivity mitigations for the remaining PCEP work. The first weekend closure will commence on February 11, 2023 from Millbrae to San Francisco 4th and King.

1.4 Change Management Board (CMB)

In January 2023, the following item was brought to CMB for approval:

• Award of Compass Bus Bridge Service Contract for Weekend Shutdowns

1.5 This Month's Accomplishments

The project team has completed the following notable activities for the month of January 2023:

- Caltrain has received \$43 million in federal funding as part of the omnibus spending bill signed by President Biden in December 2022.
- Caltrain has been awarded TIRCP grant of \$367 million and PCEP is now fully funded.
- Completed 25kV in-depth OCS awareness training for all TASI staff and tenant railroad trainers prior to full Segment 4 energization.
- Commenced project schedule reforecast that reflects the path to completion and weekend area closures for the remaining PCEP work.
- Completed bus bridge service single source procurement.
- Continued to coordinate with PG&E on TPS2 short circuit testing, low voltage power drop applications, and distribution line de-energization work.
- Held executive and project team partnering sessions.
- Performed train operator EMU refresher training.
- Commenced Segment 3 Menlo Park cutover planning.
- Completed negotiation on railroad isolation and protection change order.
- Continued implementing energized rail isolation and protection procedure.
- Continued development of OCS/TPS maintenance RFP.
- Continued safety special task force working group, including TASI, Rail Operations and PCEP to address communications, process, and procedure improvements.
- Continued providing PCEP progress updates to funding partners, leadership, elected officials, citizens, and business community.
- Continued Rail Activation effort on path to energization for Segment 4 and CEMOF.
- Finalized path for completion plan that requires more track access and work windows on weekends to maximize productivity for the remaining infrastructure, signal cutover, and testing.
- Commenced readiness reviews for weekend bus bridges for OCS construction starting in February 2023.
- Completed Rail Service Plan for first weekend partial area closure from Millbrae to San Francisco to support Segment 1 OCS construction.
- Continued to address TPS 2 findings and complete documentation required to perform short circuit retest.

1.6 Upcoming work

For the next six months, the PCEP team has set additional goals as described below:

- Complete project schedule reforecast that reflects the path to completion and weekend area closures for the remaining PCEP work.
- Continue operations planning, ambassador and rail service planning effort for weekend area closures for Segment 1 and 2 OCS construction, and complete bus bridge service single source RFP.
- Commence first weekend bus bridges for OCS construction in February 2023.

Peninsula Corridor Electrification Project

Monthly Progress Report – January 2023

- Commence focused area limited weekend shutdown work in February 2023.
- Continue to coordinate with PG&E on TPS2 short circuit testing, low voltage power drop applications, and distribution line de-energization work.
- Commence EMU maintenance training.
- Energize CEMOF for EMU commissioning.
- Hold Monthly CMB meeting for program status and change order approval.
- Complete Segment 3 Menlo Park cutover in February and the remaining Segment 3 signal cutovers in April 2023.
- Complete Segment 4 mainline live runs and full energization.
- Execute Railroad isolation and protection change order.
- Receive two more EMU trainsets in April 2023.
- Complete Segment 3 construction and ready for Sectionalization Testing.

The PCEP Project is currently on budget and on time for achieving Revenue Service in September of 2024.

1.7 Critical Items

As of January 2023, PCEP has completed Segment 2 signal cutover, fulfilled the \$410M funding gap, and have adequate RWIC to support field construction. The top critical items and related actions are highlighted below.

Critical Issues	Actions
Overhead Contact System (OCS) installation delay due to low productivity Note: The project OCS work was on hold from March 10, 2022, to March 28, 2022 during the safety stand down. Segment 2 OCS was damaged during high wind and heavy rainstorms in late December 2022 and early January 2023	 Additional BBII OCS crew training for regulation and variance in the OCS design / installation due to redesign & accommodations to resolve foundation Differing Site Conditions (DSC) issues – Completed. Hiring additional BBII OCS staff members to prevent schedule slippage and help in future installation planning – Completed. Hold OCS construction scheduling recovery workshop for remaining OCS installation and testing – Completed. Increase OCS crews and OCS wiring equipment to increase productivity – Completed. More track access including weekend area closures for remaining Segments 1 and 2 OCS construction starts on February 11, 2023. OCS repair work for Segment 2 is planned for September 2023 due to rainstorm and long lead time for materials.
Unsuccessful TPS 2 short circuit test delays drill track and Segment 4 mainline energization	 Perform comprehensive root cause analysis and develop corrective action plan. Implement configuration change control process including design drawing, shop drawings, as-built version control to ensure all parties are using the same set of drawings for TPS2 testing. Perform technical working groups including all vendors and EOR. Weekly management team briefing on corrective action status. Develop SSWP for all work performed at TPS for Caltrain review and approval.

Table 1-1. Critical Issues and Actions

Peninsula Corridor Electrification Project Monthly Progress Report – January 2023

Critical Issues	Actions
	 Perform field verification and pre-testing before short circuit re-test.

2.0 SAFETY

There were no reportable injuries in January 2023. The Reportable Injury Rate (RIR) for the entire year (2022) was 2.82. Overall, since the project's inception, the RIR is at 1.87, which is below the national average.

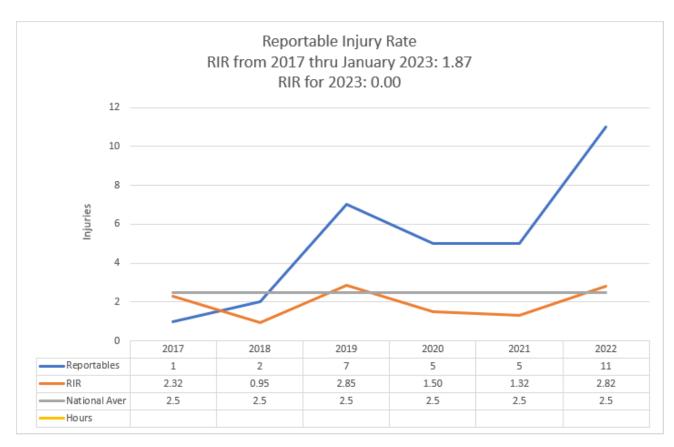


Figure 2-1. Project Reportable Injury Rate (RIR) by Year

Completed Work

Safety staff continues to coordinate with contractors to identify opportunities to improve safety performance. Organizational-wide safety briefings are being performed to ensure staff understand the application of post incident mitigation measures including rules and procedural changes designed to enhance safety. Project Safety continues to reinforce jobsite safety practices throughout the Caltrain alignment, investigate incidents, and identify mitigation measures to prevent re-occurrences. Safety project coordination meetings continue to be conducted monthly to promote a clear understanding of project safety requirements. In addition, Caltrain Safety continues weekly calls with the lead safety staff from Caltrain, PCEP, BBII, and TASI to discuss safety performance and ongoing initiatives.

Upcoming Work

The Fire/Life Safety Committee continues to work with emergency responders along the Caltrain corridor on emergency preparedness in advance of energization. The safety team has

updated the OCS and EMU emergency responder safety familiarization presentations to include voiceover features for use by the Fire Departments. The presentation will also be shared with other emergency responder jurisdictions through the project Fire/Life Safety Committee.

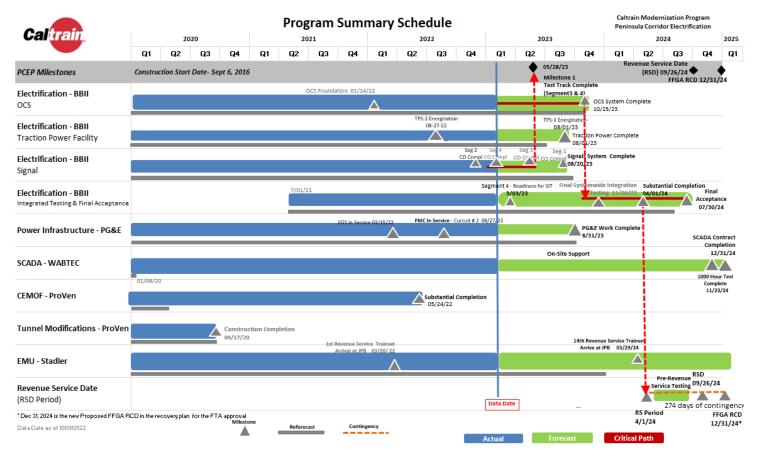
OCS safety awareness training is scheduled for Mountain View Fire Department on February 1, 2023 and Sunnyvale Fire Department from February 15-17, 2023. PCEP Safety Team will be providing OCS Safety Awareness training to the California Public Utilities Commission (CPUC) in Fresno, CA on April 4, 2023. Additional training is currently being coordinated with other Fire Departments.

Monthly Progress Report – January 2023

3.0 IMS PROGRAM SCHEDULE

3.1 Introduction

The Integrated Master Schedule (IMS) Program Summary Schedule depicted in **Figure 3-1** shows the schedule status of the major PCEP projects. The forecasted dates for this program schedule were based on the preliminary draft of BBII's reforecast schedule. The final reforecast schedule information will be available in February's MPR update. The Revenue Service Date (RSD) and Full Funding Grant Agreement (FFGA) Revenue Completion Date (RCD) remains September 26, 2024, and December 31, 2024 respectively.





Monthly Progress Report – January 2023

3.2 Critical Path Analysis

The current critical path for PCEP starts with BBII waiting past the required period on PG&E for the power drop designs in Segment 1. After reapplying to PG&E for additional designs, the critical path schedule shows BBII waiting another 250 days to receive these designs before preparing for the installation of the meter and for the permanent power drop in Segment 1. The critical path then continues with the completion of the permanent low voltage power to all the segments, Project Schedule Contingency, Substantial Completion, and Final Acceptance.

#	Activity D	Activity Name	Duration	Total	Reforecast	Reforecast	Current	Current	Refor Finish				2023			2024
-				Float	Start .	Finish	Start	Finish	Varian ce	Nov Dec	Jan Feb Ma	r Apr May Ju	un Jul Aug	Sep Oct Nov De	Jan Feb Mar	Apr May Jun Jul Aug
1	Segment 1 (8 Mi)		476	0	23-Aug-21	17-Nov-22	21-Oct-22 A	08-Feb-24	-448							
2	PD-01-1050	Receive PG&E Power Design - 0.53 CP Common / WPC 2 (Timed Out with PG&E)	92	0	23-Aug-21	15-Sep-22	21-Oct-22 A	20-Jan-23	-127		-					
3	PD-01-1830	Re-apply for Power Drop - 0.53 CP Common / WPC 2	1	0			21 -Jan -23	21-Jan-23		1	1					
4	PD-01-1840	Receive PG&E Power Design - 0.53 CP Common / WPC 2	250	0			22-Jan-23	28-Sep-28				:	:	-		
5	PD-01-1080	Complete Pedestal / Meter Install / Precon - 0.53 CP Common / WPC 2	42	0	16-Sep-22	27-Oct-22	29-Sep-23	09-Nov-23	-378	1				_		
6	PD-01-1070	Request Meter from JPB - 0.53 CP Common / WPC 2	21	0	28-Oct-22	17-Nov-22	10-Nov -23	30-Nov-23	-378							
7	WP-01-1260	Provide Power Drop WPC 2	70	0	02-Jul-22	02-Jul-22	01-Dec-23	08-Feb-24	-587					_		
8	All Segments		180	0	13-Nov-23	30-Jul-24	13-Feb-24	30-Jul-24	-1			1				
9	DS-00-7420	Low Voltage Services Ready for Energization - Segment 1 / Punchlist Verification	5	1	13-Nov-23	13-Nov-23	13-Feb-24	18-Feb-24	-98	1		1			•	
10	TS-00-0500	Low Voltage Permanent Power Provided for All Segments	0	1		13-Nov-23		18-Feb-24	-98						•	
11	FTC-0001	Project Schedule Contingency	43	0	11-Feb-24	31-Mar-24	19-Feb-24	01-Apr-24	-1	1	1	1				
12	PC-00-0990	Overall Schedule / Substantial Completion Completion Milestone	0	1		01-Apr-24		01-Apr-24	0							\$
13	GC-00-9990	Scheduled Substantial Completion	0	0		01-Apr-24		01-Apr-24*	0							*
14	GC-00-9920	Final Acceptance	0	0		30-Jul-24		30-Jul-24*	0							\$
15	Submittals		120	0	01-Apr-24	29-Jul-24	02-Apr-24	30-Jul-24	-1							
16	SM-00-20020	Final Punchlist	60	0	01-Apr-24	30-May-24	02-Apr-24	31-May-24	-1							
17	GC-00-9930	Final Acceptance Inspection	60	0	31-May-24	29-Jul-24	01-Jun-24	30-Jul-24	-1	1						

Figure 3-2. Critical Path Schedule

3.3 Schedule Contract Milestone Analysis

Milestone 1, redefined to include Segment 3 and 4 for more electrified mileage, is scheduled to be completed by May 28, 2023. The current forecast date for full alignment Substantial Completion is April 1, 2024 with Scheduled Final Acceptance forecasted now for July 30, 2024.

Contracto	Milestones	Reforecast (June 2022) Dates	Current (January 2023) Forecast	Milestone Finish Date Variance	Remarks
BBII	Segment 4 Completion	15-Nov-22	05-Feb-23	-82	Delayed by Reed Street Cutover delays and delays to Segment 4 integrated testing
BBII	Completion of Milestone 1 (Segments 3 and 4)	30-Apr-23	28-May-23	-28	Delayed by Seg 2 Phase 1 signal cutover installation delays which, in turn, delayed installation of Segment 3 signal cutovers and sectionalization testing
BBII	Traction Power Substation #1Energization	03-Jun-23	01-Aug-23	-59	Delayed by replacement of the batteries and revisions of the enclosure at TPSS-1 to meet PG&E requirements
BBII	Signal Cutovers and Systems Completion	16-Sep-23	20-Aug-23	27	Delayed by Seg 2 Phase 1 signal cutover installation delays which, in turn, delayed installation of Seg 3 and 1 signal cutovers
BBII	OCS Construction Completion	25-Sep-23	25-Oct-23	-30	Delayed by reconstruction and testing of OCS at the Guadalupe Bridge
Stadler	14th Trainset Arrival at JPB Site	04-Jan-24	22-Mar-24	-78	Stadler is experiencing track access availability, workforce availability and material issues with their Suppliers.
BBII	System Integration Testing Start (Segment 4)	15-Nov-22	03-Mar-23	-108	Delayed by energization delay of Overhead Contact System (OCS)
BBII	System Integration Testing Completion	07-Feb-24	26-Nov-23	73	Delayed by installation delay of Overhead Contact System (OCS) in Segments 2 and 1.
BBII	Substantial Completion	01-Apr-24	01-Apr-24	0	
BBII	Scheduled Final Acceptance	30-Jul-24	30-Jul-24	0	
JPB	Revenue Service Date (RSD)	26-Sep-24	26-Sep-24	0	
JPB	FFGA Revenue Completion Date (RCD)	31-Dec-24	31-Dec-24	0	

Figure 3-3. Contract Milestone Analysis

4.0 COST AND BUDGET

4.1 Introduction

This section presents an update on program cost and budget. On December 6, 2021, the JPB adopted a new Program budget of \$2.44 billion. Table 4-1 depicts a summary level of program budget, costs, and estimate at completion based on the latest update of the Electrification and EMU projects as of January 31, 2023.

4.2 Program Budget and Cost

Description of Work	Current Budget (A) ¹	Cost This Month	Cost To Date	Estimate To Complete	Estimate At Completion	Variance at Completion
		(B ²	(C) ³	(D)	(E) = (C) + (D)	(F) = (A) – (E)
Electrification	\$1,749,139,438	\$24,576,681	\$1,490,501,058	\$258,638,380	\$1,749,139,438	\$0
EMU	\$693,551,258	\$7,466,535	\$506,859,097	\$186,692,162	\$693,551,258	\$0
PCEP TOTAL	\$2,442,690,697	\$32,043,217	\$1,997,360,155	\$445,330,542	\$2,442,690,697	\$0

Table 4-1. Budget Summary by Project

^{1.} Column A "Current Budget" includes re-baseline and executed change orders and awarded contracts.

^{2.} Column B "Cost This Month" represents the cost of work performed this month.

^{3.} Column C "Cost To Date" includes actuals (amount paid) and accruals (amount of work performed) to date.

Table 4-2 depicts program budget, costs, and estimate at completion summarized by major elements of work. This budget table provides additional detail for the program and is broken down by major contracts for Electrification and EMU, minor contracts, real estate, utilities, project management oversight and other indirect support costs.

Table 4-2.	Budget Summary	by Majo	r Elements
------------	-----------------------	---------	------------

Description of Work	Re-Baseline Budget	Current Budget	Cost This Month	Cost To Date	Estimate To Complete	Estimate At Completion
Electrification	\$1,097,149,881	\$1,097,149,881	\$18,413,448	\$890,224,997	\$206,808,884	\$1,097,033,881
EMU Procurement	\$556,072,601	\$556,248,486	\$6,491,807	\$421,190,158	\$135,058,328	\$556,248,486
Minor Construction Contracts (Tunnel, CEMOF, SCADA, Non- BBI OCS)	\$67,055,072	\$68,091,194	\$0	\$64,602,778	\$3,488,416	\$68,091,194
Real Estate Acquisition & Support	\$34,914,177	\$34,914,177	-\$2,273	\$23,978,215	\$10,935,962	\$34,914,177
PG&E, Utilities	\$132,088,995	\$132,088,995	\$1,296,890	\$203,341,510	-\$71,252,516	\$132,088,995
Management Oversight & Support	\$312,699,697	\$315,007,767	\$2,760,708	\$260,282,776	\$54,724,991	\$315,007,767
TASI Support	\$114,488,767	\$114,488,767	\$1,638,025	\$92,252,301	\$22,236,466	\$114,488,767
Finance Charges	\$9,898,638	\$9,898,638	\$0	\$9,304,280	\$594,358	\$9,898,638
Insurance	\$6,581,851	\$6,581,851	\$0	\$4,897,449	\$1,684,402	\$6,581,851
Other Required Projects & Services	\$9,084,176	\$10,484,176	\$205,436	\$3,380,015	\$7,104,161	\$10,484,176
Environmental Mitigation	\$14,438,866	\$13,038,866	\$0	\$1,242,229	\$11,796,637	\$13,038,866
Caltrain Capital Overhead (ICAP)	\$48,217,887	\$48,217,887	\$1,239,175	\$22,663,447	\$25,554,440	\$48,217,887
Contingency	\$40,000,089	\$36,480,012	\$0	\$0	\$36,596,012	\$36,596,012
Total	\$2,442,690,697	\$2,442,690,697	\$32,043,217	\$1,997,360,155	\$445,330,542	\$2,442,690,697

4.3 Program Shared Risk Pool and Contingency

Caltrain and Balfour Beatty Infrastructure, Inc. (BBII) continue implementing new mechanisms to ensure a collaborative approach to Project delivery. The management team meets every week to review the issues log focusing on risk mitigation and issues resolution.

As part of global settlement, a shared risk pool of \$50 million was established to manage risks and mitigation proactively and collaboratively with the design-build contractor. Table 4-3 shows the current shared risk drawdown for the current month and to-date as well as the remaining balance of the shared Risk Pool by Risk Category. Any shared risk items (27 Risk IDs listed below in Table 4-3) that are above \$250,000 require Change Management Board (CMB) approval.

Risk ID	Risk Description	Risk Amount	Current Month	Executed to Date	Remaining Balance
1	Permanent Power Availability	\$268,572	\$0	\$160,916	\$107,656
2	Different Site Condition for OCS Foundation	\$3,500,000	\$0	\$986,104	\$2,513,896
3	Different Site Condition for Duct bank	\$2,800,000	\$226,484	\$391,881	\$2,408,119
4	Condition of existing Fiber backbone infrastructure	\$3,150,000	\$11,818	\$244,632	\$2,905,368
5	Availability of TASI Resource	\$5,777,820	\$0	\$0	\$5,777,820
6	Signal Cutover access and work window	\$5,607,150	\$0	\$0	\$5,607,150
7	Condition of existing signal system	\$538,572	\$0	\$29,125	\$509,447
8	EMI Nonconformance by EMU Vendor	\$750,000	\$0	\$0	\$750,000
9	Reed Street Cutover	\$90,000	\$0	\$0	\$90,000
10	Availability of low voltage power for cutover testing	\$1,120,000	\$0	\$0	\$1,120,000
11	Third party Permits	\$150,000	\$0	\$0	\$150,000
12	SCADA integration for the entire alignment	\$159,524	\$0	\$0	\$159,524
13	Tunnel OCS Compatibility	\$167,500	\$0	\$0	\$167,500
14	Supply chain issue due to COVID 19	\$300,000	\$0	\$28,923	\$271,077
15	End to end Systems integration commissioning	\$2,100,000	\$0	\$0	\$2,100,000
16	Existing Caltrain Operating systems interface and integration	\$1,400,000	\$0	\$0	\$1,400,000
17	Third party Approval	\$150,000	\$0	\$13,140	\$136,860
18	Impact from Caltrain other capital or third-party projects	\$2,166,683	-\$22,389	\$148,103	\$2,018,580
19	Track access delay for BBII Construction	\$1,800,000	\$0	\$128,986	\$1,671,015
20	Additional light Maintenance and Protection Needs	\$280,000	\$0	\$144,500	\$135,500
21	Crossing Protection	\$220,000	\$0	\$102,334	\$117,666
22	Power facilities	\$500,000	\$0	\$0	\$500,000
23	NCR's	\$0	\$0	\$0	\$0
24	Potholing	\$1,700,000	\$0	\$107,547	\$1,592,453
25	Pre-Revenue Service Operational Testing	\$250,000	\$0	\$0	\$250,000
26	TRO Contingency	\$3,000,000	\$0	\$0	\$3,000,000
27	Contingency	\$12,000,000	\$20,167	\$952,479	\$11,047,521
NA	Unidentified	\$54,179	\$0	\$0	\$54,179
	BBII Risk Pool Total	\$50,000,000	\$236,080	\$3,438,669	\$46,561,331

Table 4-3. Shared Risk Pool Status as of January 2023

In addition to the established Risk Pool with BBII, the Re-Baseline Budget includes a program contingency of \$40 million to cover non-BBII potential changes and unknowns.

Table 4-4 provides a detailed status of approved transfers from contingency due to executed Contract Change Orders and approved Budget Transfers.

Change Order	Description	Current Budget Contingency	EAC Contingency
Project Contingency	Previously Reported Balance	\$36,523,532	\$36,639,532
STA-056-041	Semi-Automatic Phase Break Operation	(\$43,520)	(\$43,520)
	PROJECT CONTINGENCY REMAINING BALANCE	\$36,480,012	\$36,596,012

Table 4-4. Program Contingency Drawdown Balance

Note: EAC Contingency reflects forecast contingency.

4.4 Electrification Design Builder Contract Incentives

The Global Settlement with BBII also includes incentives based on Milestone completions and remaining contract incentives. Table 4-6 provides a status of Design-Build Contractor incentives Budgeted, Awarded, and remaining Balance.

Incentives	Budgeted	Awarded	Balance
Contract Incentive:			
Quality	\$1,250,000	\$1,000,000	\$250,000
Safety	\$2,500,000	\$875,000	\$1,625,000
Community Outreach	\$2,500,000	\$1,750,000	\$750,000
DBE	\$900,000	\$0	\$900,000
Total Contract Incentive	\$7,150,000	\$3,625,000	\$3,525,000
Milestone Incentive:			
Early Signal and Crossing Cutover	\$4,000,000	\$0	\$4,000,000
Early Project Substantial Completion (NTE)	\$8,000,000	\$0	\$8,000,000
Early Revenue Service	\$3,000,000	\$0	\$3,000,000
Total Milestone Incentive	\$15,000,000		\$15,000,000

Table 4-5. BBII Incentives

4.5 **Program Cash Flow and Funding**

The remaining program expenditures are cash flowed in Figure 4-1. With the award of the full funding, the program does not expect any cash flow issues due to funding.

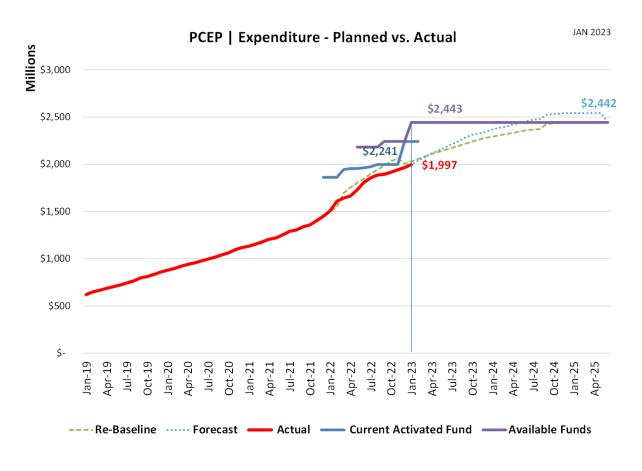


Figure 4.1 Expenditure – Funding Cash Flow

4.6 Issues

Table 4-6. Cost and Funding Issues Identified, and Actions Taken for January 2023

Issues	Actions
Additional funding setup for \$410M Funding Gap.	 On December 23, 2022, Caltrain received an additional \$43M from the Federal Transportation Administration (FTA). On January 31, 2023, Caltrain received \$367M in state funding from the Transit and Intercity Rail Capital Program (TIRCP) to finish the Peninsula Corridor Electrification Project. With the funding from FTA (\$43M) and TIRCP (\$367M), the \$410M funding gap issue has been resolved.

5.0 CHANGE MANAGEMENT

5.1 Introduction

The change management process establishes a formal administrative work process associated with the initiation, documentation, coordination, review, approval, and implementation of changes during the design, construction, or manufacturing of PCEP. The change management process accounts for the impacts of the changes and ensures prudent use of contingency.

5.2 Change Orders/Shared Risk Pool

5.2.1 Executed Shared Risk

The following Shared Risk items were executed in January 2023:

- Combination of DSC IRLs 079, 229, 248, 251, 273, 274, and 276 was executed on January 23, 2023 for \$27,687.
- Segment 4 End of Electrical Warning Signage was executed on January 10, 2023 for \$17,167.
- Redesign Grounding and Bonding at Atherton Station due to Decommissioning was executed on January 9, 2023 for a credit of (\$22,389).
- Relocation of Signal House at CT26.80 due to Utility Conflict was executed on January 25, 2023 for \$198,797.
- Contaminated Fiber Splice Closure at 25.21 was executed on January 9, 2023 for \$11,818.

5.2.2 Approved Change Orders

- CCO-257 OCS Removal and Replace of Replacement for Guadalupe Bridge Project was executed on January 25, 2023 for \$1,298,842. This Change Order is funded by the Guadalupe Bridge Project.
- CCO-041 Manual Phase Break was executed on January 17, 2023 for \$43,200.
- 5.2.3 Upcoming Change Orders/Shared Risk Items
 - Incorporation of As-Built Additional Ped Gate Mechanisms for \$549,014.
 - Right-of-Way Site Security for \$1,050,547.

5.3 Issues

Table 5-1. Change Management Issues Identified and Actions Taken for January
2023

Issues	Actions
Segment 4 Maintenance Option in the existing BBII Contract was never exercised. Maintenance of OCS/TPS for Segment 4 will be needed post Segment 4 substantial completion once Caltrain is using it for EMU testing under 25kV.	 Define EMU testing and burn in work schedule. BBII provides isolation and protection once Segment 4 is powered up. BBII will provide maintenance lite during EMU testing and burn in.
	 Prepare Request for Proposal for OCS/TPS Maintenance Service for public procurement scheduled for February 2023.
	 Develop evaluation criteria for Maintenance Service proposals.
	Recommend for award and obtain JPB board approval.